



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: JT8D-217C
UNIQUE ID NUMBER: 4PW070
ENGINE TYPE: MTF

BYPASS RATIO: 1.7
PRESSURE RATIO (π_{00}): 19.05
RATED OUTPUT (F_{00}) (kN): 92.74

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{00} (g/kN) or SN	0.0	56.2	52.7	7.9
AS % OF ORIGINAL LIMIT	0.0 %	47.6 %	67.5 %	32.7 %
AS % OF CAEP/2 LIMIT (NOx)			84.3 %	
AS % OF CAEP/4 LIMIT (NOx)			106.5 %	
AS % OF CAEP/6 LIMIT (NOx)			121.0 %	
AS % OF CAEP/8 LIMIT (NOx)			151.9 %	

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

MEASURED DATA

MODE	POWER SETTING (% F_{00})	TIME minutes	FUEL FLOW kg/s	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NOx	
TAKE-OFF	100	0.7	1.282	0	0.42	16.49	6.1
CLIMB OUT	85	2.2	1.045	0	0.49	13.02	4
APPROACH	30	4.0	0.363	0	3.79	7.65	1.5
IDLE	7	26.0	0.137	0	17.89	4.05	0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			493	0	4244	4216	-
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	45.8	45.5	6.1
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
AHS HUMIDITY (kg/kg)	.0009 - .0047

FUEL

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

MANUFACTURER: Pratt & Whitney
TEST ORGANIZATION: P&WA
TEST LOCATION: East Hartford, CT
TEST DATES: FROM 24 Feb 99 TO 02 Mar 99

REMARKS

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

If REVISED, this data supersedes databank UID
Compliance with fuel venting requirements:

0 ('x' if complies, PR if pre-regulation)