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## MAINTENANCE SPECIFICATIONS

ENGINE #1

Model Type - CF6-80E1A4

Serial No. 811207

CONFIDENTIAL

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## **ENGINE MINI PACK**

<b>Engine Model:</b>	<b>CF6-80E1A4</b>
<b>Engine Serial Number:</b>	<b>811207</b>
<b>Total Time Since New:</b>	<b>58,555</b>
<b>Total Cycles Since New:</b>	<b>8,419</b>
<b>Total Time Since Last Shop Visit:</b>	<b>12,130</b>
<b>Total Cycles Since Last Shop Visit:</b>	<b>1,753</b>
<b>Last Operator:</b>	<b>AIR CALIN</b>
<b>Audit By:</b>	<b>Chris Evans</b>
<b>Date:</b>	<b>July 29, 2021</b>

ENGINE SERIAL NUMBER:	811207
Model Type:	CF6-80E1A4
ENGINE TT:	58,555.38
ENGINE TC:	8,419
TSLSV:	12,130.03
CSLSV:	1,753
LAST OPERATOR:	Aircalin
DATE:	3/13/2020

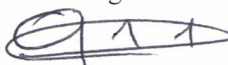
NOMENCLATURE	PART NUMBER	SERIAL NUMBER	TSN	CSN	CYCLE USAGE	MANUAL CYCLE LIMIT	CYCLE REMAINING
					E1A4	E1A4	E1A4
FAN ROTOR							
FAN ROTOR DISK (STG 1)	1669M75P08	LA095224	58555.38	8,419	8,419	20,000	11,581
FAN FORWARD SHAFT	1855M52G01	TMTMA074	58555.38	8,419	8,419	20,000	11,581
FAN ROTOR SPOOL (STG 2-5)	1782M10G02	VOLJ0100	35705.38	5,088	5,088	20,000	14,912
HPC ROTOR							
HPC STG 1 DISK	1644M21P04	BB806401	58555.38	8,419	8,419	20,000	11,581
HPC STG 2 DISK	9380M27P08	BB758234	58555.38	8,419	8,419	20,000	11,581
HPC 3-9 SPOOL	1856M15G02	VOLB7314	58555.38	8,419	8,419	20,000	11,581
HPC 10-14 STG SPOOL	1703M49G04	GWN05864	58555.38	8,419	8,419	20,000	11,581
No.4 BRG. SEAL (CDP)	1669M73P02	NCE6357N	58555.38	8,419	8,419	20,000	11,581
HPT ROTOR							
HPT STAGE 1 DISK	1863M36G06	GWN04TRP	58555.38	8,419	8,419	15,000	6,581
HPT STAGE 2 DISK	1778M72P05	MUNBF203	58555.38	8,419	8,419	15,000	6,581
ROTATING INTER STG SEAL	1778M69P05	MUNCP624	35705.38	5,088	5,088	15,000	9,912
FWD OUTER SEAL	1778M70P03	NCE8617P	58555.38	8,419	8,419	15,000	6,581
LPT ROTOR							
LPT ROTOR SHAFT	1778M39P08	RPM55FFF	58555.38	8,419	8,419	15,000	6,581
LPT STG 1 DISK	1639M11P03	FIAALHGM	58555.38	8,419	8,419	20,000	11,581
LPT STG 2 DISK	1639M12P03	FIAALJ6J	58555.38	8,419	8,419	20,000	11,581
LPT STG 3 DISK	1639M13P03	FIAALPAN	58555.38	8,419	8,419	20,000	11,581
LPT STG 4 DISK	1639M14P02	FIAALG09	58555.38	8,419	8,419	20,000	11,581
LPT STG 5 DISK	1639M15P03	FIAALG97	58555.38	8,419	8,419	20,000	11,581
LPT CONE TORQUE-SHAFT	1639M20P08	BB819300	58555.38	8,419	8,419	20,000	11,581
BOLT SHOULDER	1304M26P05	MAU53540	12130.03	1,753	1,753	22,400	20,647
BOLT SHOULDER	1304M26P05	MAU53615	12130.03	1,753	1,753	22,400	20,647
BOLT SHOULDER	1304M26P05	RTN00651	58555.38	8,419	8,419	22,400	13,981

Note: The above data has been compiled from the records provided to GA Telesis by last operator / owner. The responsibility for the accuracy and use of this information at all times remains solely with the install of these parts. Any minor difference in hours is due to rounding unless otherwise noted. To the best of our knowledge this data is true and correct.

PREPARED BY:

GA Telesis, LLC

31-Mar-20

1. Approving Civil Aviation Authority/Country:  FAA/UNITED STATES		2. <b>AUTHORIZED RELEASE CERTIFICATE</b> FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG		3. Form Tracking Number:  W/O: PA21102WA	
4. Organization Name and Address: <b>Precise Aviation, LLC.</b> <b>8446 NW 58 ST Miami, Florida 33166</b> <b>FAA CRS # P5AR253J</b>				5. Work Order/Contract/Invoice Number: W/O: PA21102WA/ RO: 47491	
6. Item:	7. Description:	8. Part Number:	9. Quantity:	10. Serial Number:	11. Status/Work:
1	ENGINE - GENERAL ELECTRIC.	CF6-80E1	1	811207	REPAIRED
12. Remarks: GENERAL ELECTRIC CF6-80E1, Serial No. 811207 has received the following limited work scope below: - Accomplished Preservation 30-365 Days- Operable engine installed in the shipping stand as per CF6-80E1 Engine Manual Subtask 72-00-00-570-058, Rev. 49, Dated Sep.15, 2020 - Next due date 13/Jul/2022  - See Precise Aviation carry over sheet prior to releasing engine into service. - This release certifies only the work requested by the customer. All open AD's, SB's and carry over items are the customer's responsibility. - Operator responsible for performing all tasks associated with the maintenance accomplished as per applicable AMM prior to releasing engine to service. - Documents on file under Precise Aviation LLC. Work Order PA21102WA.  <div style="text-align: right;">Customer supplied Time and Cycles: Engine Total Time: 58555.38 Engine Total Cycles: 8,419</div> <p>"Certifies that the work specified in blocks 11/12 was carried out in accordance with EASA Part-145 and with respect to that work the engine is considered ready for release to service under EASA Acceptable Certificate Number:"EASA.145.5310".</p>					
13a. Certifies the items identified above were manufactured in conformity to:  <input type="checkbox"/> Approved design data and are in a condition for safe operation.  <input type="checkbox"/> Non-approved design data specified in Block 12.			14a. <input checked="" type="checkbox"/> 14 CFR 43.9 Return to Service <input checked="" type="checkbox"/> Other regulation specified in Block 12  <b>Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.</b>		
13b. Authorized Signature:		13c. Approval/Authorization No.:		14b. Authorized Signature:	
				 <b>P5AR253J</b>	
13d. Name (Typed or Printed):		13e. Date: (dd/mm/yyyy):		14c. Approval/Certificate No.:	
				<b>13/Jul/2021</b>	
14d. Name (Typed or Printed):		14e. Date (dd/mm/yyyy):			
<b>Abraham Espinoza</b>					
<b>User/Installer Responsibilities</b>					
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 Civil Aviation Authority/Country: FAA/United States		2. <b>AUTHORIZED RELEASE CERTIFICATE</b> FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG			3. Form Tracking Number: 21-XTR-010	
4. Organization Name and Address: Xtreme Aviation, LLC. CRS #4XAR847C 14900 NW42nd Ave. Hangar 48, Opa-Locka, FL 33054					5. Work Order/Contract/Invoice Number: 007793	
6. Item:	7. Description:	8. Part Number:	9. Quantity:	10. Serial Number:	11. Status/Work:	
1	ENGINE	CF6-80E1A4	1	811207	REPAIRED	
12. Remarks: ENGINE RECEIVED LIMITED SCOPE OF WORK AS FOLLOWS:  "REMOVED AND REPLACED ACCESSORY GEARBOX IDG DRIVE PAD CARBON SEAL AND RING ASSY AS PER A330 AMM 7265-41-00-801-A REV 3 DATED 01-JAN-2021"  UNTESTED ENGINE: COMPLETE XTREME AVIATION WO 007793 CARRY FORWARD SHEET PRIOR TO RELEASING ENGINE INTO SERVICE -TOTAL TIME AND CYCLES VERIFIED PER CUSTOMER PROVIDED DOCUMENTS: ENGINE TOTAL TIME: 58,555.38 ENGINE TOTAL CYCLES: 8419  "Xtreme Aviation, LLC. certifies that the work specified in block 11/12 was carried out in accordance with EASA Part-145 and with respect to that work the component is considered ready to release to service under EASA Part-145 Approval Number: "EASA.145.6734"						
13a. Certifies the items identified above were manufactured in conformity to:  <input type="checkbox"/> Approved design data and are in a condition for safe operation. <input type="checkbox"/> Non-approved design data specified in Block 12.			14a. <input checked="" type="checkbox"/> 14 CFR 43.9 Return to Service <input checked="" type="checkbox"/> Other regulation specified in Block 12 Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.			
13b. Authorized Signature:		13c. Approval/Authorization No.:		14b. Authorized Signature:		14c. Approval/Certificate No.:
				 JUAN PANTOJA		4XAR847C
13d. Name (Typed or Printed):		13e. Date (dd/mm/yyyy):		14d. Name (Typed or Printed):		14e. Date (dd/mm/yyyy):
				JUAN PANTOJA		29/JAN/2021
<b>User/Installer Responsibilities</b>						
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.						



14900 NW 42<sup>nd</sup> Ave,  
Hangar 48  
Opa-Locka, FL 33054  
P: (305)526-7400  
F: (305) 526-7402  
juan@Xtreme.Aero

August 25, 2020.

## OPEN ITEMS/CARRY FORWARD STATEMENT


### ESN 811207 CF6-80E1

The subject engine was inspected by Xtreme Aviation under 007793.

Below is a list of open items that require accomplishment prior return to service:

- ECU (ELECTRONIC CONTROL UNIT) REMOVED FROM ESN 811207 REQUIRES RE-INSTALLATION.
- IDG FROM ESN 811207 REQUIRES LEAK AND OPS CK DUE TO REMOVAL.
- IDG CARBON SEAL AND RING REQUIRES LEAK CK DUE TO REPLACEMENT.

Respectfully,

  
A+P 3358502  
Juan Pantoja  
Director of Maintenance



10.OILS	1:	2:	3:	4:	APU: _
11.HYD	A/Y/1:	B/B/2: _	C/G/3: _	12.NO2:	13.Oxy: _
14.LIFT TRUCK	Ty: _	Hr: _	15.Eng Sta:	Ty: _	Hr: _
				16.Other:	Ty: _
					Hr: _

[illegible]

1. EDDY LOPEZ		6.	
2. JHON MOSCOSO		7.	
3.		8.	
4.		9.	
5.		10.	

OVERSIGNED CUSTOMER AGREES TO ALL CHARGES FOR SERVICES AND-OR PRODUCTS RENDERED.

