



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: JT8D-17A
UNIQUE ID NUMBER: 1PW014
COMBUSTOR:
ENGINE TYPE: MTF
BYPASS RATIO: 1.1
PRESSURE RATIO (π_{00}): 16.9
RATED THRUST (F_{00}) (kN): 71.2

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	8.6	47.4	60.6	18.5
AS % OF ORIGINAL LIMIT	43.8	40.1	82.2	71.1
AS % OF CAEP/2 LIMIT (NO _x)			102.7	
AS % OF CAEP/4 LIMIT (NO _x)			121.7	
AS % OF CAEP/6 LIMIT (NO _x)			132.4	
AS % OF CAEP/8 LIMIT (NO _x)			156.9	

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 ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	HC	CO	NO _x	SMOKE NUMBER
TAKE-OFF	100	0.7	1.173	0.25	1.07	19.10	16.8
CLIMB OUT	85	2.2	0.934	0.30	1.16	14.30	
APPROACH	30	4.0	0.330	0.64	2.88	6.70	
IDLE	7	26.0	0.140	6.60	12.46	3.20	
LTO TOTAL FUEL (kg) or EMISSIONS (g)			470	1543	3147	3935	-
NUMBER OF ENGINES				2	3	2	3
NUMBER OF TESTS				7	8	5	5
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				6.6	43.8	55.1	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)
STAGE BLEED 0 (% CORE FLOW)

AT - POWER SETTINGS
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)