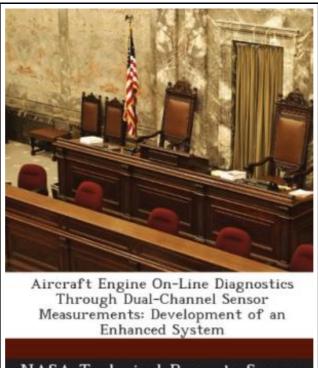
# Aircraft Engine On-Line Diagnostics Through Dual-Channel Sensor Measurements: Development of an Enhanced System



NASA Technical Reports Server (NTRS)

Filesize: 6.42 MB

# Reviews

*Completely essential go through book. This is for all who statte there had not been a worthy of reading through. It is extremely difficult to leave it before concluding, once you begin to read the book.* 

(Lydia Legros)

## AIRCRAFT ENGINE ON-LINE DIAGNOSTICS THROUGH DUAL-CHANNEL SENSOR MEASUREMENTS: DEVELOPMENT OF AN ENHANCED SYSTEM



BiblioGov. Paperback. Book Condition: New. This item is printed on demand. Paperback. 26 pages. Dimensions: 9.7in. x 7.4in. x 0.1in.In this paper, an enhanced on-line diagnostic system which utilizes dual-channel sensor measurements is developed for the aircraft engine application. The enhanced system is composed of a nonlinear on-board engine model (NOBEM), the hybrid Kalman filter (HKF) algorithm, and fault detection and isolation (FDI) logic. The NOBEM provides the analytical third channel against which the dual-channel measurements are compared. The NOBEM is further utilized as part of the HKF algorithm which estimates measured engine parameters. Engine parameters obtained from the dual-channel measurements, the NOBEM, and the HKF are compared against each other. When the discrepancy among the signals exceeds a tolerance level, the FDI logic determines the cause of discrepancy. Through this approach, the enhanced system achieves the following objectives: 1) anomaly detection, 2) component fault detection, and 3) sensor fault detection and isolation. The performance of the enhanced system is evaluated in a simulation environment using faults in sensors and components, and it is compared to an existing baseline system. This item ships from La Vergne,TN. Paperback.

Read Aircraft Engine On-Line Diagnostics Through Dual-Channel Sensor
Measurements: Development of an Enhanced System Online
Download PDF Aircraft Engine On-Line Diagnostics Through Dual-Channel Sensor
Measurements: Development of an Enhanced System

## 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 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, well all heard the story of Jonah and the Whale a hundred times. But have we...

Download ePub »

### Good Night, Zombie Scary Tales

Feiwel & 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 ePub »

_

#### 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 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... Download ePub »



# Talking Digital: A Parent s Guide for Teaching Kids to Share Smart and Stay Safe Online

Createspace, United States, 2014. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book. It is time for the digital talk. Today, kids are growing up in a wired world. Their

**Download Document »** 

لحر

## 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, Download Document »



## Just So Stories

CreateSpace Independent Publishing Platform. Paperback. Book Condition: New. This item is printed on demand. Paperback. 114 pages. Dimensions: 9.0in. x 6.0in. x 0.3in.The Just So Stories for Little Children were written by British author Rudyard **Download Document »** 

لحر

#### Coronation Mass, K. 317 Vocal Score Latin Edition

Petrucci Library Press. Paperback. Book Condition: New. Paperback. 56 pages. Dimensions: 9.6in. x 6.7in. x 0.1in.Otto Taubmanns classic vocal score of Mozarts Coronation Mass was first issued in the early 20th century and has become Download Document »



## The Poems and Prose of Ernest Dowson

Book Jungle. Paperback. Book Condition: New. Paperback. 200 pages. Dimensions: 9.2in. x 7.5in. x 0.5in.The Poems and Prose of Ernest Dowson The Project Gutenberg EBook of The Poems And Prose Of Ernest Dowson by Ernest Download Document »