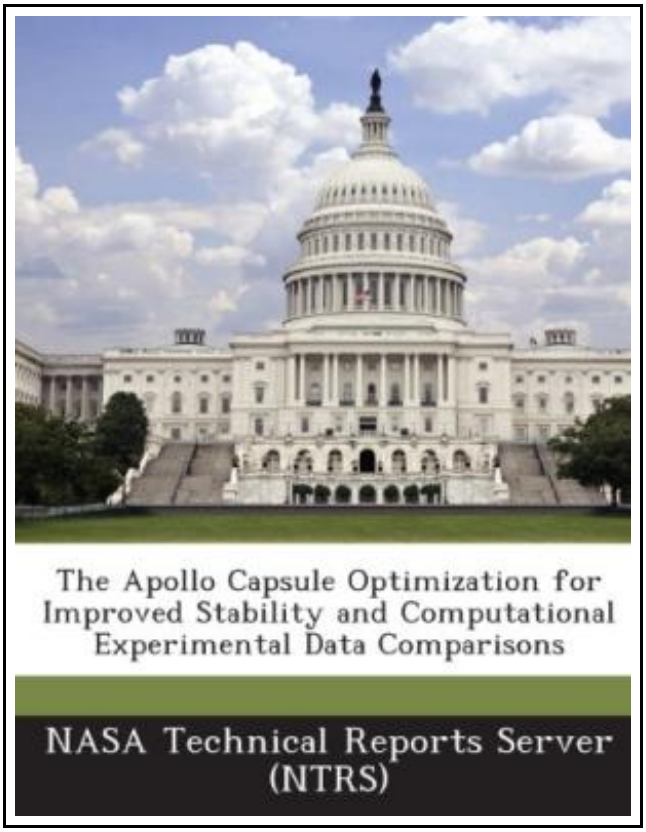
The Apollo Capsule Optimization for Improved Stability and Computational Experimental Data Comparisons (Paperback)



Filesize: 3.67 MB

Reviews

The book is fantastic and great. It generally does not expense excessive. Its been designed in an exceptionally easy way and it is simply right after i finished reading through this book by which really changed me, change the way i think.

(Adolfo Lindgren)

THE APOLLO CAPSULE OPTIMIZATION FOR IMPROVED STABILITY AND COMPUTATIONAL EXPERIMENTAL DATA COMPARISONS (PAPERBACK)

DOWNLOAD PDF

To save **The Apollo Capsule Optimization for Improved Stability and Computational Experimental Data Comparisons (Paperback)** eBook, make sure you access the link under and download the ebook or have accessibility to additional information which might be highly relevant to THE APOLLO CAPSULE OPTIMIZATION FOR IMPROVED STABILITY AND COMPUTATIONAL EXPERIMENTAL DATA COMPARISONS (PAPERBACK) ebook.

Bibliogov, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.Numerical optimization was employed on the Apollo Command Module to modify its external shape. The Apollo Command Module (CM) that was used on all NASA human space flights during the Apollo Space Program is stable and trimmed in an apex forward (alpha of approximately 40 to 80 degrees) position. This poses a safety risk if the CM separates from the launch tower during abort. Optimization was employed on the Apollo CM to remedy the undesirable stability characteristics of the configuration. Geometric shape changes were limited to axisymmetric modifications that altered the radius of the apex (R(sub A)), base radius (R(sub O)), corner radius (R(sub C)), and the cone half angle (theta), while the maximum diameter of the CM was held constant. The results of multipoint optimization on the CM indicated that the cross-range performance can be improved while maintaining robust apex-aft stability with a single trim point. Navier-Stokes computations were performed on the baseline and optimized configurations and confirmed the Euler-based optimization results. Euler Analysis of ten alternative CM vehicles with different values of the above four parameters are compared with the published experimental results of numerous wind tunnel tests during the late 1960 s. These comparisons cover a wide Mach number range and a full 180-degree pitch range and show that the Euler methods are capable of fairly accurate force and moment computations and can separate the vehicle characteristics of these ten alternative configurations.

