



Open-Loop Pitch Table Optimization for the Maximum Dynamic Pressure Orion Abort Flight Test

By Ryan A. Stilwater

BiblioGov. Paperback. Book Condition: New. This item is printed on demand. Paperback. 48 pages. Dimensions: 9.7in. x 7.4in. x 0.1in. NASA has scheduled the retirement of the space shuttle orbiter fleet at the end of 2010. The Constellation program was created to develop the next generation of human spaceflight vehicles and launch vehicles, known as Orion and Ares respectively. The Orion vehicle is a return to the capsule configuration that was used in the Mercury, Gemini, and Apollo programs. This configuration allows for the inclusion of an abort system that safely removes the capsule from the booster in the event of a failure on launch. The Flight Test Office at NASAs Dryden Flight Research Center has been tasked with the flight testing of the abort system to ensure proper functionality and safety. The abort system will be tested in various scenarios to approximate the conditions encountered during an actual Orion launch. Every abort will have a closed-loop controller with an open-loop backup that will direct the vehicle during the abort. In order to provide the best fit for the desired total angle of attack profile with the open-loop pitch table, the table is tuned using simulated abort trajectories. A pitch table...



READ ONLINE
[1.27 MB]

Reviews

Complete guideline for publication fans. I am quite late in start reading this one, but better then never. It is extremely difficult to leave it before concluding, once you begin to read the book.

-- **Llewellyn Terry**

A very wonderful book with lucid and perfect answers. It is probably the most incredible book i have study. Its been designed in an exceptionally simple way and is particularly just after i finished reading through this publication by which in fact transformed me, alter the way in my opinion.

-- **Macey Schneider**