

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 Quantity Checked
 ATISNote
 Altimeter.....QNH
 Master Switch OFF
 StrobesON

START UP CHECKS**Cold Engine**

Mixture Fully Rich
 Fuel Pump.....ON
 Prime.....4 Pumps
 Throttle 1 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

BEOFRE 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

Alternator.....ON
MagnetosBOTH
Carb Heat..... OFF
Trim Set for Takeoff
Flaps 1st satge, 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 TAKOFF 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

BFORE DESCENT CHECKS

Arrival Briefing Complete
Mixture Fully Rich
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 By, 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 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	2 nd 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 – 140 B
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SPEEDS

	Vi (Kt)	RPM	Volets
Rotation	60	PG	1 nd Stage
Climb Vz max (V_Y)	80	2500	0°
Climb θ max (V_X)	80	2500	0°
Climb en FL	70	PG	1 nd stage
Cruise (65 %)	110 V _p	2400	0°
Descente V_{NO}	V _{NO}	2400	0°
Holding	80	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	54	60	65	70	80
V_{2nd stage}	51	60	65	70	75
V_{3rd stage}	47	55		65	70

At Max Weight, 2000 ft 20°C, Vw calm,
Tarmac Runway:
DRD = 300 DD = 600
DA = 500 DRA = 250

ENGINE

Type: Lycoming Series: O – 320 – D2A
Power Produced:.....
..... 155CV at 2500 Tr/mn

FUEL

Type: 100 LL, Blue

Density: 0,72

Main Tank: 110 l

Main Tank Usable: 100 l

Auxiliary Tank: 50 l

Total Usable: 150 l

Consumption: 30 l/hr

Pressure: Normal 35 to 550 mbar

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

Navigation: Route
..... + 10 % si 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 – 140 B
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TYRES

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

WEIGHT AND BALANCE

MTOW: 1000 kg
Maxi Baggage Compartment: 40 kg

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

	Weight	Moment Arm	Moment
Empty Weight	Cf. Weight Sheet		
Cew		0,41	
Pax		1,19	
Fuel Main		1,12	
Fuel Auxiliary		1,61	
Bagage		1,9	
Total			

