ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: JT8D-17R
UNIQUE ID NUMBER: 1PW016
COMBUSTOR:
ENGINE TYPE: MTF

BYPASS RATIO: 1.0
PRESSURE RATIO (π_{oo}): 18.2

RATED THRUST (F_{oo}) (kN): 77.4

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO_X	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	4.9	37.6	79.5	21.6
AS % OF ORIGINAL LIMIT	25.0	31.9	104.0	84.9
AS % OF CAEP/2 LIMIT (NO_X)			129.9	
AS % OF CAEP/4 LIMIT (NO_X)			156.9	
AS % OF CAEP/6 LIMIT (NO_X)			173.2	
AS % OF CAEP/8 LIMIT (NO_X)			208.5	

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)			SMOKE NUMBER
				HC	CO	NO_X	
TAKE-OFF	100	0.7	1.417	0.21	0.95	25.30	19.6
CLIMB OUT	85	2.2	1.103	0.27	1.03	17.60	
APPROACH	30	4.0	0.376	0.53	2.54	8.40	
IDLE	7	26.0	0.155	0.95	9.43	3.30	
LTO TOTAL FUEL (kg) or EMISSIONS (g)			537	329	2716	5623	-
NUMBER OF ENGINES				3	3	2	3
NUMBER OF TESTS				8	8	5	5
AVERAGE D_p/F_{oo} (g/kN) or AVERAGE SN (MAX)				4.2	34.8	72.3	19.6
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: East Hartford, CT
TEST DATES: 07/12/1979-19/06/1980

REMARKS

     1. Reduced Emissions Combustor incorporated 1/1/84

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

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