

# ICAO ENGINE EXHAUST EMISSIONS DATA BANK

# **SUBSONIC ENGINES**

ENGINE IDENTIFICATION: CF34-3B BYPASS RATIO: 6.25 UNIQUE ID NUMBER: 5GE084 PRESSURE RATIO  $(\pi_{oo})$ : 19.3 ENGINE TYPE: TF RATED OUTPUT  $(F_{oo})$  (kN): 41.01

# REGULATORY DATA

CHARACTERISTIC VALUE:	НС	СО	NOx	SMOKE NUMBER
$D_p/F_{oo}$ (g/kN) or SN	13.7	110.1	30.5	23.6
AS % OF ORIGINAL LIMIT	69.9 %	93.3 %	38.8 %	78.1 %
AS % OF CAEP/2 LIMIT (NOx)			48.5 %	
AS % OF CAEP/4 LIMIT (NOx)			50.9 %	
AS % OF CAEP/6 LIMIT (NOx)			52.1 %	
AS % OF CAEP/8 LIMIT (NOx)			56.4 %	

# DATA STATUS

- PRE-REGULATION

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)

- OUT OF PRODUCTION
- 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	0.399	0.06	0	11.28	18.3
CLIMB OUT	85	2.2	0.329	0.05	0	9.68	9.2
APPROACH	30	4.0	0.116	0.13	1.88	6.63	3.1
IDLE	7	26.0	0.049	4.69	47.59	3.72	3.1
LTO TOTAL FUEL (kg) or EMISSIONS (g) 164			366	3683	1078	-	
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D <sub>p</sub> /F <sub>oo</sub> (g/kN) or AVERAGE SN (MAX)			8.9	89.7	26.3	18.3	
SIGMA $(D_p/F_{oo} \text{ in } g/kN, \text{ or } SN)$			1	-	_	_	
RANGE $(D_p/F_{oo} \text{ in } g/kN, \text{ or } SN)$			-	-	-	-	

# ACCESSORY LOADS

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

# ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	101.6-102.9
TEMPERATURE (K)	275.5-281.1
ABS HUMIDITY (kg/kg)	.00160039

# FUEL

SPEC	Jet A
H/C	1.92
AROM (%)	20.3

MANUFACTURER: GE

TEST ORGANIZATION: GE Aircraft Engines, Lynn, MA

TEST LOCATION: Lynn Cell 121

TEST DATES: FROM 21 Mar 91 TO 25 Mar 91

# REMARKS

1. Ref. GE Report R95AEB012

2. Engine S/N 807-005

3. Certification in accordance with Part III, Chapter 2, of Amendment 7 of ICAO Annex 16 Vol. II.

4. NOx levels in accordance with Part III, Chapter 2, 2.3.2 e)

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

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