



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF34-8C1 Block 1 BYPASS RATIO: 5.13
 UNIQUE ID NUMBER: 6GE096 PRESSURE RATIO (π_{oo}): 22.15
 ENGINE TYPE: TF RATED OUTPUT (F_{oo}) (kN): 56.36

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	0.5	52.5	40.9	6.7
AS % OF ORIGINAL LIMIT	2.6 %	44.5 %	48.5 %	24.2 %
AS % OF CAEP/2 LIMIT (NOx)			60.6 %	
AS % OF CAEP/4 LIMIT (NOx)			71.3 %	
AS % OF CAEP/6 LIMIT (NOx)			70.3 %	
AS % OF CAEP/8 LIMIT (NOx)			78.4 %	

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)
 - OUT OF PRODUCTION
 - OUT OF SERVICE

MEASURED DATA

MODE	POWER SETTING (% F_{oo})	TIME minutes	FUEL FLOW kg/s	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NOx	
TAKE-OFF	100	0.7	0.608	0.02	0.59	13.82	5.2
CLIMB OUT	85	2.2	0.479	0.03	0.57	12	1.25
APPROACH	30	4.0	0.170	0.07	4.67	9.85	0
IDLE	7	26.0	0.070	0.13	19.73	4.03	0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			239	20	2406	1956	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D_p/F_{oo} (g/kN) or AVERAGE SN (MAX)				0.3	42.8	35.2	5.2
SIGMA (D_p/F_{oo} in g/kN, or SN)				-	-	-	-
RANGE (D_p/F_{oo} in g/kN, or SN)				0.3 - 0.4	41.5 - 44.5	35.0 - 35.7	2.5 - 7.2

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.1 - 98.1
TEMPERATURE (K)	284 - 292
ABS HUMIDITY (kg/kg)	0.00470 - 0.00727

FUEL

SPEC	Jet A
H/C	1.937
AROM (%)	18

MANUFACTURER: GE Aircraft Engines
 TEST ORGANIZATION: Peebles Test Operation
 TEST LOCATION: Peebles, Ohio
 TEST DATES: FROM 27 Jan 02 TO 28 Jan 02

REMARKS

1. GE Report R2001AE078
2. Engine S/N 193111
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)