



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: JT8D-217A BYPASS RATIO: 1.7
UNIQUE ID NUMBER: 4PW069 PRESSURE RATIO (π_{co}): 19.7
COMBUSTOR: Environmental Kit (E_Kit)
ENGINE TYPE: MTF RATED THRUST (F_{oo}) (kN): 92.7

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F _{oo} (g/kN) or SN	0.0	48.9	57.3	7.9
AS % OF ORIGINAL LIMIT	0.0	41.4	72.2	32.7
AS % OF CAEP/2 LIMIT (NO _x)			90.3	
AS % OF CAEP/4 LIMIT (NO _x)			113.6	
AS % OF CAEP/6 LIMIT (NO _x)			129.1	
AS % OF CAEP/8 LIMIT (NO _x)			161.1	

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	NO _x	SMOKE NUMBER
TAKE-OFF	100	0.7	1.320	0.00	0.42	17.54	6.1	
CLIMB OUT	85	2.2	1.078	0.00	0.47	13.54		
APPROACH	30	4.0	0.383	0.00	3.54	7.66		
IDLE	7	26.0	0.137	0.00	15.31	4.57		
LTO TOTAL FUEL (kg) or EMISSIONS (g)			504	0	3693	4582	-	
NUMBER OF ENGINES				1	1	1	1	
NUMBER OF TESTS				3	3	3	3	
AVERAGE D _p /F _{oo} (g/kN) or AVERAGE SN (MAX)				0.0	39.8	49.4	6.1	
SIGMA (D _p /F _{oo} in g/kN, or SN)								
RANGE (D _p /F _{oo} 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)