

Baron 58 (Non-Turbo)
Quick Reference Guide
X-Plane 12



SECTION 1: TAKEOFF INFORMATION

Weights and Distances (Sea Level, ISA, Dry Runway)

- **Maximum Takeoff Weight (MTOW):** ~5,400 lbs
- **Full Fuel Max Takeoff Distance (Ground Roll):** ~2,300 ft
- **Full Fuel Max Takeoff Distance (Over 50 ft obstacle):** ~3,000 ft
- **Half Weight Takeoff Distance (Ground Roll):** ~1,400 ft
- **Half Weight Takeoff Distance (Over 50 ft obstacle):** ~2,100 ft

Takeoff Speeds

Phase	Speed (IAS)	Notes
Rotate	85 KIAS	Smooth rotation
Lift-off	90-95 KIAS	Use rudder to maintain centerline
Climb out (Vy)	100 KIAS	Best rate of climb
Climb out (Vx)	83 KIAS	Best angle of climb (short field)

SECTION 2: PERFORMANCE TABLES

Climb Performance (Cruise Climb)

Altitude	MP (inHg)	Prop RPM	IAS (KIAS)	Rate of Climb (fpm)
SL-5,000	25	2,500	120	~1,200
5,000-10,000	24	2,400	120	~900
10,000-12,000	22	2,300	115	~600

Cruise Settings

Altitude	MP (inHg)	Prop RPM	Power (%)	IAS (KIAS)	Notes
3,000 ft	24	2,400	~75%	165	Normal cruise
6,000 ft	23	2,300	~70%	160	Lean mixture
10,000 ft	21	2,300	~65%	155	Use oxygen if required

Standard Cruise Altitudes:

- VFR: Odd+500 (eastbound), Even+500 (westbound)
 - IFR: Even (eastbound), Odd (westbound)
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DESCENT SETTINGS

Phase	MP (inHg)	Prop RPM	IAS (KIAS)	Notes
Initial Descent	18-20	2,300	160-170	Smooth power reduction
Final Descent	15-17	2,300	140-150	Level off ~1000 ft AGL

CIRCUIT / PATTERN OPERATIONS

Phase	Altitude AGL	Speed (KIAS)	Power (MP)	Prop RPM	Gear/Flap
Downwind	1,000 ft	120	~18-20	2,400	Gear up / Flaps up
Abeam Numbers	1,000 ft	110	~15	2,400	Gear down / Flaps 10
Base Turn	800 ft	100	~13	2,400	Flaps 20
Final	500 ft	90-95	~12	2,400	Flaps 30 / Full
Touchdown	Ground	80-85	Idle	2,400	Full flaps, stabilized

Flap Speed Limits:

- Flaps 10°: 152 KIAS
- Flaps Full: 122 KIAS

Landing Gear Extension Speed:

- Max Extension: 152 KIAS

Max Demonstrated Crosswind:

- 21 knots

EMERGENCY / ENGINE OUT

Best Glide Speed:

- ~110 KIAS

Single-Engine Emergency (Engine Failure after Takeoff)

Step	Notes
Maintain Directional Ctrl	Use rudder and slight bank into live engine
Airspeed	100 KIAS
Mixture/Props/Throttle	Full forward
Flaps	Up
Gear	Up
Identify and Feather	Dead engine
Climb Speed (SE Vyse)	100 KIAS

Single-Engine Landing

- Approach: 105 KIAS
- Final: 95 KIAS
- Full Flaps & Gear: Only when runway is assured

Note: All values are approximations for X-Plane 12 and may vary based on simulated environmental conditions and aircraft loading.

Stay proficient. Fly safe.