ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION:	V2500-A1	BYPASS RATIO:	5.3
UNIQUE ID NUMBER:	1IA001	PRESSURE RATIO (π_{oo}):	29.8
ENGINE TYPE:	MTF	RATED OUTPUT (F_{oo}) (kN):	111.2

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	1.0	18.2	80.3	4.5
AS % OF ORIGINAL LIMIT	5.1 %	15.4 %	80.7 %	19.6 %
AS % OF CAEP/2 LIMIT (NOx)			100.8 %	
AS % OF CAEP/4 LIMIT (NOx)			120.5 %	
AS % OF CAEP/6 LIMIT (NOx)			136.9 %	
AS % OF CAEP/8 LIMIT (NOx)			161.1 %	

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)
- x   OUT OF PRODUCTION (DATE: -)
-    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	1.113	0.1	0.55	37.13	-
CLIMB OUT	85	2.2	0.924	0.11	0.55	30.82	-
APPROACH	30	4.0	0.334	0.15	0.77	13.45	-
IDLE	7	26.0	0.124	0.22	7.76	5.91	-
LTO TOTAL FUEL (kg) or EMISSIONS (g)			442	73	1656	7716	-
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)				0.65	14.8	69.3	3.5
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	4.5	% CORE FLOW	AT	0.07	POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	101.3
TEMPERATURE (K)	286
ABS HUMIDITY (kg/kg)	0.0048

FUEL

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

MANUFACTURER:	International Aero Engines
TEST ORGANIZATION:	Pratt & Whitney
TEST LOCATION:	East Hartford, CT, USA
TEST DATES:	FROM 02 Jun 88 TO 02 Jun 88

REMARKS

1. V2500 renamed V2500-A1 2.Engine Type description originally wrongly given as TF; amended in Issue 15 to

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