



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: Trent 895
UNIQUE ID NUMBER: 5RR040
ENGINE TYPE: TF

BYPASS RATIO: 5.7
PRESSURE RATIO (π_{oo}): 41.52
RATED OUTPUT (F_{oo}) (kN): 413.05

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	1.7	23.1	78.6	6.9
AS % OF ORIGINAL LIMIT	8.6 %	19.6 %	63.9 %	42.8 %
AS % OF CAEP/2 LIMIT (NOx)			79.9 %	
AS % OF CAEP/4 LIMIT (NOx)			87.3 %	
AS % OF CAEP/6 LIMIT (NOx)			95.9 %	
AS % OF CAEP/8 LIMIT (NOx)			107.4 %	

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)			SMOKE NUMBER
				HC	CO	NOx	
TAKE-OFF	100	0.7	4.030	0.02	0.27	47.79	4
CLIMB OUT	85	2.2	3.190	0	0.19	34.29	4.9
APPROACH	30	4.0	1.050	0	0.54	11.39	2.6
IDLE	7	26.0	0.330	0.89	14.71	5.11	0.5
LTO TOTAL FUEL (kg) or EMISSIONS (g)			1357	462	7834	28029	-
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)				1.1	18.8	67.81	5.34
SIGMA (D_p/F_{oo} in g/kN, or SN)				-	-	-	-
RANGE (D_p/F_{oo} in g/kN, or SN)				0.95 - 1.24	17.71 - 19.67	65.76 - 69.5	4.7 - 6.0

ACCESSORY LOADS

POWER EXTRACTION 0 (kW)
STAGE BLEED 0 % CORE FLOW

AT - POWER SETTINGS
AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	100.2
TEMPERATURE (K)	287
AWS HUMIDITY (kg/kg)	.0053 - .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: FROM Sep 94 TO -

REMARKS

1. Data from certification report DNS59304

If REVISED, this data supersedes databank UID
Compliance with fuel venting requirements:

0 ('x' if complies, PR if pre-regulation)