FOR IMMEDIATE RELEASE:

Technology Demonstration Illustrates Innovative Solution for Defense and Avionics Data Systems

ALT Software, DiSTI, Green Hills Software and RTI combine forces in new integrated-design approach for real-time data display

SANTA CLARA, CA–October 22, 2007–ALT Software, DiSTI, Green Hills Software and RTI will demonstrate at MILCOM (October 29-31, booth #305, Orlando, FL) a technology integration that promises to radically change the design and implementation of real-time, safety-critical distributed systems for defense and aerospace applications. The combination of these firms' technologies provides a robust solution for mission-critical data distribution and display.

The demonstration will consist of a real-time avionics display rendered on a Freescale Media5200 reference platform and controlled remotely from a Windows XP system. The Media5200 target board is running the Green Hills Software INTEGRITY real-time operating system (RTOS) with output to a dynamic avionics human-machine interface (HMI) created using DiSTI GL Studio and powered by ALT Software OpenGL graphics drivers. Remote-control and data access across the network leverages RTI Data Distribution Service middleware. The result is a real-time integrated avionics network that represents the potential for next-generation designs in the cockpit for remotely piloted vehicles as well as other defense and aerospace applications.

Real-Time Avionics Display Rendered on Freescale Platform remotely controlled on a WindowsXP System

The use of RTI Data Distribution Service provides a robust and data-driven network architecture that ensures the real-time availability of data anywhere on the network. RTI Data Distribution Service, an implementation of the Object Management Group (OMG) Data Distribution Service for Real-Time Systems (DDS) standard, employs application-level Quality-of-Service policies and an extremely efficient discovery protocol that automatically detects network failure and reconnects without intervention when service is restored.

–more–

"The era of point-to-point avionics systems with single-purpose displays and hard-wired connectivity is over," explained Stan Schneider, founder and CEO of RTI. "The combination of a data-centric network model with a high-performance RTOS and fast, high-quality graphical HMIs offers an innovative solution package for demanding data-availability, processing and display applications."

Green Hills Software's INTEGRITY RTOS drives the PowerPC target board running the HMI display and provides a highly reliable partitioned environment for real-time processing. INTEGRITY prohibits errant code from entering the kernel and disrupting the system, thus achieving high levels of safety and security.

"INTEGRITY has a distinguished reputation in defense and avionics systems where real-time response, safety and reliability are the most important considerations," commented David Kleidermacher, chief technology officer, Green Hills Software. "Combined with a data system on a network, INTEGRITY is a superb choice for driving an avionics or weapons system when failure is not an option."

Using DiSTI GL Studio, engineers rapidly designed and prototyped a fully functional, integrated safety-critical avionics display that includes an artificial horizon, a directional gyro, and an airspeed and altitude indicator. The display runs on the Media5200 target board using the INTEGRITY RTOS, and data for this display is driven by remote connection to a Windows PC and managed with RTI Data Distribution Service.

"Building great HMIs quickly is a critically important component of an avionics solution," said DiSTI president Joe Swinski. "Through its ability to prototype, test with the prototype and take the prototype seamlessly into the project as live code, GL Studio lets engineering teams design and build the display in conjunction with hardware implementation."

ALT Software's embedded OpenGL driver solutions support a broad range of rugged hardware and software configurations. These drivers are tuned to provide accurate, real-time rendering of content-rich 2D/3D graphics applications and user interfaces in defense display systems. In addition, ALT Software offers DO-178B Level A graphics driver kits that enable avionics developers to create and deploy for safety-critical computing platforms.

"We're pleased to be working with RTI, Green Hills Software and DiSTI in pulling together this demonstration," said Chris Brady, CEO of ALT Software. "ALT Software's OpenGL drivers provide a common, standards-based approach to programming graphics content for embedded systems. We believe this demonstration will illustrate a complete solution stack to support high-quality graphics in mission-critical avionics systems."

–more–

This technology demonstration will show defense and aerospace manufacturers the state of the art in robust and reliable data communication and display for new and enhanced systems. It also shows how suppliers with best-of-breed products can easily integrate technology to produce breakthrough solutions for complex problems.

About ALT Software

ALT Software is an embedded systems solutions provider whose offerings include device drivers and graphics system development kits. Our products include safety-critical DO-178B OpenGL graphics drivers that support 2D / 3D graphics acceleration in embedded devices. ALT's strengths include software engineering with particular expertise in graphics, audio, video, and networking. ALT's OpenGL graphics drivers are deployed in automotive, aerospace & defense, avionics, consumer, industrial, and medical devices worldwide. For more information about ALT Software and the ALT Software family of OpenGL solutions and services, please see www.altsoftware.com.

About DiSTI

DiSTI is a global leader in the development of Human Machine Interface software for businesses, governments and the military. The company's flagship products, GL Studio and GL Studio for Java, enable programmers and developers to build high-fidelity graphics, 3D simulations and fully interactive controls into their models, enhancing the level of realism and sophistication, while improving learning and retention. More than 400 customers worldwide including BAE, Boeing, Dassault, FedEx, Lockheed Martin, Honeywell, Raytheon and Thales use DiSTI solutions to build maintenance trainers, create PC and Internet-based courseware and to develop components for safety-critical applications. As a full service provider, DiSTI offers a complement of custom programming and development services, and is the recognized leader in training solutions for the global simulation and training community. For more information, visit www.simulation.com.

About Green Hills Software

Founded in 1982, Green Hills Software, Inc. is the technology leader in device software optimization (DSO) and real-time operating systems (RTOS) for 32- and 64-bit embedded systems. Our royalty-free INTEGRITY® and *velOSity™* real-time operating systems, *µ-velOSity™* microkernel, compilers, MULTI® and AdaMULTI™ integrated development environments and TimeMachine™ tool suite offer a complete development solution that addresses both deeply embedded and high-reliability applications. Green Hills Software is headquartered in Santa Barbara, CA, with European headquarters in the United Kingdom. Visit Green Hills Software at www.ghs.com.

–more–

About RTI

Real-Time Innovations (RTI) provides high-performance infrastructure solutions for the development, deployment and integration of real-time, data-driven applications. RTI's messaging, caching, Complex Event Processing (CEP) and visualization capabilities deliver dramatic improvements in latency, throughput and scalability while slashing cost of ownership. The company's software and design expertise have been leveraged in a broad range of industries including defense, intelligence, simulation, industrial control, transportation, finance, medical and communications. Founded in 1991, RTI is privately held and headquartered in Santa Clara, CA. For more information, please visit www.rti.com.

###

The URL for this release is located at: http://www.rti.com/corporate/news/rtimilcom.html

ALT Software Media Contact:
Shelley Bryen
Director of Marketing
ALT Software Inc.
sbryen@altsoftware.com
416 203-8508, ext 1117

DiSTI Corporate Contact:
Scott Ariotti, Business Development Manager
407.206.3390 ext. 25
sariotti@simulation.com

DiSTI Media Relations
Lori Siragusa
Inline Marketing Consultants
407.571.6840
lsiragusa@inlinemarketingconsultants.com

Green Hills Software Media Contact:
Barbel French
805-965-6044
bfrench@ghs.com

RTI Corporate Contact:
Melanie Gill
Real-Time Innovations
480-200-4760
melanie@rti.com

RTI Media Contact
Barbara Stewart
Patterson & Associates
480-488-6909
barbara@patterson.com