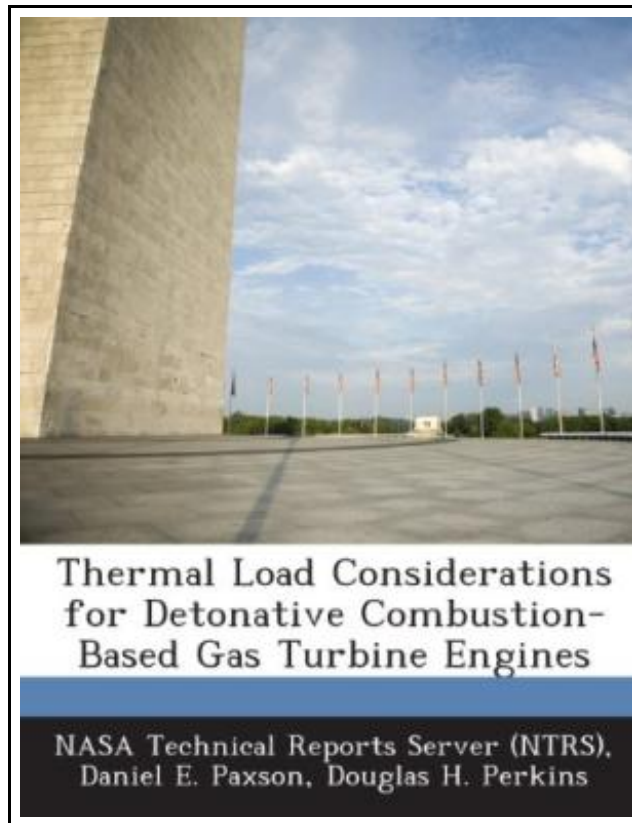


Thermal Load Considerations for Detonative Combustion-Based Gas Turbine Engines



Filesize: 2.89 MB

Reviews

This ebook may be worth a go through, and superior to other. I could comprehend every thing out of this published e pdf. It is extremely difficult to leave it before concluding, once you begin to read the book.

(Prof. Damien Schuster PhD)

THERMAL LOAD CONSIDERATIONS FOR DETONATIVE COMBUSTION-BASED GAS TURBINE ENGINES

[DOWNLOAD](#)

BiblioGov. Paperback. Book Condition: New. This item is printed on demand. Paperback. 22 pages. Dimensions: 9.7in. x 7.4in. x 0.1in. An analysis was conducted to assess methods for, and performance implications of, cooling the passages (tubes) of a pulse detonation-based combustor conceptually installed in the core of a gas turbine engine typical of regional aircraft. Temperature-limited material stress criteria were developed from common-sense engineering practice, and available material properties. Validated, one-dimensional, numerical simulations were then used to explore a variety of cooling methods and establish whether or not they met the established criteria. Simulation output data from successful schemes were averaged and used in a cycle-deck engine simulation in order to assess the impact of the cooling method on overall performance. Results were compared to both a baseline engine equipped with a constant-pressure combustor and to one equipped with an idealized detonative combustor. Major findings indicate that thermal loads in these devices are large, but potentially manageable. However, the impact on performance can be substantial. Nearly one half of the ideally possible specific fuel consumption (SFC) reduction is lost due to cooling of the tubes. Details of the analysis are described, limitations are presented, and implications are discussed. This item ships from La Vergne, TN. Paperback.



[Read Thermal Load Considerations for Detonative Combustion-Based Gas Turbine Engines Online](#)



[Download PDF Thermal Load Considerations for Detonative Combustion-Based Gas Turbine Engines](#)

See Also



Animalogy: Animal Analogies

Sylvan Dell Publishing. Paperback. Book Condition: New. Cathy Morrison (illustrator). Paperback. 32 pages. Dimensions: 9.8in. x 8.4in. x 0.4in. Compare and contrast different animals through predictable, rhyming analogies. Find the similarities between even the most incompatible...

[Download ePub »](#)



The Whale Tells His Side of the Story Hey God, Ive Got Some Guy Named Jonah in My Stomach and I Think Im Gonna Throw Up

B&H Kids. Hardcover. Book Condition: New. Cory Jones (illustrator). Hardcover. 32 pages. Dimensions: 9.1in. x 7.2in. x 0.3in. Oh sure, we all heard the story of Jonah and the Whale a hundred times. But have we...

[Download ePub »](#)



God Loves You. Chester Blue

Henry and George Press. Paperback. Book Condition: New. Ursula Andrejczuk (illustrator). Paperback. 140 pages. Dimensions: 8.0in. x 5.2in. x 0.3in. BEAUTIFUL NEW ILLUSTRATIONS BRING THE STORY TO LIFE! A charming book about a mysterious bear that shows...

[Download ePub »](#)



Good Night, Zombie Scary Tales

Feiweil & Friends. Paperback. Book Condition: New. Iacopo Bruno (illustrator). Paperback. 112 pages. Dimensions: 8.2in. x 5.4in. x 0.2in. Welcome. Have a seat. Ignore the shambling undead outside. Let us tell you a story. But be...

[Download ePub »](#)



The Stories Julian Tells A Stepping Stone Book™

Random House Books for Young Readers. Paperback. Book Condition: New. Ann Strugnell (illustrator). Paperback. 80 pages. Dimensions: 7.6in. x 5.0in. x 0.4in. Julian is a quick fibber and a wishful thinker. And he is great at...

[Download ePub »](#)