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Anechoic chamber qualification at ultrasonic frequencies TREVOR JENNY, BRIAN ANDERSON, Brigham Young University — Qualifying an anechoic chamber for frequencies that extend into the ultrasonic range is necessary for research work involving airborne ultrasonic sound. For example, an anechoic chamber allows for measurements of the direct sound radiated by an object without reflections from walls. The ANSI S12.55/ISO 3745 standard which covers anechoic chamber qualification does not extend into the ultrasonic frequency range, nor have others discussed this frequency range in the literature. An increasing number of technologies are employing ultrasound; hence the need to develop facilities to conduct basic research studies on airborne ultrasound. This presentation will discuss the challenges associated with chamber qualification and present the results for qualification of a chamber at Brigham Young University. [This work has been funded by the Los Alamos National Laboratory]

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