ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: Trent 877
UNIQUE ID NUMBER: 2RR025
ENGINE TYPE: TF

BYPASS RATIO: 6.02
PRESSURE RATIO (π_{oo}): 36.3
RATED OUTPUT (F_{oo}) (kN): 361.64

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	2.9	28.6	60.1	6.9
AS % OF ORIGINAL LIMIT	14.9 %	24.2 %	53.3 %	41.3 %
AS % OF CAEP/2 LIMIT (NOx)			66.7 %	
AS % OF CAEP/4 LIMIT (NOx)			75.5 %	
AS % OF CAEP/6 LIMIT (NOx)			83.9 %	
AS % OF CAEP/8 LIMIT (NOx)			95.8 %	

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: 01-Jul-05)
- \- 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	3.210	0	0.2	34.76	4.13
CLIMB OUT	85	2.2	2.660	0	0.16	27.59	5.27
APPROACH	30	4.0	0.900	0	0.8	10.59	2.27
IDLE	7	26.0	0.280	1.55	18.42	4.75	0.5
LTO TOTAL FUEL (kg) or EMISSIONS (g)			1139	677	8302	18736	-
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)				1.9	23.26	51.82	5.34
SIGMA (D_p/F_{oo} in g/kN, or SN)				-	-	-	-
RANGE (D_p/F_{oo} in g/kN, or SN)				1.60-2.18	21.62-24.46	50.5-52.8	4.7-6.0

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	100.2
TEMPERATURE (K)	287
ABS HUMIDITY (kg/kg)	.00527 - .00886

FUEL

SPEC	AVTUR
H/C	1.95
AROM (%)	16

MANUFACTURER: Rolls Royce plc
TEST ORGANIZATION: Rolls Royce plc
TEST LOCATION: SINFIN, Derby
TEST DATES: FROM Sep 94 TO -

REMARKS

1. Data from certification report DNS 14445

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