1. Approving Civil Aviation Authority/Country:  FAA/United States		<b>AUTHORIZED RELEASE CERTIFICATE</b> FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG			3. Form Tracking Number:  FL978-30002	
4. Organization Name and Address:   <div style="text-align: center;"> <b>Ascent Aviation Services</b>            24641 Pinal Air Park Road Marana, AZ 85653            FAA Repair Station ERKR675D         </div>					5. Work Order/Contract/Invoice Number:  FL978-30002/2	
6. Item:	7. Description:	8. Part Number:	9. Quantity:	10. Serial Number:	11. Status / Work:	
1	Power Plant	CF6-80E1A4	1	811207	Inspected	
12. Remarks: <span style="float: right;"><b>Approval for Return to Service</b></span> Inspected Power Plant per Customer provided ACI A330 AMM, Rev. 44, Aug. 17, 2019 under PWO# FL978. Engine Power Assurance Run accomplished on W/O# FL978-30001 per ACI A330 AMM 71-00-00-720-812-A. Report attached. Full Gas Path Video Borescope Inspection accomplished by Third Party per ACI A330 AMM 72-00-00 PB 601 CONF 11 with no significant findings noted. Written report attached. Preserved Long Term (On Wing) up to 1 year – Operable Engine per ACI A330 AMM Subtask 72-00-00-620-066-A on W/O# FL978-10011. Reviewed LLP and AD Status as Customer provided. Reports attached. Full Mini-Pack located at <a href="https://gatelesis.box.com/s/2944t4nqfqai72dzx041pkdywlv0ig9j">https://gatelesis.box.com/s/2944t4nqfqai72dzx041pkdywlv0ig9j</a> . Engine removed Boot Strap Method from F-OJSE / MSN 510 RH position under W/O# FL987-30008. <b>NOTE: IDG Garlock Seal leaking into IDG Mount Cavity – IDG removed and mounted in place / replacement Garlock Seal shipped with engine due to lack of special tooling.</b> <b>Oil Tank removed for shipping. Engine requires operational and leak checks after installation per applicable Maintenance Manuals.</b> <b><u>EXCEPTIONS: Specific to Preservation due to parts unavailable – Upper PCB Port drain plug on HMU requires new o-ring PN: 2670890-6. Oil Tank drain plug requires new o-ring PN: M83248-1-912. Main Fuel line drain plug requires new o-ring PN: CA5465-09.</u></b> Current Times and Cycles as reported by Customer. TSN / TSLSV: 58,555.38 / 12,130.03 CSN / CSLSV: 8,419 / 1753 Cycle Limit remaining: 6,581 HPT Rotor / LPT Rotor Shaft <div style="text-align: right;"><b>Total 41 pages of certification documents</b></div>						
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 [product article] is considered ready for release to service under EASA Part-145 Approval Number: EASA.145.4435.						
<b>Limited life parts must be accompanied by maintenance history including total time / total cycles / time since new.</b>						
13a. Certifies the items identified above were manufactured in conformity to:  <input type="checkbox"/> Approved design data and are in a condition for safe operation.  <input type="checkbox"/> Non-approved design data specified in Block 12.			14a. <input checked="" type="checkbox"/> 14 CFR 43.9 Return to Service <input checked="" type="checkbox"/> Other regulations 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.:
				 <b>Rickey Peters</b>		ERKR675D
13d. Name (Typed or Printed):		13e. Date (dd/mm/yy):		14d. Name (Typed or Printed):		14e. Date (dd/mm/yy):
				Rickey Peters		15/Jun/2020

**Installer must cross check eligibility with applicable technical data.**

**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.

**Attachment 3  
To Schedule 8**

Date: March, 14. 2020

To whom it may concern

**Subject: Non-Incident/Accident Statement for Engine model CF6-80E1A4 serial number: 811207**

This serves to confirm that during the operation of the subject engine and its installed external components, we certify the following:

- a) Has not been involved in; an incident or accident, major failure, tire, extreme stress, overheat, operated outside normal operation, immersion in water or salt water or other corrosive agents, parts were not obtained and the engine was not obtained from or used by any Military or Government Agency, or experienced any in-flight shutdown.
- b) Was operated with thrust rating of **66870 lbs @ 86°F at Take-Off (-A4 Rating)**, and have never experienced any abnormal occurrences and no operating limitations have been exceeded.
- c) No Non-OEM approved/Non-TCH Repairs were performed on this Engine or the installed external components.
- d) No PMA parts were installed and/or incorporated on this Engine or the installed external components..
- e) Was only serviced with **Mobil Jet Oil II** oil during the operation.
- f) Was not operated using CIS Fuels and/or Fuel/Additives.
- g) There is no Carry forward/Open Maintenance Items on this Engine and the installed external components.
- h) There is no Deferred Defects associated with this Engine and the installed external components.
- i) No In-House Modifications were performed on this Engine or the installed external components.

Engine status at time of delivery to **AIR CALEDONIE INTERNATIONAL**: ESN: 811207

Engine Total Time: 0      Engine Total Cycles: 0      Date: **Dec.13, 2002**  
On Aircraft: **MSN 0510** - Position: 1 LH, and manufactured by **GENERAL ELECTRIC** at **SEPTEMBER 2002**.

Engine status at time of re-delivery, installed on Aircraft F-OJSE MSN:0510, Position: #2 RH

ESN: **811207**

Engine Total Time: **58 555.38**  
Engine TSLSV: **12 130.03**

Engine Total Cycles: **8419**  
Engine CSLSVN: **1753**

Date: **March, 13. 2020**

**VP Maintenance & Engineering**

(Name)

TESSIERE FABRIC



**VP Safety & Compliance**

(Name)

**Aircalin**

Nouvelle-Calédonie

**CF6-80E1A4****UPDATED 13 March 2020****811207**TSN  
58555CSN  
8419TSLSV / CSLSV  
12130 / 1753

Nomenclature	Part Serial Number	Part Number	Part IIN	Part TSN	Part CSN	Current Part Cycle Limit @ A4 rating	Part Cycles Remaining
<b>FAN ROTOR</b>							
FAN ROTOR DISC (STG 1)	LA095224	1669M75P08	211	58555	8419	20000	11 581
FAN FORWARD SHAFT	TMTMA074	1855M52G01	217	58555	8419	20000	11 581
FAN ROTOR SPOOL (STG 2-5)	VOLJ0100	1782M10G02	21S	35705	5088	20000	14 912
<b>COMPRESSOR ROTOR</b>							
DISK-STG 1 HPCR	BB806401	1644M21P04	311	58555	8419	20000	11 581
DISK-STG 2 HPCR	BB758234	9380M27P08	312	58555	8419	20000	11 581
SPOOL-STG 3-9 HPCR	VOLB7314	1856M15G02	313	58555	8419	20000	11 581
SPOOL SHAFT, 10-14	GWN05864	1703M49G04	316	58555	8419	20000	11 581
SEAL, ROTATING-CDP	NCE6357N	1669M73P02	31T	58555	8419	20000	11 581
<b>HIGH PRESSURE TURBINE</b>							
DISK-STG 1 HPTR	GWN04TRP	1863M36G06	531	58555	8419	15000	6 581
DISK-STG 2 HPTR	MUNBF203	1778M72P05	532	58555	8419	15000	6 581
ROTATING INTER-STAGE SEAL	MUNCP624	1778M69P05	535	35705	5088	15000	9 912
FORWARD OUTER SEAL	NCE8617P	1778M70P03	538	58555	8419	15000	6 581
<b>LOW PRESSURE TURBINE ROTOR</b>							
LPT ROTOR SHAFT	RPM55FFF	1778M39P08	241	58555	8419	15000	6 581
DISK-STG 1 LPTR	FIAALHGM	1639M11P03	57A	58555	8419	20000	11 581
DISK-STG 2 LPTR	FIAALJ6J	1639M12P03	57B	58555	8419	20000	11 581
DISK-STG 3 LPTR	FIAALPAN	1639M13P03	57C	58555	8419	20000	11 581
DISK-STG 4 LPTR	FIAALG09	1639M14P02	57D	58555	8419	20000	11 581
DISK-STG 5 LPTR	FIAALG97	1639M15P03	57E	58555	8419	20000	11 581
SHAFT-TORQUE CONE	BB819300	1639M20P08	57J	58555	8419	20000	11 581
<b>FWD ENGINE MOUNT</b>							
BOLT SHOULDER	RTN00651	1304M26P05		58555	8419	22400	13 981
BOLT SHOULDER	MAU53540	1304M26P05		12130	1753	22400	20 647
BOLT SHOULDER	<b>MAU53615</b>	1304M26P05		12130	<b>1753</b>	22400	20 647

Note: LLP SHAFT P/N CHANGED FROM P04 TO P08 DUE TO COMPLIANCE OF SB 72-0262

Prepared by:

P.BROCHOT  
 Engineering Power Plant & APU  
 Deputy Engineering Office Manager





**Aircalin**

Nouvelle-Calédonie

## EQUIPMENT DOCUMENT STATUS REPORT

**WARNING :** The following report has to be considered as a working document so that information included have to be checked by the Airline prior to any use as an official document.  
In no case, the responsibility of IFR France could be involved if false data would be passed on to Civil Aviation Authorities.

PN: CF6-80E1A4

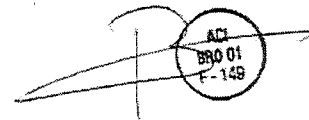
SN: 811207

REPORT DATED ON: MARCH 13, 2020

TSN: 58 555.38

CSN: 8419

Prepared by:  
Philippe brochot  
Deputy Engineering Office Manager



## EQUIPMENT AIRWORTHINESS DIRECTIVE STATUS

A/C Serial Nbr : **000510**      Airborne Hours : **68 286,30FH**      **9 939,00 CY**  
 A/C Type : **A332**      **23 317,97 HAPU**      **17 808,00 CAPU**  
 Report Issue : **17/03/2020**  
 A/C Registration : **F-OJSE**  
 Last Tech Log : **13/03/2020**

Document Number <i>Linked Document</i>	Rev.	Item	P/N <i>Justification</i>	S/N <i>Title</i>	Status	Interval	Threshold	Limit	Which ever is later	Last Performance	Next Due	Remaining
2000-16-12	00	00	CF6-80E1A4	811207	SUP							
			<b>BASIC ENGINE CF6</b> <i>HPCR STAGE 3-9 SPOOLS CRACKING AND SEPARATION. EDDY CURRENT AND ULTRASONIC INSPECTION</i> Replaced by AD 2002-25-08      Rev 00    Item 00									
2002-01-04	00	00	CF6-80E1A4	811207	SUP							
			<b>BASIC ENGINE CF6</b> <i>HPT STAGE 2 NOZZLE INSPECTION</i> Replaced by AD 2004-09-34      Rev 00    Item 00									
2002-06-07	00	02	CF6-80E1A4	811207	N/A	7 000 FH						
			<b>BASIC ENGINE CF6</b> <i>THRUST REVERSER - DIRECTIONAL PILOT VALVE (DPV) PRESSURE CHECK ##### ENGINE #####</i> <i>FOLLOWED THRU A/C AD 2002-06-07 ITEM 00 AND 01.</i>									

## EQUIPMENT AIRWORTHINESS DIRECTIVE STATUS

A/C Serial Nbr : **000510**      Airborne Hours : **68 286,30FH**      **9 939,00 CY**  
 A/C Type : **A332**      **23 317,97 HAPU**      **17 808,00 CAPU**  
 Report Issue : **17/03/2020**  
 A/C Registration : **F-OJSE**  
 Last Tech Log : **13/03/2020**

Document Number <i>Linked Document</i>	Rev.	Item	P/N <i>Justification</i>	S/N <i>Title</i>	Status	Interval	Threshold	Limit	Which- ever is later	Last Performance	Next Due	Remaining
2002-07-12	00	00	CF6-80E1A4	811207	SUP					15/06/2002 INIT		
			<b>BASIC ENGINE CF6</b> CRITICAL LLP'S MANDATORY INSPECTION ..... MANUFACTURER'S LIFE LIMITS SECTION UPDATED INSPECTION AT PIECE-PART OPPORTUNITY Replaced by AD 2009-04-10      Rev 00    Item 00									
2002-10-04	00	00	CF6-80E1A4	811207	N/A							
			<b>BASIC ENGINE CF6</b> LOW PRESSURE TURBINE ROTOR (LPTR) LOW CYCLE FATIGUE AND CRACKING ..... NOT APPLICABLE PER ENGINE MODEL AND PER PART NUMBER INSTALLED ( 1778M39P08 )									
2002-10-08	00	02	CF6-80E1A4	811207	N/A	7 000 FH						
			<b>BASIC ENGINE CF6</b> THRUST REVERSER - IMPROVED DOUBLE P-SEAL CONFIGURATION ### ENGINE ### ..... FOLLOWED THRU A/C AD IAW ITEM 00 & 01.									

