ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: JT8D-219
UNIQUE ID NUMBER: 4PW071
ENGINE TYPE: MTF

BYPASS RATIO: 1.7
PRESSURE RATIO (π_{oo}): 20.27
RATED OUTPUT (F_{oo}) (kN): 96.52

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (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 (NOx)			85.8 %	
AS % OF CAEP/4 LIMIT (NOx)			107.5 %	
AS % OF CAEP/6 LIMIT (NOx)			122.2 %	
AS % OF CAEP/8 LIMIT (NOx)			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

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	1.354	0	0.42	18.72	6.9
CLIMB OUT	85	2.2	1.085	0	0.46	13.73	4.4
APPROACH	30	4.0	0.382	0	3.57	7.65	1.5
IDLE	7	26.0	0.134	0	17.19	4.16	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_{oo} (g/kN) or AVERAGE SN (MAX)				0	41.7	47.7	6.9
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) AT - POWER SETTINGS
STAGE BLEED 0 % CORE FLOW AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	98.8-103.1
TEMPERATURE (K)	271 - 281
ABS 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)