

<b>A</b>	<b>BEFORE ENGINE START-up</b>	
1.	Daily pre-flight check	completed
2.	Passenger briefing	completed
3.	Seats	adjusted as required
4.	Seat belts & harnesses	fastened & tightened
5.	Canopy	closed and locked
6.	Parking brake	set
7.	Control stick	free
8.	Carburetor heat	off
9.	Throttle	idle
10.	Propeller control lever	HIGH-RPM position
11.	Avionics switch	off
12.	Circuit breakers (fuses)	check
<b>13. Before engine start checklist complete</b>		

<b>E</b>	<b>ENGINE RUN-up</b>	
1.	Brakes	apply
2.	Parking brake	set
3.	Fuel pressure warn. light	off
4.	Throttle	1700 RPM
5.	Prop control	cycle 3 times
6.	Ignition magnet check R/L	drop <120 (diff. <50)
7.	Carburetor heat	on (20-50) RPM
8.	Carburetor heat	off
9.	Throttle	idle
10.	Engine instruments	check (green arc)
11.	Circuit breakers (fuses)	checked
<b>12. Engine run up checklist complete</b>		

<b>B</b>	<b>ENGINE START-up</b>	
1.	ALT/BAT switch	on
2.	Generator warn. light	illuminates
3.	Fuel pressure warn. light	illuminates
4.	Anti-collision light	on
5.	Fuel selector valve	switch to fullest tank
6.	Electrical fuel pump	on
7.	Fuel pressure warn. light	off
8.	Throttle cold engine	idle
9.	hot engine	2 cm opened
10.	Choke cold engine	pull
11.	hot engine	off
12.	Brakes	apply
13.	Propeller area	check if clear
14.	Ignition switch	start (RPM 820/2min)
15.	Oil pressure gauge	green arc (<10 sec)
16.	Alternator warning light	off
17.	NAV-Lights	as required
18.	Electrical fuel pump	Warning light off
19.	Avionics master switch	on
<b>20. Engine start checklist complete</b>		

<b>F</b>	<b>BEFORE TAKE OFF</b>	
1.	Controls	free & correct
2.	Flaps	set for T/O
3.	Elevator Trim	set for T/O
4.	Propeller control	max. RPM
5.	Canopy	closed and locked
6.	T/O clearance	obtained
7.	Electric fuel pump	on
8.	Transponder	GND / ALT
9.	Landing light	on
10.	Parking brake	released
<b>11. Before take off checklist complete</b>		

<b>C</b>	<b>BEFORE TAXI CHECK</b>	
1.	Transponder	Standby/GND
2.	ATIS	note
3.	Avionics & flight instruments	setup & QNH (2x)
4.	Engines instruments	check
5.	Volt- Amperemeter	V green range A +
6.	Flaps	check & T/O
7.	Taxi clearance	obtain
<b>8. Before taxi checklist complete</b>		

<b>G</b>	<b>LINE UP CHECK</b>	
1.	All sectors	clear
2.	Runway	clear & identified
3.	Compass (both)	check
4.	Airborne time	note
<b>5. Line up checklist complete</b>		

<b>D</b>	<b>TAXI CHECK</b>	
1.	Parking brake	release
2.	Taxi- Landing lights	as required
3.	Nose wheel steering	check function
4.	Brakes	check
5.	Flight instruments & avionics	check
6.	Compass reading/gyro	check
7.	Fuel tank lever	switch left/right

<b>P</b>	<b>Airspeeds for safe operations</b>	
<b>Start</b>		
Lift off speed		50
V <sub>x</sub> best angle (flaps TO)		52
V <sub>y</sub> best rate (flaps up)		65
Engine failure after take off		70
<b>Cruise</b>		
V <sub>FE</sub> full flaps		90
V <sub>A</sub> maneuvering speed		112
V <sub>NO</sub> max. structural cruise		130
V <sub>NE</sub> never exceed		165
<b>Landing</b>		
Normal landing (full flaps)		60
Ldg. without engine power		-
- flaps in TO		65
- flaps up		70
<b>Precaution landing</b>		
Precaution landing		60
V for best glide flaps up		78
V for best glide flaps TO		73





<b>H TAKE off</b>	
1. Throttle	full open
2. Tachometer	2200-2260 RPM
3. Elevator control	neutral
4. Rudder pedals	hold direction
5. V rotate	50 kts
6. Climb speed	65 kts
7. Pos. ROC / Brakes	check / apply
8. <i>Take off checklist</i>	<i>complete</i>

<b>I CLIMB 400 FT CHECK</b>	
1. Propeller	2260 RPM
2. Throttle	open
3. Engine instruments	check
4. Climb speed	65 kts
5. Flaps	cruise position
6. Fuel pump	off
7. Landing light	off
8. <i>Climb check</i>	<i>complete</i>

<b>J CRUISE CHECK</b>	
1. Level off	trim
2. <b>Power setting 65%</b>	
2000 ft	24,7 MP 2000 RPM 16 l
4000 ft	23,3 MP 2100 RPM 16,8 l
6000 ft	22,7 MP 2200 RPM 19,3 l
8000 ft	21,5 MP 2200 RPM 21,5 l
3. <i>Cruise checklist</i>	<i>complete</i>

<b>K DESCENT CHECK</b>	
1. ATIS	note
2. Altitude	set QNH
3. Carburetor heat	as required
4. Throttle	as required
5. <i>Descent checklist</i>	<i>complete</i>

<b>L APPROACH</b>	
1. Electric fuel pump	on
2. Landing light	on
3. Carburetor heat	on
4. Throttle	as required
5. Speed	below 90 kts(IAS)
6. Flaps	set (T/O)
7. Approach speed	90 kts - flaps T/O
8. Trim	set
9. Final approach speed	60 kts - flaps full
10. Propeller control lever	full forward
11. Runway	identified
12. <i>Approach checklist</i>	<i>complete</i>

<b>M GO AROUND</b>	
1. Throttle	full
2. Carburetor heat	off
3. Flaps	T/O
4. Speed	65 kts

<b>N AFTER LANDING CHECK</b>	
1. Carburetor heat	off
2. Flaps	up
3. Transponder	stby
4. Electric fuel pump	off
5. Landing light	off
6. Landing time	note
7. <i>After landing checklist</i>	<i>complete</i>

<b>O SHUT OFF CHECK</b>	
1. Throttle	idle
2. Parking brake	set
3. Flaps	LANDING position
4. Electrical consumers	off
5. Avionic Master Switch	off
6. Ignition	off
7. Anti-collision light	off
8. Bat switch	off
9. Aircraft	secured
10. FPL	CLSD
11. <i>Shutoff checklist</i>	<i>complete</i>

<b>P Airspeeds for safe operations</b>			
<b>Start</b>			
Lift off speed	50		
V <sub>x</sub> best angle (flaps TO)	52		
V <sub>y</sub> best rate (flaps up)	65		
Engine failure after take off	70		
<b>Cruise</b>			
V <sub>FE</sub> full flaps	90		
V <sub>A</sub> maneuvering speed	112		
V <sub>NO</sub> max. structural cruise	130		
V <sub>NE</sub> never exceed	165		
<b>Landing</b>			
Normal landing (full flaps)	60		
Ldg. without engine power	-		
- flaps in TO	65		
- flaps up	70		
Precautionary landing	60		
V for best glide flaps up	78		
V for best glide flaps TO	73		
<b>Stall speeds</b>			
0°	30°	45°	60°
UP	52		
T/O	48		
LDG	43		