Prepared by: Philippe brochot  
 Deputy Engineering Office Manager

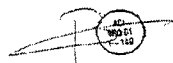


## EQUIPMENT AIRWORTHINESS DIRECTIVE STATUS

A/C Serial Nbr : **000510**      Airborne Hours : **68 286,30FH**      **9 939,00 CY**  
 A/C Type : **A332**      **23 317,97 HAPU**      **17 808,00 CAPU**  
 Report Issue : **17/03/2020**  
 A/C Registration : **F-OJSE**  
 Last Tech Log : **13/03/2020**

Document Number <i>Linked Document</i>	Rev.	Item	P/N <i>Justification</i>	S/N <i>Title</i>	Status	Interval	Threshold	Limit	Which ever is later	Last Performance	Next Due	Remaining
2002-25-08	00	00	CF6-80E1A4	811207	N/A							
			<b>BASIC ENGINE CF6</b> <i>HPCR STAGE 3-9 SPOOLS EDDY CURRENT AND            ULTRASONIC INSPECTION</i> NOT APPLICABLE PER P/N INSTALLED (1856M15G02).									
2003-20-07	00	00	CF6-80E1A4	811207	N/A							
			<b>BASIC ENGINE CF6</b> <i>FPI-FORWARD ENGINE MOUNT PLATFORM</i> NOT APPLICABLE PER PN INSTALLED (1843M82G01) AND ENGINE MODEL (CF6-80E1A2 ONLY)									
2003-26-11	00	00	CF6-80E1A4	811207	CPW					4 897 FH 719 CY 28/07/2004 EC INIT		
			<b>BASIC ENGINE CF6</b> <i>ENGINES - ENGINE FORWARD MOUNT LOADS            REDUCE THE PYLON ATTACHMENT BOLT TORQUE</i> COMPLIED WITH-AMM UPDATED NEW TORQUE APPLIED									

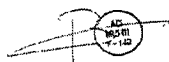
Prepared by: Philippe brochot  
 Deputy Engineering Office Manager



## EQUIPMENT AIRWORTHINESS DIRECTIVE STATUS

A/C Serial Nbr : **000510**      Airborne Hours : **68 286,30FH**      **9 939,00 CY**  
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2003-26-11	00	01	CF6-80E1A4	811207	FAC					17/09/2002 INIT		
			BASIC ENGINE CF6 ENGINES - ENGINE FORWARD MOUNT LOADS REMOVE AND REPLACE LEFT VERTICAL BOLTS BOLT PN 1304M26P05 INSTALLED DURING THE MANUFACTURE POST SB72-0214R01 STD INSTALLED									
2004-04-07	00	00	CF6-80E1A4	811207	SUP							
			BASIC ENGINE CF6 STAGE 1 HPT ROTOR DISK STAGE 1 SUPERSEDED BY AD 2006-16-06 Replaced by AD 2006-16-06 Rev 00 Item 00									
2004-09-34	00	00	CF6-80E1A4	811207	N/A							
			BASIC ENGINE CF6 HPT STAGE 2 NOZZLE INSPECTION NOT APPLICABLE PER P/N INSTALLED: 2086M62G09; 2099M26G13 & 2086M62G10									

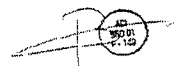


## EQUIPMENT AIRWORTHINESS DIRECTIVE STATUS

A/C Serial Nbr : **000510**      Airborne Hours : **68 286,30FH**      **9 939,00 CY**  
 A/C Type : **A332**      **23 317,97 HAPU**      **17 808,00 CAPU**  
 Report Issue : **17/03/2020**  
 A/C Registration : **F-OJSE**  
 Last Tech Log : **13/03/2020**

Document Number <i>Linked Document</i>	Rev.	Item	P/N <i>Justification</i>	S/N <i>Title</i>	Status	Interval	Threshold	Limit	Which- ever is later	Last Performance	Next Due	Remaining
2005-10-16	00	00	CF6-80E1A4	811207	SUP					9 020 FH 1 328 CY 10/06/2005 INIT		
			BASIC ENGINE CF6 FUEL AND CONTROL-ELECTRONIC CONTROL UNIT E.1.N ( E19A ) SOFTWARE ----- APPLICABLE ESN 811207 Replaced by AD 2007-17-01      Rev 00    Item 00									
2005-17-05	00	00	CF6-80E1A4	811207	N/A							
			BASIC ENGINE CF6 HPCR ROTOR STAGE 11-14 SPOOL SHAFT INSPECTION ----- NOT APPLICABLE PER P/N INSTALLED 1703M49G04									
2005-22-12	00	01	CF6-80E1A4	811207	N/A							
			BASIC ENGINE CF6 ENGINE - TRAS LOCK FLEXIBLE INSPECTION AFTER ALL ABORTED TAKEOFFS ### ENGINE ### ----- FOLLOWED THRU A/C AD ITEM 00.									

Prepared by: Philippe brochot  
 Deputy Engineering Office Manager



## EQUIPMENT AIRWORTHINESS DIRECTIVE STATUS

A/C Serial Nbr : **000510**      Airborne Hours : **68 286,30FH**      **9 939,00 CY**  
 A/C Type : **A332**      **23 317,97 HAPU**      **17 808,00 CAPU**  
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 Last Tech Log : **13/03/2020**

Document Number Linked Document	Rev.	Item	P/N Justification	S/N Title	Status	Interval	Threshold	Limit	Which- ever is later	Last Performance	Next Due	Remaining
2005-23-09	00	00	CF6-80E1A4	811207	N/A	3 700CY						
			<b>BASIC ENGINE CF6</b> ENGINE-MANDATORY FPY INSPECTION HPC CASE PN:1509M97G07 AND 2083M69G03 INCLUDED IN ALS, CHAPTER 05-21-02 NOT APPLICABLE PER PN INSTALLED 1509M97G05									
2006-16-06	00	00	CF6-80E1A4	811207	N/A							
			<b>BASIC ENGINE CF6</b> GE- STAGE 1 HPT ROTOR DISK STAGE 1 PN:1639M41P04 FOR CF6-80E1A4 NOT APPLICABLE PER P/N INSTALLED 1863M36G06.									
2007-11-20	00	00	CF6-80E1A4	811207	CPW					22 850 FH 3 331 CY 27/02/2009 S/V INIT		
			<b>BASIC ENGINE CF6</b> FUEL MANIFOLD-SHROUD RETAINING RINGS AND SNAP RINGS REPLACEMENT COMPLIED WITH ON 27 FEBRUARY 2009 IAW SB73-0075R1									

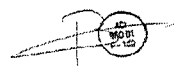
Prepared by: Philippe brochot  
 Deputy Engineering Office Manager



## EQUIPMENT AIRWORTHINESS DIRECTIVE STATUS

A/C Serial Nbr : **000510**      Airborne Hours : **68 286,30FH**      **9 939,00 CY**  
 A/C Type : **A332**      **23 317,97 HAPU**      **17 808,00 CAPU**  
 Report Issue : **17/03/2020**  
 A/C Registration : **F-OJSE**  
 Last Tech Log : **13/03/2020**

Document Number <i>Linked Document</i>	Rev.	Item	P/N <i>Justification</i>	S/N <i>Title</i>	Status	Interval	Threshold	Limit	Which ever is later	Last Performance	Next Due	Remaining
2007-11-20	00	01	CF6-80E1A4	811207	N/A							
			<b>BASIC ENGINE CF6</b> FUEL MANIFOLD-SHROUD RETAINING RINGS AND SNAP RINGS REPLACEMENT ----- NOT APPLICABLE TO NEW FUEL MANIFOLD PN: 2636M06G01 & 2636M07G01 POST SB73-0127 - PERFORMED DURING EGAT SHOP 2016									
2007-17-01	00	00	CF6-80E1A4	811207	CPW					17 130 FH 2 507 CY 13/07/2007 INIT		
			<b>BASIC ENGINE CF6</b> CF6-80E1-ECU SOFTWARE REMOVAL INSTALL NEW SOFTWARE VERSION E.1.O ----- APPLICABLE ESN 811207 SOFTWARE VERSION E1.O LOADED ON ECU SERIAL NUMBER EMDN9240									
2007-18-10	00	00	CF6-80E1A4	811207	REP	6 300CY				46 425 FH 6 666 CY 26/07/2016 BT 01999977	12 966 CY	4 547 CY
			<b>BASIC ENGINE CF6</b> COMPRESSOR REAR FRAME INSPECTION PN:1520M26GXX ( ASSY PN:1519M85G16 ) ----- APPLICABLE PER PN INSTALLED -INSPECTION PERFORMED DURING SHOP EGAT 2016									



## EQUIPMENT AIRWORTHINESS DIRECTIVE STATUS

A/C Serial Nbr : **000510**      Airborne Hours : **68 286,30FH**      **9 939,00 CY**  
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 Report Issue : **17/03/2020**  
 A/C Registration : **F-OJSE**  
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Document Number <i>Linked Document</i>	Rev.	Item	P/N <i>Justification</i>	S/N <i>Title</i>	Status	Interval	Threshold	Limit	Which- ever Is later	Last Performance	Next Due	Remaining
2008-21-11	00	00	CF6-80E1A4	811207	CPW					46 425 FH 6 666 CY 26/07/2016 BT 01999985		
			<b>BASIC ENGINE CF6</b> <i>LPT SKIN DOUBLERS AND DEFLECTORS INSTALLATION</i>  <i>MODIFIED LPT CASE INSTALLED DURING SHOP EGAT 2016</i> <i>INSTALLED PN: 2083M98G03 SN: VOLB6552</i>									
2009-04-10	00	00	CF6-80E1A4	811207	REP					46 425 FH 6 666 CY 16/07/2016	S/N	
			<b>BASIC ENGINE CF6</b> <i>CRITICAL LLP'S MANDATORY INSPECTION</i> <i>PERFORM INSPECTIONS AT EACH PIECE-PART OPPORTUNITY</i> <i>IAW INSTRUCTIONS PROVIDED IN APPLICABLE MANUAL.</i> <i>REFER AD FOR ALL LLP'S EFFECTED.</i> <i>1/ ENGINE MANUAL UPDATED.</i> <i>2/ REFER AD AND SHOP VISIT FOR ALL LLP'S EFFECTED &amp; INSPECTION C/OUT.</i>			S/N						

Prepared by: Philippe brochot  
 Deputy Engineering Office Manager



## EQUIPMENT AIRWORTHINESS DIRECTIVE STATUS

A/C Serial Nbr : **000510**      Airborne Hours : **68 286,30FH**      **9 939,00 CY**  
 A/C Type : **A332**      **23 317,97 HAPU**      **17 808,00 CAPU**  
 Report Issue : **17/03/2020**  
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 Last Tech Log : **13/03/2020**

Document Number <i>Linked Document</i>	Rev.	Item	P/N <i>Justification</i>	S/N <i>Title</i>	Status	Interval	Threshold	Limit	Which- ever is later	Last Performance	Next Due	Remaining
2009-05-02	00	00	CF6-80E1A4	811207	SUP	7 500 FH				36 431 FH 5 257 CY 06/08/2013 ANC INIT		
			BASIC ENGINE CF6 ENGINE FUEL AND CONTROL - (72-00-02) - FUEL MANIFOLD INSPECTION AND CLAMP REPLACEMENT  APPLICABLE ON ESN 811207. Replaced by AD 2014-21-01      Rev 00    Item 00									
2009-07-03	00	00	CF6-80E1A4	811207	N/A							
			BASIC ENGINE CF6 HPCR-SPOOL SHAFT STAGE 14 DISK. ONE TIME INSPECTION ECI NOT APPLICABLE SPOOL SHAFT PN 1703M49G04 FITTED									
2014-21-01	00	00	CF6-80E1A4	811207	TER	7 500 FH				46 425 FH 6 666 CY 26/07/2016 BT 01997784		
			BASIC ENGINE CF6 FUEL MANIFOLD INSPECTION / REMOVAL  N/A FUEL MANIFOLD PN: 2636M07G01 & PN: 2636M06G01 INSTALLED ON ESN: 811207									

Prepared by: Philippe brochot  
 Deputy Engineering Office Manager



## EQUIPMENT AIRWORTHINESS DIRECTIVE STATUS

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 A/C Type : **A332**      **23 317,97 HAPU**      **17 808,00 CAPU**  
 Report Issue : **17/03/2020**  
 A/C Registration : **F-OJSE**  
 Last Tech Log : **13/03/2020**

Document Number <i>Linked Document</i>	Rev.	Item	P/N <i>Justification</i>	S/N <i>Title</i>	Status	Interval	Threshold	Limit	Which- ever is later	Last Performance	Next Due	Remaining
2016-06-14	00	00	CF6-80E1A4	811207	CPW					46 425 FH 6 666 CY 26/07/2016 BT 01999978		
			<b>BASIC ENGINE CF6</b> ROTATING COMPRESSOR DISCHARGE PRESSURE (CDP) SEALS SERRATIONS COATING REPLACEMENT.  ----- PN: 1669M73P02 SN: NCE6357N INSTALLED ON ESN: 811207. INSPECTION PERFORMED DURING EGAT SHOP 2016									
2016-08-10	00	00	CF6-80E1A4	811207	CPW					46 425 FH 6 666 CY 26/07/2016 BT 01999992		
			<b>BASIC ENGINE CF6</b> ACCESSORY HEAT SHIELD ASSEMBLY - REWORK OF ACCESORY SHIELD ASSY FOR TBC PROTECTION IMPROVEMENT  ----- PERFORMED ON ESN 811207 DURING SHOP EGAT 2016. HEAT SHIELD ASSY PN: 2628M55G01 INSTALLED ON ESN: 811207									
99-24-14	00	00	CF6-80E1A4	811207	N/A							
			<b>BASIC ENGINE CF6</b> HPTR STAGE 2 DISKS AND IMPELLER SPACERS LOW CYCLE FATIGUE (LCF) AND CRACKING.  ----- NOT APPLICABLE PER ENGINE MODEL & PN INSTALLED - STG DISK (1778M72P05) AND R88DT TURBINE FITTED									

Prepared by: Philippe brochot  
 Deputy Engineering Office Manager





## EQUIPMENT AIRWORTHINESS DIRECTIVE STATUS

A/C Serial Nbr : 000510

Airborne Hours : 68 286,30FH

9 939,00 CY

A/C Type : A332

23 317,97 HAPU

17 808,00 CAPU

Report Issue : 17/03/2020

A/C Registration : F-OJSE

Last Tech Log : 13/03/2020

Document Number <i>Linked Document</i>	Rev.	Item	P/N <i>Justification</i>	S/N <i>Title</i>	Status	Interval	Threshold	Limit	Which- ever is later	Last Performance	Next Due	Remaining
99-24-15	00	00	CF6-80E1A4	811207	N/A							
<p>BASIC ENGINE CF6 HPCR STAGE 3-9 SPOOLS CRACKING AND SEPARATION.EDDY CURRENT AND ULTRASONIC INSPECTION ----- SUPERSEDED BY AD 2000-16-12 Replaced by AD 2002-25-08 Rev 00 Item 00</p>												

Prepared by: Philippe brochat  
Deputy Engineering Office Manager





**ENGINEERING & MAINTENANCE DEPT.**

Tel: (687) 35 12 72

E-mail: philippe.brochot@aircalin.nc

Ref: BT-2020-25-03-03

Dated: 25.March 2020

Subject. **Statement of Engine Power Thrust Rating.**

TO WHOM IT MAY CONCERN

This statement is to certify the followings,

AIRCALIN hereby confirms that the engine Model : CF6-80E1A4 ESN: 811207 has been used at thrust rating "A4" only since manufacture in Air Calédonie International fleet.

