



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: JT9D-7J
UNIQUE ID NUMBER: 1PW024
COMBUSTOR:
ENGINE TYPE: TF

BYPASS RATIO: 5.1
PRESSURE RATIO (π_{00}): 23.5
RATED THRUST (F_{00}) (kN): 222.4

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	64.7	145.9	79.6	20.8
AS % OF ORIGINAL LIMIT	330.1	123.6	91.5	109.4
AS % OF CAEP/2 LIMIT (NO _x)			114.4	
AS % OF CAEP/4 LIMIT (NO _x)			140.6	
AS % OF CAEP/6 LIMIT (NO _x)			159.8	
AS % OF CAEP/8 LIMIT (NO _x)			194.3	

DATA STATUS

x PRE-REGULATION
- CERTIFICATION
x 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)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	2.315	0.00	0.90	44.90	
CLIMB OUT	85	2.2	1.902	0.00	0.90	34.90	
APPROACH	30	4.0	0.679	0.50	5.50	9.40	
IDLE	7	26.0	0.238	24.50	66.70	3.30	
LTO TOTAL FUEL (kg) or EMISSIONS (g)			883	9178	25974	15885	-
NUMBER OF ENGINES				1	1	1	
NUMBER OF TESTS				1	1	1	
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				42.0	118.9	68.7	16.0
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)	
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: 16/09/1980

REMARKS

Compliance with Fuel Venting requirements:

- ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)