



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: PW815GA
UNIQUE ID NUMBER: 16PW116
COMBUSTOR: TALON X
ENGINE TYPE: TF

BYPASS RATIO: 5.6
PRESSURE RATIO (π_{00}): 35.0
RATED THRUST (F_{00}) (kN): 71.2

REGULATORY DATA ** DATA SUPERSEDED ** SEE FOLLOWING UID FOR REVISED DATA: 19PW128

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	0.1	23.4	50.5	0.3
AS % OF ORIGINAL LIMIT	0.5	19.8	45.9	1.2
AS % OF CAEP/2 LIMIT (NO _x)			57.4	
AS % OF CAEP/4 LIMIT (NO _x)			63.1	
AS % OF CAEP/6 LIMIT (NO _x)			67.9	
AS % OF CAEP/8 LIMIT (NO _x)			75.4	

DATA STATUS

- PRE-REGULATION
x CERTIFICATION
- REVISED (SEE REMARKS)

TEST ENGINE STATUS

x 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)
- 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	0.699	0.00	0.00	24.88	0.3
CLIMB OUT	85	2.2	0.573	0.00	0.00	18.89	0.2
APPROACH	30	4.0	0.201	0.02	1.50	11.47	0.2
IDLE	7	26.0	0.071	0.05	13.40	6.41	0.2
LTO TOTAL FUEL (kg) or EMISSIONS (g)			264	7	1557	3422	-
NUMBER OF ENGINES				4	4	4	4
NUMBER OF TESTS				6	6	6	6
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				0.1	21.9	48.1	0.3
SIGMA (D _p /F ₀₀ in g/kN, or SN)				0.1	1.4	1.1	0.1
RANGE (D _p /F ₀₀ in g/kN, or SN)				0-0.2	19.9-23.3	47-51.7	0-0.5

ACCESSORY LOADS

POWER EXTRACTION 0 (kW)
STAGE BLEED 0 (% CORE FLOW)

AT - POWER SETTINGS
AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	99.1-101.7
TEMPERATURE (K)	253-297
ABS HUMIDITY (kg/kg)	0.0005-0.0098

FUEL

SPEC	Jet A-1
H/C	0.16
AROM (%)	15.7-20.1

MANUFACTURER: Pratt & Whitney Canada
TEST ORGANIZATION: PW800 Development Engineering, Production
TEST LOCATION: Longueuil & Mirabel, Quebec, Canada
TEST DATES: 23/06/2014-13/03/2015

NO_x REGULATION PARAGRAPH

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

REMARKS

- P&WC ER 7572 rev A
- Engines tested: 5738/01, GA0008/01, GA0009/01, GA0011/01
- Certification in accordance with Part III, Chapter 2, of Amendment 8 of ICAO Annex 16 Vol. II.
- 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)