



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF34-8C1
UNIQUE ID NUMBER: 5GE083
COMBUSTOR:
ENGINE TYPE: TF

BYPASS RATIO: 5.1
PRESSURE RATIO (π_{00}): 23.0
RATED THRUST (F_{00}) (kN): 56.4

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	0.3	63.0	43.1	6.9
AS % OF ORIGINAL LIMIT	1.5	53.4	50.1	24.9
AS % OF CAEP/2 LIMIT (NO _x)			62.6	
AS % OF CAEP/4 LIMIT (NO _x)			68.7	
AS % OF CAEP/6 LIMIT (NO _x)			72.5	
AS % OF CAEP/8 LIMIT (NO _x)			80.6	

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)	HC	CO	NO _x	SMOKE NUMBER
TAKE-OFF	100	0.7	0.604	0.02	0.41	14.67	5.3
CLIMB OUT	85	2.2	0.494	0.02	0.50	12.82	1.5
APPROACH	30	4.0	0.168	0.06	2.91	11.10	0.0
IDLE	7	26.0	0.069	0.08	24.92	4.31	0.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			239	13	2845	2120	-
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)				0.2	51.3	37.2	5.3
SIGMA (D _p /F ₀₀ in g/kN, or SN)				0.0	1.0	0.7	1.0
RANGE (D _p /F ₀₀ in g/kN, or SN)				0.2	50.1-52	36.6-38	4.6-6.5

ACCESSORY LOADS

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

AT - POWER SETTINGS
AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	96.9-97.6
TEMPERATURE (K)	287-296.4
ABS HUMIDITY (kg/kg)	0.0056-0.00656

FUEL

SPEC	Jet A
H/C	1.93
AROM (%)	16.87

MANUFACTURER: General Electric Company
TEST ORGANIZATION: Peebles Test Operation
TEST LOCATION: Peebles, Ohio
TEST DATES: 24/09/1999

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 R99AEB031.
2. Engine S/S 965202.
3. Certification in accordance with Part III, Chapter 2, of Amendment 7 of ICAO Annex 16 Vol. II.
4. 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)