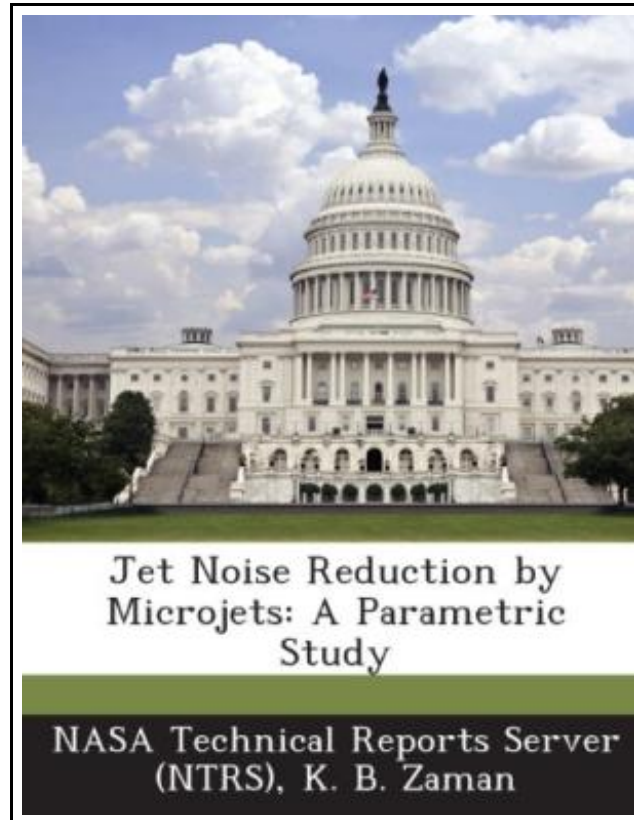


Jet Noise Reduction by Microjets: A Parametric Study



Filesize: 9.67 MB

Reviews

This publication is great. It is full of wisdom and knowledge You will not really feel monotony at at any time of the time (that's what catalogs are for relating to when you ask me).

(Dr. Everett Dicki DDS)

JET NOISE REDUCTION BY MICROJETS: A PARAMETRIC STUDY



To download **Jet Noise Reduction by Microjets: A Parametric Study** PDF, remember to follow the button under and download the ebook or have access to additional information that are related to JET NOISE REDUCTION BY MICROJETS: A PARAMETRIC STUDY ebook.

BiblioGov. Paperback. Book Condition: New. This item is printed on demand. Paperback. 30 pages. Dimensions: 9.7in. x 7.4in. x 0.1in. The effect of injecting tiny secondary jets (microjets) on the radiated noise from a subsonic primary jet is studied experimentally. The microjets are injected on to the primary jet near the nozzle exit with variable port geometry, working fluid and driving pressure. A clear noise reduction is observed that improves with increasing jet pressure. It is found that smaller diameter ports with higher driving pressure, but involving less thrust and mass fraction, can produce better noise reduction. A collection of data from the present as well as past experiments is examined in an attempt to correlate the noise reduction with the operating parameters. The results indicate that turbulent mixing noise reduction, as monitored by OASPL at a shallow angle, correlates with the ratio of jet to primary jet driving pressures normalized by the ratio of corresponding diameters (p_d/p_jD). With gaseous injection, the spectral amplitudes decrease at lower frequencies while an increase is noted at higher frequencies. It is apparent that this amplitude crossover is at least partly due to shock-associated noise from the underexpanded jets themselves. Such crossover is not seen with water injection since the flow in that case is incompressible and there is no shock-associated noise. Centerline velocity data show that larger noise reduction is accompanied by faster jet decay as well as significant reduction in turbulence intensities. While a physical understanding of the dependence of noise reduction on p_d/p_jD remains unclear, given this correlation, an analysis explains the observed dependence of the effect on various other parameters. This item ships from La Vergne, TN. Paperback.



[Read Jet Noise Reduction by Microjets: A Parametric Study Online](#)

[Download PDF Jet Noise Reduction by Microjets: A Parametric Study](#)

Other Kindle Books



[PDF] Good Night, Zombie Scary Tales

Follow the link below to download "Good Night, Zombie Scary Tales" PDF document.

[Download eBook »](#)



[PDF] God Loves You. Chester Blue

Follow the link below to download "God Loves You. Chester Blue" PDF document.

[Download eBook »](#)



[PDF] Viking Ships At Sunrise Magic Tree House, No. 15

Follow the link below to download "Viking Ships At Sunrise Magic Tree House, No. 15" PDF document.

[Download eBook »](#)



[PDF] Yearbook Volume 15

Follow the link below to download "Yearbook Volume 15" PDF document.

[Download eBook »](#)



[PDF] Absolutely Lucy #4 Lucy on the Ball A Stepping Stone BookTM

Follow the link below to download "Absolutely Lucy #4 Lucy on the Ball A Stepping Stone BookTM" PDF document.

[Download eBook »](#)



[PDF] The Stories Julian Tells A Stepping Stone BookTM

Follow the link below to download "The Stories Julian Tells A Stepping Stone BookTM" PDF document.

[Download eBook »](#)