With Best Regards,

Philippe.Brochot

Engineering Power Plant & APU.

Deputy Engineering Office Manager

**ENGINEERING & MAINTENANCE DEPT.**

Tel: (687) 35 12 72

E-mail: philippe.brochot@aircalin.nc

Ref: BT-2020-25-03-05

Dated: 25.March 2020

Subject. **Statement of engine oils used.**

TO WHOM IT MAY CONCERN

This statement is to certify the followings,

AIRCALIN hereby confirms that Oil Mobil Jet Oil II approved MIL-PRF-23699-STD has been used on engine Model : CF6-80E1A4 ESN: 811207 since manufacture.

With Best Regards,  
Philippe.Brochot  
Engineering Power Plant & APU.  
Deputy Engineering Office Manager



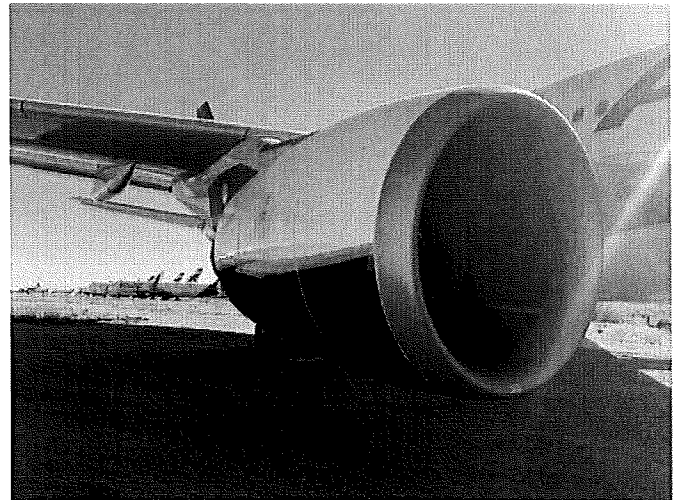
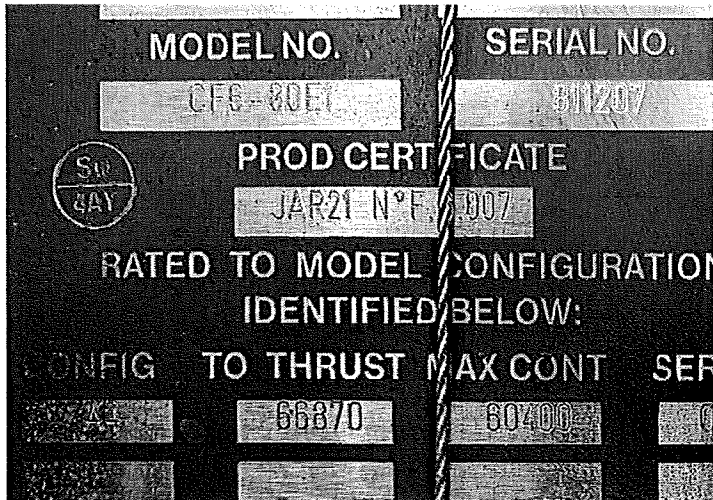


**SAS** service AERO SOLUTIONS, LLC

37731 S. Cactus Garden Way, Marana, Arizona, 85658 USA (TEL)+1.520.465.7706  
Specializing Worldwide in Borescope Inspections and Boreblend Repairs

**FOR: GA Telesis, LLC.** 1850 NW 49th St., Fort Lauderdale, FL 33309, USA

ESN:	811207	POSITION:	RH	ENG TYPE:	CF6-80E1A4	DATE:	17 April 2020
A/C MODEL:	A330-200	A/C MSN:	510	REG.#	F-OJSE	REASON:	CONDITIONAL INSPECTION
JOB SITE:	Ascent Aviation, Marana, Arizona, USA				WORK ORDER:	WO-04-20-1575	



#### Exterior Inspection

No significant discrepancies noted during cursory walkaround inspection.

#### Compressor Cases

No significant discrepancies noted during cursory walkaround inspection.

#### Accessory Drive Gearbox

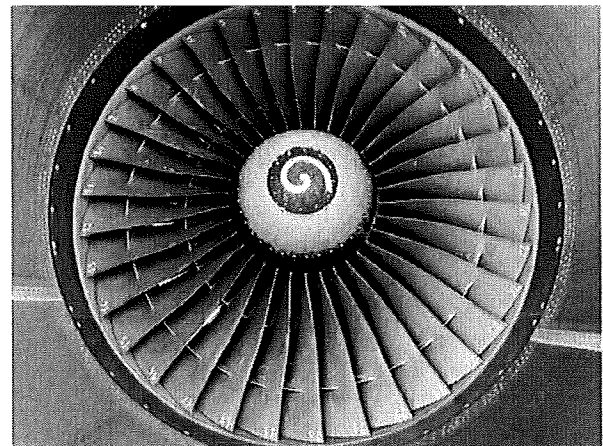
No significant discrepancies noted during cursory walkaround inspection.

#### Exhaust Cases

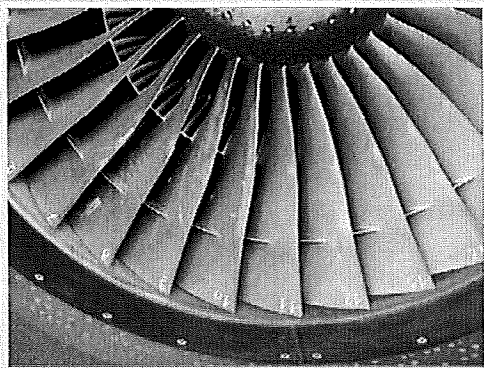
No significant discrepancies noted during cursory walkaround inspection.

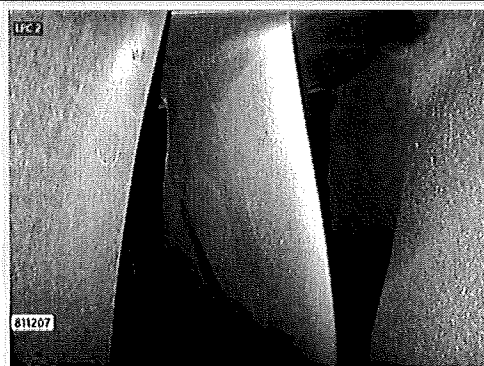
#### Exhaust Cone


No significant discrepancies noted during cursory walkaround inspection.



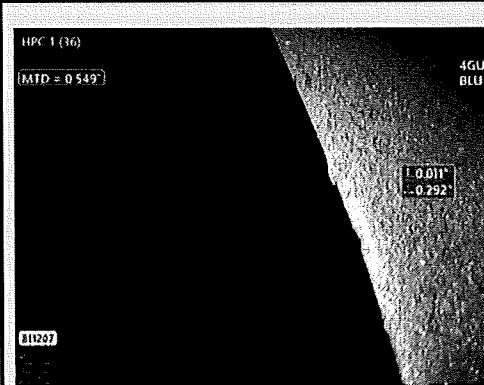
**LOW PRESSURE COMPRESSOR BSI**

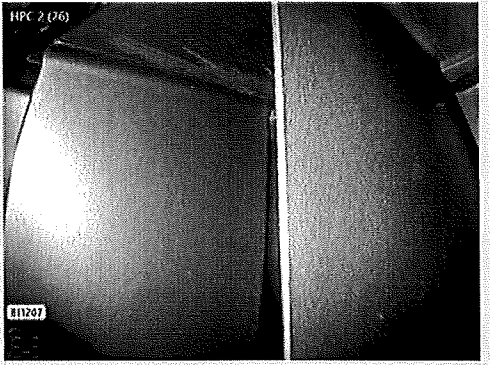
Low Pressure Stage:	Comments	
LPC Fan	No significant discrepancies noted. Some leading edge erosion observed.	
Inspected:		
Yes		
Serviceable:		
Yes		


Low Pressure Stage:	Comments	
LPC Stage 2	No significant discrepancies noted. Leading edge erosion and atmospheric buildup observed.	
Inspected:		
Yes		
Serviceable:		
Yes		

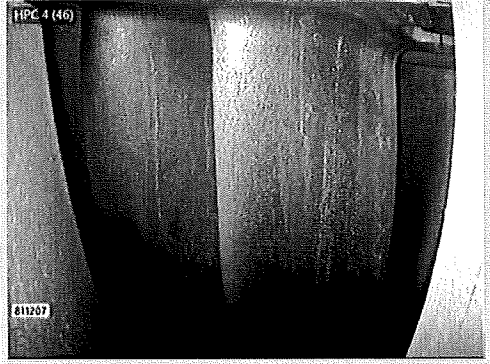
Low Pressure Stage:	Comments	
LPC Stage 5	No significant discrepancies noted at this time.	
Inspected:		
Yes		
Serviceable:		
Yes		

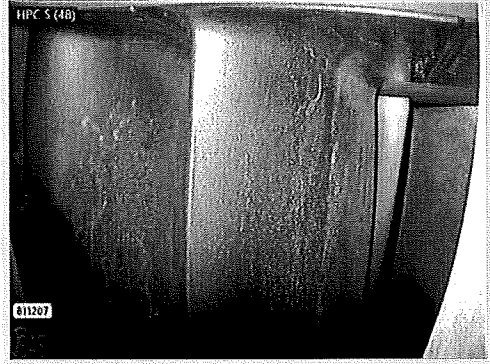
**HPC PRESSURE COMPRESSOR BSI**

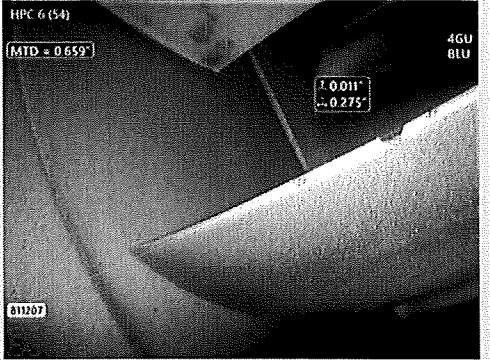
High Pressure Stage:	Comments	
HPC Stage 1	Some minor leading edge impacts observed that were measured and verified to be within AMM limits. <b>ACCEPT</b> Per A330 AMM Chap. 72-00-00 Pg. 49 attached for reference.	
Inspected:		
Yes		
Serviceable:		
Yes		

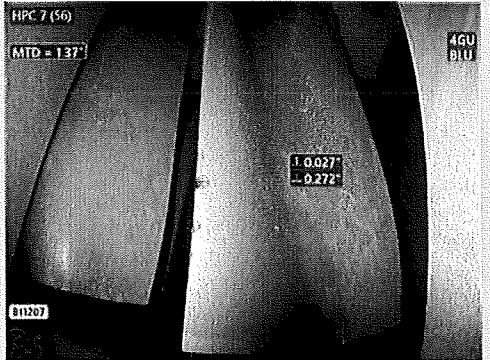
High Pressure Stage:	Comments	
HPC Stage 2	No significant discrepancies noted at this time.	
Inspected:		
Yes		
Serviceable:		
Yes		

