



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF34-8C5A1
UNIQUE ID NUMBER: 8GE107
ENGINE TYPE: TF

BYPASS RATIO: 5.13
PRESSURE RATIO (π_{00}): 23.49
RATED OUTPUT (F_{00}) (kN): 60.62

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{00} (g/kN) or SN	0.5	41.5	43.7	12.8
AS % OF ORIGINAL LIMIT	2.3 %	35.2 %	50.3 %	47.2 %
AS % OF CAEP/2 LIMIT (NOx)			62.8 %	
AS % OF CAEP/4 LIMIT (NOx)			70.0 %	
AS % OF CAEP/6 LIMIT (NOx)			74.4 %	
AS % OF CAEP/8 LIMIT (NOx)			83.4 %	

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)
- OUT OF PRODUCTION
- OUT OF SERVICE

MEASURED DATA

MODE	POWER SETTING (% F_{00})	TIME minutes	FUEL FLOW kg/s	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NOx	
TAKE-OFF	100	0.7	0.665	0.02	0.66	15.09	9.96
CLIMB OUT	85	2.2	0.543	0.02	0.57	12.82	2.66
APPROACH	30	4.0	0.183	0.06	4.17	10.87	0
IDLE	7	26.0	0.065	0.13	17.85	4.65	0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			245	18	2051	2287	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D_p/F_{00} (g/kN) or AVERAGE SN (MAX)				0.3	33.83	37.73	9.96
SIGMA (D_p/F_{00} in g/kN, or SN)				-	-	-	-
RANGE (D_p/F_{00} 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
4. Certification in accordance with Part III, Chapter 2, of Amendment 7 of ICAO Annex 16 Vol. II.
5. 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' if complies, PR if pre-regulation)