Investigation of the Impact of Turboprop Propulsion on Fuel Efficiency and Economic Feasibility

Kevin Richard Antcliff

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

Master of Science
In
Aerospace Engineering

Mark D. Guynn, Co-Chair
Craig A. Woolsey, Co-Chair
Pradeep Raj

August 12, 2014
Blacksburg, Virginia

Keywords: turboprop, aircraft design, energy efficiency, FLOPS, Vehicle Sketch Pad

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My name is Kevin Antcliff and I have been working with Mark Guynn in the ASAB at NASA Langley for the past 2 years. I have recently finished my Masters based on this work. In this study, which investigated the impact of turboprop propulsion on energy efficiency and economic feasibility, your speed-fuel trade model was utilized.

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