ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION:	CFM56-5B1/2	BYPASS RATIO:	5.7
UNIQUE ID NUMBER:	2CM016	PRESSURE RATIO (π_{oo}):	30.2
ENGINE TYPE:	TF	RATED OUTPUT (F_{oo}) (kN):	133.45

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	11.3	90.6	43.8	5.6
AS % OF ORIGINAL LIMIT	57.7 %	76.8 %	43.6 %	25.6 %
AS % OF CAEP/2 LIMIT (NOx)			54.5 %	
AS % OF CAEP/4 LIMIT (NOx)			65.0 %	
AS % OF CAEP/6 LIMIT (NOx)			73.8 %	
AS % OF CAEP/8 LIMIT (NOx)			86.7 %	

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	1.345	0.1	0.6	27.75	0.5
CLIMB OUT	85	2.2	1.104	0.1	2.5	14.91	0.5
APPROACH	30	4.0	0.369	9.1	38.4	7.02	2.3
IDLE	7	26.0	0.129	1.7	34	4.73	3.5
LTO TOTAL FUEL (kg) or EMISSIONS (g)			492	1168	10641	5314	-
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)				8.7	79.5	39.8	4.75
SIGMA (D_p/F_{oo} in g/kN, or SN)				-	-	-	-
RANGE (D_p/F_{oo} in g/kN, or SN)				8.1-9.4	73.9-85.2	38.8-40.8	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)