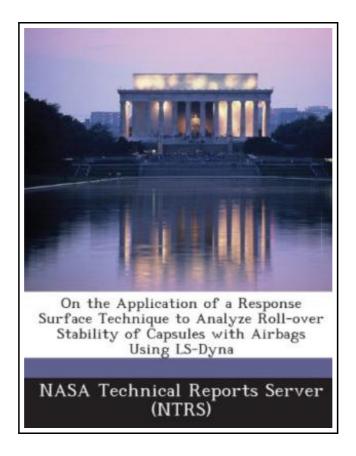
### On the Application of a Response Surface Technique to Analyze Roll-Over Stability of Capsules with Airbags Using Ls-Dyna



Filesize: 2.75 MB

#### Reviews

Undoubtedly, this is the greatest operate by any article writer. It is actually writter in straightforward words instead of confusing. Your life period is going to be change as soon as you complete looking over this book.

(Karina Ebert)

# ON THE APPLICATION OF A RESPONSE SURFACE TECHNIQUE TO ANALYZE ROLL-OVER STABILITY OF CAPSULES WITH AIRBAGS USING LS-DYNA



To save On the Application of a Response Surface Technique to Analyze Roll-Over Stability of Capsules with Airbags Using Ls-Dyna eBook, you should access the link listed below and download the file or gain access to other information that are relevant to ON THE APPLICATION OF A RESPONSE SURFACE TECHNIQUE TO ANALYZE ROLL-OVER STABILITY OF CAPSULES WITH AIRBAGS USING LS-DYNA book.

BiblioGov. Paperback. Book Condition: New. This item is printed on demand. Paperback. 22 pages. Dimensions: 9.7in. x 7.4in. x 0.1in.As NASA moves towards developing technologies needed to implement its new Exploration program, studies conducted for Apollo in the 1960s to understand the rollover stability of capsules landing are being revisited. Although rigid body kinematics analyses of the roll-over behavior of capsules on impact provided critical insight to the Apollo problem, extensive ground test programs were also used. For the new Orion spacecraft being developed to implement todays Exploration program, new air-bag designs have improved sufficiently for NASA to consider their use to mitigate landing loads to ensure crew safety and to enable re-usability of the capsule. Simple kinematics models provide only limited understanding of the behavior of these air bag systems, and more sophisticated tools must be used. In particular, NASA and its contractors are using the LS-Dyna nonlinear simulation code for impact response predictions of the full Orion vehicle with air bags by leveraging the extensive air bag prediction work previously done by the automotive industry. However, even in todays computational environment, these analyses are still high-dimensional, time consuming, and computationally intensive. To alleviate the computational burden, this paper presents an approach that uses deterministic sampling techniques and an adaptive response surface method to not only use existing LS-Dyna solutions but also to interpolate from LS-Dyna solutions to predict the stability boundaries for a capsule on airbags. Results for the stability boundary in terms of impact velocities, capsule attitude, impact plane orientation, and impact surface friction are discussed. This item ships from La Vergne, TN. Paperback.

- Read On the Application of a Response Surface Technique to Analyze Roll-Over Stability of Capsules with Airbags Using Ls-Dyna Online
- Download PDF On the Application of a Response Surface Technique to Analyze Roll-Over Stability of Capsules with Airbags Using Ls-Dyna
- Download ePUB On the Application of a Response Surface Technique to Analyze Roll-Over Stability of Capsules with Airbags Using Ls-Dyna

#### Other PDFs



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

Access the web link listed below to get "Molly on the Shore, BFMS 1 Study score" file.

Read Book »



#### [PDF] Yearbook Volume 15

Access the web link listed below to get "Yearbook Volume 15" file.

Read Book »



#### [PDF] When Santa Claus Prayed

Access the web link listed below to get "When Santa Claus Prayed" file.

Read Book »



## [PDF] Dont Line Their Pockets With Gold Line Your Own A Small How To Book on Living Large

Access the web link listed below to get "Dont Line Their Pockets With Gold Line Your Own A Small How To Book on Living Large" file.

Read Book »



#### [PDF] The Day I Forgot to Pray

Access the web link listed below to get "The Day I Forgot to Pray" file.

Read Book »



### [PDF] Kindle Fire Tips And Tricks How To Unlock The True Power Inside Your Kindle Fire

Access the web link listed below to get "Kindle Fire Tips And Tricks How To Unlock The True Power Inside Your Kindle Fire" file.

Read Book »



#### [PDF] The World is the Home of Love and Death

Follow the web link beneath to download "The World is the Home of Love and Death" PDF document.

Read Book »



#### [PDF] DK Readers Plants Bite Back Level 3 Reading Alone

Follow the web link beneath to download "DK Readers Plants Bite Back Level 3 Reading Alone" PDF document.

Read Book »



#### [PDF] Passing Judgement Short Stories about Serving Justice

Follow the web link beneath to download "Passing Judgement Short Stories about Serving Justice" PDF document.

Read Book »



#### [PDF] Animalogy: Animal Analogies

Follow the web link beneath to download "Animalogy: Animal Analogies" PDF document.

Read Book »



### [PDF] A Smarter Way to Learn JavaScript: The New Approach That Uses Technology to Cut Your Effort in Half (Paperback)

Follow the web link beneath to download "A Smarter Way to Learn JavaScript: The New Approach That Uses Technology to Cut Your Effort in Half (Paperback)" PDF document.

Read Book »



#### [PDF] The Secret Life of Trees DK READERS

Follow the web link beneath to download "The Secret Life of Trees DK READERS" PDF document.

Read Book »