ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CFM56-5B4/2
UNIQUE ID NUMBER: 2CM018
ENGINE TYPE: TF

BYPASS RATIO: 5.7
PRESSURE RATIO (π_{oo}): 27.1
RATED OUTPUT (F_{oo}) (kN): 117.9

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	14.6	106.5	34.6	5.6
AS % OF ORIGINAL LIMIT	74.5 %	90.3 %	36.7 %	24.8 %
AS % OF CAEP/2 LIMIT (NOx)			45.9 %	
AS % OF CAEP/4 LIMIT (NOx)			55.5 %	
AS % OF CAEP/6 LIMIT (NOx)			63.1 %	
AS % OF CAEP/8 LIMIT (NOx)			75.2 %	

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	1.180	0.1	1.6	16.61	0.5
CLIMB OUT	85	2.2	0.975	0.1	4.9	12.58	0.5
APPROACH	30	4.0	0.335	11.4	43.8	6.13	2.3
IDLE	7	26.0	0.121	2.2	37.1	4.49	3.5
LTO TOTAL FUEL (kg) or EMISSIONS (g)			447	1350	11234	3783	-
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				3	3	3	3
AVERAGE D_p/F_{oo} (g/kN) or AVERAGE SN (MAX)				11.2	93.5	31.5	4.75
SIGMA (D_p/F_{oo} in g/kN, or SN)				-	-	-	-
RANGE (D_p/F_{oo} in g/kN, or SN)				10.4-12.0	87.6-99.3	31.0-31.9	4.5-5.0

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	100.67-101.01
TEMPERATURE (K)	293-299
ABS HUMIDITY (kg/kg)	.0114-.0129

FUEL

SPEC	Jet A
H/C	1.93
AROM (%)	16.8

MANUFACTURER: CFMI
TEST ORGANIZATION: CFM56 Evaluation Engineering
TEST LOCATION: PTO Site IIIC
TEST DATES: FROM 15 Jun 94 TO 01 Jul 94

REMARKS

1. Ref GE Report CR-797/2.
2. Engine S/N 779131/001 & 779132/001
3. DAC combustor

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