

Bermuda Dunes Flight Training

Adaptive Commercial Pilot Syllabus



"If you aren't having fun, you're doing it wrong."

Our Training Philosophy

Welcome to the right seat of your professional aviation career. Earning your Commercial Pilot Certificate is not about learning how to fly—you already know how to do that. It is about absolute mastery, energy management, and Aeronautical Decision Making (ADM).

At Bermuda Dunes Flight Training, we do not believe in highly structured, rigid check-box systems that treat every student exactly the same. We adapt to *you*. If you nail your Chandelles on day one, we move on. If your Power-Off 180s are sloppy, we stay in the pattern until you own the airplane. This syllabus is a living roadmap designed to adapt to your individual pace and progression.

- **Prerequisite:** Private Pilot Certificate (Instrument Rating highly recommended).
- **The Mission:** To transition you from a competent private pilot to a precise, smooth, and professional PIC who flies to Commercial ACS standards.
- **The Authority:** The FAA Airman Certification Standards (ACS) and the Pilot's Operating Handbook (POH).

Phase 1: The Mindset Shift & Precision Flying

The goal of this phase is to strip away any lazy habits you picked up after your Private or Instrument checkrides. We are establishing absolute precision in pitch, power, and trim.

- **Adaptive Focus:** We assess your baseline. Can you hold altitude within 50 feet? Can you hold airspeed within 5 knots?
- **The Flights:**
 - **Advanced Airframe Handling:** Steep turns to Commercial standards (50° bank).
 - **Slow Flight & Stalls:** Absolute rudder coordination. You should be able to walk the rudders through a stall break without dropping a wing.
 - **Complex/TAA Transition (If Applicable):** Managing the upgraded avionics, electrical load management, or constant speed propeller systems (depending on if we are flying the 172S or the Cirrus SR20).

Phase 2: The Commercial Maneuvers

The goal of this phase is mastering the signature Commercial maneuvers. These are not just party tricks; they are advanced energy management exercises that teach you how to feel the aircraft without staring at the panel.

- **Adaptive Focus:** We introduce the maneuvers sequentially, but spend our time where you struggle the most.
- **The Flights:**
 - **Chandelles:** Maximum performance climbing turns. It is all about smooth, continuous pitch and roll coordination.
 - **Lazy Eights:** The ultimate test of constantly changing control pressures. You must anticipate the airplane's energy state.
 - **Steep Spirals:** Managing wind drift, glide speed, and bank angle during a continuous descending turn over a point.
 - **Eights on Pylons:** True visual flying. Maintaining pivotal altitude by referencing the wingtip against a ground point, shifting altitude as groundspeed changes.

Phase 3: Professional Operations (Takeoffs, Landings and XC)

The goal of this phase is operating the aircraft like someone is paying you to fly it.

- **Adaptive Focus:** Tailoring your cross-country planning to real-world commercial scenarios (e.g., flying charter, managing passenger comfort, evaluating marginal weather).
- **The Flights:**
 - **Maximum Performance Takeoffs & Landings:** Short field and soft field operations strictly to ACS tolerances.
 - **The Power-Off 180:** The maneuver that breaks the most commercial applicants. We will practice aggressive energy management, aiming points, and flap timing to hit a specific 200-foot touchdown zone from the downwind.
 - **The Commercial Cross-Country:** A true test of ADM, passenger briefing, diversion planning, and utilizing every resource available in the cockpit.

Phase 4: Checkride Polish

Putting it all together. No Instruction, just execution

- **Adaptive Focus:** Identifying and eliminating any lingering weak points before the examiner gets in the airplane.
- **The Flights:**
 - **Mock Oral:** A candid, no-nonsense grilling on systems, aerodynamics, weather, and Part 119/135 commercial privileges and limitations.
 - **The Dry Run:** A full mock checkride flight. If it isn't green on the progress report, we don't sign you off.

APPENDIX A: THE P.A.V.E. CHECKLIST

Use this before every flight. If you have "Marginal" items in two or more categories, do not fly.

- **P - Pilot:** Sleep, Stress, Medication. Are you physically and mentally prepared?
- **A - Aircraft:** Vacuum pump healthy? (Steam). ADC/AHRS free of flags? (G1000). Is fuel adequate?
- **V - Environment:** Is the weather meeting your Category minimums? A smart PIC knows when to put it down early to avoid punishing thermal turbulence.
- **E - External Pressures:** Are you in a rush? Is "get-there-itis" creeping in?

Appendix B: Commercial Checkride Pro-tips and Common Traps

The Commercial checkride is less about knowing the mechanics of a maneuver and more about demonstrating the judgment and energy management of a professional. After accumulating nearly 2,800 hours of total flight time, here are the most common traps I see applicants fall into during their commercial rides, and how to avoid them.

The Power-Off 180 (The Checkride Killer)

- **The Trap:** Trying to fly a standard, squared-off traffic pattern.
- **The Fix:** The second you pull that throttle, your standard pattern is out the window. Keep your base turn tight. Drop 10° of flaps initially to tighten your turning radius, but save the rest for when you have the runway definitively made. You can always lose altitude with a forward slip or by dumping the remaining flaps, but you cannot magically gain altitude if you turn base too wide.

Lazy Eights

- **The Trap:** Fixating on the altimeter and airspeed indicator, resulting in a rushed, mechanical maneuver.
- **The Fix:** It is called a *Lazy Eight* for a reason. Take your time. Find prominent reference points on the horizon (45°, 90°, 135°) before you begin, and keep your eyes outside. Let the airplane's natural stability do half the work for you. Feel the control pressures lighten over the top and heavy up at the bottom.

Chandelles

- **The Trap:** Bleeding off airspeed too quickly in the first 90 degrees of the turn.
- **The Fix:** The first 90 degrees is constant bank and changing pitch; the second 90 degrees is constant pitch and changing bank. Smoothly increase your back pressure so that you arrive at the 180-degree point just above stall speed, holding it there patiently without letting the nose drop.

Steep Spirals

- **The Trap:** Blowing the airspeed tolerance or fouling the spark plugs from an extended idle descent.
- **The Fix:** Wind drift is your biggest enemy here. Steepen your bank on the downwind and shallow it on the upwind to keep your radius constant around your point. Crucially, remember to clear the engine! Give it a smooth bump of power on the upwind heading to keep the engine warm, clear the plugs, and show the examiner you are thinking about the health of the equipment.

The Oral Exam & ADM

- **The Trap:** Digging a hole by giving the examiner more information than they asked for.
- **The Fix:** Answer the question asked, concisely and accurately. If they ask what time it is, do not explain how to build a watch. Know Part 119 and Part 135 privileges cold—understanding what you *cannot* do for hire is just as important as knowing what you can.

BRIAN'S APPENDIX: ADVANCED MANEUVERS & AIRSPEEDS

Airspeeds & Ground Reference Maneuvers

- **Private Pilot Ground Reference:** 90-100 KIAS
- **Eights on Pylons:** ~100 KIAS (depending on pivotal altitude)
- **At-Altitude Maneuvers:** 95 KIAS
- **Power-Off 180s:** Trim aggressively. Drop flaps to 10° immediately upon pulling power to tighten your turning radius and hold for 80 kts. Now, use your aim point just like turns-around-a-point for the first 90 degrees but save the rest of your flaps until you have the runway definitively made. You can use the flaps for the balloon effect if you are low. You can raise your flaps to hit your target. Keep in mind, a 172 with 30° of flaps and an idle engine will come down like an elevator.