



# ICAO ENGINE EXHAUST EMISSIONS DATA BANK

## SUBSONIC ENGINES

ENGINE IDENTIFICATION: JT3D-3B BYPASS RATIO: 1.4  
 UNIQUE ID NUMBER: 1PW001 PRESSURE RATIO ( $\pi_{oo}$ ): 13.6  
 ENGINE TYPE: TF RATED OUTPUT ( $F_{oo}$ ) (kN): 80.06

### REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
$D_p/F_{oo}$ (g/kN) or SN	395.4	328.2	37.7	63.9
AS % OF ORIGINAL LIMIT	2,017.6 %	278.2 %	56.1 %	254.1 %
AS % OF CAEP/2 LIMIT (NOx)			70.2 %	
AS % OF CAEP/4 LIMIT (NOx)			88.3 %	
AS % OF CAEP/6 LIMIT (NOx)			98.1 %	
AS % OF CAEP/8 LIMIT (NOx)			123.7 %	

### DATA STATUS

x PRE-REGULATION  
 - 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 <sub>oo</sub> )	TIME minutes	FUEL FLOW kg/s	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NOx	
TAKE-OFF	100	0.7	1.174	4	1.5	12.1	-
CLIMB OUT	85	2.2	0.932	2	2.8	9.9	-
APPROACH	30	4.0	0.346	4	24.5	4.8	-
IDLE	7	26.0	0.135	112	98	2.5	-
LTO TOTAL FUEL (kg) or EMISSIONS (g)			466	24363	23092	2740	-
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				-	-	-	-
AVERAGE D <sub>p</sub> /F <sub>oo</sub> (g/kN) or AVERAGE SN (MAX)				303.9	288.1	34.3	54.5
SIGMA (D <sub>p</sub> /F <sub>oo</sub> in g/kN, or SN)				-	-	-	-
RANGE (D <sub>p</sub> /F <sub>oo</sub> 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)	-
TEMPERATURE (K)	-
ABS HUMIDITY (kg/kg)	-

### FUEL

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

MANUFACTURER: Pratt & Whitney  
 TEST ORGANIZATION: P&WA  
 TEST LOCATION: East Hartford, CT, USA.  
 TEST DATES: FROM 08 Mar 72 TO 12 Sep 74

### REMARKS

1. Emissions data estimated from JT3D-7 engines using JT3D-3B performance data.

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