

## ENGINE START

### BEFORE ENGINE START

Flaps ..... UP  
Passengers ..... BRIEF  
Seatbelts ..... SECURED  
Circuit Breakers ..... IN  
Avionics ..... OFF  
Carb Heat ..... OFF  
Battery/Alternator ..... OFF  
Strobes ..... ON  
Beacon ..... ON  
Fuel Selector ..... SET  
Parking Brake ..... SELECT  
Tow Brakes ..... HOLD  
**END**

### ENGINE START

**Mixture** ..... RICH  
Carb Heat ..... VERIFY OFF  
Primer ..... 3 TIMES  
Throttle ..... OPEN 3 TIMES  
Throttle ..... 1/8<sup>th</sup> INCH OPEN  
**Battery/Alternator** ..... ON  
**Fuel Pump** ..... ON  
**Strobes/Beacon** ..... VERIFY ON  
Magnets ..... BOTH  
Propeller Area ..... CLEAR  
Starter ..... ENGAGE  
Throttle ..... 1000 rpm  
**Cockpit Flow** ..... PERFORM

Engine Indications ..... GREEN  
Ammeter ..... ~30 amps  
Fuel Pump ..... OFF  
Mixture ..... LEAN  
**END**

## TAXI

### BEFORE TAXI

Avionics/EFIS ..... ON  
ATIS/AWOS (123.75) ..... OBTAIN  
Altimeter ..... SET  
Clearance (119.55) ..... OBTAIN  
Transponder ..... SET + VERIFY ALT

### MOVE WITHIN LOS OF TOWER

Ground Clearance (121.9) ..... OBTAIN  
Taxi Route ..... BRIEF  
**END**

## TAXI

Brakes ..... TEST  
Steering ..... TEST  
Turn Indicator ..... WITH TURN  
Slip Indicator ..... OPPOSITE OF TURN  
Heading ..... WITH COMPASS

## RUN UP – HOLD SHORT

### ENGINE RUNUP

Parking Brake ..... SET  
Fuel Selector ..... FULLEST TANK  
Flight Controls ..... FREE/CORRECT  
Mixture ..... RICH  
Fuel Pump ..... ON  
Throttle ..... 1700 rpm  
Magnetos ..... L/R (125 drop/50 diff)  
Carb Heat ..... ON, VERIFY DROP  
Ammeter ..... ~30 amps  
Throttle ..... IDLE  
Carb Heat ..... OFF  
Throttle ..... 1000 rpm  
**END**

### BEFORE TAKEOFF

Departure ..... BRIEF  
ENG FAIL ON TAKEOFF ..... BRIEF  
Doors/Windows ..... CLOSED  
Seatbelts ..... SECURED  
Flaps ..... AS REQUIRED  
**Mixture** ..... VERIFY RICH  
**Fuel Pump** ..... VERIFY ON  
**Fuel Selector** ..... SAFEST TANK  
Trim ..... SET TAKEOFF  
Transponder ..... VERIFY ALT  
Tower Clearance (125.97) ..... OBTAIN  
**Landing Light** ..... ON  
**END**

### V SPEEDS

$V_R = 55 \text{ kts}$

$V_x = 65 \text{ kts}$

$V_y = 75 \text{ kts}$

$V_{S0} = 50 \text{ kts}$

$V_{S1} = 58 \text{ kts}$

$V_A = 112 \text{ kts}$

$V_{BG} = 70 \text{ kts}$

**Best Glide: 70 kts Va: 112 kts**

## **TAKEOFF – CLIMB - CRUISE**

### **TAKEOFF**

**Selected Runway .....** **VERIFY**  
 Throttle.....**FULL POWER**  
 Engine Instruments .....**GREEN**  
 Airspeed .....**ALIVE**  
 Rotate ..... 55 kts  
 Climb..... 75 kts (V<sub>Y</sub>)  
 Flaps ..... RETRACT

**END**

### **CLIMB (1,000 ft)**

Throttle.....AS REQUIRED  
 Airspeed ..... 85 kts  
 Landing Light ..... OFF  
 Engine Instruments .....**GREEN**  
 Mixture ..... LEAN ABOVE 3000 ft MSL

**END**

### **CRUISE**

Throttle.....AS REQUIRED  
 Fuel Selector .....**FULLEST TANK**  
 Fuel Pump..... OFF  
 Mixture ..... LEAN ABOVE 3000 ft MSL  
 Engine Instruments .....**GREEN**

**END**

**Best Glide: 70 kts Va: 112 kts**

## **DESCENT - LANDING**

### **DESCENT CHECKLIST**

Approach.....**BRIEF**  
**Fuel Pump .....** **ON**  
 Throttle ..... AS REQUIRED  
 Mixture ..... FULL BELOW 3000 ft MSL  
 Seat Belts.....**SECURED**  
 ATIS/AWOS..... **OBTAIN**  
 Altimeter ..... **SET**

**END**

### **BEFORE LANDING**

**Fuel Pump .....** **VERIFY ON**  
**Mixture .....** **VERIFY RICH**  
**Landing Lights.....** **ON**  
 Flaps ..... AS REQUIRED  
 Vref..... 70-75 kts

**END**

### **AFTER LANDING**

Flaps ..... UP  
 Carb Heat ..... **VERIFY OFF**  
**Mixture .....** **LEAN**  
**Fuel Pump .....** **OFF**  
**Landing Lights.....** **OFF**  
 Ground Clearance (121.9) ..... **OBTAIN**  
 Taxi Route.....**BRIEF**

**END**

## **ENGINE SHUTDOWN**

### **ENGINE SHUTDOWN**

Parking Brake .....**SET**  
 Tow Brakes.....**HOLD**  
 Avionics/EFIS.....**OFF**  
 Fuel Pump ..... **VERIFY OFF**  
 Throttle ..... 1000 rom  
 Mixture ..... IDLE CUT-OFF  
 Magneton ..... OFF  
 Battery/Alternator ..... OFF  
 Keys..... **ON DASHBOARD**

**END**



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**FOR SITUATION AWARENESS ONLY**

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					V <sub>BG</sub> = 70 kts