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Design, Fabrication, Assembly and Initial Testing of a SMART Rotor¹

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ABSTRACT

Sandia National Laboratories has designed and built a full set of three 9m blades (based on the Sandia CX-100 blade design) equipped with active aerodynamic blade load control surfaces on the outboard trailing edges. The design and fabrication of the blades and active aerodynamic control hardware and the instrumentation are discussed and the plans for control development are presented.

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⁴ Sandia is a multiprogram laboratory operated by Sandia Corporation, a Lockheed Martin Company, for the United States Department of Energy's National Nuclear Security Administration under contract DE-AC04-94AL85000.