ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

** DATA SUPERSEDED ** SEE SHEET: 11RR048

ENGINE IDENTIFICATION:	TAY 611-8C	BYPASS RATIO:	3.2
UNIQUE ID NUMBER:	6RR042	PRESSURE RATIO (π_{oo}):	15.8
ENGINE TYPE:	MTF	RATED OUTPUT (F_{oo}) (kN):	61.6

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	4.6	101.6	48.2	5.1
AS % OF ORIGINAL LIMIT	23.2 %	86.1 %	67.4 %	18.7 %
AS % OF CAEP/2 LIMIT (NOx)			84.3 %	
AS % OF CAEP/4 LIMIT (NOx)			96.6 %	
AS % OF CAEP/6 LIMIT (NOx)			102.7 %	
AS % OF CAEP/8 LIMIT (NOx)			118.3 %	

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)
-     OUT OF PRODUCTION
-     OUT OF SERVICE

MEASURED DATA

MODE	POWER SETTING (%F_{oo})	TIME minutes	FUEL FLOW kg/s	HC	CO	NOx	SMOKE NUMBER
				EMISSIONS INDICES (g/kg)			
TAKE-OFF	100	0.7	0.741	0.02	1.12	18.42	3.93
CLIMB OUT	85	2.2	0.612	0	1.27	15.01	2.24
APPROACH	30	4.0	0.241	0	4.99	5.6	0.23
IDLE	7	26.0	0.105	1.11	28.55	2.76	0.13
LTO TOTAL FUEL (kg) or EMISSIONS (g)			334	182	5103	2562	–
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)				2.96	82.78	41.59	3.93
SIGMA (D_p/F_{oo} in g/kN, or SN)				0	0	0	0
RANGE (D_p/F_{oo} in g/kN, or SN)				2.56-3.37	78.58-86.04	40.99-41.92	3.53-4.35

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	99.9 – 100
TEMPERATURE (K)	281.4 – 282.7
ABS HUMIDITY (kg/kg)	0.00475

FUEL

SPEC	–
H/C	1.986
AROM (%)	17.5

MANUFACTURER:	Rolls-Royce		
TEST ORGANIZATION:	Rolls-Royce		
TEST LOCATION:	Dahlewitz		
TEST DATES:	FROM 21 Jan 02	TO 22 Jan 02	

REMARKS

1. Certification report E-TR164/02
2. New airspray fuel injector

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