



1. What did ANSYS announce today?

ANSYS acquired the assets of Newmerical Technologies International (NTI), the premier developer of in-flight icing simulation software and associated design, testing and certification services. Terms of the deal were not disclosed.

2. What does NTI do?

Based in Montreal, NTI develops in-flight icing simulation software and provides associated design, testing and certification services. NTI's primary customers are in the aerospace industry. NTI offers a structured and systematic methodology to in-flight icing certification of aircraft, rotorcraft and jet engines. The best-of-breed company has focused on niche areas of computational fluid dynamics (CFD) that are too complex for others to tackle, such as in-flight icing, aerodynamic design and computational wind engineering.

3. What is driving companies to embrace NTI's technology?

Icing is a safety-critical aspect of aircraft design yet is a highly complex physical phenomenon that is extremely difficult to replicate using very expensive physical tests. Late last year, the Federal Aviation Administration introduced new rules for icing standards with particular focus on the icing environment known as supercooled liquid drops (SLD) and ice crystals at high altitude. This has significantly impacted aircraft OEMs, engine manufacturers and systems suppliers as they move through the aircraft certification process.

Capturing aircraft icing using simulation requires highly accurate computational fluid dynamics and industry proven methods and expertise for icing physics. The integration of Newmerical Technologies, with its SLD-ready, industry-leading FENSAP-ICE system of icing simulation tools, and ANSYS creates a simulation-driven solution for aircraft icing that is unmatched in the industry. This further demonstrates the ANSYS commitment to the aerospace sector and to overcoming our customers' aircraft certification challenges.

4. Why is this acquisition important?

ANSYS' longstanding vision is "Simulation Driven Product Development"™ (SDPD). Organizations can derive tremendous value by harnessing computer simulation early in the design cycle to predict how a product will perform in the real world. For this reason, simulation has proven to be an invaluable tool for manufacturers in every industry around the world.

In the aerospace industry, accelerating the aircraft certification process creates significant value for customers. With the addition of NTI, ANSYS will provide its aerospace customers with a powerful, industry-leading toolkit that enables them to validate complete virtual prototypes for in-flight icing and leverage the power of SDPD to accelerate the aircraft certification process.

5. What are NTI's key products?

FENSAP-ICE is a system for the 3-D simulation of in-flight icing of aircraft, rotorcraft, jet engines, instruments and appendages. FENSAP-ICE is comprised of 4 modules, driven through a common advanced graphical user interface.

The four interconnected modules of FENSAP-ICE are:

- FENSAP for the 3-D CFD of clean or iced components. Besides CAD fidelity and accounting for compressibility, viscosity and turbulence, FENSAP has numerical features minimizing user intervention, such as mesh movement to follow ice growth and automatic mesh optimization (OptiGrid).
- DROP3D for 3-D water concentration based on Eulerian partial differential equations, dispensing with the Lagrangian method of tracking individual droplets. DROP3D is a one-shot calculation approach for any simple or complex geometry, including high-lift wings, complete aircraft, rotorcraft, nacelles, jet engines, instruments, etc.
- ICE3D for 3-D ice accretion and water runback based on partial differential equations.
- CHT3D for 3-D Conjugate Heat Transfer analysis of bleed-air and electro-thermal, anti-/de-icing IPS: modeling heat transfer in the flow and ice, through the metal skin(s), and inside the wing, via partial differential equations with no empiricism at any interface.

6. Who are NTI's customers?

NTI and ANSYS share many customers in the global aerospace industry. NTI's customers include Airbus, Bell Helicopter Textron, Bombardier Aerospace, COMAC, Lockheed Martin, Mitsubishi, AVIC and GE Aircraft Engines, among others.

7. How will this affect ANSYS and NTI customers?

Customers of both companies will benefit from the acquisition. ANSYS customers will have even easier access to NTI's in-flight icing simulation solutions, while legacy NTI customers can expand their offerings from ANSYS proven product development solutions to meet all of their simulation needs.

8. How many people does NTI employ?

NTI employs 18 people, primarily located at the corporate headquarters in Montreal. As a result of the acquisition of NTI's assets, the NTI staff became employees of ANSYS Canada Limited.

9. Do you intend to retain NTI's employees?

ANSYS is acquiring NTI's assets to accelerate our development plans and to acquire key industry knowledge and competencies. NTI employs a variety of visionaries and thought leaders, and ANSYS is making efforts to retain all employees to help grow this important business.

10. How does NTI fit into the overall structure at ANSYS?

While the specifics are still being finalized, most of the NTI development team will integrate into ANSYS' existing product development organization.

11. What are the plans for integrating NTI's products with ANSYS' existing solutions?

NTI's tools add crucial technology to further build upon existing ANSYS solutions. The optimal value of solutions from both ANSYS and NTI can be fully realized by enabling the tools to operate closely with each other. While the specifics are still being decided, it is clear that the integration of the two product streams will provide the most benefits.

Forward-Looking Information

The Company cautions that its performance is subject to risks and uncertainties. Some matters discussed herein may constitute forward-looking statements that involve risks and uncertainties which could cause actual results to differ materially from those projected, including statements regarding customers of both companies benefitting from the acquisition. These risks and uncertainties are discussed at length, and may be amended from time to time, in the Company's Annual Report to Stockholders and its filings with the SEC, including our most recent filings on Forms 10-K and 10-Q. We undertake no obligation to publicly update or revise any forward-looking statements, whether changes occur as a result of new information or future events, after the date they were made.