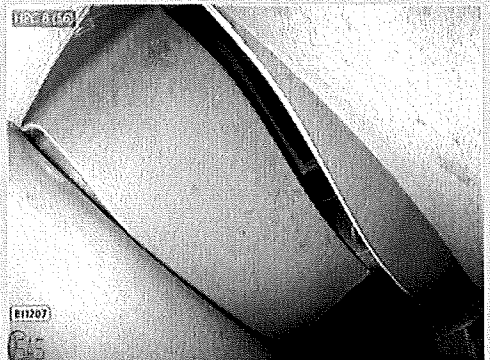
High Pressure Stage:	Comments	
HPC Stage 3	Some leading edge erosion and environmental buildup observed. No significant discrepancies noted at this time.	
Inspected:		
Yes		
Serviceable:		
Yes		

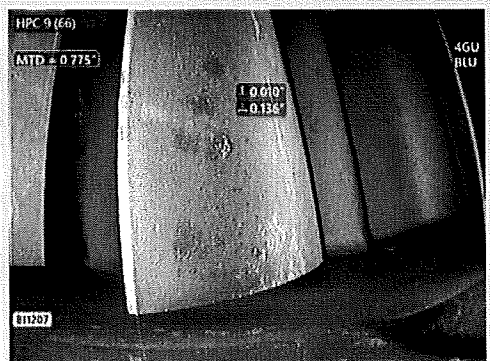
High Pressure Stage:	Comments	
HPC Stage 4	No significant discrepancies noted at this time. Some atmospheric deposit observed.	
Inspected:		
Yes		
Serviceable:		
Yes		

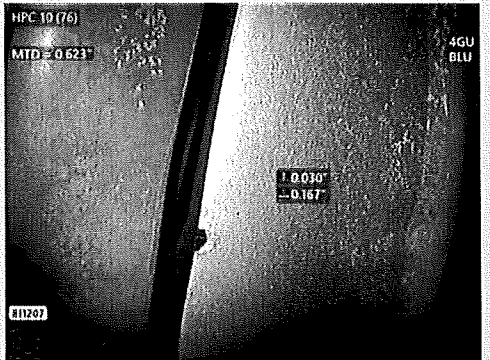
High Pressure Stage:	Comments	
HPC Stage 5	No significant discrepancies noted at this time. Some atmospheric deposit observed.	
Inspected:		
Yes		
Serviceable:		
Yes		

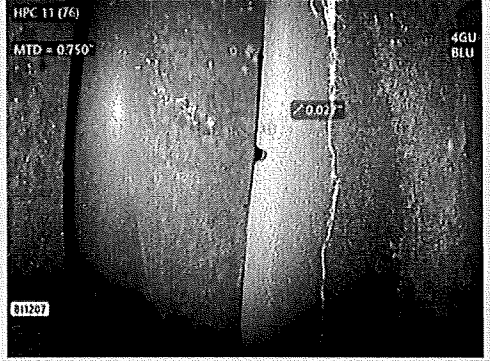
High Pressure Stage:	Comments	
HPC Stage 6	Some minor leading edge impacts observed that were measured and verified to be within AMM limits. <b>ACCEPT</b> Per A330 AMM Chap. 72-00-00 Pg. 49 attached for reference.	
Inspected:		
Yes		
Serviceable:		
Yes		

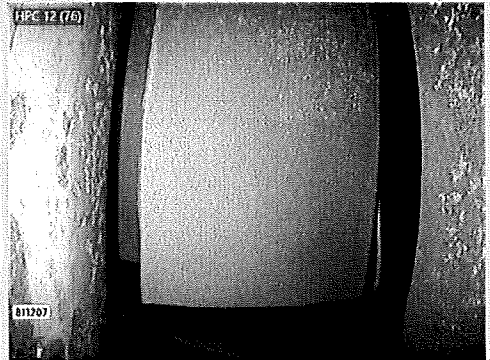
High Pressure Stage:	Comments	
HPC Stage 7	Some minor leading edge impacts observed that were measured and verified to be within AMM limits. <b>ACCEPT</b> Per A330 AMM Chap. 72-00-00 Pg. 49 attached for reference.	
Inspected:		
Yes		
Serviceable:		
Yes		

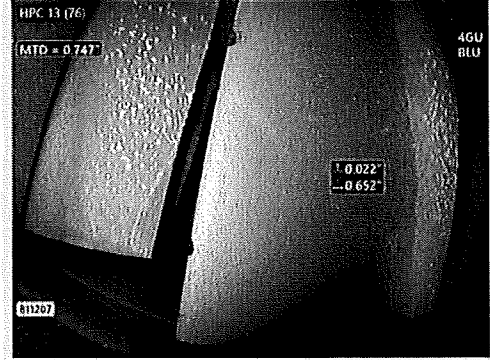
High Pressure Stage:	Comments	
HPC Stage 8	No significant discrepancies noted at this time.	
Inspected:		
Yes		
Serviceable:		
Yes		

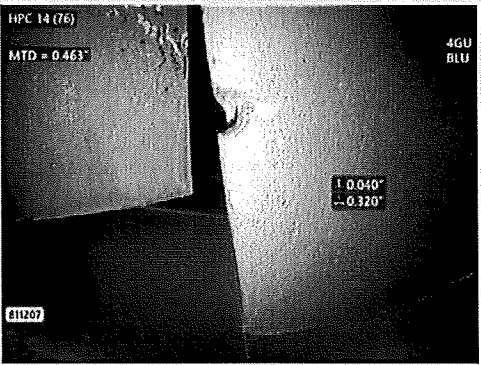

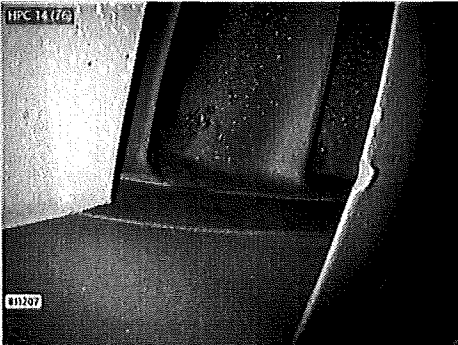
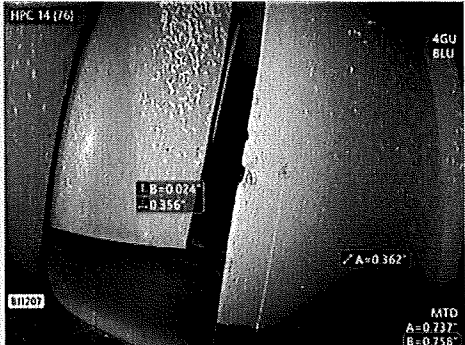
High Pressure Stage:	Comments	
HPC Stage 9	Some minor leading edge impacts observed that were measured and verified to be within AMM limits. <b>ACCEPT</b> Per A330 AMM Chap. 72-00-00 Pg. 49 attached for reference.	
Inspected:		
Yes		
Serviceable:		
Yes		

High Pressure Stage:	Comments	
HPC Stage 10	Some minor leading edge impacts observed that were measured and verified to be within AMM limits. <b>ACCEPT</b> Per A330 AMM Chap. 72-00-00 Pg. 49 attached for reference.	
Inspected:		
Yes		
Serviceable:		
Yes		

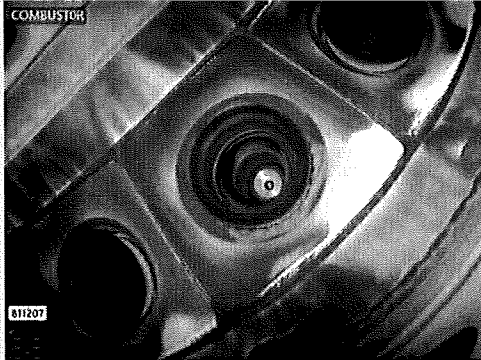
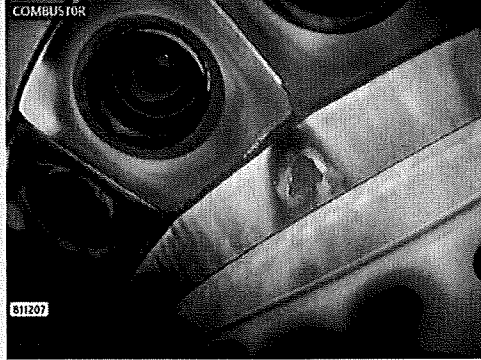
High Pressure Stage:	Comments	
HPC Stage 11	Some minor leading edge impacts observed that were measured and verified to be within AMM limits. <b>ACCEPT</b> Per A330 AMM Chap. 72-00-00 Pg. 49 attached for reference.	
Inspected:		
Yes		
Serviceable:		
Yes		

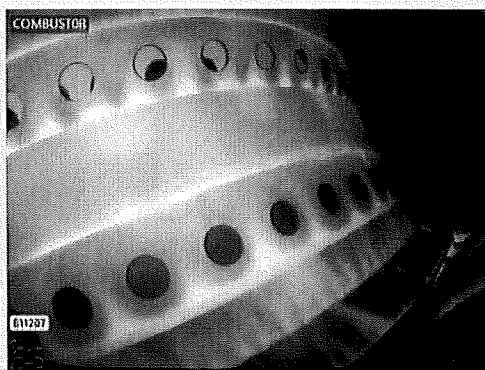
High Pressure Stage:	Comments	
HPC Stage 12	No significant discrepancies noted at this time. Some previous shop blends observed.	
Inspected:		
Yes		
Serviceable:		
Yes		

High Pressure Stage:	Comments	
HPC Stage 13	Some minor leading edge impacts observed that were measured and verified to be within AMM limits. <b>ACCEPT</b> Per A330 AMM Chap. 72-00-00 Pg. 49 attached for reference.	
Inspected:		
Yes		
Serviceable:		
Yes		

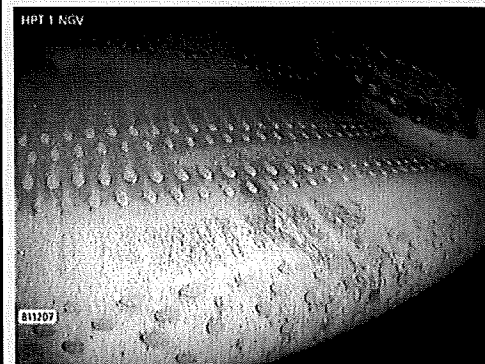
High Pressure Stage:	Comments	
HPC Stage 14	Some minor leading edge impacts observed. Few blades (less than 6) were observed to have some nicks with displaced material and a small associate tear within .500" of the blade tip. All defects were verified to be within AMM limits. <b>ACCEPT</b> Per A330 AMM Chap. 72-00-00 Pg. 49 attached for reference.	
Inspected:		
Yes		
Serviceable:		
Yes		
		  

**COMBUSTOR BSI**

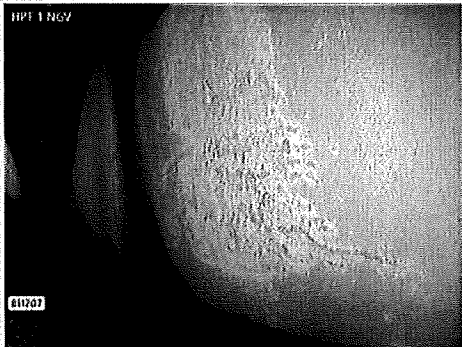
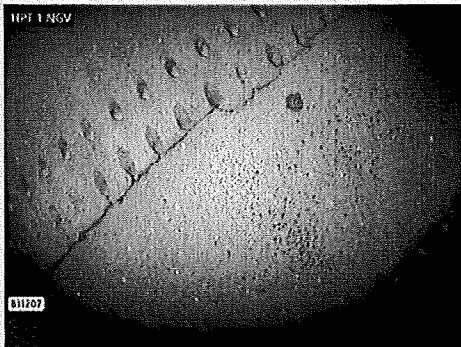
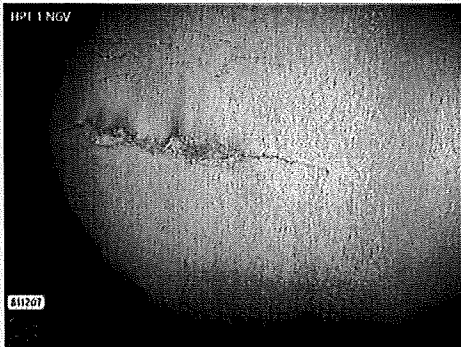
Combustor:	Comments	
Bulkhead, Deflectors and Fuel Nozzles	Some light surface and coating erosion observed to splash plate and dome area. <b>ACCEPT</b> Per A330 AMM Chap. 72-00-00 Pg. 70 attached for reference.	
Inspected:		
Yes		
Serviceable:		
Yes		
		

