ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: JT8D-15A
UNIQUE ID NUMBER: 1PW011
ENGINE TYPE: MTF

BYPASS RATIO: 1.08
PRESSURE RATIO (π_{oo}): 16.45
RATED OUTPUT (F_{oo}) (kN): 68.94

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	9.4	50.6	56.5	17.3
AS % OF ORIGINAL LIMIT	47.8 %	42.9 %	77.5 %	65.9 %
AS % OF CAEP/2 LIMIT (NOx)			96.9 %	
AS % OF CAEP/4 LIMIT (NOx)			114.0 %	
AS % OF CAEP/6 LIMIT (NOx)			123.4 %	
AS % OF CAEP/8 LIMIT (NOx)			145.3 %	

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 ($\%F_{oo}$)	TIME minutes	FUEL FLOW kg/s	EMISSIONS INDICES (g/kg) HC	CO	NOx	SMOKE NUMBER
TAKE-OFF	100	0.7	1.115	0.25	1.08	18.1	15.7
CLIMB OUT	85	2.2	0.896	0.33	1.2	13.9	-
APPROACH	30	4.0	0.312	0.65	2.9	6.6	-
IDLE	7	26.0	0.137	1.86	12.93	3.1	-
LTO TOTAL FUEL (kg) or EMISSIONS (g)			454	497	3177	3648	-
NUMBER OF ENGINES				2	3	2	3
NUMBER OF TESTS				7	8	5	4
AVERAGE D_p/F_{oo} (g/kN) or AVERAGE SN (MAX)				7.2	46.8	51.4	15.7
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)	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)