ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: TAY 650   BYPASS RATIO: 3
UNIQUE ID NUMBER: 3RR031   PRESSURE RATIO (π_{oo}):   15.9
ENGINE TYPE: MTF   RATED OUTPUT (F_{oo}) (kN):   67.2

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	6.0	80.0	44.9	12.7
AS % OF ORIGINAL LIMIT	30.6 %	67.8 %	62.6 %	48.1 %
AS % OF CAEP/2 LIMIT (NOx)			78.2 %	
AS % OF CAEP/4 LIMIT (NOx)			91.6 %	
AS % OF CAEP/6 LIMIT (NOx)			98.7 %	
AS % OF CAEP/8 LIMIT (NOx)			115.8 %	

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

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	0.860	0.11	0.69	16.45	5.6
CLIMB OUT	85	2.2	0.710	0.22	0.48	12.94	7.9
APPROACH	30	4.0	0.250	0.11	1.76	5.26	4
IDLE	7	26.0	0.120	1.23	22.36	2.5	0.56
LTO TOTAL FUEL (kg) or EMISSIONS (g)			377	261	4361	2591	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				1	4	4	4
AVERAGE D_p/F_{oo} (g/kN) or AVERAGE SN (MAX)				3.9	65.16	38.75	9.87
SIGMA (D_p/F_{oo} in g/kN, or SN)				-	-	-	-
RANGE (D_p/F_{oo} in g/kN, or SN)				3.9	62.4-67.9	38.1-39.5	9.3-10.4

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	-
TEMPERATURE (K)	283
ABS HUMIDITY (kg/kg)	.0068-.0081

FUEL

SPEC	AVTUR
H/C	1.95
AROM (%)	16.1

MANUFACTURER: Rolls Royce plc
TEST ORGANIZATION: Rolls Royce plc
TEST LOCATION: SINFIN, Derby
TEST DATES: FROM   Jun 97   TO   -

REMARKS

1. Pedhead combustor

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