ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: RB211-524G-T   BYPASS RATIO: 4.3
UNIQUE ID NUMBER: 4RR036   PRESSURE RATIO (π_{oo}): 32.1
COMBUSTOR:
ENGINE TYPE: MTF   RATED THRUST (F_{oo}) (kN): 253.0

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	9.6	56.9	57.3	6.9
AS % OF ORIGINAL LIMIT	49.0	48.2	55.0	37.4
AS % OF CAEP/2 LIMIT (NOx)			68.7	
AS % OF CAEP/4 LIMIT (NOx)			80.5	
AS % OF CAEP/6 LIMIT (NOx)			90.7	
AS % OF CAEP/8 LIMIT (NOx)			105.5	

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   (DATE: -   )

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	2.620	0.00	0.16	28.43	5.2
CLIMB OUT	85	2.2	2.100	0.03	0.14	21.80	5.2
APPROACH	30	4.0	0.740	0.00	1.17	9.68	1.8
IDLE	7	26.0	0.260	3.95	28.82	4.00	0.5
LTO TOTAL FUEL (kg) or EMISSIONS (g)			970	1610	11954	12513	-
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)				6.2	46.4	49.4	5.3
SIGMA (D_p/F_{oo} in g/kN, or SN)							
RANGE (D_p/F_{oo} in g/kN, or SN)				5.29-7.11	43.6-50.58	48-50.3	4.7-6

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)	0.0053-0.0089

FUEL

SPEC	AVTUR
H/C	1.95
AROM (%)	16

MANUFACTURER: Rolls-Royce plc
TEST ORGANIZATION: Rolls-Royce plc
TEST LOCATION: SINFIN-Derby
TEST DATES: 01/09/1994

REMARKS

    1. Data from Certification Report DNS38044

Compliance with Fuel Venting requirements: -   ('x' if complies, 'PR' if pre-regulation,
                                                       '-' if information is not available)