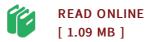




### Design Evolution and Performance Characterization of the Gtx Air-Breathing Launch Vehicle Inlet

By James R. Debonis

BiblioGov. Paperback. Book Condition: New. This item is printed on demand. Paperback. 22 pages. Dimensions: 9.7in. x 7.4in. x 0.1in. The design and analysis of a second version of the inlet for the GTX rocket-based combine-cycle launch vehicle is discussed. The previous design did not achieve its predicted performance levels due to excessive turning of low-momentum corner flows and local over-contraction due to asymmetric end-walls. This design attempts to remove these problems by reducing the spike half-angle to 10- from 12-degrees and by implementing true plane of symmetry end-walls. Axisymmetric Reynold s-Averaged Navier-Stokes simulations using both perfect gas and real gas, finite rate chemistry, assumptions were performed to aid in the design process and to create a comprehensive database of inlet performance. The inlet design, which operates over the entire air-breathing Mach number range from 0 to 12, and the performance database are presented. The performance database, for use in cycle analysis, includes predictions of mass capture, pressure recovery, throat Mach number, drag force, and heat load, for the entire Mach range. Results of the computations are compared with experimental data to validate the performance database. This item ships from La Vergne, TN. Paperback.



#### Reviews

The ideal ebook i possibly study. Better then never, though i am quite late in start reading this one. It is extremely difficult to leave it before concluding, once you begin to read the book.

-- Ava Witting

The ideal ebook i possibly study. Better then never, though i am quite late in start reading this one. It is extremely difficult to leave it before concluding, once you begin to read the book.

-- Ava Witting

### Related eBooks



#### Adobe Photoshop 7.0 - Design Professional

Book Condition: Brand New. Book Condition: Brand New.



# Children's Handwriting Book of Alphabets and Numbers: Over 4,000 Tracing Units for the Beginning Writer

Createspace, United States, 2015. Paperback. Book Condition: New. 254 x 203 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*. The Children s Handwriting Book of Alphabets and Numbers provides extensive focus on alphabet tracing and number tracing for the...



#### The Victim's Fortune: Inside the Epic Battle Over the Debts of the Holocaust

HarperCollins. Hardcover. Book Condition: New. 0066212642 Never Read-12+ year old Hardcover book with dust jacket-may have light shelf or handling wear-has a price sticker or price written inside front or back cover-publishers mark-Good Copy- I ship FAST with FREE tracking!! \* I...



# RCadvisor's Modifly: Design and Build From Scratch Your Own Modern Flying Model Airplane In One Day for Just

Rcadvisor.com, United States, 2009. Paperback. Book Condition: New. 238 x 166 mm. Language: English. Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*. Experience firsthand the joys of building and flying your very own model airplane design. Put into practice the lessons from...



Children's Educational Book: Junior Leonardo Da Vinci: An Introduction to the Art, Science and Inventions of This Great Genius. Age 7 8 9 10 Year-Olds. [Us English]

Createspace, United States, 2013. Paperback. Book Condition: New. 254 x 178 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.ABOUT SMART READS for Kids . Love Art, Love Learning Welcome. Designed to expand and inspire young minds; this is...



Children's Educational Book Junior Leonardo Da Vinci: An Introduction to the Art, Science and Inventions of This Great Genius Age 7 8 9 10 Year-Olds. [British English]

Createspace, United States, 2013. Paperback. Book Condition: New. 248 x 170 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.ABOUT SMART READS for Kids . Love Art, Love Learning Welcome. Designed to expand and inspire young minds; this is...