PRE-FLIGHT

Aircraft Exterior	Check Condition Thoroughly Fuel / Oil Leaks? Spats + Tires?
Fuel	DRAIN + DIP
Oil Quantity	CHECK MIN 4 QUARTS
Chocks / Ties	REMOVE
Intake Bungs	REMOVE
Pitot Cover	REMOVE
Rudder Lock	REMOVE
External Lighting + Pitot Heat	CHECK
Flight Controls	FULL + FREE

STARTING ENGINE

Brakes	ON
Mixture	RICH
Fuel Pump	ON & GREEN For 3 seconds
Fuel Pump	OFF
Only If Engine Cold:	
Throttle	5 PUMPS
Throttle	1/4 INCH
Left Mag	ON
Area	CLEAR
Engine	START Crank up to 10 seconds
Right Mag	ON AFTER ENGINE START
Throttle	1000 RPM

BEFORE START

Pre-flight	COMPLETED
MR	VAILD + SIGNED
Pax Brief	COMPLETE
Fuel Caps	SECURED
Harness	TIGHTEN
Fuel Selector	FULLEST
Circuit Breakers	CHECK IN
Master (Bat+Alt)	ON
Dynon	POWERING ON

AFTER START

Oil Pressure	GREEN
Volts + Amps	14V, AMPS GREEN
Avionics	ON + SET
Flaps	UP
Mixture	LEAN (6-7 LPH)
Nav Lights	ON

TAXI

Fuel Selector	SWITCH FOR TAXI
Brakes	CHECK
Directional Instruments	CHECK

ENGINE RUNUP

Brakes	ON
Mixture	RICH
Fuel Selector	FULLEST
Throttle	2000 RPM
Mags	L + R CHECKED Max Drop 150 RPM Max Diff. 50 RPM
Carby Heat	>10 RPM DROP
Engine T + P	CHECK
Volts + Amps	CHECK
Low Idle	600-800 RPM
Throttle	1000 RPM

BEFORE TAKEOFF

Mixture	RICH
Mags	BOTH ON
Elevator Trim	SLIGHTLY AFT
Aileron Trim	NEUTRAL
Flaps	SET 0 OR 15
Pitot Heat	AS REQUIRED
Instruments	SET
Fuel Pump	ON
Flight Controls	FULL + FREE
Canopy	LOCKED
Safety Brief	COMPLETE

HOLDING POINT

Mixture	RICH
Fuel Pump	ON
Lights + Strobes	ON
Transponder	CHECK
Canopy	LOCKED

AFTER TAKEOFF

300' Flaps	UP
1000' Fuel Pump	OFF
Fuel Pressure	CHECK
Landing Lights	OFF

CRUISE

Compass	CHECK
Log	UPDATE
Engine	T + P
Altimetry	CHECK
Radios	CHECK + SET
Orientate	DO
Fuel	CONSIDER
Forced Landing	HAVE A PLAN

PRE-LANDING

Autopilot	OFF
Brakes	CHECK
Mags	BOTH ON
Mixture	RICH
Fuel Selector	FULLEST
Fuel Pump	ON
Landing Lights	ON
Harness	TIGHT

FINAL

Flaps	<78 KIAS, FULL
Speed	65 KIAS
Carby Heat	OFF

AFTER LANDING

Elevator Trim	NEUTRAL
Fuel Pump	OFF
Flaps	UP
Transponder	STBY
Mixture	LEAN (6-7 LPH)
Strobe Lights	OFF
Landing Lights	OFF
Pitot Heat	OFF

SHUTDOWN

Avionics	OFF
Flaps	FULL DOWN
Throttle	1000 RPM
Mixture	IDLE CUTOFF
Propeller	STOPPED
Mags	BOTH OFF
All Switches	OFF

ENGINE FAILURE AFTER TAKEOFF

Airspeed	70 FLAPS FULL
	80 FLAPS UP
Fuel Selector	OFF
Mixture	IDLE CUT OFF
Ignition Switches	OFF
Flaps	AS REQUIRED
Master (Bat+Alt)	OFF

ENGINE FAILURE IN FLIGHT

Airspeed	80 FLAPS UP
Fuel Selector	SWITCH TANK
Fuel Pump	ON
Mixture	EXERCISE + RICH
Carb Heat	EXERCISE + ON
Throttle	EXERCISE + IDLE SET
Starter Button	PUSH
Radios	7700 + DECLARE EM

WING FIRE IN FLIGHT

External Lighting	OFF
Radios	7700 + DECLARE EM
LAND IMMEDIATELY	

ENGINE FIRE IN FLIGHT

Fuel Selector	OFF
Mixture	IDLE CUTOFF
Electrical Systems	CONSIDER
Air / Heat Vents	CLOSE
Fire Extinguisher	USE IF REQD
Radios	7700 + DECLARE EM
LAND IMMEDIATELY	

ENGINE FIRE ON GROUND

Starter	PUSH MIN 30 SEC
IF ENGINE STARTS:	
Power	1700 (60sec)
Mixture	IDLE CUTOFF
Engine	SECURE
Fire Extinguisher	USE IF REQD
IF ENGINE FAIL TO START:	
Throttle	FULL
Starter	KEEP CRANKING (30sec)
Engine	SECURE
Fire Extinguisher	USE IF REQD

CABIN OR ELECTRICAL FIRE ON GROUND

Electrical Systems	OFF
Fuel Systems	OFF
Air / Heat Vents	CLOSE ALL
Fire Extinguisher	USE IF REQD

CABIN OR ELECTRICAL FIRE IN FLIGHT

Electrical Systems	OFF
Fuel Systems	CONSIDER
Air / Heat Vents	CLOSE ALL
Fire Extinguisher	USE IF REQD
LAND IMMEDIATELY	

ALTERNATOR FAILURE

Avionics	OFF
Master Switch	OFF
Alternator Breaker	RESET
Master Switch	ON
IF ALTERNATOR STILL IS OFFLINE	
Alternator Breaker	OFF
Avionics	ON
Electrical Loads	REDUCE
Land	ASAP

HIGH CO ALARM

Cabin Heat	CLOSE
Fresh Air Vents	OPEN
IF ALARM REMAINS: Land ASAP	

AIRSPEEDS	KIAS
Best Glide Clean	80
Best Glide Flaps	70
Vy	76
Vx	66
Vne	182
Vno	156
Va	102
Flaps 15	86
Flaps 30	78
Vso / Vs	44 / 49
IN THE CIRCUIT	
Base	75
Final	65
Add 5KT to base and final if flapless	