ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: BR700-715C1-30   BYPASS RATIO: 4.55
UNIQUE ID NUMBER: 4BR004   PRESSURE RATIO (π_{oo}): 32.01
ENGINE TYPE: MTF   RATED OUTPUT (F_{oo}) (kN): 95.33

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	0.4	34.1	64.6	5.1
AS % OF ORIGINAL LIMIT	1.8 %	28.9 %	62.1 %	21.3 %
AS % OF CAEP/2 LIMIT (NOx)			77.6 %	
AS % OF CAEP/4 LIMIT (NOx)			90.9 %	
AS % OF CAEP/6 LIMIT (NOx)			102.5 %	
AS % OF CAEP/8 LIMIT (NOx)			119.3 %	

DATA STATUS

-     PRE-REGULATION
- x   CERTIFICATION
-     REVISED (SEE REMARKS)

TEST ENGINE STATUS

-     NEWLY MANUFACTURED ENGINES
- x   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	0.980	0	0.75	31.39	3.98
CLIMB OUT	85	2.2	0.799	0	0.78	22.41	3.09
APPROACH	30	4.0	0.273	0	3.06	11.55	1.09
IDLE	7	26.0	0.101	0.14	14.86	5.72	0.87
LTO TOTAL FUEL (kg) or EMISSIONS (g)			370	22	2655	5314	-
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)				0.23	27.77	55.71	3.98
SIGMA (D_p/F_{oo} in g/kN, or SN)				-	-	-	-
RANGE (D_p/F_{oo} in g/kN, or SN)				0.17-0.29	27.22-28.85	55.26-56.04	3.61-4.26

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	101.3-101.9
TEMPERATURE (K)	288.8-294.4
ABS HUMIDITY (kg/kg)	0.0066-.0079

FUEL

SPEC	AVTUR
H/C	1.89
AROM (%)	17.7

MANUFACTURER: BMW Rolls-Royce GmbH
TEST ORGANIZATION: BMW Rolls-Royce GmbH
TEST LOCATION: BMW Rolls-Royce GmbH, Dahlewitz, Germany
TEST DATES: FROM   07 May 98   TO 08 May 98

REMARKS

Data from Certification Report E-TR484/98 (FR) ISS00

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