

Cfd Analysis of Nozzle Jet Plume Effects on Sonic Boom Signature (Paperback)



Filesize: 4.21 MB

Reviews

This book may be worth purchasing. It typically fails to expense excessive. It is extremely difficult to leave it before concluding, once you begin to read the book.

(Ken Watsica)

CFD ANALYSIS OF NOZZLE JET PLUME EFFECTS ON SONIC BOOM SIGNATURE (PAPERBACK)

[DOWNLOAD](#)

Bibliogov, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.A computational fluid dynamics study is conducted to examine nozzle exhaust jet plume effects on the Sonic boom signature of a supersonic aircraft. A simplified axisymmetric nozzle geometry, representative of the nozzle on the NASA Dryden NF-15B Lift and Nozzle Change Effects on Tail Shock research airplane, is considered. The computational fluid dynamics code is validated using available wind-tunnel sonic boom experimental data. The effects of grid size, spatial order of accuracy, grid type, and flow viscosity on the accuracy of the predicted sonic boom pressure signature are quantified. Grid lines parallel to the Mach wave direction are found to give the best results. Second-order accurate upwind methods are required as a minimum for accurate sonic boom simulations. The highly underexpanded nozzle flow is found to provide significantly more reduction in the tail shock strength in the sonic boom N-wave pressure signature than perfectly expanded and overexpanded nozzle flows. A tail shock train in the sonic boom signature is observed for the highly underexpanded nozzle flow. Axisymmetric computational fluid dynamics simulations show the flow physics inside the F-15 nozzle to be nonisentropic and complex.



[Read Cfd Analysis of Nozzle Jet Plume Effects on Sonic Boom Signature \(Paperback\) Online](#)



[Download PDF Cfd Analysis of Nozzle Jet Plume Effects on Sonic Boom Signature \(Paperback\)](#)

Other Kindle Books



The First Epistle of H. N. a Crying-Voyce of the Holye Spirit of Loue. Translated Out of Base-Almayne Into English. (1574) (Paperback)

Eebo Editions, Proquest, United States, 2010. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.EARLY HISTORY OF RELIGION. Imagine holding history in your hands. Now...

[Download PDF »](#)



Two Treatises: The Pearle of the Gospell, and the Pilgrims Profession to Which Is Added a Glasse for Gentlewomen to Dresse Themselves By. by Thomas Taylor Preacher of Gods Word to the Towne of Reding. (1624-1625) (Paperback)

Proquest, Eebo Editions, United States, 2010. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.EARLY HISTORY OF RELIGION. Imagine holding history in your hands. Now...

[Download PDF »](#)



Two Treatises: The Pearle of the Gospell, and the Pilgrims Profession to Which Is Added a Glasse for Gentlewomen to Dresse Themselves By. by Thomas Taylor Preacher of Gods Word to the Towne of Reding. (1625) (Paperback)

Proquest, Eebo Editions, United States, 2010. Paperback. Book Condition: New. 246 x 189 mm. Language: English Brand New Book ***** Print on Demand *****.EARLY HISTORY OF RELIGION. Imagine holding history in your hands. Now you...

[Download PDF »](#)



Ohio Court Rules 2013, Practice Procedure (Paperback)

Createspace, United States, 2012. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****. Superseded by 2014 Edition. This title is available, but should be relied...

[Download PDF »](#)



Index to the Classified Subject Catalogue of the Buffalo Library; The Whole System Being Adopted from the Classification and Subject Index of Mr. Melvil Dewey, with Some Modifications . (Paperback)

Rarebooksclub.com, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.This historic book may have numerous typos and missing text. Purchasers can usually...

[Download PDF »](#)