

<p><u>V - SPEEDS (KIAS)</u></p> <p>Vso.....32 Vs.....39 Vr.....43 Vx.....60 Vy.....65 Vfe.....75 Vno.....108 Vne.....138 Va (1320 lbs).....88 Va (1025 lbs).....84 Best Glide.....60 Maximum Crosswind.....10 Maximum Headwind.....23</p> <p style="text-align: center;"><u>PREFLIGHT COCKPIT CHECK</u></p> <p>Weather..... CHECK ATIS/ASOS/AWOS.....OBTAIN Weight & Balance....COMPLETE Documents (AROW).....CHECK Inspection/AD status.....CHECK Hobbs.....CHECK Ignition.....OFF Avionics Master.....OFF Master.....ON Pitch-Roll Trim.....TEST Instruments.....ON Fuel Quantity.....CHECK Turn Coordinator.....AUDIBLE Flaps.....EXTEND Lights.....ON/INSPECT/OFF Fuel Selector.....ON Master.....OFF Circuit Breakers.....CHECK Canopy.....CLEAN</p>	<p><u>EXTERIOR INSPECTION</u></p> <p><u>Left Wing</u> Flaps.....CHECK Ailerons.....CHECK Leading Edge.....CHECK Pitot Tube.....CHECK Static Port.....CHECK Fuel Quantity.....CHECK Fuel Filler Cap.....SECURE Fuel Sump.....CHECK Main Wheel.....CHECK Fuel Tank Vent.....CHECK</p> <p><u>Nose</u> Nose Cowling.....SECURE Fuel Strainer.....CHECK Oil Quantity.....CHECK Engine Coolant.....CHECK Cooling Inlets.....CHECK Engine Mount.....SECURE Prop. & Spinner.....CHECK Carburetor Air Filter.....CHECK Nose Wheel Strut/Tire.....CHECK</p> <p><u>Right Wing</u> Leading Edge.....CHECK Fuel Sump.....CHECK Main Wheel.....CHECK Fuel Quantity.....CHECK Fuel Filler Cap.....SECURE Aileron.....CHECK Flap.....CHECK</p> <p><u>Empennage</u> Horiz. Stabilizer.....CHECK Elevator.....CHECK Trim Tab.....CHECK Rudder.....CHECK</p>
---	--

<p><u>BEFORE ENGINE START</u></p> <p>Preflight Inspection..COMPLETE Passenger Briefing..COMPLETE Safety Harness.....SECURE Controls.....FREE & CORRECT Canopy.....CLEAN</p> <p style="text-align: center;"><u>ENGINE START</u></p> <p>Brakes.....SET Fuel Selector...FULLEST TANK Throttle.....IDLE Choke.....FULL ON (HOT START – NO CHOKE) Carburetor Heat.....COLD Master.....ON Strobes.....ON Fuel Pump.....ON Brakes.....HOLD Propeller Area.....CLEAR Ignition.....START Choke.....OFF GRADUALLY Instruments.....ON Throttle.....2000 RPM Oil Pressure.....CHECK</p> <p style="text-align: center;"><u>WARMUP ENGINE FOR 2 MINUTES AT 2000 RPM</u></p> <p>Fuel Pump.....OFF Fuel Pressure.....CHECK Avionics.....ON</p> <p style="text-align: center;"><u>TAXI</u></p> <p>Transponder.....STBY Flaps.....RETRACT Taxi Area.....CLEAR Brakes.....RELEASE Instruments.....SET & CHECK Controls.....APPLY WIND CORRECTION</p>	<p style="text-align: center;"><u>RUNUP</u></p> <p>Canopy.....CLOSED & LOCKED Brakes.....SET Power.....2500 RPM UNTIL OIL PRESSURE REACHES 50°C Power.....4000 RPM Ignition.....CHECK L/R/BOTH MAX. DROP 300 RPM MAX. DIFFERENTIAL 120 RPM Carb Heat.....CHECK Oil Temperature.....CHECK Oil Pressure.....CHECK Ammeter.....CHECK Power.....IDLE</p> <p style="text-align: center;"><u>BEFORE TAKEOFF</u></p> <p>Altimeter.....SET Trim.....NEUTRAL Controls.....FREE & CORRECT Canopy.....CLOSED & LOCKED Safety Harness.....FASTENED Fuel Selector.....FULLEST TANK Fuel Pump.....ON Ignition.....ON Transponder.....ALT Lights.....AS REQUIRED</p> <p style="text-align: center;"><u>NORMAL TAKEOFF</u></p> <p>Flaps.....10° Throttle.....FULL OPEN Max. 5800 RPM for max. 5 mins. Engine Speed.....CHECK Engine Instruments.....CHECK Rotate.....43 KTS Climb.....65 KIAS (Vy) Flaps..RETRACT above 150' AGL</p>
--	--

