

# Baron 58 Mini POH – Checklist & Quick Reference

X Plane 12 Pnly – Not for Real World Applications



## Preflight Inspection

- Aircraft documents – onboard & valid
  - Control locks – REMOVE
  - Master switch – ON
  - Fuel quantity – CHECK
  - Flaps – EXTEND
  - Lights – CHECK
  - Pitot heat – CHECK
  - Master switch – OFF
  - Fuel – SUMP all drains
  - Oil level – CHECK (min 5 qt per engine)
  - General condition – WALKAROUND
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## Engine Start

- Brakes – HOLD
  - Carb heat – OFF
  - Mixture – FULL RICH
  - Throttle – OPEN ¼"
  - Master switch – ON
  - Beacon – ON
  - Fuel pump – ON, then OFF
  - Primer – AS REQUIRED
  - Ignition – START (release at start)
  - Oil pressure – CHECK (within 30 sec)
  - Avionics – ON after start
  - Radios – SET
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## ☒ Taxi

- Brakes – TEST
  - Turn & slip – CHECK
  - Heading – CHECK
  - Attitude – CHECK
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## ☒ Run-Up / Pre-Takeoff

- Parking brake – SET
- Mixture – FULL RICH
- Throttle – 1700 RPM
- Magnetos – CHECK ( $\leq 125$  RPM drop / 50 RPM difference)
- Carb heat – CHECK (RPM drop)
- Engine gauges – GREEN
- Suction – CHECK
- Ammeter/Voltmeter – CHECK
- Throttle – IDLE, then 1000 RPM
- Flight instruments – SET
- Trim – SET
- Flaps – SET
- Controls – FREE & CORRECT

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## ☒ **Takeoff**

- Doors/windows – SECURE
- Mixture – FULL RICH
- Carb heat – OFF
- Transponder – ALT
- Landing light – ON
- Final – CLEAR
- Rotate – 85 KIAS

## ☒ **Climb**

- Flaps – UP
- Climb speed – 105 KIAS
- Engine – MONITOR
- Landing light – OFF above 1000' AGL

## ☒ **Cruise**

- Power – SET (2500 RPM / 24" MP)
- Mixture – LEAN as required
- Engine instruments – CHECK
- Heading/altitude – MONITOR

## ☒ **Descent**

- ATIS / Weather – OBTAIN
- Altimeter – SET
- Mixture – ENRICHEN
- Power – REDUCE
- Carb heat – AS REQUIRED

## ☒ **Circuit / Landing**

- Fuel – BOTH
- Mixture – FULL RICH
- Carb heat – ON
- Flaps – SET (15° for approach, 30° for landing)
- Final approach – 95 KIAS
- Runway – CONFIRM
- Touchdown – MAINS FIRST, NOSEWHEEL GENTLY

## **Post-Flight / Shutdown**

- Avionics – OFF
  - Throttle – IDLE
  - Mixture – CUTOFF
  - Ignition – OFF, KEY REMOVE
  - Master switch – OFF
  - Lights – OFF
  - Control lock – INSTALL
  - Aircraft – SECURE & TIEDOWN
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## **Quick Reference**

### **V-Speeds (Baron 58)**

Speed	Value (KIAS)	Description
Vr	85	Rotation speed
Vx	92	Best angle climb
Vy	105	Best rate climb
Vfe	152	Max flap extension
Vno	195	Max structural cruise
Vne	223	Never exceed
Vs	74	Stall clean
Vso	65	Stall landing config

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### **Power Settings & Mixture Guidelines**

#### **Takeoff**

- **Throttle:** Full throttle
- **Prop RPM:** 2700 RPM
- **Mixture:** Full rich (adjust for field elevation)

#### **Climb**

- **Throttle:** 25" MP
- **Prop RPM:** 2500 RPM
- **Mixture:** Lean to peak EGT or 25°F rich of peak
- **Climb Speed:** 105 KIAS

#### **Cruise**

- **Throttle:** 24" MP
- **Prop RPM:** 2300 RPM
- **Mixture:** Lean to 50°F rich of peak EGT
- **Cruise Speed:** 170-180 KIAS at 6000 ft, 150-160 KIAS at 9000 ft

## **Descent**

- **Throttle:** Reduce to maintain desired descent rate
- **Mixture:** Enrich as required
- **Descent Speed:** 170 KIAS at 16000-13000 ft, 160 KIAS below 13000 ft

## **Landing**

- **Throttle:** Reduce to idle
- **Prop RPM:** 2500 RPM
- **Mixture:** Full rich
- **Flaps:** 15° for approach, 30° for landing
- **Landing Speed:** 95 KIAS