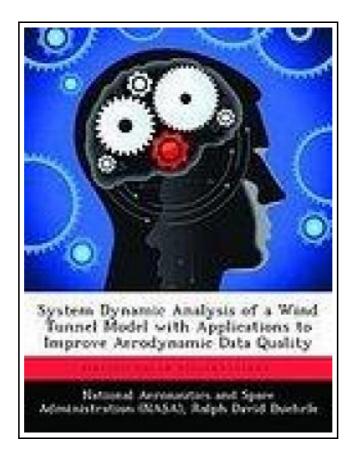
System Dynamic Analysis of a Wind Tunnel Model with Applications to Improve Aerodynamic Data Quality



Filesize: 4.04 MB

Reviews

A whole new e book with a brand new standpoint. I have read through and i also am certain that i am going to planning to read again yet again later on. I found out this book from my i and dad advised this pdf to learn.

(Audrey Lowe I)

SYSTEM DYNAMIC ANALYSIS OF A WIND TUNNEL MODEL WITH APPLICATIONS TO IMPROVE AERODYNAMIC DATA QUALITY



Biblioscholar Mrz 2013, 2013. Taschenbuch. Book Condition: Neu. 246x189x8 mm. This item is printed on demand - Print on Demand Neuware - The research investigates the effect of wind tunnel model system dynamics on measured aerodynamic data. During wind tunnel tests designed to obtain lift and drag data, the required aerodynamic measurements are the steady-state balance forces and moments, pressures, and model attitude. However, the wind tunnel model system can be subjected to unsteady aerodynamic and inertial loads which result in oscillatory translations and angular rotations. The steady-state force balance and inertial model attitude measurements are obtained by filtering and averaging data taken during conditions of high model vibrations. The main goals of this research are to characterize the effects of model system dynamics on the measured steady-state aerodynamic data and develop a correction technique to compensate for dynamically induced errors. Equations of motion are formulated for the dynamic response of the model system subjected to arbitrary aerodynamic and inertial inputs. The resulting modal model is examined to study the effects of the model system dynamic response on the aerodynamic data. In particular, the equations of motion are used to describe the effect of dynamics on the inertial model attitude, or angle of attack, measurement system that is used routinely at the NASA Langley Research Center and other wind tunnel facilities throughout the world. This activity was prompted by the inertial model attitude sensor response observed during high levels of model vibration while testing in the National Transonic Facility at the NASA Langley Research Center. The inertial attitude sensor cannot distinguish between the gravitational acceleration and centrifugal accelerations associated with wind tunnel model system vibration, which results in a model attitude measurement bias error. Bias errors over an order of magnitude greater than the required device accuracy were found in...

- Read System Dynamic Analysis of a Wind Tunnel Model with Applications to Improve Aerodynamic Data Quality Online
- Download PDF System Dynamic Analysis of a Wind Tunnel Model with Applications to Improve Aerodynamic Data Quality

Other Books



Psychologisches Testverfahren

Reference Series Books LLC Nov 2011, 2011. Taschenbuch. Book Condition: Neu. 249x191x7 mm. This item is printed on demand - Print on Demand Neuware - Quelle: Wikipedia. Seiten: 100. Kapitel: Myers-Briggs-Typindikator, Keirsey Temperament Sorter, DISG,...

Save ePub »



Programming in D

Ali Cehreli Dez 2015, 2015. Buch. Book Condition: Neu. 264x182x53 mm. This item is printed on demand - Print on Demand Neuware - The main aim of this book is to teach D to readers...

Save ePub »



The genuine book marketing case analysis of the the lam light. Yin Qihua Science Press 21.00(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 :2007-01-01 Pages: 244 Publisher: Science Press Welcome Our service and quality...

Save ePub »



Tinga Tinga Tales: Why Lion Roars - Read it Yourself with Ladybird

Paperback. Book Condition: New. Not Signed; This is a Tinga Tinga tale inspired by traditional stories from Africa. Lion is king of Tinga Tinga but he can't roar! Can his friend Flea help Lion to...

Save ePub »



Sport is Fun (Red B) NF

Pearson Education Limited. Paperback. Book Condition: new. BRAND NEW, Sport is Fun (Red B) NF, Dianne Irving, This title is part of Pearson's Bug Club - the first whole-school reading programme that joins books and...

Save ePub »



THE Key to My Children Series: Evan s Eyebrows Say Yes (Paperback)

AUTHORHOUSE, United States, 2006. Paperback. Book Condition: New. 274 x 216 mm. Language: English . Brand New Book ***** Print on Demand *****.THE KEY TO MY CHILDREN SERIES: EVAN S EYEBROWS SAY YES is about

Download PDF »



The Golden Spinning Wheel, Op. 109 / B. 197: Study Score (Paperback)

Petrucci Library Press, United States, 2013. Paperback. Book Condition: New. 579 x 401 mm. Language: English . Brand New Book ***** Print on Demand *****.The composer worked on this symphonic poem from January to April

Download PDF »



Public Opinion + Conducting Empirical Analysis

SAGE Publications Inc, United States, 2011. Kit. Book Condition: New. Revised ed.. 279 \times 217 mm. Language: English . Brand New Book. Public Opinion : One of the central tenets of a democracy is that

Download PDF »



Short Stories Collection II: Just for Kids Ages 4 to 8 Years Old

2013. PAP. Book Condition: New. New Book. Delivered from our UK warehouse in 3 to 5 business days. THIS BOOK IS PRINTED ON DEMAND. Established seller since 2000.

Download 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

Pearson, United States, 2015. Book. Book Condition: New. 10th. 250 x 189 mm. Language: English . Brand New Book. NOTE: Used books, rentals, and purchases made outside of Pearson If purchasing or renting from companies

Download PDF »