SHORT-FIELD TAKEOFF

Flaps.....20°
 Throttle.....FULL OPEN
 Engine Instruments.....CHECK
 Rotate.....43 KIAS
 Climb.....60 KIAS (Vx)
 Until clear of obstacle
 Climb.....65 KIAS (Vy)
 Flaps.....RETRACT

CLIMB

Throttle....REDUCE (5500 RPM)
 Airspeed.....CRUISE CLIMB
 Trim.....SET
 Engine Instruments.....CHECK

CRUISE

Throttle.....SET
 Trim.....SET
 Fuel Pump.....OFF
 Landing Light.....OFF
 Fuel Pressure.....CHECK
 Engine Instruments.....CHECK

DESCENT

Power.....ABOVE 3000 RPM
 Airspeed.....AS DESIRED
 Altimeter.....SET
 Landing Light.....ON

BEFORE LANDING

Safety Harness.....SECURE
 Fuel Pump.....ON
 Fuel Selector....FULLEST TANK
 Fuel Pressure.....CHECK
 Throttle.....BELOW 5500 RPM

NORMAL LANDING

Power.....AS NEEDED
 Flaps.....SET below 75 KIAS
 Airspeed.....60 KTS
 Trim.....AS NEEDED

AFTER LANDING

Flaps.....RETRACT
 Transponder.....STBY
 Lights.....AS REQUIRED
 Fuel Pump.....OFF
 Trims.....NEUTRAL

ENGINE SHUTDOWN

Throttle.....IDLE
 Engine Instruments.....CHECK
 Avionics.....OFF
 Lights.....OFF
 Ignition.....OFF
 Instruments.....OFF
 Master.....OFF
 Fuel Selector.....OFF

SECURING AIRCRAFT

Flight Controls.....SECURE
 Hobbs Time.....RECORD
 Squawks.....NOTE
 Trash.....REMOVE
 Canopy.....CLOSED/LOCKED
 Tie-Downs.....SECURE
 Flight Plan.....CLOSE

**EMERGENCY PROCEDURES
 ENGINE FAILURE IN
 FLIGHT**

Airspeed.....60 KIAS
 Landing Site.....LOCATE
 Fuel Pump.....ON
 Fuel Selector....FULLEST TANK
 Throttle.....IDLE
 Ignition.....START

***IF ENGINE FAILS TO RESTART
 PROCEED TO EMERGENCY
 LANDING CHECKLIST***

**EMERGENCY LANDING
 WITHOUT POWER**

Airspeed.....60 KIAS
 Trim.....ADJUST
 Safety Harness.....TIGHTEN
 Flaps.....EXTEND as necessary
 Radio Call.....121.5
 Transponder.....7700
 Fuel Selector.....OFF
 Ignition.....OFF
 Master Switch.....OFF

CARBURETOR ICING

Carburetor Heat.....ON
 Throttle.....SET 1/3 POWER
 Airspeed.....MIN. 76 KIAS
 Power.....INCREASE gradually

ENGINE FIRE ON START

Fuel Selector.....OFF
 Throttle.....FULL OPEN
 Ignition.....OFF
 Abandon Airplane

**EMERGENCY PROCEDURES
 ENGINE FIRE ON GROUND**

Cabin Heat.....CLOSE
 Fuel Selector.....OFF
 Throttle.....FULL OPEN
 Ignition.....OFF
 Abandon Airplane

**ENGINE FIRE DURING
 TAKEOFF**

Airspeed.....60 KIAS
 Cabin Heat.....CLOSE
 Fuel Selector.....OFF
 Throttle.....FULL OPEN
 Ignition.....OFF
 Land and Abandon Airplane

**ENGINE FIRE DURING
 FLIGHT**

Cabin Heat.....CLOSE
 Fuel Selector.....OFF
 Throttle.....FULL OPEN
 Ignition.....OFF
 when remaining fuel is consumed
 Landing Site.....LOCATE

***PROCEED WITH EMERGENCY
 LANDING CHECKLIST***

**CANOPY OPEN DURING
 FLIGHT**

Maintain positive control of aircraft
DO NOT TRY TO CLOSE
 Continue takeoff
 Climb to safe altitude
 Maintain airspeed of 65 KIAS
 Fly a normal traffic pattern
 Max. airspeed 75 KIAS
 Land then close and lock canopy