



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: TAY611-8C
UNIQUE ID NUMBER: 11RR048
ENGINE TYPE: MTF

BYPASS RATIO: 3.26
PRESSURE RATIO (π_{oo}): 15.88
RATED OUTPUT (F_{oo}) (kN): 61.6

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	5.2	72.4	43.0	5.2
AS % OF ORIGINAL LIMIT	26.6 %	61.3 %	59.9 %	19.1 %
AS % OF CAEP/2 LIMIT (NOx)			74.9 %	
AS % OF CAEP/4 LIMIT (NOx)			85.7 %	
AS % OF CAEP/6 LIMIT (NOx)			91.2 %	
AS % OF CAEP/8 LIMIT (NOx)			105.1 %	

DATA STATUS

- PRE-REGULATION
x CERTIFICATION
x 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	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NOx	
TAKE-OFF	100	0.7	0.731	0.03	0.5	19.3	4.39
CLIMB OUT	85	2.2	0.604	0.05	0.95	15.4	3.46
APPROACH	30	4.0	0.215	0.65	2.89	5.31	0.46
IDLE	7	26.0	0.102	1.49	24.4	2.53	0.21
LTO TOTAL FUEL (kg) or EMISSIONS (g)			321	275	4123	2500	-
NUMBER OF ENGINES				3	3	3	3
NUMBER OF TESTS				5	5	5	5
AVERAGE D_p/F_{oo} (g/kN) or AVERAGE SN (MAX)				4.465	66.9	40.58	4.7
SIGMA (D_p/F_{oo} in g/kN, or SN)				1.308	11.5	0.9	0.59
RANGE (D_p/F_{oo} in g/kN, or SN)				2.57-5.62	59.55-82.67	39.5-41.7	3.67-5.2

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	99.9 - 102
TEMPERATURE (K)	281.4 - 292.5
ABS HUMIDITY (kg/kg)	0.00475 - 0.00587

FUEL

SPEC	-
H/C	1.946
AROM (%)	17.1

MANUFACTURER: Rolls-Royce
TEST ORGANIZATION: Rolls-Royce
TEST LOCATION: Dahlewitz
TEST DATES: FROM 22 Jan 02 TO 08 May 11

REMARKS

1. Certification Report O-TR0546/11
2. Certification in accordance with Part III, Chapter 2, of Amendment 6 of ICAO Annex 16 Vol. II.
3. NOx levels in accordance with Part III, Chapter 2, 2.3.2 d) (CAEP/6)

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

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