Embraer 190 Quick Reference Guide

Taxi (Dep.)
- Breakaway, use minimal thrust. No more than 35% N1 on ground
- Little thrust required to keep movement going
- Should roll at idle thrust & slightly accelerate with 2 eng. running
- 90° turns, no more than 10kts GS // 20-30kts normal straightaways
- Taxi to runway on Eng. #1 (keep #2 off until 2 mins prior to departure)

Takeoff
- Flaps 2 (most common for departures)
- Flaps 4 (short runway departures)
- Advance PWR to 40% N1 before applying T/O PWR
- If at MTOW, Rotate around **125-150kts** (lighter TOW = lesser speed req'd)
- Positive Rate - **Gear up**
- Initial pitch 12.5° nose up at a rate of 3-5°/sec.
- No more than 30° bank (15° max single engine) above 400ft AGL
- **Gusty Winds:** A higher takeoff power setting than normal is recommended

Acceleration Alt. (1000ft AFE)
- Set Climb Thrust & adjust as necessary
- Flap Retraction (Sequential/One at a time)
- Clean (gear & flaps up) while accelerating aircraft at a stable rate

Climb
- 250kts to 10,000ft
- CLB Spd: 270-290kts/M0.73-M.75

Cruise
- Once at cruise FL, accelerate to desired Mach #
- M0.76-M0.80

Fuel Planning
- For maximum efficiency, step climb as appropriate. Consider taking into account aircraft weight, winds and direction of travel

DO NOT exceed 90% N1 in cruise

Descent
- VNAV as appropriate

Arrival Planning
- Descend at M# until reaching 280kts
- 250kts below 10,000ft @ rates ≤1500fpm
- Landing lights on at 10,000ft

Arrival (Configure)
- Flaps 1 - 230kts
- Flaps 2 - 215kts
- Flaps 3 - 200kts
- Flaps 4 - 180kts or while slowing to Vref
- Flaps 5 - 180kts Slowing to Vref
- Flaps Full - 165kts (for short rwys or steep approaches)

Glideslope Capture
- Flaps 1- Reaching IAF on approach
- Flaps 2, Base or Intermediate vector, Bug 180kts
             ——Glideslope Alive——
- Flaps 3, Gear down, & Bug 160kts
             ——One dot below GS Intercept——
- Flaps 5 (Full), Bug Vap (Vref + 5kts)

- Stable prior to 1000ft AGL **(2.5° pitch nose up on final –> threshold)**

Landing
- GPWS callouts
- Begin round out at 50ft **(5° works best)**
- Once 30ft, retard power to idle slowly

Reversers & Taxi (Arrival)
- @60kts, Reduce to min rev., Closed @ 30kts
- Exit high-speed taxiways at <30kts or 8-12kts any other taxiway
- Taxi to parking on Eng. #1 (turn off #2, 2 mins after exiting runway)
- **Start APU** on taxi in
- Shutdown engines, lights, turn pax signs off, and open doors.