ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION:	CF34-10E6	BYPASS RATIO:	5.09
UNIQUE ID NUMBER:	11GE143	PRESSURE RATIO (π_{oo}):	25.5
ENGINE TYPE:	TF	RATED OUTPUT (F_{oo}) (kN):	77.4

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	13.3	102.2	41.3	12.1
AS % OF ORIGINAL LIMIT	68.1 %	86.6 %	45.4 %	47.7 %
AS % OF CAEP/2 LIMIT (NOx)			56.7 %	
AS % OF CAEP/4 LIMIT (NOx)			66.4 %	
AS % OF CAEP/6 LIMIT (NOx)			73.0 %	
AS % OF CAEP/8 LIMIT (NOx)			85.1 %	

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)

- \- OUT OF PRODUCTION
- \- 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	0.07	0.81	17.78	9.39
CLIMB OUT	85	2.2	0.653	0.1	0.75	14.97	5.1
APPROACH	30	4.0	0.223	0.13	4.84	7.59	0.11
IDLE	7	26.0	0.085	4.94	46.1	3.55	0.6
LTO TOTAL FUEL (kg) or EMISSIONS (g)			306	670	6439	2757	-
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)				8.66	83.2	35.6	9.4
SIGMA (D_p/F_{oo} in g/kN, or SN)				0.79	2.8	0.25	1.32
RANGE (D_p/F_{oo} in g/kN, or SN)				8.1-9.6	80.4-86.1	35.4-35.9	8.6-10.9

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.2-97.9
TEMPERATURE (K)	292-298
ABS HUMIDITY (kg/kg)	0.0053 - 0.0078

FUEL

SPEC	Jet A1
H/C	1.92
AROM (%)	15.9% - 17.5%

MANUFACTURER: GE Transportation
TEST ORGANIZATION: Peebles Test Operation
TEST LOCATION: Site 3C
TEST DATES: FROM 05 Jun 09 TO 06 Jun 09

REMARKS

1. GE Report R2008AE622Block 2 Engines
2. Engine 994-743/1
3. Engines with 2251M21 combustor or equivalent
4. Alternate fuel injector manufacturer
5. Certification in accordance with Part III, Chapter 2, of Amendment 7 of ICAO Annex 16 Vol. II.
6. NOx levels in accordance with Part III, Chapter 2, 2.3.2 e)

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