

Preflight Inspection Int + ExtComplete**INTERNAL CHECKS**

Canopy.....Closed and Locked
 Seatbelts.....Fastened
 Parking Brake Set
 Flaps Fully Up
 Trim Full and Free, Set Neutral
 Carb Heat..... OFF
 Flying Controls..... Full and Free
 Master Switch.....ON
 Warning PanelTest
 Fuel Tank..... Selected
 Fuel Quantity Checked
 ATISNote
 Altimeter.....QNH
 Master Switch OFF
 Strobes ON

START UP CHECKS**Cold Engine**

Mixture Fully Rich
 Fuel Pump.....ON
 Prime.....4 Pumps
 Throttle1 cm
 MagnetosBOTH
 Area.....Check Clear
 Starter ON, 10 s max
 As Soon As Engine Is Started
 Power 1200 RPM
 Oil Pressure Established

Hot Engine

Same procedures as with a cold engine,
however only prime with 2 pumps

Flooded Engine

Mixture OFF
Fuel Pump..... OFF
Throttle Full
Magnetos BOTH
Area.....Check Clear
Starter ON
As Soon As Engine Is Started
Mixture Fully Rich
Power 1200 RPM
Oil Pressure Established

BEFORE TAXI CHECKS

Alternator.....ON
Alternator.....Charging
Fuel Pump..... OFF
Fuel Flow..... Checked
Master Switch..... ON
DI..... Set
Request Clearance Completed

TAXI CHECKS

Test Brakes Completed

POWER CHECKS

Parking Brake Set
Oil Pressure and T° Checked
Area.....Check Clear
Power..... 2000 RPM
Suction..... 5"
Magnetos
..... R then L Max Drop 175 RPM
.....R then L Max Difference 50 RPM
Carb Heat..... Hot for 10 Seconds
Throttle Close
Power 1200 RPM

PRE TAKEOFF CHECKS

Master Switch.....ON
Alternator.....ON
MagnetosBOTH
Carb Heat..... OFF
Trim Set for Takeoff
Flaps1st stage, 1 green
Mixture Fully Rich
Engine Instruments..... Checked
Flight Instruments..... Checked
Canopy.....Closed and Locked
Safety Briefing..... Completed
Fuel Pump.....ON
Transponder.....ALT

LINE UP CHECKS

Compass Checked
DI..... Set
TDA.....Noted

AFTER TAKEOFF CHECKS

Flaps Fully Up
Fuel Pump..... OFF
Climb Speed Checked

CRUISING GUIDE

Power Set
Mixture Set
Engine Instruments..... Checked
DI..... Set
Altimeter..... Checked
Fuel Checked
Carb Heat.....
..... As Required

Nb: When changing from one fuel tank to another the FUEL PUMP must be ON

Nb: Avoid running the engine between 2150 and 2350 Tr/mn for long periods of time

BFORE DESCENT CHECKS

Arrival Briefing Complete
Mixture Fully Rich
Fuel Tank.....Most Full Selected
DI..... Set
Altimeter..... Set
Carb Hat.....
..... As Required

PRE LANDING CHECKS

Flaps As Required
Mixture Fully Rich
Carb Heat.....
..... As Required
Fuel Pump..... ON

AFTER LANDING CHECKS

Flaps Fully Up
Carb Heat..... OFF
Fuel Pump..... OFF
Transponder..... Stand Bye, 7000

SHUTDOWN CHECKS

Master Switch..... OFF
Alternator..... OFF
Magnetos Check (800 tr/mn).....
..... Completed
Mixture OFF
Magnetos OFF, Keys Out
Strobes OFF
Battery. OFF
Flaps. Fully Down

GO-AROUND CHECKS

Pull Back ↔ Power.....At The Same Time
Carb Heat..... OFF
Vi > to 65 Kt (1,2 Vs)
Flaps2nd then 1st Stage

Then Complete:

AFTER TAKEOFF CHECKS

CF. Flight Manual**POWER LOSS IN FLIGHT CHECKS**

Vi 80 Kt
Fuel Tank..... Open
Mixture Fully Rich
Fuel Pump..... ON
Carb Heat..... ON
Magnetos BOTH
 As Soon As Power Is Restored
Carb Heat..... OFF
Fuel Pump..... OFF

EMERGENCY LANDING CHECKS

Vi 80 Kt
Transponder..... 7700
Distress Beacon ON
ATC Informed
Pax Prepared
 Once Landing Area Is Chosen
Flaps 2nd Stage
Vi 70 Kt
Fuel Tanks Closed
Mixture OFF
Magnetos OFF
Alternator and Battery OFF
Canopy..... Unlocked, left ajar
 Land As Soft As Possible

AEROCLUB DE LIMOGES	SPEED CENTERING	DR 400 – 180
------------------------	----------------------------	--------------

SPEEDS

	Vi (Kt)	RPM	Volets
Rotation	60	PG	1 nd Stage
Climb Vz max (V_Y)	90	2500	0°
Climb θ max (V_X)	80	2500	0°
Climb en FL	70	PG	1 nd stage
Cruise (65 %)	120 V _p	2450	0°
Descente V_{NO}	V _{NO}	2450	0°
Holding	85	1800	0°
Approach	80	2000	1 st stage
Final Clean	80	1500	0°
Final 2nd Stage	75	1600	1 st stage
Final 3rd Stage	70	1700	2 nd stage

V _{FE}	92	Minimum Drag	80
V _A	116	Emergence Landing 2rd Stage	70
V _{NO}	140	Crosswind	22
V _{NE}	166		

	Vs	1,1Vs	1,2Vs	1,3Vs	1,45Vs
Min Drag	57	65	70	75	85
V_{2nd stage}	53	60	65	70	80
V_{3rd stage}	51	60		70	75

At Max Weight, 2000 ft 20°C, Vw calm,
Tarmac Runway:
DRD = 400 DD = 800
DA = 600 DRA = 300

ENGINE

Type: Lycoming Series: O – 360 – A3A
Power Produced:.....
..... 180 CV at 2700 Tr/mn
..... 170 CV at 2600 Tr/mn

Nb: Avoid running the engine between
2150 and 2350 Tr/mn for long periods of
time

FUEL

Type: 100 LL, Blue

Density: 0,72

Main Tank: 110 l

Main Tank Usable: 100 l

Auxiliary Tank: 2 x 40 l

Total Usable: 180 l**Consumption: 36 l/hr**

Pressure: Normal 35 to 550 mbar

**FUEL CARRIAGE
REGULATIONS****VFR GENERAL AVIATION**

Navigation: Route
..... + 10 % if MTO unknown
..... + 20' (day) / 45' (night)

Local: 30' (day) / 45' (night)

Min at landing: **15'**

OIL

Min: 6 US Quarts (5,7l)

Max: 8 US Quarts (7,5l)

Pressure: Normal 3,8 to 6,5 bars

Min 1,7 bar Max 7,9 bars

Temperature: Normal 60 to 118°C

AEROCLUB DE LIMOGES	SPEED CENTERING	DR 400 – 180
------------------------	----------------------------	--------------

TYRES

Main Landing Gear: 2 bars
Nose Wheel: 1,8 bars

WEIGHT AND BALANCE

MTOW : 1100 kg MLW : 1045 kg
Maxi Baggage Compartment: 60 kg

Load Factor Limits: +3,8 / - 1,9

	Masse	Bras de levier	Moment
Empty Weight	642	0,317	203,5
Crew		0,41	
Pax		1,19	
Fuel Main		1,12	
Fuel Wings		0,1	
Bagage		1,9	
Total			

