



# ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

## SUBSONIC ENGINES

ENGINE IDENTIFICATION: JT15D-1 series  
UNIQUE ID NUMBER: 1PW035  
COMBUSTOR:  
ENGINE TYPE: TF

BYPASS RATIO: 3.3  
PRESSURE RATIO ( $\pi_{oo}$ ): 9.8  
RATED THRUST ( $F_{oo}$ ) (kN): 9.8

### REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
D <sub>p</sub> /F <sub>oo</sub> (g/kN) or SN	293.6	665.2	31.1	19.3
AS % OF ORIGINAL LIMIT				
AS % OF CAEP/2 LIMIT (NO <sub>x</sub> )				
AS % OF CAEP/4 LIMIT (NO <sub>x</sub> )				
AS % OF CAEP/6 LIMIT (NO <sub>x</sub> )				
AS % OF CAEP/8 LIMIT (NO <sub>x</sub> )				

### 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 <sub>oo</sub> )	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO <sub>x</sub>	
TAKE-OFF	100	0.7	0.148	0.01	2.65	7.60	15.0
CLIMB OUT	85	2.2	0.124	0.01	3.50	6.77	
APPROACH	30	4.0	0.051	4.43	40.50	3.44	
IDLE	7	26.0	0.023	50.50	132.00	1.75	
LTO TOTAL FUEL (kg) or EMISSIONS (g)			71	1866	5306	263	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				1	1	1	1
AVERAGE D <sub>p</sub> /F <sub>oo</sub> (g/kN) or AVERAGE SN (MAX)				190.7	542.0	26.9	15.0
SIGMA (D <sub>p</sub> /F <sub>oo</sub> in g/kN, or SN)							
RANGE (D <sub>p</sub> /F <sub>oo</sub> 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)	100.5
TEMPERATURE (K)	290
ABS HUMIDITY (kg/kg)	0.0079

### FUEL

SPEC	Jet A-1
H/C	1.85
AROM (%)	20

MANUFACTURER: Pratt & Whitney Canada  
TEST ORGANIZATION: Pratt & Whitney Canada  
TEST LOCATION: Longueuil, Quebec  
TEST DATES: 17/08/1977

### REMARKS

1. Not required to meet GASEOUS emissions regulations.
2. Applicable to JT15D-1, -1A, -1B.

Compliance with Fuel Venting requirements:

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