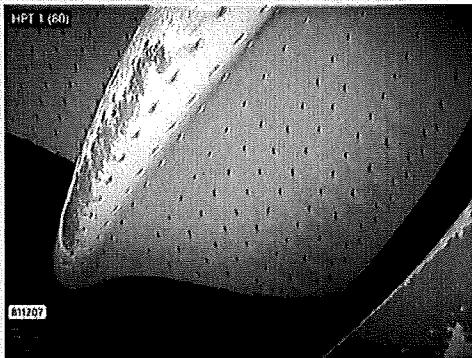
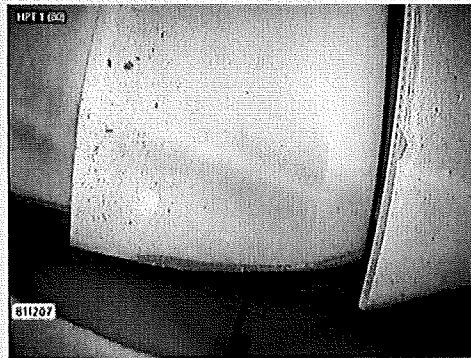
Combustor:	Comments	
Inner and Outer Liners	Some light surface discoloration observed. <b>ACCEPT</b> Per A330 AMM Chap. 72-00-00 Pg. 71 attached for reference.	
Inspected:		
Yes		
Serviceable:		
Yes		


**HIGH PRESSURE TURBINE STAGE 1 BSI**

High Pressure Turbine:	Comments	
HPT1 NGV	Several vanes observed with tight leading edge cracks, concave side radial cracks, convex cracking and burning, and trailing edge burns. Some cracking observed to the platforms that has no associated missing material. All findings were verified to be within AMM limits. <b>ACCEPT</b> Per A330 AMM Chap. 72-00-00 Pg. 215, Pg. 216, and Pg. 217 attached for reference.	
Inspected:		
Yes		
Serviceable:		
Yes		

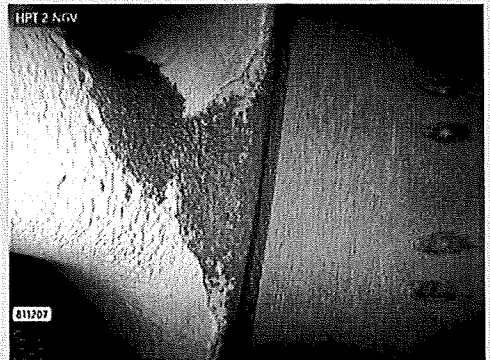
  

		
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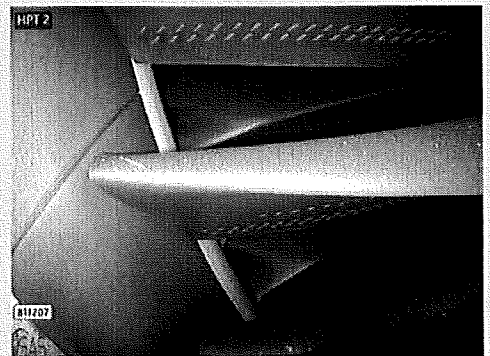
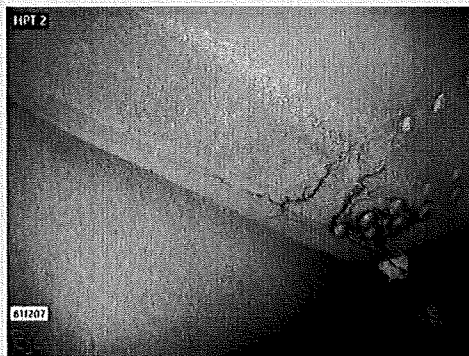
High Pressure Turbine:	Comments	
HPT1 Blades	Several blades observed with TBC (Thermal Barrier Coating) loss and erosion. <b>ACCEPT</b> Per A330 AMM Chap. 72-00-00 Pg. 93 attached for reference.	 
Inspected:		
Yes		
Serviceable:		
Yes		

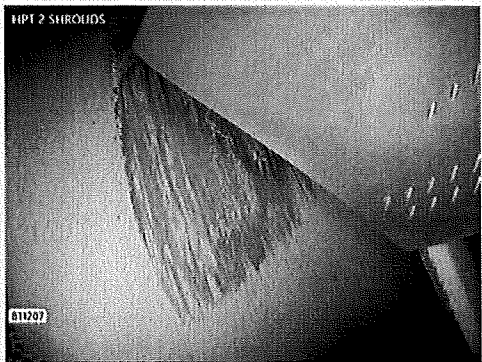
High Pressure Turbine:	Comments	
HPT1 Shrouds	Numerous axial cracks observed on several shrouds. This condition is acceptable in any amount. <b>ACCEPT</b> Per A330 AMM Chap. 72-00-00 Pg. 217 attached for reference.	
Inspected:		
Yes		
Serviceable:		
Yes		

**HIGH PRESSURE TURBINE STAGE 2 BSI**

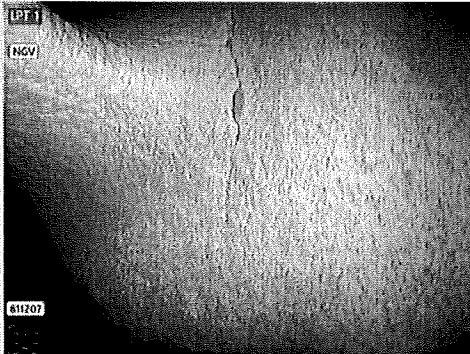
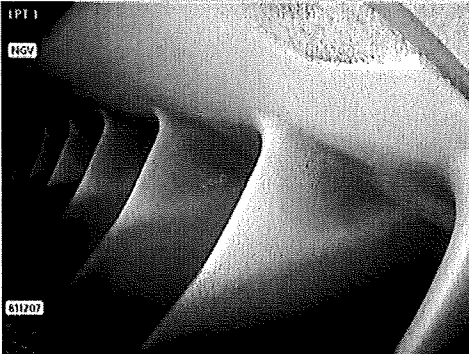
High Pressure Turbine:		
HPT2 NGV's	Numerous vanes observed with TBC (Thermal Barrier Coating) erosion. Some tight cracks observed along the platform mating faces. Some cracks were observed around the borescope port. These cracks are considered to be outer platform cracks between the vanes. All of these cracks measured less than .150" in length and are therefore acceptable in any number. <b>ACCEPT</b> Per A330 AMM Chap. 72-00-00 Pg. 219 attached for reference.	
Inspected:		
Yes		
Serviceable:		
Yes		

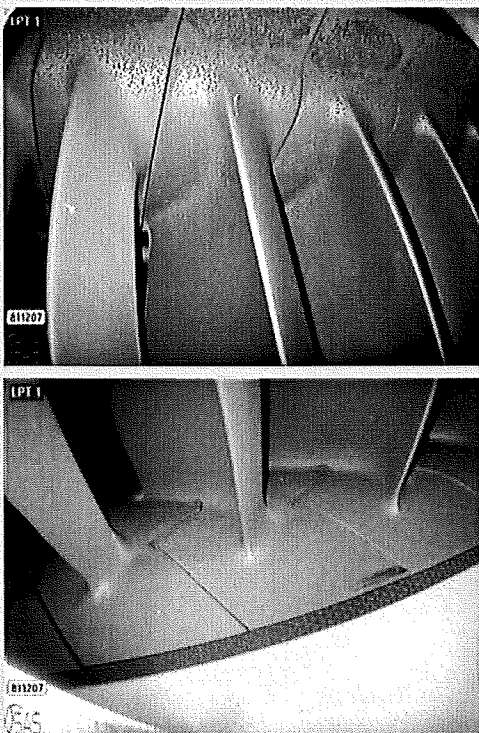
High Pressure Turbine:	Comments
HPT2 Blades	No significant discrepancies noted. Some previous tip repairs and surface stains observed.
Inspected:	
Yes	
Serviceable:	
Yes	


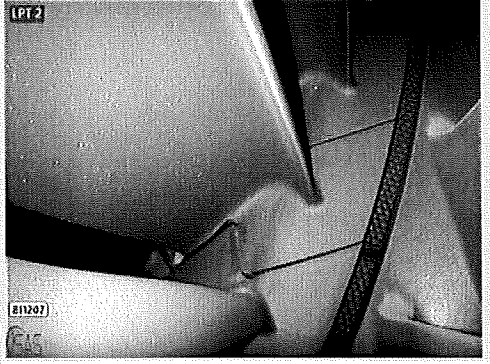


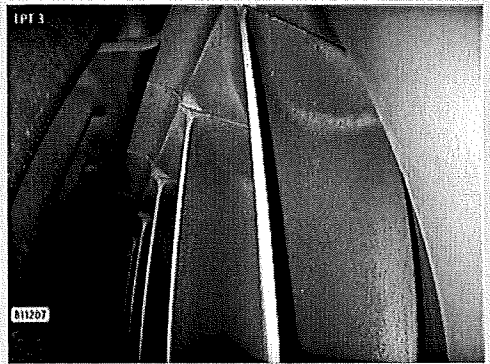
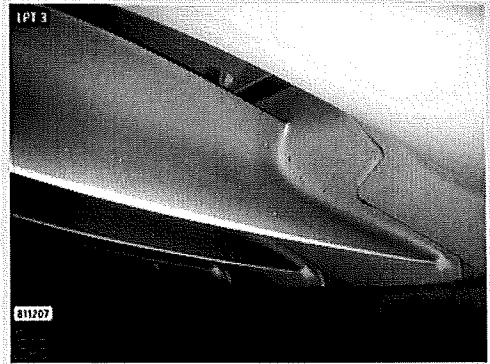
High Pressure Turbine:	Comments	
HPT2 Shrouds	Some light surface rub observed. No significant discrepancies noted at this time.	
Inspected:		
Yes		
Serviceable:		
Yes		

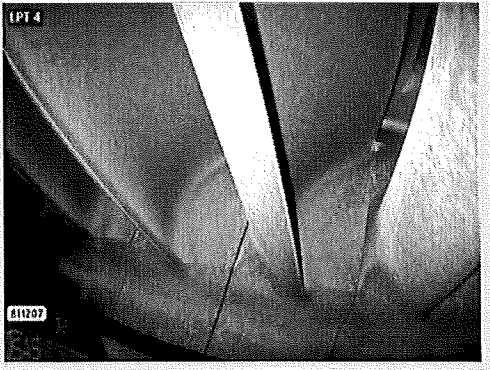
**LOW PRESSURE TURBINE BSI**

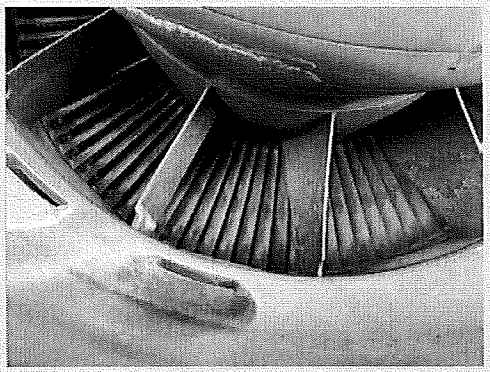
Low Pressure Turbine:	Comments	
LPT Stage 1 NGV	Numerous vanes observed with tight coating/ craze cracks on the platform and near the leading edge fillet radius. No significant defects or parent material damage observed.	
Inspected:		
Yes		
Serviceable:		
Yes		
		

Low Pressure Turbine:	Comments	
LPT Stage 1 Blades	Some coating discoloration observed. Some rubs observed to the top surface of the seal lip. All rubbed areas were less than 50% of their respective seal lips. <b>ACCEPT</b> Per A330 AMM Chap. 72-00-00 Pg. 113 attached for reference.	
Inspected:		
Yes		
Serviceable:		
Yes		

Low Pressure Turbine:	Comments	
LPT Stage 2 Blades	No significant discrepancies noted at this time.	
Inspected:		
Yes		
Serviceable:		
Yes		
		

