



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: JT8D-11
UNIQUE ID NUMBER: 1PW008
ENGINE TYPE: MTF

BYPASS RATIO: 1
PRESSURE RATIO (π_{00}): 17.17
RATED OUTPUT (F_{00}) (kN): 66.72

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{00} (g/kN) or SN	39.5	139.8	57.6	24.0
AS % OF ORIGINAL LIMIT	201.6 %	118.4 %	77.5 %	90.9 %
AS % OF CAEP/2 LIMIT (NOx)			96.9 %	
AS % OF CAEP/4 LIMIT (NOx)			112.6 %	
AS % OF CAEP/6 LIMIT (NOx)			121.3 %	
AS % OF CAEP/8 LIMIT (NOx)			141.2 %	

DATA STATUS

x PRE-REGULATION
- CERTIFICATION
- REVISED (SEE REMARKS)

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES
- 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_{00})	TIME minutes	FUEL FLOW kg/s	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NOx	
TAKE-OFF	100	0.7	1.121	0.4	1.2	18.9	-
CLIMB OUT	85	2.2	0.914	0.45	1.9	14.6	-
APPROACH	30	4.0	0.334	1.4	9.4	5.8	-
IDLE	7	26.0	0.146	10	35	2.75	-
LTO TOTAL FUEL (kg) or EMISSIONS (g)			475	2455	8983	3740	-
NUMBER OF ENGINES				13	13	13	13
NUMBER OF TESTS				14	14	14	14
AVERAGE D_p/F_{00} (g/kN) or AVERAGE SN (MAX)				36.8	134.7	56.1	23
SIGMA (D_p/F_{00} in g/kN, or SN)				-	-	-	-
RANGE (D_p/F_{00} 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)	262 - 300
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 incorporated 1/1/84

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

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