ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: AE3007C1
UNIQUE ID NUMBER: 6AL024
ENGINE TYPE: MTF

BYPASS RATIO: 5.1
PRESSURE RATIO (π_{oo}): 16.58
RATED OUTPUT (F_{oo}) (kN): 31.46

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	19.0	93.3	46.6	0.0
AS % OF ORIGINAL LIMIT	97.1 %	79.1 %	63.6 %	0.0 %
AS % OF CAEP/2 LIMIT (NOx)			79.5 %	
AS % OF CAEP/4 LIMIT (NOx)			80.9 %	
AS % OF CAEP/6 LIMIT (NOx)			81.5 %	
AS % OF CAEP/8 LIMIT (NOx)			86.6 %	

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)
- OUT OF PRODUCTION
- 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	0.322	0	0	20.2	0.01
CLIMB OUT	85	2.2	0.269	0.01	0	17.6	0.01
APPROACH	30	4.0	0.099	0.21	1.62	6.71	0.01
IDLE	7	26.0	0.042	5.88	36.04	3.14	0.01
LTO TOTAL FUEL (kg) or EMISSIONS (g)			138	389	2389	1262	-
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)				12.36	76	40.16	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 AE3007C1 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)