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## New Self-Calibrating Infrasound Sensor Design

We will present the results of testing of a new self-calibrating infrasound sensor design, developed by Hyperion. This design integrates a sound source and system controller logic into the body of a Hyperion infrasound sensor. Both analog and digital versions of this design were constructed and tested. The calibrator produces a sinusoidal pressure signal with amplitude and frequency specified by the user into the back-volume of the infrasound sensor. The calibration controller corrects for static pressure and temperature effects on the pressure source, and the system can be operated fully remotely. Results of testing of this system will be presented along with a discussion of possible improvements of this design, including improvements in methodology which would make this system more directly traceable in a metrological sense.

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