



## Overview of Variable-Speed Power-Turbine Research

By Gerard E Welch

Bibliogov, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.The vertical take-off and landing (VTOL) and high-speed cruise capability of the NASA Large Civil Tilt-Rotor (LCTR) notional vehicle is envisaged to enable increased throughput in the national airspace. A key challenge of the LCTR is the requirement to vary the main rotor speeds from 100 at take-off to near 50 at cruise as required to minimize mission fuel burn. The variable-speed power-turbine (VSPT), driving a fixed gear-ratio transmission, provides one approach for effecting this wide speed variation. The key aerodynamic and rotordynamic challenges of the VSPT were described in the FAP Conference presentation. The challenges include maintaining high turbine efficiency at high work factor, wide (60 deg.) of incidence variation in all blade rows due to the speed variation, and operation at low Reynolds numbers (with transitional flow). The PT -shaft of the VSPT must be designed for safe operation in the wide speed range required, and therefore poses challenges associated with rotordynamics. The technical challenges drive research activities underway at NASA. An overview of the NASA SRW VSPT research activities was provided. These activities included conceptual...



[READ ONLINE](#)  
[ 1.95 MB ]

### Reviews

*Unquestionably, this is actually the greatest function by any author. I was able to comprehend every little thing using this created e book. Its been printed in an remarkably straightforward way which is merely following i finished reading this ebook in which in fact altered me, alter the way i think.*  
-- Arianna Witting

*An exceptional book as well as the font used was exciting to read. It is actually rally intriguing through reading time. You will not sense monotony at anytime of the time (that's what catalogues are for about when you ask me).*  
-- Crystel Hagenes

## Related eBooks



### **Index to the Classified Subject Catalogue of the Buffalo Library; The Whole System Being Adopted from the Classification and Subject Index of Mr. Melvil Dewey, with Some Modifications .**

Rarebooksclub.com, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.This historic book may have numerous typos and missing text. Purchasers can usually download a free scanned copy of the...



### **A Kindergarten Manual for Jewish Religious Schools; Teacher s Text Book for Use in School and Home**

Rarebooksclub.com, United States, 2012. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.This historic book may have numerous typos and missing text. Purchasers can download a free scanned copy of the original...



### **Two Treatises: The Pearle of the Gospell, and the Pilgrims Profession to Which Is Added a Glasse for Gentlewomen to Dresse Themselves By. by Thomas Taylor Preacher of Gods Word to the Towne of Reding. (1624-1625)**

Proquest, Eebo Editions, United States, 2010. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.EARLY HISTORY OF RELIGION. Imagine holding history in your hands. Now you can. Digitally preserved and previously accessible...



### **Two Treatises: The Pearle of the Gospell, and the Pilgrims Profession to Which Is Added a Glasse for Gentlewomen to Dresse Themselves By. by Thomas Taylor Preacher of Gods Word to the Towne of Reding. (1625)**

Proquest, Eebo Editions, United States, 2010. Paperback. Book Condition: New. 246 x 189 mm. Language: English Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.EARLY HISTORY OF RELIGION. Imagine holding history in your hands. Now you can. Digitally preserved and previously accessible only...



### **Kindergarten Culture in the Family and Kindergarten; A Complete Sketch of Froebel s System of Early Education, Adapted to American Institutions. for the Use of Mothers and Teachers**

Rarebooksclub.com, United States, 2012. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.This historic book may have numerous typos and missing text. Purchasers can download a free scanned copy of the original...



### **Southern Educational Review Volume**

3

Rarebooksclub.com, United States, 2012. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.This historic book may have numerous typos and missing text. Purchasers can download a free scanned copy of the original...