ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: PW1215G
UNIQUE ID NUMBER: 21PW139
ENGINE TYPE: TF

BYPASS RATIO: 8.6
PRESSURE RATIO (π_{oo}): 29.4
RATED OUTPUT (F_{oo}) (kN): 67.7

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	0.1	32.1	38.4	3.9
AS % OF ORIGINAL LIMIT	0.5 %	27 %	39 %	15 %
AS % OF CAEP/2 LIMIT (NOx)			49 %	
AS % OF CAEP/4 LIMIT (NOx)			55 %	
AS % OF CAEP/6 LIMIT (NOx)			59 %	
AS % OF CAEP/8 LIMIT (NOx)			66 %	

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 ($\%F_{oo}$)	TIME minutes	FUEL FLOW kg/s	EMISSIONS INDICES (g/kg) HC	CO	NOx	SMOKE NUMBER
TAKE-OFF	100	0.7	0.551	0.03	0.4	20	3
CLIMB OUT	85	2.2	0.461	0.02	0.4	15.8	1.8
APPROACH	30	4.0	0.166	0.02	3	8.3	0.4
IDLE	7	26.0	0.065	0.02	16	4.8	0.4
LTO TOTAL FUEL (kg) or EMISSIONS (g)			225	4	1768	2244	-
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)				0.06	26.1	33.2	3
SIGMA (D_p/F_{oo} in g/kN, or SN)				-	-	-	-
RANGE (D_p/F_{oo} in g/kN, or SN)				0.06 - 0.0	24.4 - 27.5	32.8 - 33.7	3.0 - 3.1

ACCESSORY LOADS

POWER EXTRACTION	0	(kW)	AT	-	POWER SETTINGS
STAGE BLEED	0	% CORE FLOW	AT	-	POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	101.15 - 102.25
TEMPERATURE (K)	276.5 - 293.2
ABS HUMIDITY (kg/kg)	0.00108 - 0.00576

FUEL

SPEC	Jet A
H/C	1.9
AROM (%)	18.0 - 18.7

MANUFACTURER: Pratt & Whitney
TEST ORGANIZATION: Pratt & Whitney
TEST LOCATION: East Hartford, CT
TEST DATES: FROM 28 Mar 19 TO 01 Apr 19

REMARKS

1. Block C Combustor

If REVISED, this data supersedes databank UID
Compliance with fuel venting requirements: x ('x' if complies, PR if pre-regulation)