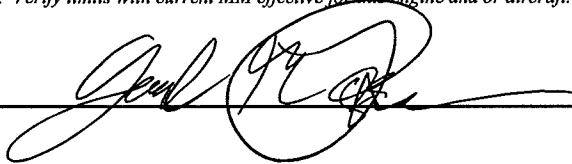
Low Pressure Turbine:	Comments	
LPT Stage 3 Blades	No significant discrepancies noted at this time.	
Inspected:		
Yes		
Serviceable:		
Yes		
		

Low Pressure Turbine:	Comments	
LPT Stage 4 Blades	No significant discrepancies noted at this time. Some coating discoloration and environmental deposit observed.	
Inspected:		
Yes		
Serviceable:		
Yes		

Low Pressure Turbine:	Comments	
LPT Stage 5 Blades	No significant discrepancies noted as viewed from the exhaust.	
Inspected:		
Yes		
Serviceable:		
Yes		

*This report and the accompanying video is submitted on behalf of Service Aero Solutions, LLC (SAS) and subject to the condition that it is understood and agreed that the contents are based on diligent inspection and are exclusive of latent defects in materials, rigging, or systems not detectable without removal or disassembly; but are believed to be correct and are fairly representative of the condition of the engine at the time of inspection and prior to any operation. Furthermore, the client acknowledges that SAS' liability with regards to the work performed is limited to the amount of the invoice. This BSI report is submitted without prejudice and in confidence to the named client and is without responsibility to others to whom it may be shown. This report is void if altered in any way. The engine(s) inspected were prepared for borescope and returned to original condition by another facility contracted by the client and not affiliated with SAS. Maintenance Manual pages attached to this report, if any, are uncontrolled and are for general reference only. Verify limits with current MM effective for this engine and or aircraft.*

SIGNATURE



Jared M. Palmer A&amp;P 3235584

**AIRBUS**

Customer : ACI

Type : A330.\*

Rev. Date : Aug 17, 2019

Manual : AMM

Selected applicability : ALL

72-00-00 PB 601 CONF 11 - ENGINE - GENERAL - INSPECTION/CHECK

Stages	Condition	Notes	Maximum Serviceable Limits
1-2, 4-9	Tears, nicks, cracks, missing material and dents on the leading and trailing edges.	*[1], *[2], *[3], *[4]	All nicks, missing material and dents are permitted if not more than 0.05 in. (1.27 mm) in depth, and the blade is not torn or bent. Torn or cracked edges are not permitted.
3	Tears, nicks, cracks, missing material and dents on the leading and trailing edges.	*[1], *[3], *[4]	No damage permitted in outer 2 in. (50.80 mm) of blade. For the rest of the blade, all other limits apply.
END OF POST GE SB 72-156			
10-12	Tears, nicks, cracks, missing material and dents on the leading and trailing edges.	*[3], *[4]	If the damage is less than 0.30 in. (7.62 mm) from the tip: all nicks, missing material and dents are permitted if not more than 0.05 in. (1.27 mm) in depth. The blade must not be torn, cracked or bent. Nicks, dents and missing material less than 0.12 in. (3.05 mm) in depth, or cracks and tears less than 0.12 in. (3.05 mm) in length are permitted if no more than six blades in each stage are damaged. If the damage is more than 0.299 in. (7.59 mm) from the tip: Any number of nicks, missing material and dents up to 0.0499 in. (1.27 mm) maximum depth are serviceable. The blade must not be torn or bent. Torn or cracked edges greater than 0.299 in. (7.59 mm) from the tip are not serviceable.
END OF PRE GE SB 72-156			
12-14	Cracks	*[1]	The cracks must be in a radial direction along the tip of the blade.
13-14	Nicks, dents and missing material on the leading and the trailing edges.	*[3]	Permitted, if less than 0.05 in. (1.27 mm) in depth.
13-14	Nicks, dents, missing material, tears and cracks on the leading and trailing edges, less than or equal to 0.5 in. (12.70 mm) from the blade tip.	*[3]	A maximum of six blades per stage are permitted, if less than 0.120 in. (3.05 mm) in depth.
13-14	Tears, cracks and bends on the leading and trailing edges, greater than 0.50 in. (12.70 mm) from the blade tip.	*[3]	Not permitted.

**NOTE:** \*[1] All limits for the leading edge of the blade apply to the area from the leading edge to 0.199 in. (5.05 mm) from the leading edge. All limits for the trailing edge of the blade apply to the area from the trailing edge of the blade to 0.199 in. (5.05 mm) from the trailing edge.

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**AIRBUS**

Customer : ACI  
 Type : A330.\*  
 Rev. Date : Aug 17, 2019

Manual : AMM  
 Selected applicability : ALL

72-00-00 PB 601 CONF 11 - ENGINE - GENERAL - INSPECTION/CHECK

- (2) Dome plate and if visible, the dome plate cooling holes as follows:  
 (Ref. Fig. Combustion Chamber Dome Plate Inspection SHEET 1)

NOTE: The dome plate cooling holes are visible after splash plate missing material occurs.

INSPECT/CHECK	MAXIMUM SERVICEABLE LIMITS	REMARK
Discoloration	Any amount permitted.	
Carbon accumulation	Any amount permitted.	
Missing, chipped or spalled areas of the thermal barrier coating	Any amount permitted.	
Dome plate radial cracks in the cooling holes area	Any amount permitted if they do not connect with other cracks.	See the continue-in-service limits (Ref. AMM TASK 72-00-00-200-831) .
Inner and outer region of dome plate radial cracks	Any amount permitted if they do not connect with other cracks.	See the continue-in-service limits (Ref. AMM TASK 72-00-00-200-831) .
Dome plate circumferential cracks in the cooling holes area	Any amount permitted if less than 0.50 in. (12.70 mm) in length. Up to two cracks permitted if they are less than 1 in. (25.40 mm) in length and there is 2.5 in. (63.50 mm) or more between the cracks.	See the continue-in-service limits (Ref. AMM TASK 72-00-00-200-831) .
Inner and outer region of dome plate circumferential cracks	Any amount permitted if less than 0.50 in. (12.70 mm) in length. Up to two cracks permitted if they are less than 1 in. (25.40 mm) in length and there is 2.5 in. (63.50 mm) or more between the cracks.	See the continue-in-service limits (Ref. AMM TASK 72-00-00-200-831) .
Missing metal (overhangs)	Five damaged areas are permitted on each dome plate overhang, if less than 0.5 in. (12.70 mm) in radial depth and 1 in. (25.40 mm) in circumferential length.	See the continue-in-service limits (Ref. AMM TASK 72-00-00-200-831) .
Burn-through holes in the dome plate	Any amount of burn-through areas if the total area is not more than 0.40 in.2 (258.06 mm2) and no single burn through area is more than 0.2 in.2 (129.03 mm2).	See the continue-in-service limits (Ref. AMM TASK 72-00-00-200-831) .
Inner and outer band cracks	Not permitted.	See the continue-in-service limits (Ref. AMM TASK 72-00-00-200-831) .

- (3) Dome sleeve as follows:

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 Type : A330.\*  
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Manual : AMM  
 Selected applicability : ALL

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INSPECT/CHECK	MAXIMUM SERVICEABLE LIMITS	REMARK
Discoloration	Any amount permitted.	No maintenance necessary.
Carbon accumulation	Any amount permitted.	No maintenance necessary.
Distortion	Any amount permitted.	No maintenance necessary.

- (4) Inner/outer combustion liner panels for:  
 (Ref. Fig. Combustion Chamber Assembly Inspection SHEET 1)  
 (Ref. Fig. Combustion Section - Combustion Outer/Inner Liner Inspection)

NOTE: A closed or decreasing combustor liner overhang gap shortens the life span of the combustor, leading to distortion or burn-through.

NOTE: If a dilution hole is contained in the damaged area, include the dilution hole in the area created.

NOTE: It is recommended at first report of inner liner burn-through to do a borescope inspection of the stage-1 high pressure turbine nozzle.

NOTE: It is recommended at first report of outer liner burn-through to do a borescope inspection of the stage-1 high pressure turbine nozzle.

INSPECT/CHECK	MAXIMUM SERVICEABLE LIMITS	REMARK
Axial cracks	Any number of cracks less than one panel is permitted. No more than 30 cracks of one panel length per liner are permitted. No more than seven cracks that extend across two panels per liner are permitted.  Any two panel cracks must have a borescope inspection every 200 cycles to make sure that the crack does not increase. Cracks more than two panels are not permitted. Axial cracks interconnected with any other cracks are not permitted.	See over-serviceable limit extensions (Ref. AMM TASK 72-00-00-200-831) .
Circumferential cracks in panels with dilution holes	Any number permitted if the cracked area between two dilution holes is next to at least three adjacent areas, between dilution holes, that have no cracks.	See over-serviceable limit extensions (Ref. AMM TASK 72-00-00-200-831) .
Connected cracks	Not permitted.	See over-serviceable limit extensions (Ref. AMM TASK 72-00-00-200-831) .

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**AIRBUS**

Customer : ACI  
 Type : A330.\*  
 Rev. Date : Aug 17, 2019

Manual : AMM  
 Selected applicability : ALL

72-00-00 PB 601 CONF 11 - ENGINE - GENERAL - INSPECTION/CHECK

INSPECT/CHECK	MAXIMUM SERVICEABLE LIMITS	REMARK
NOTE: This type of damage (material gone from the leading edge tip) is the result of shroud distortion from heat.		
B.Axial and radial cracks in area A related to parent metal that is gone because of oxidation. 1st Stage High Pressure Turbine Rotor Blade Inspection	Not permitted.	
C.Axial and radial cracks in area A related to impact damage	Permitted if they do not extend out of the leading edge.	
D.Radial cracks out of the leading edge holes in area B.	Any number provided they do not connect three holes and do not turn into the axial direction.	
E.Axial cracks in area B.	Not serviceable.	
F.Nicks and dents in area A.	Any amount provided damage or resultant cracking does not extend past the gill holes.	
G.Nicks and dents in area B. 1st Stage High Pressure Turbine Rotor Blade Inspection	Any amount provided damage or resultant cracking does not extend past the gill holes and is not associated with tears, missing material or cracking.	
H.Material that is gone.	One piece per blade not larger in diameter than the span between two leading edge holes or 0.24 in. (6.0960 mm) provided it is not below the fifth concave gill hole from the top and there is no associated cracking. The internal leading edge crossover wall must be intact. Only three blades per rotor set.	
J.Missing TBC.	Any Amount Permitted.	
K.Parent Metal Oxidation-Rough surface with green and/or black coloration.	Any Amount Permitted. Decrease the borescope inspection level to half of the standard recommended interval.  NOTE: Further decreases in re-inspection intervals may be needed based on each operator experience.	Look for axial cracks adjacent to the oxidized area.
L.Maximum service extension for leading edge:		
The area above the 4th hole from the platform for cracks, nicks, and dents due to impact with no missing material allowed.	10 cycles.	

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**AIRBUS**

Customer : ACI  
 Type : A330.\*  
 Rev. Date : Aug 17, 2019

Manual : AMM  
 Selected applicability : ALL

72-00-00 PB 601 CONF 11 - ENGINE - GENERAL - INSPECTION/CHECK

INSPECT/CHECK	MAXIMUM SERVICEABLE LIMITS	REMARK
D. Cracks in dented areas	Any number provided that the crack is confined to the distressed area and that there are no cracks out or away from the distressed area. Maximum crack length 0.38 in. (9.6520 mm) long.	
3. Concave and convex surfaces for:		
A. Nicks and dents	Any number 0.03 in. (0.7620 mm) deep, minimum separation 0.25 in. (6.3500 mm) with no protrusions on opposite side. 5 dents per side with maximum protrusions of 0.02 in. (0.5080 mm) on the opposite side.	
4. Top surface of blade platform (not including blade root radius) for:		
A. Nicks and dents	Any number, 0.02 in. (0.5080 mm) deep.	
5. Inspect shroud circumferential mate faces for: Low Pressure Turbine Shroud Circumferential Inspection SHEET 1		
A. Wear (irregular or jagged)	Permitted if there are no irregular or jagged signs of wear on the interlock area of the mate face.	
6. Inspect the shroud interlocks for:		
A. Wear (irregular or jagged)	Not serviceable.	
B. Wear, with loss of axial preload	Not serviceable, if there is no axial preload.	
C. Shingled or unlatched	Not serviceable. If interlocks can be unshingled or relatched with axial preload present, then blades are serviceable.	
7. Inspect the seal lips for: Typical Low Pressure Turbine Rotor Blade Inspection SHEET 1		
A. Rubs, turned or missing material	Any amount up to 50 percent of seal lip.	
(1) Maximum service extensions for LPT rotor are:		
<ul style="list-style-type: none"> <li>10 cycles for 1st thru 4th stage blades, any amount of tip shroud interlock wear is allowed. Missing airfoils or missing tip shrouds are allowed, provided missing material or cracks do not exceed 50 percent of the cord width of blade and 25 percent of chord width in the inner half of the blade.</li> <li>5 cycles for 5th stage blades, any amount of tip shroud interlock wear is allowed. One</li> </ul>		

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**AIRBUS**

Customer : ACI	Manual : AMM
Type : A330.*	Selected applicability : ALL
Rev. Date : Aug 17, 2019	
72-00-00 PB 601 CONF 11 - ENGINE - GENERAL - INSPECTION/CHECK	

- (2) Install an ACCESS PLATFORM 1M(3 FT).  
 (3) Remove borescope plugs:

**CAUTION:** MAKE SURE THAT YOU PUT LABELS ON THE BORESCOPE PLUGS. ENGINE DAMAGE CAN OCCUR IF THE BORESCOPE PLUGS ARE NOT PUT BACK IN THE CORRECT LOCATIONS.

