



**National Aviation Company of India Limited**

**ANNEXURE “VI” – DETAILS OF AIR INDIA’S A310-300 FREIGHTER AIRCRAFT  
VT-EQT**

1.	No. of aircraft	1
2.	Registration No.	<b>VT-EQT</b>
3.	Manufacturer’s Serial No.	544
4.	Operating Weights & Fuel Capacity	
	Max. Taxi weight (t)	153.9
	Max. Take Off weight (t)	153.0
	Max. Landing weight (t)	123.0
	Max. Zero Fuel weight (t)	113.0
	Operating Empty weight (t)	76.5
	Fuel Capacity (USG)	16,140
5.	Powerplant	
	Engine Type	CF6-80C2A2
	Thrust (S.L.S.) (lb)	53,500
6.	Cargo Capacity	
	Main Deck	Can Accommodate :
		12[88”x125”] ULDs in single row or
		11[96”x125”] ULDs in single row or
		5 [125”x96”] ULDs in single row or
		14[125”x88”] ULDs in side by side row or
		12[125”x96”] ULDs in side by side row and
		4[88”x125”] ULDs in single row configuration
	Fwd Hold	3 Pallets
	Aft Hold	7LD3
	Spec. Bulk Volume (cft)	303
7.	No. of Galleys (Dry)	1
8.	No. of Courier Seats	3
9.	No. of Toilets	1
10.	Noise Compliance	Stage 3



**National Aviation Company of India Limited**

**A310-300 FREIGHTER AIRCRAFT SPECIFIC DATA**

Registration No.	<b>VT-EQT</b>
Year of Manufacture	<b>Aug'90</b>
Manufacturer's Sl.No.	544
<b>As of 1<sup>st</sup> September, 2009</b>	
Hours since new	55523
Cycles since new	21636
Next 'C' check due on ('C' check interval 18 months)	October 2010
<b>As of 1<sup>st</sup> September, 2009</b>	
Engine #1	695-103
Hours since new	48116
Cycles since new	16946
Cycles to next shop visit	874
Engine #2	690-276
Hours since new	44932
Cycles since new	14220
Cycles to next shop visit	1385

**The above indicated engines will be installed at the time of delivery. Kindly note that, during inspection of the aircraft the engines may be different.**



**National Aviation Company of India Limited**

**A310-300 FREIGHTER AIRCRAFT – MAINTENANCE SCHEDULE**

**Airframe :**

'A' check interval	500 hours
'2A'	1000 hours
'3A'*	1500 hours OR 220 days**
'C'	18 months
5Y	5 years
10Y	10 years

\* Flight Release check.

\*\* Whichever is earlier

**Engines : ON CONDITION**

**Landing Gear : Overhaul Intervals**

NLG : 12,000 cycles OR 9 years

MLG : 16,000 cycles OR 8 years

**Landing Gear due for Overhaul (DD/MM/YR)**

	<b>VT – EQT</b>
NLG	20.09.2011
MLG LH	12.12.2014
MLG RH	12.12.2014



**Aviation Company of India Limited**

**AVIONICS FOR VT-EQT**

<b>Equipment</b>	<b>Manufacturers</b>	<b>Model</b>	<b>Qty.</b>
VHF NAV	Collins	VHF 700	Dual
ADF	Collins	ADF 700	Dual
ILS	Collins	ILS 700	Dual
Weather Radar	Collins	WRT-701x	Dual
Transponder Mode 'S'	Honeywell	TRA-67A	Dual
HF	Collins	HFS700	Dual
PA Amplifier	Collins	PAU-700	
TCAS System	Honeywell	TPA-81A	
CVR	Honeywell	SSCVR	
IRS	Litton	461800-0300-2201	Triple
FMC	Smiths	745SUE4B4	Dual
ADC	Honeywell	4045053903	Dual
Selcal	Team	SC2253A	
FCC	SFENA	13470ADM	Dual
DFAU	Teledyne	2227000-10/A	
EGPWC	Honeywell	965-0976-003-206-20C	
DME	Collins	DME-700	Dual

N A C I L



**National Aviation Company of India Limited**

**A310-300F POWERED WITH GE CF6-80C2A2 ENGINES**

**MAJOR JOBS CARRIED OUT ON VT-EQT**

The VT-EQT aircraft was converted to freighter at EADS EFW facility in Dresden. The freighter conversion is covered by a STC – Supplemental Type Certificate (FAR 25.85) and is approved by EASA and Indian regulatory agency – DGCA.

