**Winds System Calibration Flight Plan**

**Purpose:** Conduct an aircraft to obtain data for calibration the gust probe wind system that accounts for airflow around the aircraft, which changes depending on aircraft configuration.

**Procedure:**

For the Citation Research Aircraft, air speeds are ~ 140, 180 and 225 knots.

Repeated at three altitudes (i.e. 10,000 ft, 20,000 ft, and 29,000 ft)

1. Take off and climb to first altitude.
2. Fly at minimum airspeed in level flight (i.e. 30 seconds or better 3 minutes).
3. Transition to **3** **porpoises**, approximately 100 ft altitude change each side, approximately 20 seconds for each.
4. Back at original altitude, **Yaw** the aircraft left and right approx. **8º** (Maximum of 10º), **3 times**. Approximately 10 second for each.
5. Regain Level Flight, and reverse direction.
6. Repeat 2-4
7. **Accelerate** to a **medium** speed.
8. Repeat 2-5.
9. Reverse direction, and **accelerate** to a **maximum** speed.
10. Repeat 2-4.
11. After the 3 airspeeds are repeated, **Climb** to next altitude and repeat.



