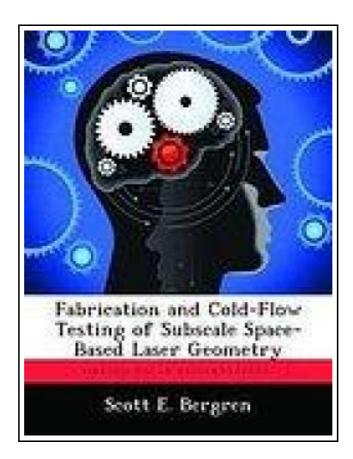
# Fabrication and Cold-Flow Testing of Subscale Space-Based Laser Geometry



Filesize: 2.33 MB

# Reviews

*This written ebook is wonderful. This is certainly for anyone who statte there was not a really worth studying. You may like how the author compose this pdf. (Odessa Graham)* 

### FABRICATION AND COLD-FLOW TESTING OF SUBSCALE SPACE-BASED LASER GEOMETRY

## DOWNLOAD PDF

ረጋ

Biblioscholar Nov 2012, 2012. Taschenbuch. Book Condition: Neu. 246x189x6 mm. This item is printed on demand - Print on Demand Neuware - The objectives of this research were to build a facility that could simulate the expected fluid flow properties in the conceptual Space Based Laser Integrated Flight Experiment (SBL IFX) gas dynamic laser using cold-flow, and to investigate the performance of the model. A 1/5-scale model of one quadrant of the SBL IFX cylindrical, gas dynamic laser was fabricated and mated to a blow-down/vacuum combination wind tunnel. The primary components of the test apparatus consisted of a nozzle array, optical cavity, supersonic diffuser, centerbody, and transition. The throat height of a single nozzle was 1 mm and the expansion ratio was two. The transition structure was designed to attach the subscale model to the wind tunnel facility vacuum line and was not part of the SBL IFX design. Using rapid data acquisition and schlieren photography, the fluid velocities in the diffuser where determined to became subsonic after a transient time interval of 0.2 seconds from wind tunnel startup for a 30 second long test. During this transient time interval, a well-defined, attached oblique shock wave was observed off the leading edge of the centerbody within the optical cavity of the diffuser, and the fluid in the optical cavity reached an observed maximum Mach number of 2.7. The brevity of the supersonic flow within the optical cavity was due to the minimum area of the transition structure being too small to swallow a normal shock that propagates down the length of the test section during a transient time period at wind tunnel startup. 108 pp. Englisch.

Read Fabrication and Cold-Flow Testing of Subscale Space-Based Laser Geometry Online

Download PDF Fabrication and Cold-Flow Testing of Subscale Space-Based Laser Geometry

### **Relevant PDFs**

-

#### 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,... Download eBook »

-

#### 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... Download eBook »

-	

#### Aeschylus

BiblioLife. Paperback. Book Condition: New. This item is printed on demand. Paperback. 260 pages. Dimensions: 8.0in. x 5.0in. x 0.6in.This Translation of A eschylus, an entirely new one, is designed as an Appendix to my...

Download eBook »

#### Yearbook Volume 15

RareBooksClub. Paperback. Book Condition: New. This item is printed on demand. Paperback. 58 pages. Dimensions: 9.7in. x 7.4in. x 0.1in.This historic book may have numerous typos and missing text. Purchasers can usually download a free... Download eBook »

≣	

#### Kindle Fire Tips And Tricks How To Unlock The True Power Inside Your Kindle Fire

CreateSpace Independent Publishing Platform. Paperback. Book Condition: New. This item is printed on demand. Paperback. 52 pages. Dimensions: 9.0in. x 6.0in. x 0.1in.Still finding it getting your way around your Kindle Fire Wish you had... Download eBook »