Question 3.27

Topic: Calibration of Probe

Question: If, under Method 2F or 2G, we calibrate a probe in a wind tunnel at 60 and 90 fps, can we use it at any velocity?

Answer: When using a three-dimensional probe (i.e., DA, DAT, or spherical) either under Method 2F or in yaw-determination mode under Method 2G, you may use the probe at any average velocity greater than or equal to 20 fps if it has been calibrated at 60 and 90 fps. That is, a three-dimensional probe may not be used under Method 2F or 2G if the average velocity is less than 20 fps.

Under Method 2G, if you calibrate a Type S probe at 60 and 90 fps, you may use the probe at any average velocity greater than or equal to 30 fps. A Type S probe under Method 2G may be used at average velocities less than 30 fps, but only if one of the two velocity settings used when calibrating the probe is less than or equal to the average velocity encountered in the field. This must be verified in accordance with the procedures specified in Section 12.4 of Method 2G. Also, the QA/QC requirements in Sections 10.6.12 through 10.6.14 of Method 2G for calibration coefficients must be met at the chosen calibration velocity settings.

References: 40 CFR Part 60, Appendix A-2, Methods 2F and 2G

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