Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Federal Office of Civil Aviation, Environmental Affairs

ENGINE EXHAUST EMISSIONS MEASUREMENT
PISTON ENGINES

ENGINE IDENT	LYC IO-360-A1B6	INJECTOR	RSA-5AD1
UNIQUE ID NUMBER	PF03	INJECTION NOZZLE	-
ENGINE TYPE	4Cyl. 4Stroke Air Cooled	RATED POWER (Poo) (HP)	200
PROPELLER TYPE	HC-C2YK-1		

DATA STATUS

- x EMISSION INVENTORY
- PRE-REGULATION
- CERTIFICATION
- REVISED

TEST ENGINE STATUS

- NEWLY MANUFACTURED ENG.
- x USED ENGINE
- DEDICATED TO PRODUCTION
- OTHER (SEE REMARKS)

MEASUREMET STATUS

- GROUND BASED FIXED PITCH PROP
- x GROUND BASED VARIABLE PITCH PROP

CURRENT ENGINE STATUS

- x IN PRODUCTION
- OUT OF PRODUCTION
- OUT OF SERVICE

EMISSIONS STATUS

- DATA CORRECTED TO REFERENCE TEMPERATURE
- DATA CORRECTED TO REFERENCE (ANNEX 16 VOLUME II)
- IV5 CALCULATION METHODOLOGY VERSION NUMBER

MEASURED DATA

MODE	POWER SETTING (%)	TIME (minutes)	FUEL FLOW (kg/s)	EI HC (g/kg)	EI CO (g/kg)	EI NOx (g/kg)	PM (µg/m^3)
TAKE-OFF	100	0.3	0.0136	15.5	1278	1	
CLIMB OUT	85	2.5	0.0106	16.7	1288	1	17000
CRUISE	65	60	0.0098	17.8	1309	1	43000
APPROACH	45	3	0.0062	20.6	1342	1	94000
TAXI	12	12	0.0014	48.3	1054	2	8900
CRUISE LEAN	65	60	0.0072	9.4	393	33	38000
LTO TOTAL FUEL (kg) or EMISSIONS (g)			3.96	102	4922	5	
CRUISE 1HOUR FUEL (kg) or EMISSIONS (g)			25.9	244	10181	846	
NUMBER OF TESTED ENGINES			1	1	1	1	1
NUMBER OF TESTS			3	3	3	3	1

ATMOSPHERIC CONDITIONS

BAROMETER QNH (hPa)	1019
TEMPERATURE (°C))	9
DEW POINT (°C)	7
DENSITY ALTITUDE (ft)	1187

FUEL

SPEC	AVGAS100LL
HC	C7H13

MANUFACTURER:

TEST ORGANIZATION:	FOCA
TEST LOCATION:	LSZB
TEST DATES:	18. Okt 05

REFERENCE:

33-05-003 groundmeasurement56.injected.
constantspeed.IV5HBKEZ_051018_rit
Experts: W. Bula/T. Rindlisbacher

REMARKS:

According to engine manual, this engine can be leaned during climb out, which has not been taken into account (emissions at worst case)