



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: JT8D-219
UNIQUE ID NUMBER: 4PW071
COMBUSTOR: Environmental Kit (E_Kit)
ENGINE TYPE: MTF
BYPASS RATIO: 1.7
PRESSURE RATIO (π_{00}): 20.3
RATED THRUST (F_{00}) (kN): 96.5

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	0.0	51.2	55.3	8.9
AS % OF ORIGINAL LIMIT	0.0	43.4	68.7	37.2
AS % OF CAEP/2 LIMIT (NO _x)			85.8	
AS % OF CAEP/4 LIMIT (NO _x)			107.5	
AS % OF CAEP/6 LIMIT (NO _x)			122.2	
AS % OF CAEP/8 LIMIT (NO _x)			151.8	

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 ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	HC	CO	NO _x	SMOKE NUMBER
TAKE-OFF	100	0.7	1.354	0.00	0.42	18.72	6.9
CLIMB OUT	85	2.2	1.085	0.00	0.46	13.73	4.4
APPROACH	30	4.0	0.382	0.00	3.57	7.65	1.5
IDLE	7	26.0	0.134	0.00	17.19	4.16	0.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			501	0	4021	4604	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				0.0	41.7	47.7	6.9
SIGMA (D _p /F ₀₀ in g/kN, or SN)							
RANGE (D _p /F ₀₀ in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW)
STAGE BLEED 0 (% CORE FLOW)

AT - POWER SETTINGS
AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	98.8-103.1
TEMPERATURE (K)	271-281
ABS HUMIDITY (kg/kg)	0.0009-0.0047

FUEL

SPEC	Jet A
H/C	1.91
AROM (%)	18

MANUFACTURER: Pratt & Whitney
TEST ORGANIZATION: P&WA
TEST LOCATION: East Hartford, CT
TEST DATES: 24/02/1999-02/03/1999

REMARKS

1. Environmental Kit (E-Kit) Combustor and Fuel Nozzles, incorporated 5/99

Compliance with Fuel Venting requirements:

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