Read The Apollo Capsule Optimization for Improved Stability and Computational Experimental Data Comparisons (Paperback) Online
Download PDF The Apollo Capsule Optimization for Improved Stability and Computational Experimental Data Comparisons (Paperback)
Download ePUB The Apollo Capsule Optimization for Improved Stability and Computational Experimental Data Comparisons (Paperback)

See Also

[PDF] Index to the Classified Subject Catalogue of the Buffalo Library; The Whole System Being Adopted from the Classification and Subject Index of Mr. Melvil Dewey, with Some Modifications . (Paperback)

Access the hyperlink listed below to read "Index to the Classified Subject Catalogue of the Buffalo Library; The Whole System Being Adopted from the Classification and Subject Index of Mr. Melvil Dewey, with Some Modifications . (Paperback)" PDF file.

Save eBook »

[PDF] A Kindergarten Manual for Jewish Religious Schools; Teacher s Text Book for Use in School and Home (Paperback)

Access the hyperlink listed below to read "A Kindergarten Manual for Jewish Religious Schools; Teacher s Text Book for Use in School and Home (Paperback)" PDF file.

Save eBook »

[PDF] A Year Book for Primary Grades; Based on Froebel s Mother Plays (Paperback)

Access the hyperlink listed below to read "A Year Book for Primary Grades; Based on Froebel s Mother Plays (Paperback)" PDF file.

Save eBook »

[PDF] Two Treatises: The Pearle of the Gospell, and the Pilgrims Profession to Which Is Added a Glasse for Gentlewomen to Dresse Themselues By. by Thomas Taylor Preacher of Gods Word to the Towne of Reding. (1624-1625) (Paperback)

Access the hyperlink listed below to read "Two Treatises: The Pearle of the Gospell, and the Pilgrims Profession to Which Is Added a Glasse for Gentlewomen to Dresse Themselues By. by Thomas Taylor Preacher of Gods Word to the Towne of Reding. (1624-1625) (Paperback)" PDF file.

Save eBook »

[PDF] Two Treatises: The Pearle of the Gospell, and the Pilgrims Profession to Which Is Added a Glasse for Gentlewomen to Dresse Themselues By. by Thomas Taylor Preacher of Gods Word to the Towne of Reding. (1625) (Paperback)

Access the hyperlink listed below to read "Two Treatises: The Pearle of the Gospell, and the Pilgrims Profession to Which Is Added a Glasse for Gentlewomen to Dresse Themselues By. by Thomas Taylor Preacher of Gods Word to the Towne of Reding. (1625) (Paperback)" PDF file.

Save eBook »

[PDF] Variations on an Original Theme Enigma , Op. 36: Study Score (Paperback)

Access the hyperlink listed below to read "Variations on an Original Theme Enigma , Op. 36: Study Score (Paperback)" PDF file.

Save eBook »

[PDF] Children s Educational Book: Junior Leonardo Da Vinci: An Introduction to the Art, Science and Inventions of This Great Genius. Age 7 8 9 10 Year-Olds. [Us English] (Paperback)

Click the web link under to read "Children s Educational Book: Junior Leonardo Da Vinci: An Introduction to the Art, Science and Inventions of This Great Genius. Age 7 8 9 10 Year-Olds. [Us English] (Paperback)" PDF document.

Save Book »

[PDF] Who Am I in the Lives of Children? an Introduction to Early Childhood Education, Enhanced Pearson Etext with Loose-Leaf Version -- Access Card Package

Click the web link under to read "Who Am I in the Lives of Children? an Introduction to Early Childhood Education, Enhanced Pearson Etext with Loose-Leaf Version -- Access Card Package" PDF document.

Save Book »

[PDF] The Well-Trained Mind: A Guide to Classical Education at Home (Hardback)

Click the web link under to read "The Well-Trained Mind: A Guide to Classical Education at Home (Hardback)" PDF document.

Save Book »

[PDF] Readers Clubhouse Set a Nick is Sick (Paperback)

Click the web link under to read "Readers Clubhouse Set a Nick is Sick (Paperback)" PDF document.

Save Book »

[PDF] Public Opinion + Conducting Empirical Analysis

Click the web link under to read "Public Opinion + Conducting Empirical Analysis" PDF document.

Save Book »

[PDF] Children s Handwriting Book of Alphabets and Numbers: Over 4,000 Tracing Units for the Beginning Writer (Paperback)

Click the web link under to read "Children s Handwriting Book of Alphabets and Numbers: Over 4,000 Tracing Units for the Beginning Writer (Paperback)" PDF document.

Save Book »