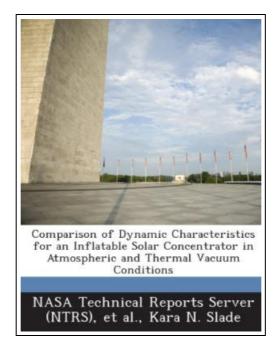
Comparison of Dynamic Characteristics for an Inflatable Solar Concentrator in Atmospheric and Thermal Vacuum Conditions



Filesize: 4.65 MB

Reviews

This pdf can be worthy of a read, and much better than other. I am quite late in start reading this one, but better then never. Its been printed in an remarkably easy way which is merely following i finished reading this book by which basically changed me, alter the way i think.

(Nedra Kiehn)

COMPARISON OF DYNAMIC CHARACTERISTICS FOR AN INFLATABLE SOLAR CONCENTRATOR IN ATMOSPHERIC AND THERMAL VACUUM CONDITIONS



BiblioGov. Paperback. Book Condition: New. This item is printed on demand. Paperback. 30 pages. Dimensions: 9.7in. x 7.4in. x 0.1in.Dynamic testing of an inflatable solar concentrator structure in a thermal vacuum chamber as well as in ambient laboratory conditions is described in detail. Unique aspects of modal testing for the extremely lightweight inflatable are identified, including the use of a noncontacting laser vibrometer measurement system. For the thermal vacuum environment, mode shapes and frequency response functions are compared for three different test article inflation pressures at room temperature. Modes that persist through all the inflation pressure regimes are identified, as well as modes that are unique for each pressure. In atmospheric pressure and room temperature conditions, dynamic measurements were obtained for the expected operational inflation pressure of 0. 5 psig. Experimental mode shapes and frequency response functions for ambient conditions are described and compared to the 0. 5 psig results from the thermal vacuum tests. Only a few mode shapes were identified that occurred in both vacuum and atmospheric environments. This somewhat surprising result is discussed in detail, and attributed at least partly to 1.) large differences in modal damping, and 2.) significant differences in the mass of air contained by the structure, in the two environments. Results of this investigation point out the necessity of testing inflatable space structures in vacuum conditions before they can be launched. Ground testing in atmospheric pressure is not sufficient for predicting on-orbit dynamics of non-rigidized inflatable systems. This item ships from La Vergne, TN. Paperback.

- Read Comparison of Dynamic Characteristics for an Inflatable Solar Concentrator in Atmospheric and Thermal Vacuum Conditions Online
- Download PDF Comparison of Dynamic Characteristics for an Inflatable Solar Concentrator in Atmospheric and Thermal Vacuum Conditions

Related Kindle Books



DK Readers Day at Greenhill Farm Level 1 Beginning to Read

DK CHILDREN. Paperback. Book Condition: New. Paperback. 32 pages. Dimensions: 8.8in. x 5.7in. x 0.2in.This Level 1 book is appropriate for children who are just beginning to read. When the rooster crows, Greenhill Farm springs...

Download Document »



Becoming Barenaked: Leaving a Six Figure Career, Selling All of Our Crap, Pulling the Kids Out of School, and Buying an RV We Hit the Road in Search Our Own American Dream. Redefining What It Meant to Be a Family in America.

 $Createspace, United States, 2015. \ Paperback. \ Book Condition: New. \ 258 \times 208 \ mm. \ Language: English \ . \ Brand \ New Book ***** Print on Demand *****. This isn't porn. Everyone always asks and some of our family thinks...$

Download Document »



Funny Things I Heard at the Bus Stop: Volume 1: A Collection of Short Stories for Young Readers

Createspace, United States, 2012. Paperback. Book Condition: New. 226 x 150 mm. Language: English . Brand New Book ***** Print on Demand *****. Funny Things I Heard At The Bus Stop, Volume 1 is a collection...

Download Document »



Klara the Cow Who Knows How to Bow (Fun Rhyming Picture Book/Bedtime Story with Farm Animals about Friendships, Being Special and Loved. Ages 2-8) (Friendship Series Book 1)

Createspace, United States, 2015. Paperback. Book Condition: New. Apoorva Dingar (illustrator). Large Print. 214 x 149 mm. Language: English . Brand New Book ***** Print on Demand *****.Klara is a little different from the other...

Download Document »



hc] not to hurt the child's eyes the green read: big fairy 2 [New Genuine(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: 2008-01-01 Pages: 95 Publisher: Jilin Art Shop Books all new book...

Download Document »