



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: JT8D-17
UNIQUE ID NUMBER: 1PW013
ENGINE TYPE: MTF

BYPASS RATIO: 1.02
PRESSURE RATIO (π_{00}): 17.01
RATED OUTPUT (F_{00}) (kN): 71.17

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{00} (g/kN) or SN	6.2	42.6	70.0	18.5
AS % OF ORIGINAL LIMIT	31.5 %	36.1 %	94.6 %	71.1 %
AS % OF CAEP/2 LIMIT (NOx)			118.3 %	
AS % OF CAEP/4 LIMIT (NOx)			140.1 %	
AS % OF CAEP/6 LIMIT (NOx)			152.3 %	
AS % OF CAEP/8 LIMIT (NOx)			180.3 %	

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_{00})	TIME minutes	FUEL FLOW kg/s	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NOx	
TAKE-OFF	100	0.7	1.245	0.22	0.95	20.6	16.8
CLIMB OUT	85	2.2	0.997	0.27	1.1	15.7	-
APPROACH	30	4.0	0.354	0.52	2.67	8	-
IDLE	7	26.0	0.147	1.25	10.46	3.2	-
LTO TOTAL FUEL (kg) or EMISSIONS (g)			499	379	2826	4559	-
NUMBER OF ENGINES				3	3	2	3
NUMBER OF TESTS				8	8	5	5
AVERAGE D_p/F_{00} (g/kN) or AVERAGE SN (MAX)				5.3	39.4	63.7	16.8
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)	266 - 297
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 07 Dec 79 TO 19 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)