**NOTE:** As of date, all the applicable FAA Airworthiness Directives which are due have been complied.



AIR INDIA  
ENGINE OVERHAUL, OAP, MUMBAI

LIFE LIMITED PARTS LIST FOR THE ENGINE										
GE-CF6-80C2 A2 ENGINE										
ENGINE S/No:	695-103 A2	Release Date	24.10.08							
ENG TSN	48116		ENG CSN		16946					
BOOSTER S/No.	21X90313	TSN	47135		CSN	14467				
		TSO	12452		CSO	4241				
S/No.	DESCRIPTION	PART No.	SERIAL No.	U. HRS.	U. CYB	TSN	CSN	LIFE BALANCE		REMARKS
								HOURS	CYCLES	
1	Sig.1 Fan disk	1700M91F06	MPO55795		20000	44623	16894		3106	
2	Sig.2 -5 spool	1856M71F01	VOLOS656		20000	47135	14467		5333	
3	Fan forward Shaft	1277M75G07	MPO51656		20000	41194	15263		4737	
4	Fan Mid shaft	1852M41F01	MPOT4508		20000	39954	13573		6427	
CORE S/No.	31X90142	TSN	41293		CSN	13556				
		TSO	9564		CSO	3253				
S/No.	DESCRIPTION	P/No.	Sr.No.	U. HRS.	U. CYB	TSN	CSN	LIFE BALANCE		REMARKS
								HOURS	CYCLES	
1	Sig.1 Disk	9380M26F02	SNG08425		14480	39407	13261		1219	
2	Sig.2 Disk	9380M27F03	GWNC1564		20000	41293	13556		6444	
3	Spool 3-9 Stage	1856M15G02	VOLB0564		20000	20714	8810		11190	
4	Sig.10 Disk	9380M29F03	GWNC6253		20000	41293	13556		6444	
5	Spool 11-14 Stage	9380M30G08	MPOS3012		16600	43790	15214		1386	
6										
7										
8	Rot. CDP Seal	1347M31F01	LKM50919		20000	31846	8860		11140	
9										
HPT SR.No	53X95318	TSN	39642		CSN	13044				
		TSO	14256		CSO	4152				
S/No.	DESCRIPTION	P/No.	Sr.No.	U. HRS.	U. CYB	TSN	CSN	LIFE BALANCE		REMARKS
								HOURS	CYCLES	
1	Sig.1 Disk	2047M32G04	MPCAA581		15000	45824	14126		874	
2	Impeller spacer	1539M12F02	GFF5A49E		15000	14274	4079		10921	
3	Sig.2 Disk	9362M43F02	BTAC3603		15000	41194	14092		908	
4	Vane Ring Diffuser	9190M28F16	RRE12287		15000	43588	13330		1670	
LPT S/No.	57X90309	TSN	44663		CSN	14343				
		TSO	19999		CSO	6295				
S/No.	DESCRIPTION	P/No.	Sr.No.	U. HRS.	U. CYB	TSN	CSN	LIFE BALANCE		REMARKS
								HOURS	CYCLES	
1	Sig.1 Disk	9373M51F04	FLA1E694		20000	44663	14343		5657	
2	Sig.2 Disk	9373M52F04	FLA1F956		20000	44663	14343		5657	
3	Sig.3 Disk	9373M53F05	SNG07329		20000	34780	12023		7977	
4	Sig.4 Disk	9373M54F04	FLAAA96		20000	34780	12023		7977	
5	Sig.5 Disk	9373M55F04	FLA2F576		20000	44663	14343		5657	
6	LPT Shaft	9382M59F05	RRAO0920		20000	44663	14343		5657	
Aft Mount Links										
1	LB Link	1846M23G01	EGTB7989		50000	17326	5983		44017	
2	RH Link	9348M184G03	WIN814AV		80000	11369	3744		76256	
Prepared By: Shanthi M.K. Sr. Engineer										



