ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: JT8D-9 series
UNIQUE ID NUMBER: 1PW007
ENGINE TYPE: MTF

BYPASS RATIO: 1.04
PRESSURE RATIO (π_{oo}): 15.88
RATED OUTPUT (F_{oo}) (kN): 64.5

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	14.4	57.2	59.6	11.8
AS % OF ORIGINAL LIMIT	73.7 %	48.5 %	83.1 %	44.4 %
AS % OF CAEP/2 LIMIT (NOx)			103.8 %	
AS % OF CAEP/4 LIMIT (NOx)			120.2 %	
AS % OF CAEP/6 LIMIT (NOx)			128.8 %	
AS % OF CAEP/8 LIMIT (NOx)			149.8 %	

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	1.040	0.15	1.04	19.3	10.1
CLIMB OUT	85	2.2	0.845	0.18	1.11	14.5	-
APPROACH	30	4.0	0.298	0.6	2.14	6	-
IDLE	7	26.0	0.132	3.12	14.14	2.9	-
LTO TOTAL FUEL (kg) or EMISSIONS (g)			433	713	3241	3488	-
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)				11.1	50.2	54.2	10.1
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 incorporated 1/1/84.
2. Applicable to JT8D-9, -9A.

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