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**MEASUREMENT AND ANALYSIS OF BLANK TIRE  
TREAD VIBRATION AND RADIATED NOISE**

**Final Report**  
**SQDH 2003 – 3**  
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16. Abstract Traffic noise is a major concern in many communities. Although there are many measures being taken to reduce exposure to traffic noise, the most efficient method is to reduce the noise at its source. Tire noise has been shown to exceed the noise levels produced by the power at highway speeds. Nearfield acoustical holography measurements indicate that most of the acoustic radiation generated by tire/pavement interaction is localized to the entrance and exit to the contact patch. Accelerometers were embedded into the tread of blank tires to measure the vibration response of the tire as it rotates through the contact patch.					
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