ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: PW4X58
UNIQUE ID NUMBER: 5PW074
COMBUSTOR: Talon II
ENGINE TYPE: TF

BYPASS RATIO: 4.8
PRESSURE RATIO (π_{oo}): 28.4

RATED THRUST (F_{oo}) (kN): 258.0

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO_X	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	3.4	41.6	46.3	14.9
AS % OF ORIGINAL LIMIT	17.3	35.3	47.8	81.6
AS % OF CAEP/2 LIMIT (NO_X)			59.8	
AS % OF CAEP/4 LIMIT (NO_X)			71.8	
AS % OF CAEP/6 LIMIT (NO_X)			81.6	
AS % OF CAEP/8 LIMIT (NO_X)			96.7	

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 SETTING ($\%F_{oo}$)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			
				HC	CO	NO_X	SMOKE NUMBER
TAKE-OFF	100	0.7	2.496	0.00	0.20	22.50	11.6
CLIMB OUT	85	2.2	1.999	0.00	0.30	18.00	9.0
APPROACH	30	4.0	0.663	0.00	3.80	11.10	0.5
IDLE	7	26.0	0.212	1.70	24.30	4.30	0.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			859	562	8741	10297	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D_p/F_{oo} (g/kN) or AVERAGE SN (MAX)				2.2	33.9	39.9	11.6
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)	100-101.3
TEMPERATURE (K)	277-281
ABS HUMIDITY (kg/kg)	0.00268-0.00342

FUEL

SPEC	Jet A
H/C	1.9
AROM (%)	20.6

MANUFACTURER: Pratt & Whitney
TEST ORGANIZATION: Pratt & Whitney
TEST LOCATION: East Hartford, CT
TEST DATES: 03/11/1999-04/11/1999

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 Report PWA-7312.
2. TALON II Combustor

Compliance with Fuel Venting requirements: -   *('x' if complies, 'PR' if pre-regulation,*
'-' if information is not available)

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