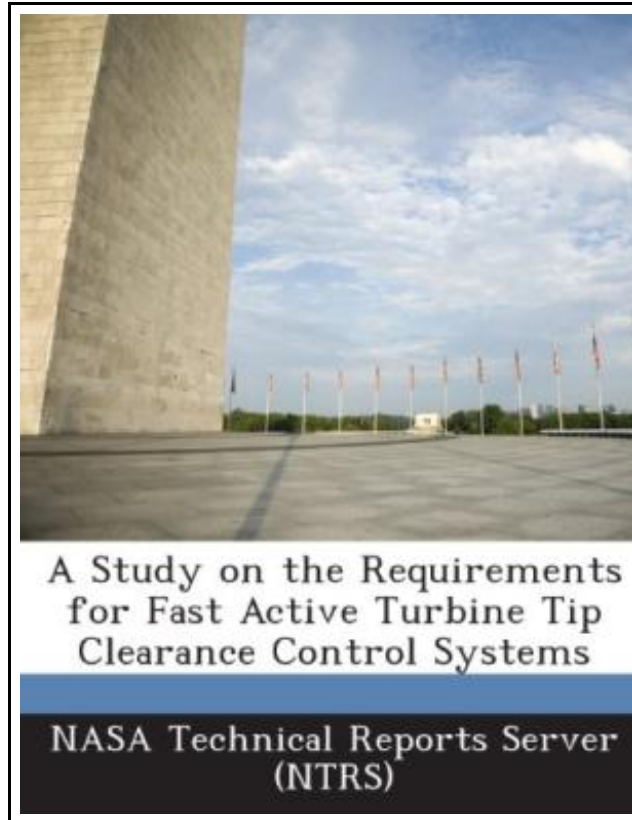


A Study on the Requirements for Fast Active Turbine Tip Clearance Control Systems



Filesize: 4.47 MB

Reviews

Great e book and beneficial one. It is amongst the most awesome pdf i actually have read through. You wont feel monotony at at any time of your own time (that's what catalogs are for relating to if you request me).

(Dorothy Daugherty)

A STUDY ON THE REQUIREMENTS FOR FAST ACTIVE TURBINE TIP CLEARANCE CONTROL SYSTEMS

DOWNLOAD



To save **A Study on the Requirements for Fast Active Turbine Tip Clearance Control Systems** eBook, please click the button beneath and save the file or gain access to other information that are related to **A STUDY ON THE REQUIREMENTS FOR FAST ACTIVE TURBINE TIP CLEARANCE CONTROL SYSTEMS** book.

BiblioGov. Paperback. Book Condition: New. This item is printed on demand. Paperback. 28 pages. Dimensions: 9.7in. x 7.4in. x 0.1in. This paper addresses the requirements of a control system for active turbine tip clearance control in a generic commercial turbofan engine through design and analysis. The control objective is to articulate the shroud in the high pressure turbine section in order to maintain a certain clearance set point given several possible engine transient events. The system must also exhibit reasonable robustness to modeling uncertainties and reasonable noise rejection properties. Two actuators were chosen to fulfill such a requirement, both of which possess different levels of technological readiness: electrohydraulic servovalves and piezoelectric stacks. Identification of design constraints, desired actuator parameters, and actuator limitations are addressed in depth; all of which are intimately tied with the hardware and controller design process. Analytical demonstrations of the performance and robustness characteristics of the two axisymmetric LQG clearance control systems are presented. Takeoff simulation results show that both actuators are capable of maintaining the clearance within acceptable bounds and demonstrate robustness to parameter uncertainty. The present model-based control strategy was employed to demonstrate the tradeoff between performance, control effort, and robustness and to implement optimal state estimation in a noisy engine environment with intent to eliminate ad hoc methods for designing reliable control systems. This item ships from La Vergne, TN. Paperback.



[Read A Study on the Requirements for Fast Active Turbine Tip Clearance Control Systems Online](#)



[Download PDF A Study on the Requirements for Fast Active Turbine Tip Clearance Control Systems](#)

Other eBooks



[PDF] Animalogy: Animal Analogies

Access the link beneath to get "Animalogy: Animal Analogies" PDF document.

[Read eBook »](#)



[PDF] Molly on the Shore, BFMS 1 Study score

Access the link beneath to get "Molly on the Shore, BFMS 1 Study score" PDF document.

[Read eBook »](#)



[PDF] 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

Access the link beneath to get "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" PDF document.

[Read eBook »](#)



[PDF] Good Night, Zombie Scary Tales

Access the link beneath to get "Good Night, Zombie Scary Tales" PDF document.

[Read eBook »](#)



[PDF] When Santa Claus Prayed

Access the link beneath to get "When Santa Claus Prayed" PDF document.

[Read eBook »](#)



[PDF] God Loves You. Chester Blue

Access the link beneath to get "God Loves You. Chester Blue" PDF document.

[Read eBook »](#)