ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: V2527E-A5
UNIQUE ID NUMBER: 8IA010
ENGINE TYPE: MTF

BYPASS RATIO: 4.82
PRESSURE RATIO (π_{oo}): 27.2
RATED OUTPUT (F_{oo}) (kN): 111.2

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	0.4	30.6	56.2	11.6
AS % OF ORIGINAL LIMIT	2.3 %	25.9 %	59.6 %	50.4 %
AS % OF CAEP/2 LIMIT (NOx)			74.4 %	
AS % OF CAEP/4 LIMIT (NOx)			89.9 %	
AS % OF CAEP/6 LIMIT (NOx)			102.1 %	
AS % OF CAEP/8 LIMIT (NOx)			121.7 %	

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)

- \- 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	1.053	0.04	0.53	26.5	5.2
CLIMB OUT	85	2.2	0.880	0.04	0.62	22.3	7.2
APPROACH	30	4.0	0.319	0.06	2.44	8.9	4.2
IDLE	7	26.0	0.128	0.11	12.43	4.7	2.6
LTO TOTAL FUEL (kg) or EMISSIONS (g)			437	32	2764	5382	-
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)				0.29	24.9	48.5	9
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	4.5	% CORE FLOW	AT	0.07	POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	101.0 - 101.8
TEMPERATURE (K)	288 - 296
ABS HUMIDITY (kg/kg)	.0086 - .0114

FUEL

SPEC	Jet A
H/C	
AROM (%)	

MANUFACTURER: International Aero Engines
TEST ORGANIZATION: P&W
TEST LOCATION: East Hartford, CT
TEST DATES: FROM 12 Aug 92 TO 13 Aug 92

REMARKS

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