



ICAO ENGINE EXHAUST EMISSIONS DATA BANK

SUBSONIC ENGINES

ENGINE IDENTIFICATION: V2524-A5
UNIQUE ID NUMBER: 3IA007
ENGINE TYPE: MTF

BYPASS RATIO: 4.81
PRESSURE RATIO (π_{00}): 26.9
RATED OUTPUT (F_{00}) (kN): 109.06

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NOx	SMOKE NUMBER
D_p/F_{00} (g/kN) or SN	0.4	30.4	56.1	11.6
AS % OF ORIGINAL LIMIT	2.2 %	25.8 %	59.8 %	50.2 %
AS % OF CAEP/2 LIMIT (NOx)			74.8 %	
AS % OF CAEP/4 LIMIT (NOx)			90.4 %	
AS % OF CAEP/6 LIMIT (NOx)			102.8 %	
AS % OF CAEP/8 LIMIT (NOx)			122.6 %	

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_{00})	TIME minutes	FUEL FLOW kg/s	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NOx	
TAKE-OFF	100	0.7	1.042	0.042	0.54	26.2	5.2
CLIMB OUT	85	2.2	0.868	0.042	0.63	22	7.2
APPROACH	30	4.0	0.328	0.061	2.37	9	4.2
IDLE	7	26.0	0.123	0.1	12.64	4.7	2.6
LTO TOTAL FUEL (kg) or EMISSIONS (g)			429	31	2708	5278	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D_p/F_{00} (g/kN) or AVERAGE SN (MAX)				0.28	24.8	48.4	9
SIGMA (D_p/F_{00} in g/kN, or SN)				-	-	-	-
RANGE (D_p/F_{00} in g/kN, or SN)				-	-	-	-

ACCESSORY LOADS

POWER EXTRACTION 0 (kW)
STAGE BLEED 6.2%/5.5% % CORE FLOW

AT - POWER SETTINGS
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)