



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF34-8E2
UNIQUE ID NUMBER: 8GE113
ENGINE TYPE: TF

BYPASS RATIO: 5.13
PRESSURE RATIO (π_{oo}): 21.71
RATED OUTPUT (F_{oo}) (kN): 55.19

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	0.6	48.2	40.7	5.9
AS % OF ORIGINAL LIMIT	3.0 %	40.9 %	48.8 %	21.2 %
AS % OF CAEP/2 LIMIT (NOx)			61.0 %	
AS % OF CAEP/4 LIMIT (NOx)			67.0 %	
AS % OF CAEP/6 LIMIT (NOx)			70.4 %	
AS % OF CAEP/8 LIMIT (NOx)			78.3 %	

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

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	0.591	0.02	0.59	13.6	4.58
CLIMB OUT	85	2.2	0.485	0.03	0.58	11.82	0.87
APPROACH	30	4.0	0.168	0.07	4.52	10.29	0
IDLE	7	26.0	0.062	0.16	20.01	4.45	0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			226	21	2168	1940	-
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)				0.38	39.28	35.14	4.58
SIGMA (D_p/F_{oo} in g/kN, or SN)				-	-	-	-
RANGE (D_p/F_{oo} 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)	97.1 to 98.1
TEMPERATURE (K)	284 to 292
ABS HUMIDITY (kg/kg)	0.00470 to 0.00727

FUEL

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

MANUFACTURER: GE
TEST ORGANIZATION: CF6 Eval Engineering
TEST LOCATION: PTO Site 3B Peebles
TEST DATES: FROM 27 Jan 02 TO 28 Jan 02

REMARKS

1. Ref. GE REPORT R2001AE078
2. Engine S/N 193111
3. Data corrected per ICAO Annex 16, Vol 2, Part III, Appendix 3

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

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