ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CFM56-5B2/2
UNIQUE ID NUMBER: 2CM017
ENGINE TYPE: TF

BYPASS RATIO: 5.7
PRESSURE RATIO (π_{oo}): 31.2
RATED OUTPUT (F_{oo}) (kN): 137.9

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	10.5	85.9	46.0	5.6
AS % OF ORIGINAL LIMIT	53.6 %	72.8 %	44.9 %	25.8 %
AS % OF CAEP/2 LIMIT (NOx)			56.2 %	
AS % OF CAEP/4 LIMIT (NOx)			66.3 %	
AS % OF CAEP/6 LIMIT (NOx)			75.0 %	
AS % OF CAEP/8 LIMIT (NOx)			87.6 %	

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	1.406	0.1	0.4	29.57	0.5
CLIMB OUT	85	2.2	1.132	0.1	1.7	15.86	0.5
APPROACH	30	4.0	0.377	8.4	35.8	7.24	2.3
IDLE	7	26.0	0.131	1.7	33.7	4.82	3.5
LTO TOTAL FUEL (kg) or EMISSIONS (g)			503	1128	10404	5756	-
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)				8.1	75.4	41.8	4.75
SIGMA (D_p/F_{oo} in g/kN, or SN)				-	-	-	-
RANGE (D_p/F_{oo} in g/kN, or SN)				7.9-8.9	70.0-80.9	40.7-42.8	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)