



## ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

## SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF34-8C1 Block 1  
UNIQUE ID NUMBER: 6GE096  
COMBUSTOR: LEC  
ENGINE TYPE: TF

BYPASS RATIO: 5.1  
PRESSURE RATIO ( $\pi_{00}$ ): 22.2  
RATED THRUST ( $F_{00}$ ) (kN): 56.4

## REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
D <sub>p</sub> /F <sub>00</sub> (g/kN) or SN	0.5	52.5	40.9	6.7
AS % OF ORIGINAL LIMIT	2.6	44.5	48.5	24.2
AS % OF CAEP/2 LIMIT (NO <sub>x</sub> )			60.6	
AS % OF CAEP/4 LIMIT (NO <sub>x</sub> )			71.3	
AS % OF CAEP/6 LIMIT (NO <sub>x</sub> )			70.3	
AS % OF CAEP/8 LIMIT (NO <sub>x</sub> )			78.4	

## 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)

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

## MEASURED DATA

MODE	POWER SETTING (%F <sub>00</sub> )	TIME (minutes)	FUEL FLOW (kg/s)	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
TAKE-OFF	100	0.7	0.608	0.02	0.59	13.82	5.2
CLIMB OUT	85	2.2	0.479	0.03	0.57	12.00	1.3
APPROACH	30	4.0	0.170	0.07	4.67	9.85	0.0
IDLE	7	26.0	0.070	0.13	19.73	4.03	0.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			239	20	2406	1956	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D <sub>p</sub> /F <sub>00</sub> (g/kN) or AVERAGE SN (MAX)				0.3	42.8	35.2	5.2
SIGMA (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)							
RANGE (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)				0.3-0.4	41.5-44.5	35-35.7	2.5-7.2

## 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: Peebles Test Operation  
TEST LOCATION: Peebles, Ohio  
TEST DATES: 27/01/2002-28/01/2002

NO<sub>x</sub> REGULATION PARAGRAPH

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

## REMARKS

1. GE Report R2001AE078
2. Engine S/N 193111
3. Certification in accordance with Part III, Chapter 2, of Amendment 7 of ICAO Annex 16 Vol. II.
4. NO<sub>x</sub> 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)