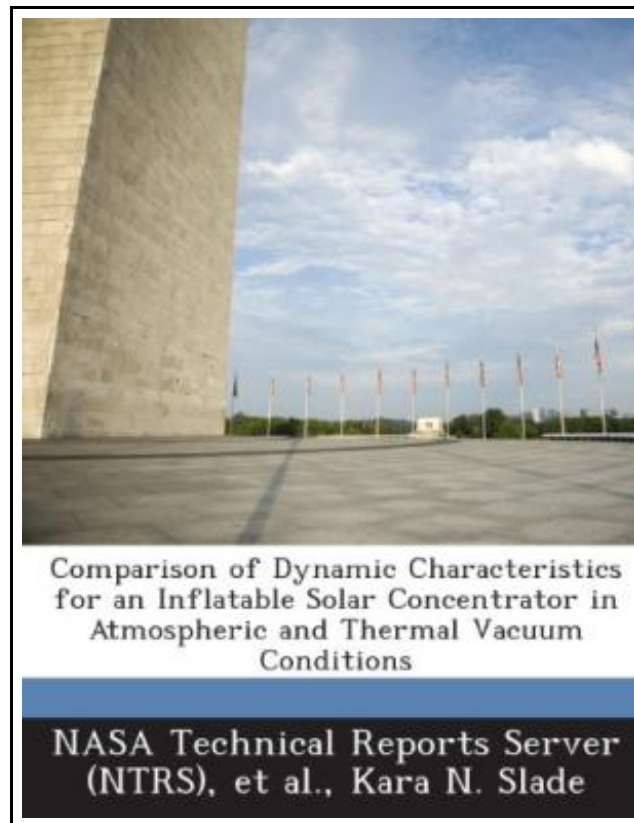


# Comparison of Dynamic Characteristics for an Inflatable Solar Concentrator in Atmospheric and Thermal Vacuum Conditions



Filesize: 4.82 MB



## ***Reviews***

*Extremely helpful to any or all category of men and women. It really is rally exciting throgh reading time. I am just happy to let you know that this is basically the greatest pdf i have got go through in my personal existence and may be he finest book for at any time.*  
*(Carroll Greenfelder IV)*

## 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](#)

## See Also



### **Animalogy: Animal Analogies**

Sylvan Dell Publishing. Paperback. Book Condition: New. Cathy Morrison (illustrator). Paperback. 32 pages. Dimensions: 9.8in. x 8.4in. x 0.4in. Compare and contrast different animals through predictable, rhyming analogies. Find the similarities between even the most incompatible...

[Download PDF »](#)



### **The Whale Tells His Side of the Story Hey God, Ive Got Some Guy Named Jonah in My Stomach and I Think Im Gonna Throw Up**

B&H Kids. Hardcover. Book Condition: New. Cory Jones (illustrator). Hardcover. 32 pages. Dimensions: 9.1in. x 7.2in. x 0.3in. Oh sure, we all heard the story of Jonah and the Whale a hundred times. But have we...

[Download PDF »](#)



### **God Loves You. Chester Blue**

Henry and George Press. Paperback. Book Condition: New. Ursula Andrejczuk (illustrator). Paperback. 140 pages. Dimensions: 8.0in. x 5.2in. x 0.3in. BEAUTIFUL NEW ILLUSTRATIONS BRING THE STORY TO LIFE! A charming book about a mysterious bear that shows...

[Download PDF »](#)



### **Good Night, Zombie Scary Tales**

Feiweil & Friends. Paperback. Book Condition: New. Iacopo Bruno (illustrator). Paperback. 112 pages. Dimensions: 8.2in. x 5.4in. x 0.2in. Welcome. Have a seat. Ignore the shambling undead outside. Let us tell you a story. But be...

[Download PDF »](#)



### **Molly on the Shore, BFMS 1 Study score**

Petrucci Library Press. Paperback. Book Condition: New. Paperback. 26 pages. Dimensions: 9.7in. x 6.9in. x 0.3in. Percy Grainger, like his contemporary Bela Bartok, was intensely interested in folk music and became a member of the English...

[Download PDF »](#)



**Edge] the collection stacks of children's literature: Chunhyang Qiuyun 1.2 --- Children's Literature 2004(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 Pages: 815 Publisher: the Chinese teenager Shop Books all book.

[Read Book »](#)



**Tiger Tales DK Readers, Level 3 Reading Alone**

DK CHILDREN. Paperback. Book Condition: New. Paperback. 48 pages. Dimensions: 8.7in. x 5.7in. x 0.2in.Hunter or hunted How much longer will these magnificent beasts prowl the plant These stories will touch your heart. The 48-page

[Read Book »](#)



**The Pickthorn Chronicles**

CreateSpace Independent Publishing Platform. Paperback. Book Condition: New. This item is printed on demand. Paperback. 112 pages. Dimensions: 9.0in. x 6.0in. x 0.3in.Pickthorn has selected some great stories as a sequel to his first book,

[Read Book »](#)



**Cloudy With a Chance of Meatballs**

Atheneum Books for Young Readers, 1982. Paperback. Book Condition: New. No Jacket. New paperback print book copy of Cloudy with a Chance of Meatballs written by Judi Barrett. Drawn by Ron Barrett. New York: Athenium

[Read Book »](#)



**DK Readers Plants Bite Back Level 3 Reading Alone**

DK CHILDREN. Paperback. Book Condition: New. Paperback. 48 pages. Dimensions: 9.0in. x 5.8in. x 0.2in.With Eyewitness Readers, children will learn to read --then read to learn! There are plants that prickle, sting, or even munch

[Read Book »](#)