ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CFM56-2B-1
UNIQUE ID NUMBER: 1CM002
ENGINE TYPE: TF

BYPASS RATIO: 6
PRESSURE RATIO (π_{oo}): 23.5
RATED OUTPUT (F_{oo}) (kN): 97.86

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	6.0	82.5	46.3	7.7
AS % OF ORIGINAL LIMIT	30.4 %	69.9 %	53.2 %	32.4 %
AS % OF CAEP/2 LIMIT (NOx)			66.5 %	
AS % OF CAEP/4 LIMIT (NOx)			81.7 %	
AS % OF CAEP/6 LIMIT (NOx)			92.9 %	
AS % OF CAEP/8 LIMIT (NOx)			113.0 %	

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) HC	CO	NOx	SMOKE NUMBER
TAKE-OFF	100	0.7	0.985	0.04	0.9	18.5	6
CLIMB OUT	85	2.2	0.819	0.05	0.9	16	3
APPROACH	30	4.0	0.311	0.08	4.2	8.2	2.6
IDLE	7	26.0	0.128	1.83	30.7	4	2.2
LTO TOTAL FUEL (kg) or EMISSIONS (g)			424	378	6578	3906	-
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)				3.87	67.2	39.9	6
SIGMA (D_p/F_{oo} in g/kN, or SN)				0.41	4.1	0.6	0.8
RANGE (D_p/F_{oo} in g/kN, or SN)				3.40-4.15	63.5-71.7	39.4-40.5	5.4-6.9

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	95.98-97.49
TEMPERATURE (K)	279 - 286
ABS HUMIDITY (kg/kg)	.002-.009

FUEL

SPEC	Jet A
H/C	1.93
AROM (%)	16

MANUFACTURER: CFMI
TEST ORGANIZATION: CFM56 Evaluation Engineering
TEST LOCATION: Peebles Site IVD
TEST DATES: FROM 11 Nov 83 TO 14 Nov 83

REMARKS

1. Ref GE Report R83AEB631.
2. Engine S/N 692441.

If REVISED, this data supersedes databank UID
Compliance with fuel venting requirements: 0 ('x' if complies, PR if pre-regulation)