

# **Ducted Fan Aerodynamics and Modeling, with Applications of Steady and Synthetic Jet Flow Control**

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Dissertation submitted to the faculty of the Virginia Polytechnic Institute and State University in partial fulfillment of the requirements for the degree of

Doctor of Philosophy  
In  
Mechanical Engineering

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May 4th, 2011  
Blacksburg, VA

Keywords: ducted fan, shrouded propeller, synthetic jets, flow control, aerodynamic modeling, non-dimensional, unmanned aerial vehicle, micro air vehicle

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May 10, 2011

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A handwritten signature in black ink that reads "Paul A. Gelhausen".

Paul A. Gelhausen  
Chief Technical Officer  
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