

Abstract Submitted
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Three Dimensional Vortex Formation of a Finite-Span Synthetic Jet¹ TYLER VAN BUREN, MICHAEL AMITAY, Rensselaer Polytechnic Institute
— Synthetic jets have been a topic for multiple investigations in the field of flow control. Understanding the flow physics associated with these jets is crucial in the development and application of this technology. Synthetic jets are commonly used in boundary layer control, and a large part of that comes from the flow interaction with the vortices created at the synthetic jet orifice. Three dimensional particle image velocimetry experiments have been conducted on the flow field near the orifice of a synthetic jet issued into a quiescent flow with interests in exploring the effects of multiple geometric features (such as throat length, aspect ratio, exit angle, etc.) of a rectangular orifice.

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