



On-Orbit Passive Thermography

By Patricia A. Howell

BiblioGov. Paperback. Book Condition: New. This item is printed on demand. Paperback. 22 pages. Dimensions: 9.7in. x 7.4in. x 0.1in. On July 12, 2006, British-born astronaut Piers Sellers became the first person to conduct thermal nondestructive evaluation experiments in space, demonstrating the feasibility of a new tool for detecting damage to the reinforced carbon-carbon (RCC) structures of the Shuttle. This new tool was an EVA (Extravehicular Activity, or spacewalk) compatible infrared camera developed by NASA engineers. Data was collected both on the wing leading edge of the Orbiter and on pre-damaged samples mounted in the Shuttle's cargo bay. A total of 10 infrared movies were collected during the EVA totaling over 250 megabytes of data. Images were downloaded from the orbiting Shuttle to Johnson Space Center for analysis and processing. Results are shown to be comparable to ground-based thermal inspections performed in the laboratory with the same type of camera and simulated solar heating. The EVA camera system detected flat-bottom holes as small as 2.54cm in diameter with 50 material loss from the back (hidden) surface in RCC during this first test of the EVA IR Camera. Data for the time history of the specimen temperature and the capability...



READ ONLINE

[8.41 MB]

Reviews

I just started off reading this article publication. It is definitely simplistic but surprises in the 50 percent of your ebook. You are going to like how the author create this publication.

-- **Clint Labadie**

Comprehensive guide! Its this sort of very good go through. It generally is not going to price too much. Its been designed in an remarkably basic way which is simply following i finished reading this pdf where really changed me, affect the way i really believe.

-- **Prof. Jeremie Blanda DDS**

Related Books



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 Folk-Song Society soon after his arrival in...



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 scanned copy of the original book (without...



When Santa Claus Prayed

Xulon Press. Paperback. Book Condition: New. Paperback. 28 pages. Dimensions: 9.0in. x 8.1in. x 0.3in.Dad, youre wrong about Santa Claus! I cant sit on baby Jesus's lap or even see him! I cant send letters to Jesus! Santa Claus is the star...



By the Fire Volume 1

CreateSpace Independent Publishing Platform. Paperback. Book Condition: New. This item is printed on demand. Paperback. 130 pages. Dimensions: 9.0in. x 6.0in. x 0.3in.By the Fire is an exciting new Bi-Monthly publication featuring new works by Stewart Felkel. Inside these pages you will...



Shepherds Hey, Bfms 16: Study Score

Petrucci Library Press. Paperback. Book Condition: New. Paperback. 22 pages. Dimensions: 9.4in. x 7.1in. x 0.0in.Percy Grainger, like his contemporary Bela Bartok, was intensely interested in folk music and became a member of the English Folk-Song Society soon after his arrival in...



Magnificat in D Major, Bwv 243 Study Score Latin Edition

Petrucci Library Press. Paperback. Book Condition: New. Paperback. 70 pages. Dimensions: 9.8in. x 7.2in. x 0.3in.Bach composed the first version of this piece in 1723 using the key of E-flat major for the Christmas Vespers in Leipzig which contained several Christmas texts....