ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: V2522-A5
UNIQUE ID NUMBER: 3IA006
ENGINE TYPE: MTF

BYPASS RATIO: 4.88
PRESSURE RATIO (π_{oo}): 25.6
RATED OUTPUT (F_{oo}) (kN): 102.66

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	0.5	33.0	53.3	11.6
AS % OF ORIGINAL LIMIT	2.3 %	28.0 %	58.5 %	49.4 %
AS % OF CAEP/2 LIMIT (NOx)			73.1 %	
AS % OF CAEP/4 LIMIT (NOx)			88.9 %	
AS % OF CAEP/6 LIMIT (NOx)			101.1 %	
AS % OF CAEP/8 LIMIT (NOx)			121.3 %	

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)			SMOKE NUMBER
				HC	CO	NOx	
TAKE-OFF	100	0.7	0.971	0.041	0.57	24.5	5.4
CLIMB OUT	85	2.2	0.817	0.041	0.67	20.8	7.5
APPROACH	30	4.0	0.311	0.062	2.6	8.7	4
IDLE	7	26.0	0.118	0.103	13.42	4.5	2.6
LTO TOTAL FUEL (kg) or EMISSIONS (g)			407	30	2760	4720	–
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	26.9	46	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 6.2%/5.5% % CORE FLOW AT 7%/30% 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: Pratt & Whitney
TEST LOCATION: East Hartford, CT, USA
TEST DATES: FROM 12 Aug 92 TO 13 Aug 92

REMARKS

1. Engine Type description originally wrongly given as TF; amended in Issue 15 to MTF

If REVISED, this data supersedes databank UID
Compliance with fuel venting requirements: 0 ('x' if complies, PR if pre-regulation)