ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: TAY Mk650-15
UNIQUE ID NUMBER: 1RR021
COMBUSTOR:
ENGINE TYPE: MTF

BYPASS RATIO: 3.0
PRESSURE RATIO (π_{oo}): 16.4

RATED THRUST (F_{oo}) (kN): 67.2

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOₓ	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	13.9	117.2	47.1	20.6
AS % OF ORIGINAL LIMIT	71.0	99.4	64.6	78.2
AS % OF CAEP/2 LIMIT (NOₓ)			80.8	
AS % OF CAEP/4 LIMIT (NOₓ)			94.4	
AS % OF CAEP/6 LIMIT (NOₓ)			101.7	
AS % OF CAEP/8 LIMIT (NOₓ)			119.3	

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)

- x   OUT OF PRODUCTION (DATE: -   )
-     OUT OF SERVICE   (DATE: -   )

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	0.874	0.37	1.74	19.81	17.6
CLIMB OUT	85	2.2	0.715	0.41	2.01	16.47	16.0
APPROACH	30	4.0	0.254	0.88	6.54	4.55	2.2
IDLE	7	26.0	0.119	3.29	33.77	1.70	0.3
LTO TOTAL FUEL (kg) or EMISSIONS (g)			378	717	6921	2875	-
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				4	4	4	4
AVERAGE D_p/F_{oo} (g/kN) or AVERAGE SN (MAX)				10.7	102.9	42.8	17.6
SIGMA (D_p/F_{oo} in g/kN, or SN)				0.6	11.8	3.9	2.0
RANGE (D_p/F_{oo} in g/kN, or SN)				10.2-11.1	94.6-111.3	40.2-45.6	16.2-19

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	99-101
TEMPERATURE (K)	280-289
ABS HUMIDITY (kg/kg)	0.005-0.008

FUEL

SPEC	AVTUR
H/C	1.91
AROM (%)	20

MANUFACTURER: Rolls-Royce plc
TEST ORGANIZATION: Rolls-Royce Ltd
TEST LOCATION: Derby
TEST DATES: 01/03/1988-01/10/1989

REMARKS

    1. Data from certification report CRR19057

Compliance with Fuel Venting requirements: -   ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)

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