ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF34-8E5A2   BYPASS RATIO: 5.13
UNIQUE ID NUMBER: 8GE102   PRESSURE RATIO (π_{oo}):   24.82
ENGINE TYPE: TF   RATED OUTPUT (F_{oo}) (kN):   64.53

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	0.4	38.0	46.1	22.2
AS % OF ORIGINAL LIMIT	2.2 %	32.2 %	51.4 %	83.3 %
AS % OF CAEP/2 LIMIT (NOx)			64.2 %	
AS % OF CAEP/4 LIMIT (NOx)			72.2 %	
AS % OF CAEP/6 LIMIT (NOx)			77.4 %	
AS % OF CAEP/8 LIMIT (NOx)			87.4 %	

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	0.721	0.02	0.77	16.71	17.27
CLIMB OUT	85	2.2	0.586	0.02	0.57	13.52	4.4
APPROACH	30	4.0	0.193	0.06	3.92	11.09	0
IDLE	7	26.0	0.067	0.12	16.71	4.76	0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			259	18	1999	2565	–
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)				0.27	30.97	39.75	17.27
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)