



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: PW4x62
UNIQUE ID NUMBER: 1PW058
COMBUSTOR: Reduced smoke
ENGINE TYPE: TF

BYPASS RATIO: 4.4
PRESSURE RATIO (π_{00}): 33.4
RATED THRUST (F_{00}) (kN): 275.8

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	3.1	31.4	64.9	10.8
AS % OF ORIGINAL LIMIT	15.7	26.6	60.8	60.3
AS % OF CAEP/2 LIMIT (NO _x)			76.0	
AS % OF CAEP/4 LIMIT (NO _x)			88.0	
AS % OF CAEP/6 LIMIT (NO _x)			98.7	
AS % OF CAEP/8 LIMIT (NO _x)			114.0	

DATA STATUS

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

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES
- 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	2.858	0.10	0.35	36.30	8.4
CLIMB OUT	85	2.2	2.161	0.06	0.49	25.70	
APPROACH	30	4.0	0.725	0.14	1.69	12.20	
IDLE	7	26.0	0.217	1.53	19.51	4.90	
LTO TOTAL FUEL (kg) or EMISSIONS (g)			918	571	7080	15470	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				2.0	25.6	56.0	8.4
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)	100.2
TEMPERATURE (K)	299
ABS HUMIDITY (kg/kg)	0.01

FUEL

SPEC	Jet A
H/C	1.88
AROM (%)	19.7

MANUFACTURER: Pratt & Whitney
TEST ORGANIZATION: Pratt & Whitney
TEST LOCATION:
TEST DATES: 17/08/1987-23/08/1987

NO_x REGULATION PARAGRAPH

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

REMARKS

1. Data from X698-5 with reduced smoke combustor.

Compliance with Fuel Venting requirements:

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