



# ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

## SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-80C2B2  
UNIQUE ID NUMBER: 2GE042  
COMBUSTOR: 1862M39  
ENGINE TYPE: TF

BYPASS RATIO: 5.1  
PRESSURE RATIO ( $\pi_{00}$ ): 27.5  
RATED THRUST ( $F_{00}$ ) (kN): 231.1

### REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
D <sub>p</sub> /F <sub>00</sub> (g/kN) or SN	3.5	34.7	43.7	6.6
AS % OF ORIGINAL LIMIT	17.7	29.4	45.9	34.9
AS % OF CAEP/2 LIMIT (NO <sub>x</sub> )			57.4	
AS % OF CAEP/4 LIMIT (NO <sub>x</sub> )			69.2	
AS % OF CAEP/6 LIMIT (NO <sub>x</sub> )			78.7	
AS % OF CAEP/8 LIMIT (NO <sub>x</sub> )			93.7	

### 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	2.124	0.05	0.04	22.02	5.6
CLIMB OUT	85	2.2	1.756	0.05	0.05	18.25	3.1
APPROACH	30	4.0	0.585	0.12	2.61	11.79	0.0
IDLE	7	26.0	0.190	1.97	22.41	4.45	0.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			758	617	7024	9169	-
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				4	4	4	4
AVERAGE D <sub>p</sub> /F <sub>00</sub> (g/kN) or AVERAGE SN (MAX)				2.7	30.5	39.7	5.6
SIGMA (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)				0.3	1.5	0.2	0.6
RANGE (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)				2.43-3.15	29.3-32.4	39.4-40	5-6.4

### ACCESSORY LOADS

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

AT - POWER SETTINGS  
AT - POWER SETTINGS

### ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.6-98.2
TEMPERATURE (K)	279-293
ABS HUMIDITY (kg/kg)	0.00457-0.00743

### FUEL

SPEC	Jet A
H/C	1.94
AROM (%)	15.3

MANUFACTURER: General Electric Company  
TEST ORGANIZATION: CF6 Eval Engineering  
TEST LOCATION: Site IIIB, PTO Peebles  
TEST DATES: 13/01/1995-17/01/1995

### 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. Ref GE report TM95-17.
2. Engine S/N 704/233 & 704/234
3. 1862M39 combustor
4. Certification in accordance with Part III, Chapter 2, of Amendment 7 of ICAO Annex 16 Vol. II.
5. 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)