

# ICAO ENGINE EXHAUST EMISSIONS DATA BANK

# **SUBSONIC ENGINES**

ENGINE IDENTIFICATION: CF6-6D1A BYPASS RATIO: 5.9 UNIQUE ID NUMBER: 1GE002 PRESSURE RATIO  $(\pi_{oo})$ : 25.4 ENGINE TYPE: TF RATED OUTPUT  $(F_{oo})$  (kN): 181.9

# REGULATORY DATA

CHARACTERISTIC VALUE:	НС	СО	NOx	SMOKE NUMBER
$D_p/F_{oo}$ (g/kN) or SN	34.1	87.1	71.6	_
AS % OF ORIGINAL LIMIT	173.9 %	73.8 %	78.9 %	0.0 %
AS % OF CAEP/2 LIMIT (NOx)			98.6 %	
AS % OF CAEP/4 LIMIT (NOx)			120.1 %	
AS % OF CAEP/6 LIMIT (NOx)			136.5 %	
AS % OF CAEP/8 LIMIT (NOx)			164.1 %	

# DATA STATUS

x 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)

x OUT OF PRODUCTION (DATE: - )

- OUT OF SERVICE

FUEL

SPEC

H/C AROM (%)

# MEASURED DATA

	POWER	TIME	FUEL FLOW	EMISSIONS INDICES (g/kg)		(g/kg)	
MODE	SETTING	minutes	kg/s	HC	CO	NOx	SMOKE NUMBER
	(%F <sub>00</sub> )						
TAKE-OFF	100	0.7	1.812	0.3	0.5	41.6	4
CLIMB OUT	85	2.2	1.502	0.3	0.5	33.9	3
APPROACH	30	4.0	0.494	0.6	5.5	11.8	3
IDLE	7	26.0	0.176	19.9	52	4.6	4
LTO TOTAL FUEL (kg) or EMISSIONS (g) 667				5617	15066	12549	-
NUMBER OF ENGINES				7	7	7	7
NUMBER OF TESTS				7	7	7	7
AVERAGE D <sub>p</sub> /F <sub>oo</sub> (g/kN) or AVERAGE SN (MAX)				30.9	82.8	69	-
SIGMA $(D_p/F_{oo} \text{ in } g/kN, \text{ or } SN)$				3.5	6.9	2.3	2.2
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)	99.15-100.46		
TEMPERATURE (K)	280 - 301		
ABS HUMIDITY (kg/kg)	.003015		

MANUFACTURER: GE Aircraft Engines
TEST ORGANIZATION: Production Engine Test

TEST LOCATION: Production Test Cells M34 & M35

TEST DATES: FROM 16 Aug 79 TO 19 Nov 79

# REMARKS

1. Ref Report no FAA-EE-80-27 (GE Report R80AEG420)

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

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

Jet A 1.93

18.7