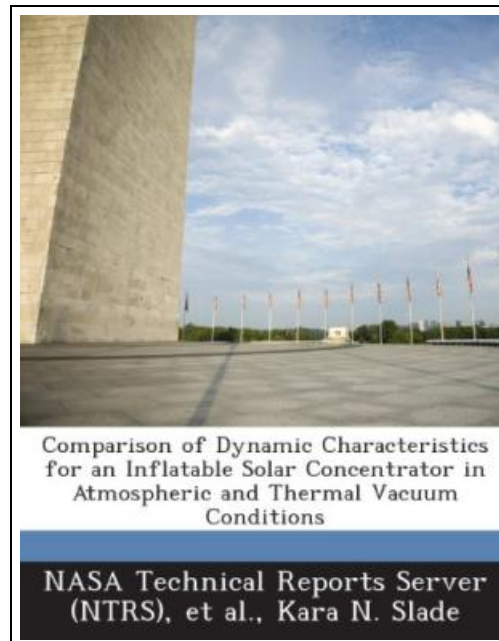


## Comparison of Dynamic Characteristics for an Inflatable Solar Concentrator in Atmospheric and Thermal Vacuum Conditions



Filesize: 6.38 MB

### **Reviews**

*This pdf is wonderful. This can be for anyone who statte there had not been a well worth studying. You are going to like just how the writer write this pdf.*

*(Mrs. Adriana Schmidt V)*

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

[DOWNLOAD PDF](#)

To get **Comparison of Dynamic Characteristics for an Inflatable Solar Concentrator in Atmospheric and Thermal Vacuum Conditions** PDF, you should click the hyperlink listed below and save the document or gain access to additional information that are have conjunction with COMPARISON OF DYNAMIC CHARACTERISTICS FOR AN INFLATABLE SOLAR CONCENTRATOR IN ATMOSPHERIC AND THERMAL VACUUM CONDITIONS book.

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](#)

## You May Also Like

**[PDF] DK Readers Day at Greenhill Farm Level 1 Beginning to Read**

Follow the web link beneath to download "DK Readers Day at Greenhill Farm Level 1 Beginning to Read" PDF document.

[Save eBook »](#)

**[PDF] 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.**

Follow the web link beneath to download "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." PDF document.

[Save eBook »](#)

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

Follow the web link beneath to download "Funny Things I Heard at the Bus Stop: Volume 1: A Collection of Short Stories for Young Readers" PDF document.

[Save eBook »](#)

**[PDF] 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)**

Follow the web link beneath to download "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)" PDF document.

[Save eBook »](#)

**[PDF] hc] not to hurt the child's eyes the green read: big fairy 2 [New Genuine(Chinese Edition)**

Follow the web link beneath to download "hc] not to hurt the child's eyes the green read: big fairy 2 [New Genuine(Chinese Edition)" PDF document.

[Save eBook »](#)

**[PDF] Letters to Grant Volume 2: Volume 2 Addresses a Kaleidoscope of Stories That Primarily, But Not Exclusively, Occurred in the United States. It de**

Follow the web link beneath to download "Letters to Grant Volume 2: Volume 2 Addresses a Kaleidoscope of Stories That Primarily, But Not Exclusively, Occurred in the United States. It de" PDF document.

[Save eBook »](#)