ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

** DATA SUPERSEDED ** SEE SHEET: 8GE110

ENGINE IDENTIFICATION: CF34-8C5
UNIQUE ID NUMBER: 6GE092
ENGINE TYPE: TF

BYPASS RATIO: 5.13
PRESSURE RATIO (π_{oo}): 23.09
RATED OUTPUT (F_{oo}) (kN): 59.42

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	0.5	42.8	43.0	10.7
AS % OF ORIGINAL LIMIT	2.6 %	36.3 %	49.9 %	39.2 %
AS % OF CAEP/2 LIMIT (NOx)			62.4 %	
AS % OF CAEP/4 LIMIT (NOx)			69.2 %	
AS % OF CAEP/6 LIMIT (NOx)			73.4 %	
AS % OF CAEP/8 LIMIT (NOx)			82.2 %	

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	0.648	0.02	0.64	14.69	8.32
CLIMB OUT	85	2.2	0.530	0.02	0.57	12.6	2.52
APPROACH	30	4.0	0.179	0.06	4.24	10.75	0
IDLE	7	26.0	0.064	0.13	18.25	4.6	0
LTO TOTAL FUEL (kg) or EMISSIONS (g)	240			18	2070	2205	–
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	34.86	37.12	8.32
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 - 98.1
TEMPERATURE (K)	284 - 292
ABS HUMIDITY (kg/kg)	.00470 - .00727

FUEL

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

MANUFACTURER: GE Aircraft Engines
TEST ORGANIZATION: Peebles Test Operation
TEST LOCATION: Peebles, Ohio
TEST DATES: FROM   27 Jan 02   TO 28 Jan 02

REMARKS

1. GE Report R2001AE078
2. Engine S/N 193111
3. LEC combustor
4. Minor change to climb SN (2.52 to 2.12) in Issue 15

If REVISED, this data supersedes databank UID
Compliance with fuel venting requirements: 0   ('x' if complies, PR if pre-regulation)