



# ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

## SUBSONIC ENGINES

ENGINE IDENTIFICATION: TAY Mk620-15  
UNIQUE ID NUMBER: 1RR020  
COMBUSTOR:  
ENGINE TYPE: MTF

BYPASS RATIO: 3.0  
PRESSURE RATIO ( $\pi_{00}$ ): 16.1  
RATED THRUST ( $F_{00}$ ) (kN): 61.6

### REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
D <sub>p</sub> /F <sub>00</sub> (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 (NO <sub>x</sub> )			86.8	
AS % OF CAEP/4 LIMIT (NO <sub>x</sub> )			99.2	
AS % OF CAEP/6 LIMIT (NO <sub>x</sub> )			105.6	
AS % OF CAEP/8 LIMIT (NO <sub>x</sub> )			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 (DATE: - )

### MEASURED DATA

MODE	POWER	TIME	FUEL FLOW	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
	SETTING (%F <sub>00</sub> )	(minutes)	(kg/s)	HC	CO	NO <sub>x</sub>	
TAKE-OFF	100	0.7	0.760	0.80	0.70	21.10	21.3
CLIMB OUT	85	2.2	0.630	0.30	0.80	16.80	18.9
APPROACH	30	4.0	0.230	0.90	3.90	5.70	13.1
IDLE	7	26.0	0.110	3.40	24.10	2.50	3.4
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 <sub>p</sub> /F <sub>00</sub> (g/kN) or AVERAGE SN (MAX)				10.7	69.3	45.6	21.3
SIGMA (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)				1.4	4.1	0.7	1.6
RANGE (D <sub>p</sub> /F <sub>00</sub> 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 plc  
TEST ORGANIZATION:  
TEST LOCATION:  
TEST DATES: 01/10/1986-01/11/1986

### REMARKS

1. Data from certification report CRR19019

Compliance with Fuel Venting requirements:

- ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)