



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF34-8E5
UNIQUE ID NUMBER: 01P08GE197
COMBUSTOR: LEC
ENGINE TYPE: TF

BYPASS RATIO: 5.1
PRESSURE RATIO (π_{00}): 23.2
RATED THRUST (F_{00}) (kN): 59.7

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (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 (NO _x)			62.5	
AS % OF CAEP/4 LIMIT (NO _x)			69.4	
AS % OF CAEP/6 LIMIT (NO _x)			73.6	
AS % OF CAEP/8 LIMIT (NO _x)			82.5	

For non-volatile particulate matter (nvPM) emissions, please refer to the ICAO Engine nvPM Emissions Data Sheet.

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 (DATE: -)
- OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	HC	CO	NO _x	SMOKE NUMBER
TAKE-OFF	100	0.7	0.652	0.02	0.64	14.77	8.6
CLIMB OUT	85	2.2	0.533	0.02	0.57	12.65	2.2
APPROACH	30	4.0	0.180	0.06	4.23	10.77	0.0
IDLE	7	26.0	0.064	0.13	18.16	4.61	0.0
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 ₀₀ (g/kN) or AVERAGE SN (MAX)				0.3	34.6	37.3	8.6
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)
STAGE BLEED 0 (% CORE FLOW)

AT - POWER SETTINGS
AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.1-98.1
TEMPERATURE (K)	284-292
ABS HUMIDITY (kg/kg)	0.0047-0.00727

FUEL

SPEC	Jet A
H/C	1.94
AROM (%)	18

MANUFACTURER: General Electric Company
TEST ORGANIZATION: CF6 Eval Engineering
TEST LOCATION: PTO Site 3B Peebles
TEST DATES: 27/01/2002-28/01/2002

NO_x REGULATION PARAGRAPH

	2.3.2 c) (CAEP/4)
	2.3.2 d) (CAEP/6)
x	2.3.2 e) (CAEP/8)

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. NO_x levels in accordance with Part III, Chapter 2, 2.3.2 e)

Compliance with Fuel Venting requirements:

- ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)