

# Critical Book on Non-destructive testing methods for Aeronautical Materials

- Important for design, inspection, maintenance, repair, corrosion protection and safety
- Excellent book for academic courses and industry training

LANCASTER, PA, USA, April 28, 2015 /EINPresswire.com/ -- [DEStech Publications](#) announces the publication of *Aeronautical Applications of Non-destructive Testing*: by Abbas Fahr, Ph.D, Senior Research Officer, Aerospace Structures, Materials and Manufacturing National Research Council, Canada.

This critical book is among the first to provide a detailed assessment of non-destructive testing methods for the many materials and thousands of parts in aircraft. It describes a wide variety of NDT techniques and explains their application in the evaluation and inspection of aerospace materials and components ranging from the entire airframe to systems and subsystems. At the same time the book offers guidance on the information derived from each NDT method and its relation to aircraft design, repair, maintenance and overall safety. The book covers basic principles, as well as practical details of instrumentation, procedures and operational results with a

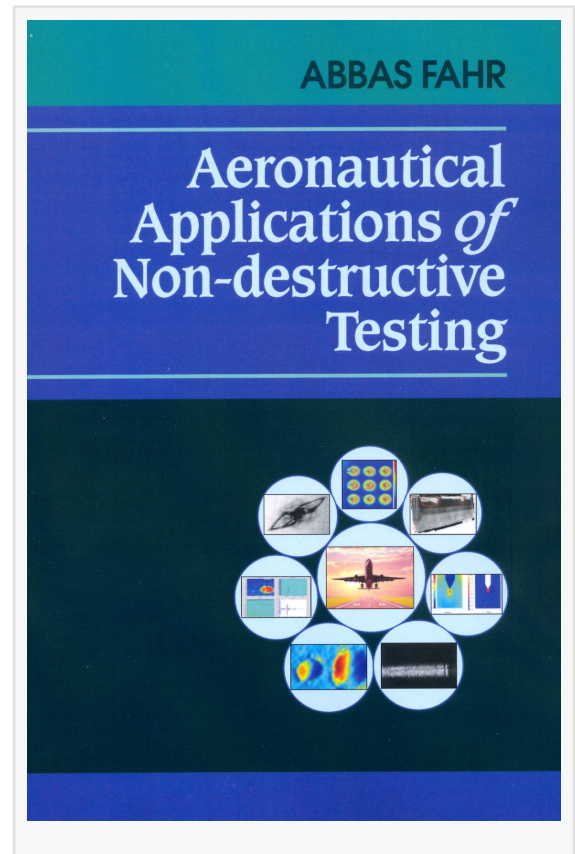
full discussion of each method's capabilities and limitations as these pertain to aircraft inspection and different types of materials, e.g., composites and metal alloys. This book also contains important instructional material for courses on NDT, composite materials, corrosion and inspection reliability.

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This first-edition text provides an ideal background/introduction for a new recruit to the field of aeronautical non-destructive testing (NDT) – both for civilian and military aircraft.  
*Tony Sinclair, Ph.D, University of Toronto*

Technologies covered include: optical and enhanced optical methods; liquid penetrant, replication and magnetic particle inspection; electromagnetic and eddy current approaches; acoustics and ultrasonic techniques; infrared thermal imaging; and radiographic methods. A final section is devoted to NDT reliability and ways the probability of detection can be measured to establish inspection intervals.

*Aeronautical Applications of Non-destructive Testing* is published by DEStech Publications, Inc., best known for advanced publications in engineering and science. ISBN: 978-1-60595-120-1, ©2014 510 pages, 6x9, soft cover, Price: \$179.50.



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