ENGINE OVERHAUL, OAP, MUMBAI

ENGINE INSTALLATION / REMOVAL DETAILS

<b>CUSTOMER</b>	AI	<b>ENGINE MODEL</b>	GE CF6-80C2	
Engine Sr. No.	695-103 A2	TSN/CSN	48116	16946
A/C Location;	EQT-1	TSO/CSO	48116	16946
Date:	1-Sep-09	TSV/CSV	2725	728
		W/O NO.		
T/O EGT MARGIN		MCT MRGN		OIL PR.

**Reason For Removal:**  
**MODULE STATUS**

Description	Serial No.	TSN	CSN	TSO	CSO	REMARKS
Booster	21X90313	47135	14467	12452	4241	
Core	31X90142	41293	13556	9564	3253	
Combustor	GGMW3442	-	-	2738	730	
HPT stg 1 nozz assy	51X90116	45418	16747	2738	730	
HPT	53X95318	39642	13044	14256	4152	
LPT	57X90309	44663	14343	19999	6295	
A.G.B	FIA5K139	-	-	21462	7104	
T.G.B	FIA6P061	-	-	13920	4768	
I.G.B.	EPEO20866	-	-	2738	730	
Mid shaft	MPOT4508	46876	15256	15356	4692	
Fwd. shaft	MPOS1656	48116	16946	17041	5184	

Module Minimum Life balance		
Module	Cycles	Life limiting part
Booster	3106	Stg.1 Fan disk
Core	1219	Stg.1 Disk
HPT	874	Stg.1 Disk
LPT	5657	Fwd.Shaft
Mid shaft	6427	Mid shaft
Fwd. shaft	4737	Fwd. shaft
<b>MINIMUM</b>	<b>874</b>	<b>Stg.1 Disk</b>

