ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF34-10E6
UNIQUE ID NUMBER: 8GE116
ENGINE TYPE: TF

BYPASS RATIO: 5.09
PRESSURE RATIO (π_{oo}):   25.6
RATED OUTPUT (F_{oo}) (kN):   77.4

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	13.8	107.9	43.0	5.8
AS % OF ORIGINAL LIMIT	70.2 %	91.4 %	47.2 %	22.9 %
AS % OF CAEP/2 LIMIT (NOx)			59.0 %	
AS % OF CAEP/4 LIMIT (NOx)			69.0 %	
AS % OF CAEP/6 LIMIT (NOx)			76.1 %	
AS % OF CAEP/8 LIMIT (NOx)			88.4 %	

DATA STATUS

-    PRE-REGULATION
- x   CERTIFICATION
-    REVISED (SEE REMARKS)

TEST ENGINE STATUS

-    NEWLY MANUFACTURED ENGINES
- x   DEDICATED ENGINES TO PRODUCTION STANDARD
-    OTHER (SEE REMARKS)

EMISSIONS STATUS

- x   DATA CORRECTED TO REFERENCE (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
- x   OUT OF PRODUCTION (DATE: end 2007)
-    OUT OF SERVICE

MEASURED DATA

MODE	POWER SETTING (%F_{oo})	TIME minutes	FUEL FLOW kg/s	EMISSIONS INDICES (g/kg) HC	CO	NOx	SMOKE NUMBER
TAKE-OFF	100	0.7	0.792	0.04	0.43	18.51	4.52
CLIMB OUT	85	2.2	0.659	0.06	0.38	15.62	1.89
APPROACH	30	4.0	0.227	0.09	4.18	7.76	0.41
IDLE	7	26.0	0.085	5.15	49.4	3.59	0.83
LTO TOTAL FUEL (kg) or EMISSIONS (g)			307	692	6798	2871	–
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D_p/F_{oo} (g/kN) or AVERAGE SN (MAX)				8.94	87.89	37.11	4.52
SIGMA (D_p/F_{oo} in g/kN, or SN)				–	–	–	–
RANGE (D_p/F_{oo} in g/kN, or SN)				8.4-9.3	84.9-89.7	36.6-37.7	3.7-5.6

ACCESSORY LOADS

POWER EXTRACTION   0   (kW)   AT   All   POWER SETTINGS
STAGE BLEED   0   % CORE FLOW   AT   All   POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	98.4-98.6
TEMPERATURE (K)	294-295
ABS HUMIDITY (kg/kg)	0.00922 - 0.01192

FUEL

SPEC	Jet A1
H/C	1.92 - 1.93
AROM (%)	18.1 - 19.3

MANUFACTURER: GE Transportation
TEST ORGANIZATION: Peebles Test Operation
TEST LOCATION: Site 4D
TEST DATES: FROM 24 Jul 04   TO 25 Jul 04

REMARKS

1. GE Reports R2004AE636 and R2006AE173
2. Block 1 Engines
3. Engine 994-110/1

If REVISED, this data supersedes databank UID
Compliance with fuel venting requirements: x   ('x' if complies, PR if pre-regulation)