



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF34-3A
UNIQUE ID NUMBER: 1GE034
COMBUSTOR: LEC II
ENGINE TYPE: TF

BYPASS RATIO: 6.3
PRESSURE RATIO (π_{00}): 19.7
RATED THRUST (F_{00}) (kN): 41.0

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	11.8	100.4	32.2	28.2
AS % OF ORIGINAL LIMIT	60.0	85.1	40.6	93.3
AS % OF CAEP/2 LIMIT (NO _x)			50.7	
AS % OF CAEP/4 LIMIT (NO _x)			53.2	
AS % OF CAEP/6 LIMIT (NO _x)			54.5	
AS % OF CAEP/8 LIMIT (NO _x)			58.9	

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 (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	0.407	0.06	0.00	11.61	21.9
CLIMB OUT	85	2.2	0.334	0.06	0.00	10.14	9.2
APPROACH	30	4.0	0.119	0.13	1.90	6.86	3.1
IDLE	7	26.0	0.050	3.95	42.60	3.82	3.1
LTO TOTAL FUEL (kg) or EMISSIONS (g)			167	313	3350	1137	-
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)				7.6	81.8	27.8	21.9
SIGMA (D _p /F ₀₀ in g/kN, or SN)				0.2	3.3	1.6	0.3
RANGE (D _p /F ₀₀ in g/kN, or SN)				7.41-7.78	79.2-85.5	26-29	21.7-22.2

ACCESSORY LOADS

POWER EXTRACTION 0 (kW)
STAGE BLEED 0 (% CORE FLOW)

AT - POWER SETTINGS
AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	101.6-102.9
TEMPERATURE (K)	275.5-281.1
ABS HUMIDITY (kg/kg)	0.0016-0.0039

FUEL

SPEC	JP-5
H/C	1.92
AROM (%)	20.3

MANUFACTURER: General Electric Company
TEST ORGANIZATION: General Electric Company
TEST LOCATION: Lynn Cell 121
TEST DATES: 21/03/1991-23/03/1991

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 R91AEB051 (1/92 rev).
2. Engine S/N 807-005.
3. LEC II combustor.

Compliance with Fuel Venting requirements:

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