



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: TAY Mk611-8
UNIQUE ID NUMBER: 1RR019
ENGINE TYPE: MTF
BYPASS RATIO: 3
PRESSURE RATIO (π_{oo}): 16.1
RATED OUTPUT (F_{oo}) (kN): 61.6

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	13.9	79.0	50.1	25.0
AS % OF ORIGINAL LIMIT	71.0 %	66.9 %	69.5 %	92.4 %
AS % OF CAEP/2 LIMIT (NOx)			86.8 %	
AS % OF CAEP/4 LIMIT (NOx)			99.2 %	
AS % OF CAEP/6 LIMIT (NOx)			105.6 %	
AS % OF CAEP/8 LIMIT (NOx)			121.5 %	

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: -)
- 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	0.760	0.8	0.7	21.1	21.3
CLIMB OUT	85	2.2	0.630	0.3	0.8	16.8	18.86
APPROACH	30	4.0	0.230	0.9	3.9	5.7	13.1
IDLE	7	26.0	0.110	3.4	24.1	2.5	3.36
LTO TOTAL FUEL (kg) or EMISSIONS (g)			342	684	4440	2814	-
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				6	6	6	6
AVERAGE D_p/F_{oo} (g/kN) or AVERAGE SN (MAX)				10.7	69.3	45.6	21.3
SIGMA (D_p/F_{oo} in g/kN, or SN)				1.4	4.1	0.7	1.6
RANGE (D_p/F_{oo} in g/kN, or SN)				9.11-12.97	65.5-74.8	44.9-46.7	18.9-22.8

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	100
TEMPERATURE (K)	288
ABS HUMIDITY (kg/kg)	0.005

FUEL

SPEC	AVTUR
H/C	1.91
AROM (%)	20

MANUFACTURER: Rolls Royce Ltd
TEST ORGANIZATION: -
TEST LOCATION: -
TEST DATES: FROM Oct 86 TO Nov 86

REMARKS

1. Data from certification report CRR19019

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