## IR thermographic evaluation of thermal diffusivity anisotropy: comparative analysis of some algorithms

by V.P. Vavilov\*, D.D. Burleigh\*\* and V.V. Shiryaev\*

\* Tomsk Polytechnic University, Tomsk, Russia

\*\* Surfside Consulting, San Diego, U.S.A.

## Abstract

The paper contains theoretical and experimental results on determining thermal diffusivity in anisotropic Carbon Fiber Reinforced Plastic composite laminates up to 5 mm thick. The effectiveness of the theory is evaluated by using a 3D numerical model. Both spot-mask and multi-slit mask techniques for determining diffusivity lateral components are analyzed.

This article was submitted to the QIRT Journal for publication.