ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: BR700-715C1-30
UNIQUE ID NUMBER: 4BR007
ENGINE TYPE: MTF

BYPASS RATIO: 4.54
PRESSURE RATIO (π_{oo}): 32.15
RATED OUTPUT (F_{oo}) (kN): 95.33

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	0.3	41.8	55.8	6.3
AS % OF ORIGINAL LIMIT	1.4 %	35.4 %	53.5 %	26.1 %
AS % OF CAEP/2 LIMIT (NOx)			66.9 %	
AS % OF CAEP/4 LIMIT (NOx)			78.2 %	
AS % OF CAEP/6 LIMIT (NOx)			88.2 %	
AS % OF CAEP/8 LIMIT (NOx)			102.5 %	

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	0.984	0.01	0.8	27.92	4.86
CLIMB OUT	85	2.2	0.805	0.06	0.64	20.05	4.26
APPROACH	30	4.0	0.272	0.02	3.23	9.23	1.12
IDLE	7	26.0	0.105	0.06	17.85	4.28	0.04
LTO TOTAL FUEL (kg) or EMISSIONS (g)			377	18	3236	4588	-
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)				0.18	34.04	48.13	4.86
SIGMA (D_p/F_{oo} in g/kN, or SN)				-	-	-	-
RANGE (D_p/F_{oo} in g/kN, or SN)				0.02-0.34	33.51-34.63	46.96-49.29	4.62-5.28

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	100.9-101.3
TEMPERATURE (K)	294.4-297.2
ABS HUMIDITY (kg/kg)	.0072-.0075

FUEL

SPEC	AVTUR
H/C	1.93
AROM (%)	16.6

MANUFACTURER: BMW Rolls-Royce GmbH
TEST ORGANIZATION: BMW Rolls-Royce GmbH
TEST LOCATION: BMW Rolls-Royce GmbH, Dahlewitz, Germany
TEST DATES: FROM 29 Jun 99 TO -

REMARKS

1. Data from certification report E-TR346/99 (FR) ISS00.
2. Incorporating improved fuel injector.

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