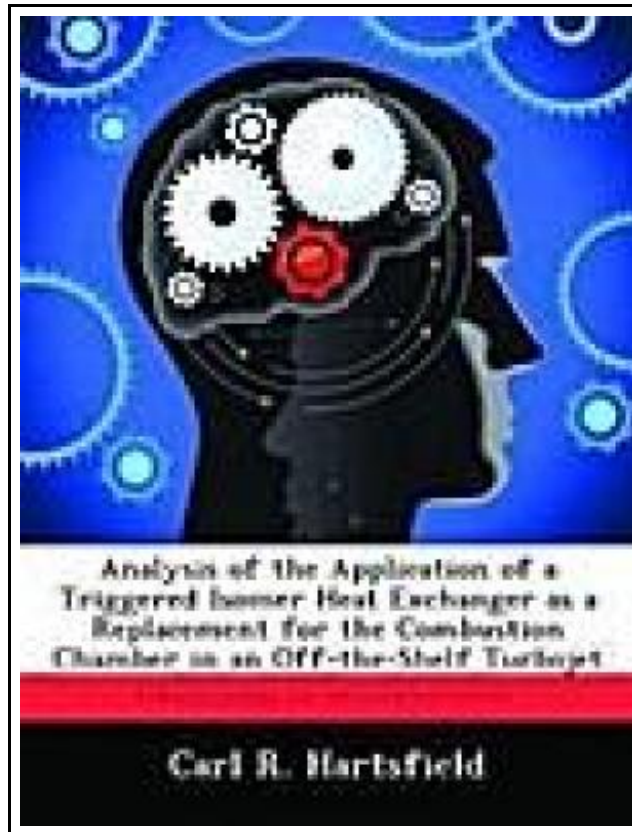


Analysis of the Application of a Triggered Isomer Heat Exchanger as a Replacement for the Combustion Chamber in an Off-the-Shelf Turbojet



Filesize: 6.22 MB

Reviews

This ebook is very gripping and fascinating. Sure, it is engage in, nevertheless an amazing and interesting literature. It is extremely difficult to leave it before concluding, once you begin to read the book.

(Ms. Ora Buckridge)

ANALYSIS OF THE APPLICATION OF A TRIGGERED ISOMER HEAT EXCHANGER AS A REPLACEMENT FOR THE COMBUSTION CHAMBER IN AN OFF-THE-SHELF TURBOJET



Biblioscholar Okt 2012, 2012. Taschenbuch. Book Condition: Neu. 246x189x6 mm. This item is printed on demand - Print on Demand Neuware - The objective of this research was to determine the feasibility of using a nuclear reaction heat source, such as the electromagnetically triggered decay of an isomer, in a solid-state heat exchanger to power an off-the-shelf gas turbine engine. Two primary performance measures examined were the total pressure decrement across the heat exchanger and the total temperature capability leaving the heat exchanger. The analysis included the use of a commercial software package, ANSYS// 5.6.1, running on a 700 MHz Pentium III PC. This package includes the FLOTRAN computational fluid dynamics program, a finite element program based on unstructured meshes, with multiple discretization schemes, turbulence models, and advection options. Boundary conditions on velocity, pressure, temperature, heat flux, and heat generation are available and were used in this research. Three basic geometries of heat exchanger were explored in this research: Concentric annular tubes, radial trapezoidal fins, and a dual, concentric annulus of rectangular fins. These were selected due to the simplicity of geometry and potential ease of manufacture. In addition, because the flow through all of these geometries could be reasonably approximated by a series of two dimensional flow fields, run times were on the order of 1 day, a significant reduction from 3-D flow calculations. All three configurations produced sufficient heat transfer. Pressure ratios across the heat exchangers varied in the range from 94.5970 to 97.5%. Turbine inlet temperatures varied from 986 K to 1150 K (1775 R to 2070 R). In the J-57 engine, these conditions will produce a static, sea-level thrust of approximately 37,000 N (8,300 lb.) to 47,000 N (10,600 lb.), compared to 46,000 N (10,300 lb.) for the conventional engine. 94 pp. Englisch.



Read Analysis of the Application of a Triggered Isomer Heat Exchanger as a Replacement for the Combustion Chamber in an Off-the-Shelf Turbojet Online



Download PDF Analysis of the Application of a Triggered Isomer Heat Exchanger as a Replacement for the Combustion Chamber in an Off-the-Shelf Turbojet

You May Also Like



The Diary of a Goose Girl (Illustrated Edition) (Dodo Press)

Dodo Press, United Kingdom, 2007. Paperback. Book Condition: New. Claude A Shepperson (illustrator). Illustrated. 229 x 152 mm. Language: English . Brand New Book ***** Print on Demand *****.Kate Douglas Wiggin, nee Smith (1856-1923) was...

[Read ePub »](#)



The Diary of a Goose Girl (Illustrated 1902 Edition)

Echo Library, United States, 2008. Paperback. Book Condition: New. Illustrated. 203 x 127 mm. Language: English . Brand New Book ***** Print on Demand *****.Kate Douglas Wiggin, nee Smith (1856-1923) was an American children s...

[Read ePub »](#)



The Romance of a Christmas Card (Illustrated Edition) (Dodo Press)

Dodo Press, United Kingdom, 2007. Paperback. Book Condition: New. Alice Ercl Hunt (illustrator). Illustrated. 229 x 147 mm. Language: English . Brand New Book ***** Print on Demand *****.Kate Douglas Wiggin, nee Smith (1856-1923) was...

[Read ePub »](#)



Little Girl Lost: The True Story of a Broken Child

HarperCollins Publishers. Paperback. Book Condition: new. BRAND NEW, Little Girl Lost: The True Story of a Broken Child, Mia Marconi, The fourth in a series of true short stories from foster carer Mia Marconi. Kira...

[Read ePub »](#)



All My Fault: The True Story of a Sadistic Father and a Little Girl Left Destroyed

Ebury Publishing. Paperback. Book Condition: new. BRAND NEW, All My Fault: The True Story of a Sadistic Father and a Little Girl Left Destroyed, Audrey Delaney, 'I could see what he was doing to the...

[Read ePub »](#)



Read Write Inc. Phonics: Blue Set 6 Non-Fiction 5 at the Seaside

Oxford University Press, United Kingdom, 2016. Paperback. Book Condition: New. 207 x 102 mm. Language: N/A. Brand New Book. These decodable non-fiction books provide structured practice for children learning to read. Each set of books

[Read eBook »](#)



The Noon Witch, Op. 108 / B. 196: Study Score

Petrucchi Library Press, United States, 2013. Paperback. Book Condition: New. 240 x 168 mm. Language: English . Brand New Book ***** Print on Demand *****.The third of the four late tone poems inspired by Bouquet,

[Read eBook »](#)



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)

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

[Read eBook »](#)



The Kid Friendly ADHD and Autism Cookbook The Ultimate Guide to the Gluten Free Casein Free Diet by Pamela J Compart and Dana Laake 2006 Hardcover

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

[Read eBook »](#)



TJ new concept of the Preschool Quality Education Engineering the daily learning book of: new happy learning young children (2-4 years old) in small classes (3)(Chinese Edition)

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment. Paperback. Pub Date :2005-09-01 Publisher: Chinese children before making Reading: All books are the

[Read eBook »](#)