ENGINE LIMITER	
3-9 SPOOL INSP	N/A
HPT STG 1 D (SB 1089)	N/A
HPC STG 1 DISK	874
<b>IST LIMITER</b>	<b>874</b>



**AIR INDIA**  
ENGINE OVERHAUL, OAP, MUMBAI

LIFE LIMITED PARTS LIST FOR THE ENGINE										
GE-CF6-80C2 A2 ENGINE										
ENGINE S/No.	690276	Release Date	01.03.07							
ENG TSN	44932	ENG CSN	14220							
BOOSTER S/No.	21X95318	TSN	39459	CSN	13378					
		TSO	16575	CSO	4728					
S/No.	DESCRIPTION	PART No.	SERIAL No.	U.HRS.	U.CYB	TSN	CSN	LIFE BALANCE		REMARKS
								HOURS	CYCLEB	
1	Stg.1 Fan disk	1703M91P06	MPOS5791		20000	38384	15088		4992	
2	Stg.2 -5 spool	9373M84G05	VOLO2669		20000	46800	16899		3101	
3	Fan forward Shaft	1177M75G07	GWNY0673		20000	38063	11610		8390	
4	Fan Mid shaft	1662M41F01	MFOBM406		20000	48004	9719		10281	
CORE S/No.	31X95311	TSN	38999	CSN	15215					
		TSO	7635	CSO	3508					
S/No.	DESCRIPTION	P/No.	Sr.No.	U.HRS.	U.CYB	TSN	CSN	LIFE BALANCE		REMARKS
								HOURS	CYCLEB	
1	Stg.1 Disk	9380M26P02	SNGO5895		14480	35944	8133		6347	
2	Stg.2 Disk	9380M17P03	SNGO8512		20000	38999	15215		4785	
3	Spool 3-9 Stage	1854M95F02	VOLOG007		15000	40006	9115		5885	
4	Stg.10 Disk	9380M29P03	SNGO8491		20000	38999	15215		4785	
5	Spool 11-14 Stage	1531M21G01	MPOAB869		20000	39081	13646		6354	
6										
7										
8	Rot. CDF Seal	1347M31F02	SNGO4411		20000	38999	15215		4785	
9										
HPT SR.No	53X90119	TSN	46594	CSN	18857					
		TSO	2766	CSO	898					
S/No.	DESCRIPTION	P/No.	Sr.No.	U.HRS.	U.CYB	TSN	CSN	LIFE BALANCE		REMARKS
								HOURS	CYCLEB	
1	Stg.1 Disk	1531M84G12	GWNOECWJ		15000	2766	898		14102	
2	Impeller spacer	1539M12P02	GPEP5921		15000	29152	10353		4647	
3	Stg.2 Disk	9362M43P09	MUNHBB129		15000	2766	898		14102	
4	Vane Ring Diffuser	9290M38P15	BTADS285		15000	34639	12642		2358	
LPT S/No.	57X95313	TSN	40060	CSN	14614					
		TSO	12843	CSO	4272					
S/No.	DESCRIPTION	P/No.	Sr.No.	U.HRS.	U.CYB	TSN	CSN	LIFE BALANCE		REMARKS
								HOURS	CYCLEB	
1	Stg.1 Disk	9373M51P04	SNGO7112		20000	40060	14614		5386	
2	Stg.2 Disk	9373M52P04	SNGO7825		20000	40060	14614		5396	
3	Stg.3 Disk	9373M53P05	SNGO6923		20000	40060	14614		5386	
4	Stg.4 Disk	9373M54P04	RRAO6008		20000	42415	13716		6284	
5	Stg.5 Disk	9373M55P04	FIA4M128		20000	40060	14614		5386	
6	LPT Shaft	9382M59P06	GWNC7630		20000	40060	14614		5386	
Aft Mount Link										
1	LH Link	1846M23G01	EGTB7984		50000	14626	5342		44658	
2	RH Link	9348M84G03	WIN4575Y		80000		5216		74784	
Prepared By: Shamhl M.K. Dy. Chief Engineer										



**AIR INDIA**

ENGINE OVERHAUL, OAP, MUMBAI

ENGINE INSTALLATION /REMOVAL DETAILS

<b>CUSTOMER</b>	AI	<b>ENGINE MODEL</b>	GE CF6-80C2 A2	
Engine Sr. No.	690276	TSN/CSN	44932	14220
A/C Location :	EQT-2	TSO/CSO	35301	11992
Date:	1-Sep-09	TSV/CSV	2766	898
		W/O NO.		
T/O EGT MARGIN		MCT MRGN		OIL PR.

**Reason For Removal:**

MODULE STATUS						
Description	Serial No.	TSN	CSN	TSO	CSO	REMARKS
Booster	21X95318	39459	13378	16575	4728	
Core	31X95311	38999	15215	9635	3508	
Combustor	GGMF4186	-	-	2766	898	
HPT stg 1 nozz assy	51X90142	45197	17058	2766	898	
HPT	53X90119	46594	18857	2766	898	
LPT	57X95313	40060	14614	12843	4272	
A.G.B	FIA05282	-	-	2766	898	
T.G.B	FIA6P363	-	-	14617	4747	
I.G.B	F1A8L096	-	-	14617	4747	
Mid shaft	MPOBM406	54873	12329	9635	3508	
Fwd. shaft	GWNY0673	44932	14220	24937	8094	
LH LINK	EGTB7984	14626	5342			
RH LINK	WIN4575Y		5216			

Module Minimum Life balance		
Module	Cycles	Life limiting part
Booster	3101	Stg.2 -4 spool
Core	4785	Stg.2 Disk
HPT	2358	Vane Ring Diffuser
LPT	5386	Stg.4 Disk
Mid shaft	10281	Mid shaft
Fwd. shaft	8390	Fwd. shaft
<b>MINIMUM</b>	<b>2358</b>	<b>Vane Ring Diffuser</b>

ENGINE LIMITER	
3-9 SPOOL INSP	1385
HPT IMPL SPACER	2358
<b>Ist LIMITER</b>	<b>1,385</b>