

CONVAIR-580 STATE PARAMETER CALIBRATIONS FOR POST-SAFARI 2000

Due to an engine problem during the last few days of the SAFARI 2000 project in Namibia, a post-SAFARI calibration flight using a rawinsonde as an independent measure of state parameters was not carried out. The next such calibration flight, using a National Weather Service rawinsonde as an independent measure of state parameters, was conducted about one year later on 14 July 2001 (UW flight 1872) as a MID-CLAMS project calibration flight. This calibration flight showed that $tstatr$ was in substantial agreement with the Pietersburg, South Africa, 23 August 2000 comparison, while the Cambridge and Ophir-derived dewpoints required no corrections according to the MID-CLAMS comparisons. Thus, the MID-SAFARI calibrations can probably be used from UW Flight 1821 through the end of SAFARI (UW Flt 1839). A comparison of the correction factors required for $tstatr$ from the two rawinsonde comparisons are shown below.

$$tstatr_{corrected} = 0.98(tstatr_{raw}) + 2.2 \quad (\text{MID-SAFARI})$$

$$tstatr_{_corrected} = 0.98(tstatr_{_raw}) + 0.9 \quad (\text{MID-CLAMS})$$
