

Investigation of a Moire Based Crack Detection Technique for Propulsion Health Monitoring



Filesize: 3.88 MB

Reviews


A whole new eBook with a brand new viewpoint. Yes, it is perform, continue to an interesting and amazing literature. You wont truly feel monotony at whenever you want of the time (that's what catalogs are for concerning should you ask me).

(Margie Jaskolski)

INVESTIGATION OF A MOIRE BASED CRACK DETECTION TECHNIQUE FOR PROPULSION HEALTH MONITORING



BiblioGov. Paperback. Book Condition: New. This item is printed on demand. Paperback. 22 pages. Dimensions: 9.7in. x 7.4in. x 0.1in. The development of techniques for the health monitoring of the rotating components in gas turbine engines is of major interest to NASA's Aviation Safety Program. As part of this on-going effort several experiments utilizing a novel optical Moiré based concept along with external blade tip clearance and shaft displacement instrumentation were conducted on a simulated turbine engine disk as a means of demonstrating a potential optical crack detection technique. A Moiré pattern results from the overlap of two repetitive patterns with slightly different periods. With this technique, it is possible to detect very small differences in spacing and hence radial growth in a rotating disk due to a flaw such as a crack. The experiment involved etching a circular reference pattern on a subscale engine disk that had a 50.8 mm (2 in.) long notch machined into it to simulate a crack. The disk was operated at speeds up to 12 000 rpm and the Moiré pattern due to the shift with respect to the reference pattern was monitored as a means of detecting the radial growth of the disk due to the defect. In addition, blade displacement data were acquired using external blade tip clearance and shaft displacement sensors as a means of confirming the data obtained from the optical technique. The results of the crack detection experiments and its associated analysis are presented in this paper. This item ships from La Vergne, TN. Paperback.

 [Read Investigation of a Moire Based Crack Detection Technique for Propulsion Health Monitoring Online](#)

 [Download PDF Investigation of a Moire Based Crack Detection Technique for Propulsion Health Monitoring](#)

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...

[Save ePub »](#)



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...

[Save ePub »](#)



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...

[Save ePub »](#)



Viking Ships At Sunrise Magic Tree House, No. 15

Random House Books for Young Readers. Paperback. Book Condition: New. Sal Murdocca (illustrator). Paperback. 96 pages. Dimensions: 7.4in. x 4.9in. x 0.2in. Jack and Annie are ready for their next fantasy adventure in the bestselling middle-grade...

[Save ePub »](#)



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...

[Save ePub »](#)



TJ new concept of the Preschool Quality Education Engineering the daily learning book of: new happy learning young children (2-4 years old) in small classes (3)(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 :2005-09-01 Publisher: Chinese children before making Reading: All books are the

[Save Document »](#)



A Sea Symphony - Study Score

Petrucchi Library Press. Paperback. Book Condition: New. Paperback. 324 pages. Dimensions: 9.6in. x 6.7in. x 0.7in. Vaughan Williams conducted the first performance of his great choral symphony on his 38th birthday, October 12, 1910, at the

[Save Document »](#)



Passing Judgement Short Stories about Serving Justice

Isinglass Press. Paperback. Book Condition: New. Paperback. 102 pages. Dimensions: 9.0in. x 6.0in. x 0.3in. Passing Judgment is a compact collection of twelve short stories about people who deliver their own form of justice. These are

[Save Document »](#)



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,

[Save Document »](#)



Bully, the Bullied, and the Not-So Innocent Bystander: From Preschool to High School and Beyond: Breaking the Cycle of Violence and Creating More Deeply Caring Communities (Paperback)

HarperCollins Publishers Inc, United States, 2016. Paperback. Book Condition: New. Reprint. 203 x 135 mm. Language: English . Brand New Book. An international bestseller, Barbara Coloroso's groundbreaking and trusted guide on bullying-including cyberbullying-arms parents

[Save Document »](#)