ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CFM56-5B6/P   BYPASS RATIO: 6
UNIQUE ID NUMBER: 3CM028   PRESSURE RATIO (π_{oo}): 24.64
ENGINE TYPE: TF   RATED OUTPUT (F_{oo}) (kN): 104.53

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	13.3	53.1	46.9	7.0
AS % OF ORIGINAL LIMIT	67.9 %	45.0 %	52.5 %	29.9 %
AS % OF CAEP/2 LIMIT (NOx)			65.7 %	
AS % OF CAEP/4 LIMIT (NOx)			80.3 %	
AS % OF CAEP/6 LIMIT (NOx)			91.2 %	
AS % OF CAEP/8 LIMIT (NOx)			110.2 %	

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)			SMOKE NUMBER
				HC	CO	NOx	
TAKE-OFF	100	0.7	0.961	0.2	0.9	23.6	5.4
CLIMB OUT	85	2.2	0.799	0.2	1	19.6	2.2
APPROACH	30	4.0	0.275	0.6	2.9	9.2	0.3
IDLE	7	26.0	0.097	5.5	27.7	4	0.6
LTO TOTAL FUEL (kg) or EMISSIONS (g)			363	901	4525	4232	–
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)				8.61	43.27	40.49	5.4
SIGMA (D_p/F_{oo} in g/kN, or SN)				–	–	–	–
RANGE (D_p/F_{oo} in g/kN, or SN)				–	–	–	–

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	98.2-99.6
TEMPERATURE (K)	281.5-283.6
ABS HUMIDITY (kg/kg)	.0065-.0075

FUEL

SPEC	Jet A
H/C	1.92
AROM (%)	19

MANUFACTURER: GE
TEST ORGANIZATION: CFM56-5B Eval Engineering
TEST LOCATION: Techspace-Aero Facility, Liege, Belgium
TEST DATES: FROM   Nov 95   TO   –

REMARKS

1. FAA Certification Report CR-797/P, June 95.
2. Engine S/N 779-194/1

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