ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: Trent 556-61   BYPASS RATIO: 7.5
UNIQUE ID NUMBER: 6RR041   PRESSURE RATIO (π_{oo}):   36.71
ENGINE TYPE: TF   RATED OUTPUT (F_{oo}) (kN):   261.5

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	0.2	16.6	67.2	3.7
AS % OF ORIGINAL LIMIT	1.0 %	14.1 %	59.2 %	20.3 %
AS % OF CAEP/2 LIMIT (NOx)			74.1 %	
AS % OF CAEP/4 LIMIT (NOx)			83.6 %	
AS % OF CAEP/6 LIMIT (NOx)			92.8 %	
AS % OF CAEP/8 LIMIT (NOx)			105.8 %	

DATA STATUS   TEST ENGINE STATUS

-    PRE-REGULATION   x   NEWLY MANUFACTURED ENGINES
x   CERTIFICATION   -   DEDICATED ENGINES TO PRODUCTION STANDARD
-    REVISED (SEE REMARKS)   -   OTHER (SEE REMARKS)

EMISSIONS STATUS   CURRENT ENGINE STATUS

x   DATA CORRECTED TO REFERENCE   (IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
     (ANNEX 16 VOLUME II)   x   OUT OF PRODUCTION (DATE: 26-Jun-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	2.240	0	0.02	44.91	2.24
CLIMB OUT	85	2.2	1.830	0	0.25	32.76	2.09
APPROACH	30	4.0	0.620	0	0.46	11.78	1.02
IDLE	7	26.0	0.230	0.1	10.3	6.19	0.76
LTO TOTAL FUEL (kg) or EMISSIONS (g)	843			36	3826	16113	-
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				4	4	4	4
AVERAGE D_p/F_{oo} (g/kN) or AVERAGE SN (MAX)				0.1	14.6	61.1	3.1
SIGMA (D_p/F_{oo} in g/kN, or SN)				0.14	0.99	0.42	1.13
RANGE (D_p/F_{oo} in g/kN, or SN)				0 - 0.2	13.9 - 15.3	60.8 - 61.4	2.3 - 3.9

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS   FUEL

BAROMETER (kPa)	100.04 - 102.91
TEMPERATURE (K)	275.5 - 280.3
ABS HUMIDITY (kg/kg)	0.0038 - 0.0062

SPEC	-
H/C	1.97
AROM (%)	17.6

MANUFACTURER: Rolls Royce
TEST ORGANIZATION: Rolls Royce
TEST LOCATION: Derby
TEST DATES: FROM 07 Jan 02   TO 18 Jan 02

REMARKS

1. Certification report DNS 85728
2. Phase 5 tiled combustor

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