



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: PW1124G1-JM BYPASS RATIO: 12.7
UNIQUE ID NUMBER: 01P18PW149 PRESSURE RATIO (π_{co}): 28.8
COMBUSTOR: TALON X, Block-C
ENGINE TYPE: TF RATED THRUST (F_{eo}) (kN): 107.8

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F _{eo} (g/kN) or SN	0.9	40.3	25.7	12.7
AS % OF ORIGINAL LIMIT	5.0	34.0	26.0	55.0
AS % OF CAEP/2 LIMIT (NO _x)			33.0	
AS % OF CAEP/4 LIMIT (NO _x)			40.0	
AS % OF CAEP/6 LIMIT (NO _x)			45.0	
AS % OF CAEP/8 LIMIT (NO _x)			53.0	

For non-volatile particulate matter (nvPM) emissions, please refer to the ICAO Engine nvPM Emissions Data Sheet.

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	TIME	FUEL FLOW	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
	SETTING (%F _{eo})	(minutes)	(kg/s)	HC	CO	NO _x	
TAKE-OFF	100	0.7	0.710	0.10	0.26	16.47	11.6
CLIMB OUT	85	2.2	0.600	0.10	0.38	13.85	7.9
APPROACH	30	4.0	0.210	0.02	6.39	8.92	0.4
IDLE	7	26.0	0.080	0.55	29.78	4.72	1.2
LTO TOTAL FUEL (kg) or EMISSIONS (g)			284	80	4076	2626	–
NUMBER OF ENGINES				3	3	3	3
NUMBER OF TESTS				9	9	9	9
AVERAGE D _p /F _{eo} (g/kN) or AVERAGE SN (MAX)				0.8	37.2	23.8	11.6
SIGMA (D _p /F _{eo} in g/kN, or SN)							
RANGE (D _p /F _{eo} 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)	99.6-101.7
TEMPERATURE (K)	265.6-278.2
ABS HUMIDITY (kg/kg)	0.00071-0.00203

FUEL

SPEC	Jet A
H/C	1.86
AROM (%)	15.1-16.6

MANUFACTURER: Pratt & Whitney
TEST ORGANIZATION: Pratt & Whitney
TEST LOCATION: X8 Test Stand, East Hartford, CT
TEST DATES: 11/03/2014-14/03/2014

NO_x REGULATION PARAGRAPH

	2.3.2 c) (CAEP/4)
	2.3.2 d) (CAEP/6)
x	2.3.2 e) (CAEP/8)

REMARKS

1. Data from Certification Report PWA-11521, 3 engines tested, block C combustor
2. Certification in accordance with Part III, Chapter 2, of Amendment 8 of ICAO Annex 16 Vol. II.
3. NO_x levels in accordance with Part III, Chapter 2, 2.3.2 e) (CAEP/8)

Compliance with Fuel Venting requirements:

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