



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF34-8E5A1
UNIQUE ID NUMBER: 8GE105
ENGINE TYPE: TF

BYPASS RATIO: 5.13
PRESSURE RATIO (π_{00}): 24.12
RATED OUTPUT (F_{00}) (kN): 62.49

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{00} (g/kN) or SN	0.4	39.8	44.9	17.6
AS % OF ORIGINAL LIMIT	2.3 %	33.7 %	50.9 %	65.2 %
AS % OF CAEP/2 LIMIT (NOx)			63.6 %	
AS % OF CAEP/4 LIMIT (NOx)			71.1 %	
AS % OF CAEP/6 LIMIT (NOx)			75.9 %	
AS % OF CAEP/8 LIMIT (NOx)			85.4 %	

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	0.691	0.02	0.71	15.81	13.64
CLIMB OUT	85	2.2	0.563	0.02	0.57	13.15	3.49
APPROACH	30	4.0	0.188	0.06	4.05	11.06	0
IDLE	7	26.0	0.066	0.13	17.3	4.7	0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			251	18	2026	2419	-
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)				0.29	32.43	38.71	13.64
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)