

# ICAO ENGINE EXHAUST EMISSIONS DATA BANK

# **SUBSONIC ENGINES**

ENGINE IDENTIFICATION: CF6-80C2A5F BYPASS RATIO: 5.1 UNIQUE ID NUMBER: 3GE056 PRESSURE RATIO  $(\pi_{oo})$ : 32.88 ENGINE TYPE: TF RATED OUTPUT  $(F_{oo})$  (kN): 271.88

# REGULATORY DATA

CHARACTERISTIC VALUE:	НC	СО	NOx	SMOKE NUMBER
$D_p/F_{oo}$ (g/kN) or SN	2.1	25.8	51.8	8.7
AS % OF ORIGINAL LIMIT	10.7 %	21.9 %	49.0 %	48.3 %
AS % OF CAEP/2 LIMIT (NOx)			61.2 %	
AS % OF CAEP/4 LIMIT (NOx)			71.2 %	
AS % OF CAEP/6 LIMIT (NOx)			80.0 %	
AS % OF CAEP/8 LIMIT (NOx)			92.7 %	

# DATA STATUS

- PRE-REGULATION

x CERTIFICATION

- REVISED (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE

(ANNEX 16 VOLUME II)

# TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES

- DEDICATED ENGINES TO PRODUCTION STANDARD

- OTHER (SEE REMARKS)

### CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)

x OUT OF PRODUCTION (DATE: - )

- OUT OF SERVICE

# MEASURED DATA

	POWER	TIME	FUEL FLOW	EMI	SSIONS INDICES	(g/kg)	
MODE	SETTING	minutes	kg/s	HC	CO	NOx	SMOKE NUMBER
	(%F <sub>00</sub> )						
TAKE-OFF	100	0.7	2.630	0.05	0.05	28.11	7.4
CLIMB OUT	85	2.2	2.106	0.04	0.04	21.27	5.2
APPROACH	30	4.0	0.691	0.11	1.92	12.64	0
IDLE	7	26.0	0.220	1.18	16.96	4.9	0
LTO TOTAL FUEL (kg) or EMISSIONS (g) 897			440	6156	12796	_	
NUMBER OF ENGINES			2	2	2	2	
NUMBER OF TESTS			4	4	4	4	
AVERAGE D <sub>p</sub> /F <sub>oo</sub> (g/kN) or AVERAGE SN (MAX)			1.63	22.68	47.07	7.4	
SIGMA $(D_p/F_{oo} \text{ in } g/kN, \text{ or } SN)$			1	_	1	_	
RANGE $(D_p/F_{oo} \text{ in g/kN, or SN})$			-	-	-	-	

# ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS STAGE BLEED 0 % CORE FLOW AT - POWER SETTINGS

# ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.61-98.15		
TEMPERATURE (K)	279-293		
ABS HUMIDITY (kg/kg)	.00460074		

FUEL

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

MANUFACTURER: GI

TEST ORGANIZATION: CF6 Ecval Engineering

TEST LOCATION: Site IIIB, PTO, Peebles, Ohio, USA
TEST DATES: FROM 13 Jan 95 TO 17 Jan 95

# REMARKS

1. GE Report TM95-17.

2. Engine S/N 704/223 & 704/234

3. 1862M39 combustor

If REVISED, this data supersedes databank UID Compliance with fuel venting requirements:

0 ('x' if complies, PR if pre-regulation)