ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: PW4168A
UNIQUE ID NUMBER: 7PW082
ENGINE TYPE: TF

BYPASS RATIO: 5.1
PRESSURE RATIO (π_{oo}): 31.84
RATED OUTPUT (F_{oo}) (kN): 302.5

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	0.5	27.4	53.3	16.4
AS % OF ORIGINAL LIMIT	2.3 %	23.2 %	51.4 %	93.5 %
AS % OF CAEP/2 LIMIT (NOx)			64.3 %	
AS % OF CAEP/4 LIMIT (NOx)			75.4 %	
AS % OF CAEP/6 LIMIT (NOx)			85.1 %	
AS % OF CAEP/8 LIMIT (NOx)			99.1 %	

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)

- \- OUT OF PRODUCTION
- \- 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	2.884	0	0.1	26.9	12.5
CLIMB OUT	85	2.2	2.363	0	0.2	20.2	11
APPROACH	30	4.0	0.809	0	2.4	12.1	0.6
IDLE	7	26.0	0.250	0.2	15.9	5.2	0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			1017	78	6741	13936	-
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)				0.3	22.3	46	12.5
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)	101.4 - 102.3
TEMPERATURE (K)	279 - 282
ABS HUMIDITY (kg/kg)	.00210 - .00355

FUEL

SPEC	Jet A
H/C	1.94
AROM (%)	15.5

MANUFACTURER: Pratt & Whitney
TEST ORGANIZATION: Pratt & Whitney
TEST LOCATION: East Hartford, CT
TEST DATES: FROM 10 Apr 00 TO -

REMARKS

Data from Report PWA-7138

If REVISED, this data supersedes databank UID
Compliance with fuel venting requirements: 0 ('x' if complies, PR if pre-regulation)