



## ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

## SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-80E1A1  
UNIQUE ID NUMBER: 2GE050  
COMBUSTOR: 1862M39  
ENGINE TYPE: TF

BYPASS RATIO: 5.1  
PRESSURE RATIO ( $\pi_{00}$ ): 32.5  
RATED THRUST ( $F_{00}$ ) (kN): 281.5

## REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
D <sub>p</sub> /F <sub>00</sub> (g/kN) or SN	2.3	26.6	51.7	8.1
AS % OF ORIGINAL LIMIT	11.7	22.5	49.3	45.4
AS % OF CAEP/2 LIMIT (NO <sub>x</sub> )			61.6	
AS % OF CAEP/4 LIMIT (NO <sub>x</sub> )			71.9	
AS % OF CAEP/6 LIMIT (NO <sub>x</sub> )			80.9	
AS % OF CAEP/8 LIMIT (NO <sub>x</sub> )			93.9	

## 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 <sub>00</sub> )	TIME (minutes)	FUEL FLOW (kg/s)	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
TAKE-OFF	100	0.7	2.702	0.05	0.05	27.59	6.9
CLIMB OUT	85	2.2	2.199	0.04	0.04	21.44	6.2
APPROACH	30	4.0	0.714	0.11	1.92	12.61	0.0
IDLE	7	26.0	0.226	1.30	17.64	4.87	0.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			928	494	6565	13232	-
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)				1.8	23.3	47.0	6.9
SIGMA (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)				0.2	1.2	0.4	1.1
RANGE (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)				1.44-1.88	19.8-22.7	45-45.8	6.5-8.7

## 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)
x	2.3.2 d) (CAEP/6)
	2.3.2 e) (CAEP/8)

## REMARKS

1. Ref GE report TM95-17.
2. Engine S/N 704/233 & 704/234
3. 1862M39 combustor

Compliance with Fuel Venting requirements:

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