

# ICAO ENGINE EXHAUST EMISSIONS DATA BANK

## **SUBSONIC ENGINES**

\*\* DATA SUPERSEDED \*\* SEE SHEET: 10PW098

ENGINE IDENTIFICATION: PW4084D BYPASS RATIO: 6.3 PRESSURE RATIO  $(\pi_{\circ\circ})$ : 36.36 UNIQUE ID NUMBER: 3PW065 RATED OUTPUT  $(F_{\circ\circ})$  (kN): 369.6 ENGINE TYPE: TF

### REGULATORY DATA

CHARACTERISTIC VALUE:	НС	СО	NOx	SMOKE NUMBER
$D_p/F_{oo}$ (g/kN) or SN	5.6	35.1	83.6	6.9
AS % OF ORIGINAL LIMIT	28.6 %	29.7 %	74.2 %	41.7 %
AS % OF CAEP/2 LIMIT (NOx)			92.7 %	
AS % OF CAEP/4 LIMIT (NOx)			104.9 %	
AS % OF CAEP/6 LIMIT (NOx)			116.6 %	
AS % OF CAEP/8 LIMIT (NOx)			133.0 %	

### DATA STATUS

PRE-REGIILATION

CERTIFICATION

REVISED (SEE REMARKS)

# TEST ENGINE STATUS

NEWLY MANUFACTURED ENGINES ×

DEDICATED ENGINES TO PRODUCTION STANDARD

OTHER (SEE REMARKS)

#### EMISSIONS STATUS

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

	POWER	TIME	FUEL FLOW	EMI	SSIONS INDICES	(g/kg)	
MODE	SETTING	minutes	kg/s	HC	CO	NOx	SMOKE NUMBER
	(%F <sub>00</sub> )						
TAKE-OFF	100	0.7	3.511	0.03	0.18	53.02	5.4
CLIMB OUT	85	2.2	2.771	0.03	0.24	39.47	3.1
APPROACH	30	4.0	0.907	0.06	0.48	12.7	1
IDLE	7	26.0	0.258	3.29	25.74	4.08	0
LTO TOTAL FUEL (kg) or EMISSIONS (g) 1133			1133	1353	10579	26662	_
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D <sub>p</sub> /F <sub>oo</sub> (g/kN) or AVERAGE SN (MAX)			3.66	28.6	72.14	5.36	
SIGMA ( $D_p/F_{oo}$ in $g/kN$ , or $SN$ )			i	1	1	_	
RANGE (D <sub>p</sub> /F <sub>oo</sub> in g/kN, or SN)			-	-	-	-	

# ACCESSORY LOADS

(kW) % CORE FLOW POWER EXTRACTION 0 AΤ POWER SETTINGS STAGE BLEED POWER SETTINGS

## ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	101.06-101.56		
TEMPERATURE (K)	292.8-302.6		
ABS HUMIDITY (kg/kg)	.00970112		

FUEL

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

MANUFACTURER: Pratt & Whitney
TEST ORGANIZATION: Pratt & Whitney
TEST LOCATION:

TEST LOCATION: East not seemed from 15 Jun 96 East Hartford, Conn, USA

TO 16 Jun 96

## REMARKS

Data from Report PWA-6678

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

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