ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION:	JT8D-209	BYPASS RATIO:	1.8
UNIQUE ID NUMBER:	1PW017	PRESSURE RATIO (π_{oo}):	18.3
COMBUSTOR:			
ENGINE TYPE:	MTF	RATED THRUST (F_{oo}) (kN):	85.6

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO_X	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	18.8	49.8	68.7	14.3
AS % OF ORIGINAL LIMIT	95.9	42.2	89.7	57.8
AS % OF CAEP/2 LIMIT (NO_X)			112.2	
AS % OF CAEP/4 LIMIT (NO_X)			140.1	
AS % OF CAEP/6 LIMIT (NO_X)			158.0	
AS % OF CAEP/8 LIMIT (NO_X)			196.4	

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   (DATE: -   )

MEASURED DATA

MODE	POWER SETTING (%F_{oo})	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg) HC	CO	NO_X	SMOKE NUMBER
TAKE-OFF	100	0.7	1.191	0.35	1.03	22.80	11.1
CLIMB OUT	85	2.2	0.983	0.50	1.40	19.00	
APPROACH	30	4.0	0.359	1.69	4.37	8.80	
IDLE	7	26.0	0.130	4.03	14.10	3.50	
LTO TOTAL FUEL (kg) or EMISSIONS (g)			469	1047	3476	5075	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D_p/F_{oo} (g/kN) or AVERAGE SN (MAX)				12.2	40.6	59.3	11.1
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)	275-288
ABS HUMIDITY (kg/kg)	

FUEL

SPEC	Jet A
H/C	1.89
AROM (%)	19.2

MANUFACTURER:	Pratt & Whitney
TEST ORGANIZATION:	P&WA
TEST LOCATION:	East Hartford, CT
TEST DATES:	07/11/1983-30/11/1983

REMARKS

     1. All measurements by traverse.
     2. SCH 46-16B combustor.

Compliance with Fuel Venting requirements: -   ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)

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