ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION:	CFM56-5B2	BYPASS RATIO:	5.6
UNIQUE ID NUMBER:	2CM013	PRESSURE RATIO (π_{oo}):	31.3
ENGINE TYPE:	TF	RATED OUTPUT (F_{oo}) (kN):	137.9

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	6.6	47.4	71.3	13.0
AS % OF ORIGINAL LIMIT	33.9 %	40.2 %	69.5 %	60.0 %
AS % OF CAEP/2 LIMIT (NOx)			86.9 %	
AS % OF CAEP/4 LIMIT (NOx)			102.4 %	
AS % OF CAEP/6 LIMIT (NOx)			115.8 %	
AS % OF CAEP/8 LIMIT (NOx)			135.2 %	

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	1.426	0.1	0.5	37.8	8.2
CLIMB OUT	85	2.2	1.158	0.1	0.5	28.5	10.1
APPROACH	30	4.0	0.376	0.12	1.4	11	0
IDLE	7	26.0	0.119	3.04	27.4	4.7	0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			489	596	5319	8485	–
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)				4.31	38.6	61.5	10.1
SIGMA (D_p/F_{oo} in g/kN, or SN)				0.24	0.21	0.5	1.3
RANGE (D_p/F_{oo} in g/kN, or SN)				4.05-4.53	38.3-38.7	61.2-62.2	8.6-11.0

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.49 – 98.18
TEMPERATURE (K)	283.4 – 293.9
ABS HUMIDITY (kg/kg)	.0067 – .0076

FUEL

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

MANUFACTURER:	CFMI
TEST ORGANIZATION:	CFM56 Evaluation Engineering
TEST LOCATION:	Peebles Site IIIB
TEST DATES:	FROM 07 Oct 92 TO 08 Oct 92

REMARKS

1. Ref GE Report R92AEB262.
2. Engine S/N 779101

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