ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION:	AE3007A3	BYPASS RATIO:	4.72
UNIQUE ID NUMBER:	6AL018	PRESSURE RATIO (π_{oo}):	17.2
ENGINE TYPE:	MTF	RATED OUTPUT (F_{oo}) (kN):	33

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	18.7	92.5	50.2	0.0
AS % OF ORIGINAL LIMIT	95.4 %	78.4 %	67.5 %	0.0 %
AS % OF CAEP/2 LIMIT (NOx)			84.3 %	
AS % OF CAEP/4 LIMIT (NOx)			86.2 %	
AS % OF CAEP/6 LIMIT (NOx)			87.1 %	
AS % OF CAEP/8 LIMIT (NOx)			92.8 %	

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	0.358	0	0	20.93	0.01
CLIMB OUT	85	2.2	0.300	0	0	18.27	0.01
APPROACH	30	4.0	0.108	0.23	2	6.56	0.01
IDLE	7	26.0	0.045	5.65	34.86	3.18	0.01
LTO TOTAL FUEL (kg) or EMISSIONS (g)			150	401	2488	1429	-
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)				12.14	75.39	43.31	0.01
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)	99.6 - 99.7
TEMPERATURE (K)	297 - 301
ABS HUMIDITY (kg/kg)	0.0115 - 0.0141

FUEL

SPEC	Jet A
H/C	1.9
AROM (%)	16 - 20

MANUFACTURER: Rolls-Royce Corporation
TEST ORGANIZATION: Rolls-Royce Corporation
TEST LOCATION: Indianapolis, Indiana, USA
TEST DATES: FROM 28 Aug 02 TO 29 Aug 02

REMARKS

1. For effectivity see Rolls-Royce Notice to Operators No. AE3007A-076
2. Data in this form for AE3007A3 engine fitted with PAB fuel nozzles
3. Results based on Rolls-Royce report EDR 19972

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