ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: RB211-524C2   BYPASS RATIO: 4.5
UNIQUE ID NUMBER: 1RR006   PRESSURE RATIO (π_{oo}):   29.1
ENGINE TYPE: TF   RATED OUTPUT (F_{oo}) (kN):   224.8

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	179.4	227.6	84.5	18.7
AS % OF ORIGINAL LIMIT	915.4 %	192.9 %	86.1 %	98.4 %
AS % OF CAEP/2 LIMIT (NOx)			107.6 %	
AS % OF CAEP/4 LIMIT (NOx)			128.9 %	
AS % OF CAEP/6 LIMIT (NOx)			146.5 %	
AS % OF CAEP/8 LIMIT (NOx)			173.0 %	

DATA STATUS   TEST ENGINE STATUS

   x   PRE-REGULATION   -   NEWLY MANUFACTURED ENGINES
   -    CERTIFICATION   x   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: -)
                                     -    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	2.480	0	0.66	41.9	14.5
CLIMB OUT	85	2.2	2.020	0.22	1.63	32.3	10.9
APPROACH	30	4.0	0.740	4.42	18.9	10.4	2.2
IDLE	7	26.0	0.300	54.2	81	3.37	0.7
LTO TOTAL FUEL (kg) or EMISSIONS (g)			1016	26209	41768	16401	-
NUMBER OF ENGINES				-	-	-	-
NUMBER OF TESTS				-	-	-	-
AVERAGE D_p/F_{oo} (g/kN) or AVERAGE SN (MAX)				116.5	185.4	72.9	14.5
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   FUEL

BAROMETER (kPa)	102
TEMPERATURE (K)	288
ABS HUMIDITY (kg/kg)	0.005

SPEC	AVTUR
H/C	1.91
AROM (%)	20

MANUFACTURER: Rolls Royce Ltd
TEST ORGANIZATION: Rolls Royce Ltd
TEST LOCATION: SINFIN-Derby
TEST DATES: FROM   Sep 86   TO   -

REMARKS

1. Package 1 combustor
2. SN mode data scaled from 1RR004

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