- (a) Remove borescope plugs B2-1 through B2-4.  
 (Ref. Fig. Engine Borescope Port Locations SHEET 1)

**NOTE:** Removal of the ECS duct can be necessary for easier access to the borescope plug B2-4.

**NOTE:** If it is necessary to remove the borescope port B2-5, you must first remove the ECS duct.

**NOTE:** To inspect the 1st and 2nd stage rotors and shrouds, and 2nd stage nozzle, remove borescope plugs B3-1 and B3-2.

Subtask 72-00-00-480-069-A

H. Install N2 rotation equipment (Ref. AMM TASK 72-00-00-860-802) .

#### 4. Procedure

Subtask 72-00-00-290-115-A

- A. Borescope inspect the 1st stage High Pressure Turbine (HPT) nozzle for:  
 (Ref. Fig. 1st Stage High Pressure Turbine Nozzle Vane Inspection SHEET 1)

**NOTE:** During borescope inspection, plugged cooling holes are permitted if the damage from cracks, erosion, and burns are within the permitted limits.

INSPECT/CHECK	MAXIMUM SERVICEABLE LIMITS	REMARK
1. Inspect the leading edge of the vane airfoil for:		
A. Cracks interconnecting nose holes	Any number if no material is gone. See for maximum serviceable extension.	
B. Cracks propagating from nose holes, but not interconnecting nose holes	Any number if no material is gone. See maximum serviceable extension.	
C. Burns or erosion	Permitted if the maximum loss of material or burns (that are fully through the metal) are not more than 0.3 in.2 (194.0 mm2) for each vane. A maximum of four vanes in a 90 degree arc can have this damage. If adjacent vanes have damage, replace the three fuel nozzles that are upstream of the damaged area within the next 100 flight cycles. See maximum serviceable extension.	

Print Date: April 15, 2020

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**AIRBUS**

Customer : ACI

Type : A330.\*

Rev. Date : Aug 17, 2019

Manual : AMM

Selected applicability : ALL

72-00-00 PB 601 CONF 11 - ENGINE - GENERAL - INSPECTION/CHECK

INSPECT/CHECK	MAXIMUM SERVICEABLE LIMITS	REMARK
D.Maximum serviceable extension for 1st stage HPT nozzle vane:		
Leading edge missing material from cracking or burn-through up to 0.5 in.2 (323.0 mm2) per airfoil. Maximum of four vanes per 90 degree arc.	25 cycles.	
2.Concave surface of vane airfoil for:		
A.Radial cracks out of the gill holes	Any number; no missing material. See maximum service extension.	
B.Other cracks (not in the gill holes rows)	Any number no missing material. See maximum service extension.	
C.Burns	Any number no missing material or burn through. See maximum service extension.	
D.Cracks in fillet area adjacent to inner and outer platforms	Any number no missing material. See maximum service extension.	
E.Maximum service extension for 1st stage HPT nozzle vane:		
Convex surface missing material from cracking or burn-through up to 0.5 in.2 (322.58 mm2) per airfoil	25 cycles.	
3.Convex surface of vane airfoil for:		
A.Radial cracks	Any number no missing material. See maximum service extension.	
B.Axial cracks	Any number no missing material. See maximum service extension.	
C.Burns	Any number no missing material or burn through. See maximum service extension.	
D.Cracks in fillet area adjacent to inner and outer platforms	Any number no missing material. See maximum service extension.	
E.Maximum service extension for 1st stage HPT nozzle vane:		
Concave surface missing material from cracking or burn-through up to 0.5 in.2 (322.58 mm2) per airfoil	25 cycles.	
4.Trailing edge of vane airfoil for:		
A.Axial cracks originating from slots adjacent to trailing edge	Any number.	
B.Buckling or bowing	Any amount.	
C.Burns, tears or dents (loss of metal)	Total area removed from trailing edge not to exceed 6 in.2 (3870.96 mm2) per assembly, 1.5 in.2 (967.74 mm2) per airfoil. See maximum service extensions.	
D.Maximum service extension for 1st stage HPT nozzle vane:		
Trailing edge missing material from cracking or burn-through up to 2.5 in.2 (1612.90 mm2) per air-	25 cycles.	

\*BACK TO FINDING

**AIRBUS**

Customer : ACI

Type : A330.\*

Rev. Date : Aug 17, 2019

Manual : AMM

Selected applicability : ALL

72-00-00 PB 601 CONF 11 - ENGINE - GENERAL - INSPECTION/CHECK

INSPECT/CHECK	MAXIMUM SERVICEABLE LIMITS	REMARK
foil and up to an accumulated 10 in.2 (6451.60 mm2) per assembly		
5.All areas of airfoil for:		
A.Craze cracks	Any amount.	
NOTE: Craze cracks are superficial cracks that do not break the coating surface.		
B.Nicks, scores, scratches and dents	Any amount.	
C.Metal splatter	Any amount.	
6.Inner and outer platform for:		
A.Cracks in parent metal	Any number no missing material. See maximum service extensions.	
B.Nicks, scores scratches, and dents on platform surface	Any number.	
C.Burns on vane platform	Any number, not through platform. See maximum service extensions.	
D.Bulging and/or bowing	Not serviceable. See maximum service extensions.	
E.Maximum service extension for 1 st stage HPT nozzle vane:		
inner/outer platform missing material from cracking or burn-through.	Up to 0.2 in.2 (129.03 mm2) per airfoil and up to an accumulated 1.0 in.2 (645.16 mm2) per assembly	

Subtask 72-00-00-290-116-A

- B. Inspect the 1st stage HPT shroud rub surface for:  
(Ref. Fig. 1st Stage High Pressure Turbine Shroud SHEET 1)

INSPECT/CHECK	MAXIMUM SERVICEABLE LIMITS	REMARK
1.Axial cracks	Any number or length of cracks in flowpath surface.	
2.Circumferential cracks	Any number up to 0.375 in. (9.5250 mm) long separated by 0.125 in. (3.1750 mm). See maximum service extension.	
3.Radial cracks in gas face forward wall	Three per segment across forward wall separated by 0.5 in. (12.7000 mm). See maximum service extension.	
4.Interconnecting cracks	Connection of any axial and circumferential cracks up to maximum limits of steps 1. and 2. Limit is exceeded when any third crack connects except at shroud ends. See maximum service extension.	
5.Missing material	Maximum area of 0.1 in. (2.5400 mm) circumferentially (dimension	

\*BACK TO FINDING

**AIRBUS**

Customer : ACI  
 Type : A330.\*  
 Rev. Date : Aug 17, 2019

Manual : AMM  
 Selected applicability : ALL

72-00-00 PB 601 CONF 11 - ENGINE - GENERAL - INSPECTION/CHECK

INSPECT/CHECK	MAXIMUM SERVICEABLE LIMITS	REMARK
E.Nicks, scores, scratches or dents	Any number up to 0.25 in. (6.3500 mm) and 0.03 in. (0.7620 mm) deep.	
F.Bowling of trailing edge	Any number up to 0.1 in. (2.5400 mm) from the original contour.	
G.Burns in convex and concave sides	One area up to 1 in.2 (645.16 mm2) with no through holes.	
H.Burns or spalling on vane leading edge (charred only, no holes through airfoil)	1 in. (25.4000 mm) long radially, 0.25 in. (6.3500 mm) wide per vane.	
J.Missing material in the trailing edge	One piece 0.15 in. (3.8100 mm) wide by 0.15 in. (3.8100 mm) long.	
2.Inspect the inner and outer platform for:		
A.Cracks between vanes	Any number 0.15 in. (3.8100 mm) long. Two per segment, 0.6 in. (15.2400 mm) long separated by 0.3 in. (7.6200 mm)	
B.Crack between airfoils in NGV segment, adjacent to airfoil/platform fillet. Crack is in outer platform, not directly in airfoil fillet.	One crack (or two cracks that merge to make one crack) allowed from forward to aft edge of platform, if crack does not wrap around leading edge of airfoil. Lifting of material greater than the thickness of the platform is not allowed.	
C.Nicks, scores, scratches and dents on the platform surfaces	Any number up to 0.03 in. (0.7620 mm) deep.	
D.Craze cracking	Any amount.	
NOTE: Craze cracks are superficial cracks that do not break the coating surface.		
E.Cracks in the outer and inner platform leading or trailing edges or mating face edges	Permitted	
F.Cracks in the outer and inner platform leading or trailing edges or mating face edges that: intersect, extend into the airfoil or run along the airfoil fillet radius	Not permitted	
3.Maximum service extension for 2nd stage HPT nozzle assembly is 25 cycles for all limits allowed up to 20 percent beyond serviceable.		
4.Inspect the 2nd stage HPT shrouds for:		
2nd Stage High Pressure Turbine Shroud Segment SHEET 1		
A.Wear	Any amount. No wear through allowed.	
B.Erosion/rub marks	Any amount. No burn through allowed.	
C.Axial cracks	Any amount 0.2 in. (5.0 mm) long. Four cracks up to 1 in. (25.4 mm)	

\*BACK TO FINDING



**SAS**  
SERVICE AERO SOLUTIONS

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Specializing Worldwide in Borescope Inspections and Boreblend repairs

**ASCENT**

**A330 ENGINE GROUND RUN-UP**

A/C MSN: 510

A/C Reg: F-OJSE

DATE: 15-Apr-20

Calculated For:

GA Telesis, LLC.

OAT C°: 27

Press: 29.93

Field Altitude: 1893

Work Order:

WO-04-20-1575

**ENGINE INFORMATION**

ENGINE MODEL:	CF680E1A4	ECU PART NUMBER:	1960M84P07	BUMP LEVEL:	N/A
ENGINE FAMILY:	11	PMUX INSTALLED:	NO	EGT SHUNT	85

	ESN 811220	ESN 811207
Peak EGT on Start	1 501	2 470

**35% POWER ASSURANCE**

	1	2
%N1 TARGET	71.95	71.95
%N2 MAXIMUM	95.41	95.74
EGT MAXIMUM	600	606.5
FUEL FLOW MAXIMUM	3,429	3,527
F/F CORRECTION	-227	-227
%N1 ACTUAL	71.95	71.95
%N2 ACTUAL	93.8	94.2
EGT ACTUAL	598	596
FUEL FLOW ACTUAL	3,200	3,200
N1 VIB ACTUAL	0.2	2
N2 VIB ACTUAL	0.7	1
%N2 MARGIN	1.61	1.54
EGT MARGIN	2	10.5
FUEL FLOW MARGIN	2	100

**83% POWER ASSURANCE**

	1	2
%N1 TARGET	99.95	99.95
%N2 MAXIMUM	106.44	106.44
EGT MAXIMUM	858	859
FUEL FLOW MAXIMUM	8,968	8,968
F/F CORRECTION	-587	-587
%N1 ACTUAL	99.95	99.95
%N2 ACTUAL	105.1	105.5
EGT ACTUAL	853	847
FUEL FLOW ACTUAL	8,360	8,090
N1 VIB ACTUAL	0.8	1.7
N2 VIB ACTUAL	2.3	1
%N2 MARGIN	1.34	0.94
EGT MARGIN	5	12
FUEL FLOW MARGIN	21	291

NOTES: EGT and FF altitude correction was accomplished for field elevation (1893 Ft.). Maximum Fuel Flow is only a guideline and not a limit per AMM  
EGT, N2, AND FUEL FLOW MAXIMUMS HAVE BEEN CORRECTED FOR N1 TRIM LEVEL 0 for Eng. No. 1  
and TRIM LEVEL 4 for Eng. No. 2.

Calculated By: Jared Palmer

Signed: \_\_\_\_\_

Date: 15-Apr-20