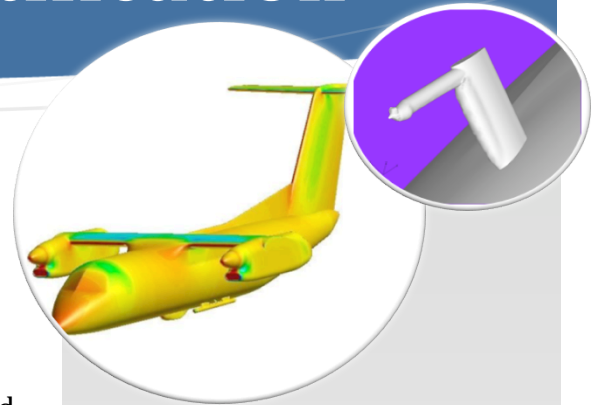


Effective Use of CFD for In-flight Icing Certification



In-flight ice formation on aircraft, rotorcraft, jet engines, UAV, detectors, antennae and optronics surfaces can significantly affect performance, handling qualities and safety. OEM or supplementary certification campaigns, long and tedious, can be greatly helped with modern icing CFD.

“Modern” icing CFD is defined as tools that are an extension of aerodynamic design and analysis technologies. Such an integrated aerodynamic/icing approach is proving itself a cost-effective *aid-to-design-and-to-certification* when made part of a well-structured compliance plan. Using “advanced and realistic” 3D simulations based on modern physical models allows a more comprehensive exploration of the combined aircraft/icing envelopes, optimized ice protection system design, and targeted/focused/reduced icing tunnel and flight tests. The end result is a more cost-effective and safer product that is easier to certify.

This course presents the *state-of-the-art of icing CFD* by linking theory to applications. It is structured to be of equal interest to aerodynamics, icing, systems and flight simulation engineers, regulators and DERs.

Detailed knowledge of CFD is not essential. The lectures cover the major aspects of in-flight icing simulation: airflow, water impingement, ice accretion, anti-icing and de-icing calculations; handling quality issues; CFD-assisted certification.

The instructors bring a wealth of knowledge, as scientists who have produced codes in current use, practicing engineers who certify aircraft for major manufacturers, and former regulators who have closely monitored certification campaigns and have a deep understanding of safety issues.

Information

Date	October 18 - 22, 2010
Location	Gyeongsang National University Jinju, South Korea
Cost	1,500 US\$ + applicable taxes
Registration	Using the registration form enclosed or on NTI web site
E-mail	events@newmerical.com
Web site	www.newmerical.com

Instructors

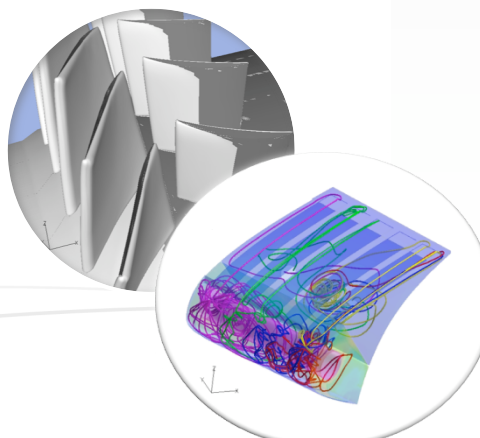
Mr. Martin AUBÉ
Newmerical Technologies

Mr. John P. DOW, Sr.
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Former FAA Specialist

Prof. Wagdi G. HABASHI
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