ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF34-8E6
UNIQUE ID NUMBER: 8GE109
ENGINE TYPE: TF

BYPASS RATIO: 5.13
PRESSURE RATIO (π_{oo}): 23.18
RATED OUTPUT (F_{oo}) (kN): 59.68

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	0.5	42.5	43.2	11.1
AS % OF ORIGINAL LIMIT	2.4 %	36.0 %	50.0 %	40.7 %
AS % OF CAEP/2 LIMIT (NOx)			62.5 %	
AS % OF CAEP/4 LIMIT (NOx)			69.4 %	
AS % OF CAEP/6 LIMIT (NOx)			73.6 %	
AS % OF CAEP/8 LIMIT (NOx)			82.5 %	

DATA STATUS

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

TEST ENGINE STATUS

- x NEWLY MANUFACTURED ENGINES
- \- 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: -)
- \- 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	0.652	0.02	0.64	14.77	8.63
CLIMB OUT	85	2.2	0.533	0.02	0.57	12.65	2.24
APPROACH	30	4.0	0.180	0.06	4.23	10.77	0
IDLE	7	26.0	0.064	0.13	18.16	4.61	0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			241	18	2066	2223	-
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)				0.31	34.62	37.25	8.63
SIGMA (D_p/F_{oo} in g/kN, or SN)				-	-	-	-
RANGE (D_p/F_{oo} in g/kN, or SN)				-	-	-	-

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.1 to 98.1
TEMPERATURE (K)	284 to 292
ABS HUMIDITY (kg/kg)	0.00470 to 0.00727

FUEL

SPEC	Jet A
H/C	1.937
AROM (%)	18

MANUFACTURER: GE
TEST ORGANIZATION: CF6 Eval Engineering
TEST LOCATION: PTO Site 3B Peebles
TEST DATES: FROM 27 Jan 02 TO 28 Jan 02

REMARKS

1. Ref. GE REPORT R2001AE078
2. Engine S/N 193111
3. Data corrected per ICAO Annex 16, Vol 2, Part III, Appendix 3

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