



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: PW4077
UNIQUE ID NUMBER: 2PW061
ENGINE TYPE: TF

BYPASS RATIO: 6.7
PRESSURE RATIO (π_{oo}): 33.2
RATED OUTPUT (F_{oo}) (kN): 343

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	5.2	26.6	65.3	9.5
AS % OF ORIGINAL LIMIT	26.5 %	22.5 %	61.4 %	56.3 %
AS % OF CAEP/2 LIMIT (NOx)			76.7 %	
AS % OF CAEP/4 LIMIT (NOx)			89.0 %	
AS % OF CAEP/6 LIMIT (NOx)			99.9 %	
AS % OF CAEP/8 LIMIT (NOx)			115.5 %	

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)			SMOKE NUMBER
				HC	CO	NOx	
TAKE-OFF	100	0.7	3.019	0.1	0.1	39.8	7.4
CLIMB OUT	85	2.2	2.452	0.1	0.1	32.5	3
APPROACH	30	4.0	0.816	0.2	0.4	11.3	0.6
IDLE	7	26.0	0.232	3	20.2	4.2	0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			1008	1170	7434	19299	-
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)				3.4	21.7	56.3	7.4
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)	101.3
TEMPERATURE (K)	288
ABS HUMIDITY (kg/kg)	0.0063

FUEL

SPEC	Jet A
H/C	1.92
AROM (%)	20.3

MANUFACTURER: Pratt and Whitney
TEST ORGANIZATION: Pratt and Whitney
TEST LOCATION: East Hartford, Ct, USA
TEST DATES: FROM 26 Apr 94 TO 02 May 94

REMARKS

Data from X832-4

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

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