

SANDIA REPORT

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**MEASURED DATA FOR THE SANDIA 34 METER
VERTICAL AXIS WIND TURBINE**

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ABSTRACT

The 34-meter Test Bed is a research-oriented, variable-speed vertical-axis wind turbine located at the USDA Agricultural Research Station in Bushland, Texas. Sandia National Laboratories designed and built this machine to perform research in structural dynamics, aerodynamics, and fatigue. Testing to determine its performance in various wind conditions and rotation rates has been ongoing for over three years. This report documents a broad range of test data and includes comparisons to analytical results.

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