

**Flight Plan Tampa to Denver** (v. 2.3)

Flight date: March 28th or 29th, 2008

7 A.M. EDT aircraft access, 11 A.M. departure, 1-hour postflight access w/ power. Arrival at NCAR Research Aviation Facility at approximately 4 P.M. CDT.

Transfer from MacDill AFB, Tampa to Rocky Mountain Metropolitan Airport (KBJC), Denver.

Flight plan assumes VFR conditions.

Elapsed time (no wind): 6.4 hrs.

**Waypoints:**

**WPT A)** MacDill AFB: 27.85N, 82.5W

**WPT B)** SW Georgia: 31.0N, 84.5W

**WPT C)** Dept. of Energy Atmospheric Radiation Measurement (ARM) site: 36.62N, 97.50W

**WPT D)** Denver Centennial Airport (KAPA): 39.57N, 104.85W

**WPT E)** Rocky Mountain Metro Airport (KBJC): 39.91N, 105.12

Assumed winds are calm

Default climb and descent rates 1500 ft/min.

Calculation TAS will be 220 kts below 10,000 ft; 240 kts at or above 10,000 ft

**Leg 1: A→B (1.1 hr)**

En-route climb to 10,500 ft; level for 20 min for calibration (FltSci ok's end of level leg)

En-route climb to 16,500; level for 15 min for calibration (FltSci ok's end of level leg)

En-route descent to arrive at **WPT B** at 1500' AGL

**Leg 2: B→C (3.3 hr)**

Maintain approx. 1500' AGL for 30 min to sample haze, rural emissions, agricultural burning

En-route climb to approx. 9000' AGL (5 min)

Maintain approx. 9000' AGL for 10 min to sample clean air above boundary layer

En-route descent to approx. 1500' AGL (5 min) . . .

. . .repeat two more times, ending level at 1500' AGL then. . .

En-route continuous climb to FL 200 or higher; cross **WPT C** at approx. 10,000'.

**Leg 3: C→D (1.7 hr)**

Maintain level flight at FL200 for 20 min., then altitude at pilot's discretion.

Descend to reach 1500' AGL approx. 50 miles prior to **WPT D** (KAPA); maintain 1500' AGL.

Perform missed approach at KAPA.

**Leg 4: D→E (0.2 hr)**

Direct to **WPT E** (KBJC) at minimum safe altitude. Approach and land at KBJC.

**Science crew:** Tom Ryerson-C3X                      Dan Lack-STA 2

Roya Bahreini-STA 3                      John Holloway-Galley

Jim Roberts-Galley



