Jet Noise Reduction by Downstream Fluidic Injection: Effect of Injection: Pressure Ratio and Number of Injection Ports

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This study investigates the effects of downstream fluidic injection on jet noise reduction. The study focuses on the performance of a jet noise reduction system using a single injection port at different injection pressures. The system consists of a jet noise reduction system with a single injection port located downstream of the jet. The injection port was designed to operate at different injection pressures to study the effect of the injection pressure on jet noise reduction. The study reported that the injection pressure has a significant effect on jet noise reduction. The results showed that increasing the injection pressure resulted in a decrease in jet noise. This was attributed to the increased shear layer thickness and the resulting attenuation of the jet noise. The study also investigated the effect of the injection port location on jet noise reduction. The results showed that the injection port position had a significant effect on jet noise reduction. The study concluded that the injection pressure and location are critical factors in jet noise reduction and should be carefully considered in the design of jet noise reduction systems.