



DOWNLOAD



Multi-Fidelity Simulation of a Turbofan Engine with Results Zoomed Into Mini-Maps for a Zero-D Cycle Simulation

By Mark G. Turner

BiblioGov. Paperback. Book Condition: New. This item is printed on demand. Paperback. 22 pages. Dimensions: 9.7in. x 7.4in. x 0.1in. A Zero-D cycle simulation of the GE90-94B high bypass turbofan engine has been achieved utilizing mini-maps generated from a high-fidelity simulation. The simulation utilizes the Numerical Propulsion System Simulation (NPSS) thermodynamic cycle modeling system coupled to a high-fidelity full-engine model represented by a set of coupled 3D computational fluid dynamic (CFD) component models. Boundary conditions from the balanced, steady state cycle model are used to define component boundary conditions in the full-engine model. Operating characteristics of the 3D component models are integrated into the cycle model via partial performance maps generated from the CFD flow solutions using one-dimensional mean line turbomachinery programs. This paper highlights the generation of the high-pressure compressor, booster, and fan partial performance maps, as well as turbine maps for the high pressure and low pressure turbine. These are actually mini-maps in the sense that they are developed only for a narrow operating range of the component. Results are compared between actual cycle data at a take-off condition and the comparable condition utilizing these mini-maps. The mini-maps are also presented with comparison to actual component data where possible....



READ ONLINE

Reviews

This created ebook is great. it was writtern very properly and useful. Its been printed in an exceedingly easy way in fact it is just right after i finished reading this pdf where basically modified me, alter the way i think.

-- **Aglae Becker**

This ebook is definitely worth buying. It is definitely basic but excitement within the fifty percent in the ebook. Its been designed in an extremely straightforward way which is merely following i finished reading this ebook where basically changed me, alter the way in my opinion.

-- **Ward Morar**

Relevant Books



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 up in the right place at just...



Good Night, Zombie Scary Tales

Feiwei & 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 warned. Good Night, Zombie isnt just any...



Molly on the Shore, BFMS 1 Study score

Petrucci Library Press. Paperback. Book Condition: New. Paperback. 26 pages. Dimensions: 9.7in. x 6.9in. x 0.3in.Percy Grainger, like his contemporary Bela Bartok, was intensely interested in folk music and became a member of the English Folk-Song Society soon after his arrival in...



Yearbook Volume 15

RareBooksClub. Paperback. Book Condition: New. This item is printed on demand. Paperback. 58 pages. Dimensions: 9.7in. x 7.4in. x 0.1in.This historic book may have numerous typos and missing text. Purchasers can usually download a free scanned copy of the original book (without...



DK Readers Robin Hood Level 4 Proficient Readers

DK CHILDREN. Paperback. Book Condition: New. Nick Harris (illustrator). Paperback. 48 pages. Dimensions: 8.4in. x 5.7in. x 0.2in.Discover the rollicking exploits of Robin and his merry men as they take from the rich and give to the poor. Join Robin Hood and...



The Stories Julian Tells A Stepping Stone BookTM

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 telling stories. He can make peopleespecially his...