ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

** DATA SUPERSEDED ** SEE SHEET: 8PW085

ENGINE IDENTIFICATION:	JT8D-7 series	BYPASS RATIO:	1.05
UNIQUE ID NUMBER:	1PW005	PRESSURE RATIO (π_{oo}):	15.82
ENGINE TYPE:	MTF	RATED OUTPUT (F_{oo}) (kN):	62.27

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	17.2	52.9	57.5	11.1
AS % OF ORIGINAL LIMIT	87.6 %	44.8 %	80.3 %	41.3 %
AS % OF CAEP/2 LIMIT (NOx)			100.3 %	
AS % OF CAEP/4 LIMIT (NOx)			115.1 %	
AS % OF CAEP/6 LIMIT (NOx)			122.7 %	
AS % OF CAEP/8 LIMIT (NOx)			141.7 %	

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)
- x   OUT OF PRODUCTION (DATE: -)
-    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	0.989	0.25	0.9	17.2	9.5
CLIMB OUT	85	2.2	0.811	0.25	1.1	14	–
APPROACH	30	4.0	0.286	0.4	2.2	6.3	–
IDLE	7	26.0	0.129	3.8	14.3	3.15	–
LTO TOTAL FUEL (kg) or EMISSIONS (g)			419	830	3186	3281	–
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				7	7	4	4
AVERAGE D_p/F_{oo} (g/kN) or AVERAGE SN (MAX)				13.2	50.9	52.3	9.5
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)	–
TEMPERATURE (K)	270 - 311
ABS HUMIDITY (kg/kg)	–

FUEL

SPEC	Jet A
H/C	–
AROM (%)	–

MANUFACTURER:	Pratt & Whitney
TEST ORGANIZATION:	P&WA
TEST LOCATION:	E Hartford, CT, USA
TEST DATES:	FROM 26 Feb 80 TO 18 Jun 80

REMARKS

1. Reduced emissions combustor.
2. Applicable to JT8D-7, -7A, -7B.

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