

Baron 55-A55 1961-1963

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BEFORE START

1. Passenger brief----- Perform
2. Fuel selector -----Test then Mains
3. Emergency gear crank -----Free
4. Circuit breakers----- Check
5. Rudder pedals ----- Set
6. Avionics Master-----Off
7. Flight Controls ----- Free & Correct

STARTING ENGINE

(Start left engine first)

1. Cowl flaps----- Open
 2. Beacon ----- On
 3. Brakes ----- Set
 4. Throttle ----- Set 1000RPM
 5. Prop ----- High RPM
 6. Mixture ----- Rich
 7. Battery ----- On
 8. Boost Pump ----- HIGH till Fuel Pressure Stabilizes , Then OFF
 9. Propeller Area ----- CLEAR
 10. Ignition Switch----- START
 11. Throttle ----- 800-1000 RPM
 12. Oil Pressure----- 30 PSI in 30 sec
 13. Generator ----- On
 14. Throttle -----1000 RPM
- Repeat Steps for Other Engine*

PRE-TAXI

1. Avionics Master Switch -----On
2. Mixtures -----Lean
3. Engine Instruments -----Check
4. Radios & Nav Aids -----Set & Check
5. Transponder ----- Set to 1200 ALT
6. Altimeter -----Set to Baro. Per AWOS/ATIS
7. Heading Indicator -----Set to Mag. Compass
8. Fuel Selectors -----Main Tanks
9. Fuel Quantity Selector -----Main
10. Flaps -----Up

TAXI CHECK

1. Brakes ----- Test
2. HI – AI – Turn Coord.----- Test

RUNUP

1. Brakes -----Set & Hold
2. Trim ----- Set for T.O.
3. Instruments ----- Check
4. Mixtures ----- Best Power
5. Throttles ----- 2200 RPM
6. Propellers -----Cycle
7. Throttles ----- 1700 RPM
8. Magnetos ----- Check (< 150 Drop, 50 Diff)
9. Throttles -----1500 RPM
10. Feather ----- Test <500 RPM drop
11. Voltage/Amps ----- Check output
12. Gyro Pressure-----Check (4.75" - 5.25")
13. Oil temperature -----Check >75 F.
14. Oil Pressure ----- 30-60 PSI
15. Throttle -----Check IDLE, then 1000RPM
16. Throttle Friction -----Set

BEFORE TAKEOFF

1. Flaps ----- 0° or 10°
2. Props ----- Full Forward
3. Mixture ----- Best power
4. Boost Pumps ----- OFF
5. Doors/Windows ----- Closed
6. Cowl Flaps ----- OPEN
7. Fuel Selectors ----- MAIN
8. Fuel Quantity Indicator----- MAIN
9. Landing lights ----- On

TAKEOFF BRIEFING

- If any any problems are experienced prior to liftoff, takeoff will be aborted.
- If an engine fails after liftoff prior to gear retraction, below V_{mc}, land straight ahead.
- If an engine failurs after gear retraction, continue the takeoff, pitch for Vyse, 100 kts, fly straight, and secure the failed engine.

This checklist is a guide and not a substitute for the information in the Pilot Operating Handbook. The applicable POH and STC installations remain the official documentation for this aircraft. The pilot in command is responsible for complying with all items in the Pilot Operating Handbook and applicable STCs.

TAKEOFF

1. Flaps ----- 0 orr 10deg
2. Throttle ----- Full OPEN
3. Engine Instruments -Check (RPM 2625)
4. Rotate ----- 80 KIAS
5. Vy ----- 101 KIAS
6. Flaps ----- UP
7. Gear ----- UP

CLIMB

1. Climb ----- 123 KIAS
2. Throttle ----- 25" MP
3. Prop ----- 2500 RPM
4. Mixture ----- As. Req.
5. Fuel pumps ----- OFF
6. Cowl Flaps ----- Open
7. Landing lights ----- Off

CRUISE

1. Throttle ----- Set
2. Props ----- 2300 RPM
3. Mixture ----- Lean
4. Cowl Flaps----- Close
5. Fuel ----- Proper Tanks

DESCENT

1. Power ----- As req.
2. Mixture ----- Rich
3. Fuel Selectors----- MAIN
4. Fuel Quantity Selector ----- MAIN
5. Cowl Flaps ----- Close
6. ATIS/AWOS -----Tune
7. Altimeter ----- Set
8. Heading Indicator----- Set to Compass
9. Landing Lights-----ON

BEFORE LANDING

1. **G** as ----- MAIN
2. **U** ndercariage ----- DOWN (< 143 KIAS)
3. **M** ixtures ----- RICH Below 3000'
4. **P** rops ----- HIGH RPM
5. **F** laps ----- As Req'd.

LANDING

1. Gear ----- Down <143 Kts
2. Flaps ----- 30°
3. Airspeed ----- 90 Kts short final

AFTER LANDING

1. Flaps ----- Retract
2. Cowl Flaps----- Open
3. Landing Lights ----- Off
4. De-ice Equip ----- Off
5. Pitot Heat ----- Off
6. Heater ----- Off
7. Trim -----Takeoff
8. Transponder ----- 1200 Alt.

SECURING

1. Avionics ----- Off
2. Throttle ----- 1500 RPM 20 Sec.
3. Throttle ----- 1000 RPM
4. Mixture ----- Cut-off.
5. Mags. ----- Off
6. Generators ----- Off
7. Battery ----- Off

ENGINE IN-FLIGHT FIRE SHUT-DOWN

1. Fuel selector -----Off
2. Throttle -----Close
3. Prop ----- Feather
4. Mixture -----Idle Cut-off
5. Aux fuel pump ----- Off
6. Gen./ Mags. ----- Off
7. Emergency Descent if fire doesn't go out

AIR START/UN-FEATHERING

1. Mixture-----Rich
2. Fuel ----- Mains
3. Throttle ----- Set 1000RPM
4. Boost Pump ----- High then off
5. Prop ----- Full Forward
6. When engine starts, move throttle to 15" to warm engine

MANUAL GEAR EXTENSION

1. Reduce airspeed to 100-120 ks
2. Pull landing gear motor circuit breaker
3. Lower landing gear lever
4. Hand crank counterclockwise ~55 Turns
5. Check all Down indicators
6. Verify gear lights and horn
7. Stow Gear Handle

V_{so} - 66 Stall – gear and flaps down
 V_{s1} - 75 Stall - gear and flaps up
 V_{mca} - 78 Min. control with loss of engine
 V_{ss} - 84 Min. single engine planned inop..

V_x - 84 Two engine
 V_{xse} - 91 Single engine Max.Cross Wind - 22Kts
 V_{yse} - 100 Single engine
 V_y - 101 Two engine

V_{fe} - 113 Flap extension speed
 V_{le/o} -143 Landing gear operation
 V_a - 157 4800 lbs. 140 @ 4000 lbs.
 V_{no} - 183 Normal operating speed

V_{ne} - 224 Never exceed speed
 107 - Single engine approach
 90 - Single engine final approach
 88 - Go around initial pitch