



DOWNLOAD



Aircraft Fault Tolerance:

By Hever Moncayo

VDM Verlag Mai 2011, 2011. Taschenbuch. Book Condition: Neu. 220x150x9 mm. This item is printed on demand - Print on Demand Neuware - The capability to efficiently perform checkout, testing, and monitoring of aerospace vehicles, subsystems, and components during flight operations in the presence of uncertainties, nonlinearities, and component failures is a challenging problem. This requires intelligent systems with the ability to perform timely status determination, diagnostics, prognostics, and decision making as a key aspect to increase the safety of missions. This book describes the design, development, and flight-simulation testing of an integrated Artificial Immune System (AIS) for detection, identification, and evaluation of a wide variety of sensor, actuator, propulsion, and structural failures/damages including the prediction of the achievable states and other limitations on performance and handling qualities. The NASA IFCS F-15 research aircraft model is used and represents a supersonic fighter which include model following adaptive control laws based on non- linear dynamic inversion and artificial neural network augmentation. Flight simulation tests are described to analyze and demonstrate the performance of the immunity-based architecture. 144 pp. English.



READ ONLINE
[2.96 MB]

Reviews

Very beneficial for all type of folks. It can be rally intriguing throug studying time. You will like how the writer publish this ebook.

-- **Nathan Cruickshank**

Totally one of the better pdf I have at any time read through. It really is simplified but shocks within the 50 % from the ebook. Once you begin to read the book, it is extremely difficult to leave it before concluding.

-- **Mariano Spinka**