



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

**** DATA SUPERSEDED ** SEE SHEET: 8PW089**

ENGINE IDENTIFICATION: PW4084 BYPASS RATIO: 6.4
UNIQUE ID NUMBER: 2PW062 PRESSURE RATIO (π_{oo}): 36.2
ENGINE TYPE: TF RATED OUTPUT (F_{oo}) (kN): 369.6

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	4.5	23.0	72.8	13.5
AS % OF ORIGINAL LIMIT	23.0 %	19.5 %	64.8 %	81.6 %
AS % OF CAEP/2 LIMIT (NOx)			81.0 %	
AS % OF CAEP/4 LIMIT (NOx)			91.7 %	
AS % OF CAEP/6 LIMIT (NOx)			102.0 %	
AS % OF CAEP/8 LIMIT (NOx)			116.4 %	

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	3.411	0.1	0.1	45	10.5
CLIMB OUT	85	2.2	2.689	0.1	0.1	35.5	-
APPROACH	30	4.0	0.875	0.2	0.4	12	-
IDLE	7	26.0	0.242	2.7	18.73	4.4	-
LTO TOTAL FUEL (kg) or EMISSIONS (g)			1086	1111	7205	23229	-
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)				2.9	19.5	62.8	10.5
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)	101.3
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)