



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: PW4062 BYPASS RATIO: 4.6
 UNIQUE ID NUMBER: 12PW102 PRESSURE RATIO (π_{00}): 31
 ENGINE TYPE: TF RATED OUTPUT (F_{00}) (kN): 275.8

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{00} (g/kN) or SN	17.0	59.8	58.0	10.0
AS % OF ORIGINAL LIMIT	86.5 %	50.7 %	56.7 %	56.0 %
AS % OF CAEP/2 LIMIT (NOx)			71.1 %	
AS % OF CAEP/4 LIMIT (NOx)			84.0 %	
AS % OF CAEP/6 LIMIT (NOx)			95.1 %	
AS % OF CAEP/8 LIMIT (NOx)			111.2 %	

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)
 - OUT OF PRODUCTION
 - OUT OF SERVICE

MEASURED DATA

MODE	POWER SETTING	TIME minutes	FUEL FLOW kg/s	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
	(%F _{oo})			HC	CO	NOx	
TAKE-OFF	100	0.7	2.725	0.08	0.61	34.36	8.5
CLIMB OUT	85	2.2	2.125	0.07	0.5	25.98	6
APPROACH	30	4.0	0.718	0.09	1.93	12.17	0.5
IDLE	7	26.0	0.210	10.86	42.61	3.78	0.1
LTO TOTAL FUEL (kg) or EMISSIONS (g)			894	3594	14475	14555	-
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				4	4	4	4
AVERAGE D _p /F _{oo} (g/kN) or AVERAGE SN (MAX)				13.03	52.49	52.78	8.5
SIGMA (D _p /F _{oo} in g/kN, or SN)				-	-	-	-
RANGE (D _p /F _{oo} 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)	101.90-102.55
TEMPERATURE (K)	173.21-279.79
ABS HUMIDITY (kg/kg)	0.002189-0.003801

FUEL

SPEC	Jet A
H/C	-
AROM (%)	18.6

MANUFACTURER: Pratt & Whitney
 TEST ORGANIZATION: Pratt & Whitney
 TEST LOCATION: P7 Production Test Cell, Middletown, CT
 TEST DATES: FROM 30 Nov 12 TO 12 Mar 13

REMARKS

1. Data from Report PWA-9720 with Phase 3 reduced pressure loss combustor
2. Certification in accordance with Part III, Chapter 2, of Amendment 7 of ICAO Annex 16 Vol. II.
3. NOx levels in accordance with Part III, Chapter 2, 2.3.2 d) (CAEP/6)

If REVISED, this data supersedes databank UID
 Compliance with fuel venting requirements:

X ('x' if complies, PR if pre-regulation)