



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: Trent 772
UNIQUE ID NUMBER: 2RR023
ENGINE TYPE: MTF
BYPASS RATIO: 5.03
PRESSURE RATIO (π_{00}): 35.79
RATED OUTPUT (F_{00}) (kN): 315.9

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{00} (g/kN) or SN	3.5	16.4	78.9	1.6
AS % OF ORIGINAL LIMIT	18.0 %	13.9 %	70.7 %	9.4 %
AS % OF CAEP/2 LIMIT (NOx)			88.4 %	
AS % OF CAEP/4 LIMIT (NOx)			100.4 %	
AS % OF CAEP/6 LIMIT (NOx)			111.9 %	
AS % OF CAEP/8 LIMIT (NOx)			127.9 %	

DATA STATUS

- PRE-REGULATION
x CERTIFICATION
- REVISED (SEE REMARKS)

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES
- 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: -)
x OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (% F_{00})	TIME minutes	FUEL FLOW kg/s	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NOx	
TAKE-OFF	100	0.7	3.150	0.33	0.18	43.6	-
CLIMB OUT	85	2.2	2.580	0.35	0.15	32.66	-
APPROACH	30	4.0	0.840	0.81	0.78	10.68	-
IDLE	7	26.0	0.270	0.97	9.36	5.74	-
LTO TOTAL FUEL (kg) or EMISSIONS (g)			1096	735	4175	21462	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D_p/F_{00} (g/kN) or AVERAGE SN (MAX)				2.29	13.32	68.09	1.26
SIGMA (D_p/F_{00} in g/kN, or SN)				-	-	-	-
RANGE (D_p/F_{00} in g/kN, or SN)				1.23 - 3.18	12.29-14.00	67.7 - 68.4	1.1 - 1.5

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	100.6
TEMPERATURE (K)	293
AHS HUMIDITY (kg/kg)	.0073 - .0084

FUEL

SPEC	AVTUR
H/C	1.94
AROM (%)	16

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

REMARKS

1. Data from certification report DNS 12859.
2. For SN by mode data use 3RR030 data

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