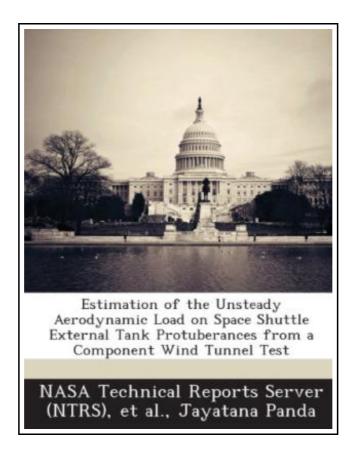
Estimation of the Unsteady Aerodynamic Load on Space Shuttle External Tank Protuberances from a Component Wind Tunnel Test



Filesize: 5.24 MB

Reviews

Definitely one of the best book I actually have ever go through. Sure, it can be perform, nonetheless an amazing and interesting literature. I found out this pdf from my dad and i suggested this book to discover.

(Ms. Chanel Streich)

ESTIMATION OF THE UNSTEADY AERODYNAMIC LOAD ON SPACE SHUTTLE EXTERNAL TANK PROTUBERANCES FROM A COMPONENT WIND TUNNEL TEST

DOWNLOAD PDF

ረጌ

Bibliogov, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.At the wake of the Columbia (STS-107) accident it was decided to remove the Protuberance Aerodynamic Load (PAL) Ramp that was originally intended to protect various protuberances outside of the Space Shuttle External Tank from high buffet load induced by cross-flows at transonic speed. In order to establish the buffet load without the PAL ramp, a wind tunnel test was conducted where segments of the protuberances were instrumented with dynamic pressure transducers; and power-spectra of sectional lift and drag forces at various span-wise locations between two adjacent support brackets were measured under different cross flow angles, Mach number and other conditions. Additionally, frequency-dependent spatial correlations between the sectional forces were also established. The sectional forces were then adjusted by the correlation length to establish span-averaged spectra of normal and lateral forces that can be suitably added to various other unsteady forces encountered by the protuberance. This paper describes the methodology used for calculating the correlation-adjusted power spectrum of the buffet load. A second part of the paper describes wind-tunnel results on the difference in the buffet load on the protuberances with and without the PAL ramp. In general when the ramp height is the same as that of the protuberance height, such as that found on the liquid Oxygen part of the tank, the ramp is found to cause significant reduction of the unsteady aerodynamic load. However, on the liquid Hydrogen part of the tank, where the Oxygen feed-line is far larger in diameter than the height of the PAL ramp, little protection is found to be available to all but the Cable Tray.

Read Estimation of the Unsteady Aerodynamic Load on Space Shuttle External Tank
Protuberances from a Component Wind Tunnel Test Online
Download PDF Estimation of the Unsteady Aerodynamic Load on Space Shuttle
External Tank Protuberances from a Component Wind Tunnel Test

Other eBooks



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 .

Rarebooksclub.com, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.This historic book may have numerous typos and missing text. Purchasers can usually... Read ePub »

Å

Games with Books : 28 of the Best Childrens Books and How to Use Them to Help Your Child Learn - From Preschool to Third Grade Book Condition: Brand New. Book Condition: Brand New. Read ePub »



Games with Books : Twenty-Eight of the Best Childrens Books and How to Use Them to Help Your Child Learn - from Preschool to Third Grade Book Condition: Brand New. Book Condition: Brand New. Read ePub »



Weebies Family Halloween Night English Language: English Language British Full Colour

Createspace, United States, 2014. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book ***** Print on Demand *****.Children s Weebies Family Halloween Night Book 20 starts to teach Pre-School and... Read ePub »



TJ new concept of the Preschool Quality Education Engineering: new happy learning young children (3-5 years old) daily learning book Intermediate (2) (Chinese Edition)

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment.Paperback. Pub Date :2005-09-01 Publisher: Chinese children before making Reading: All books are the...

Read ePub »



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)

Proquest, Eebo Editions, United States, 2010. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.EARLY HISTORY OF RELIGION. Imagine holding history in your hands. Now Download eBook »



My Baby Brother Is a Little Monster by Sarah Albee 2007 Paperback Book Condition: Brand New. Book Condition: Brand New. Download eBook »



Environments for Outdoor Play: A Practical Guide to Making Space for Children (New edition)

SAGE Publications Ltd. Paperback. Book Condition: new. BRAND NEW, Environments for Outdoor Play: A Practical Guide to Making Space for Children (New edition), Theresa Casey, 'Theresa's book is full of lots of inspiring, practical, 'how Download eBook »



Decameron and the Philosophy of Storytelling: Author as Midwife and Pimp (Hardback)

Columbia University Press, United States, 2005. Hardback. Book Condition: New. New.. 236 x 155 mm. Language: English . Brand New Book. In this creative and engaging reading, Richard Kuhns explores the ways in which Decameron **Download eBook »**

	1
PDF	

Read Write Inc. Phonics: Grey Set 7 Non-Fiction 5 a Place in Space: The Moon Oxford University Press, United Kingdom, 2016. Paperback. Book Condition: New. 197 x 88 mm. Language: N/A. Brand New Book. These decodable non-fiction books provide structured practice for children learning to read. Each set of books

Download eBook »