



Quantum3D Press Contact

Barbara Stewart
+1 (480) 488-6909 barbara@patterson.com

Quantum3D Sales Contact

Ray Niacaris
+1 (909) 593-2055 salesinfo@quantum3d.com

Lockheed Martin Selects Quantum3D for Avionics Display Solutions

SAN JOSE, CA—February 10, 2009—[Quantum3D, Inc.](http://www.quantum3d.com), a leading provider of real-time visual simulation and embedded computing solutions, today announced that a division of [Lockheed Martin](http://www.lockheedmartin.com), specializing in systems integration of military aircraft, has selected Quantum3D's [IData](#) Human Machine Interface (HMI) toolset to support the simulation and embedded display of graphical information shown on cockpit displays.

The IData HMI toolset will provide systems engineers at Lockheed Martin Systems Integration in Owego, NY, and at its facility in Havant, UK, with a breakthrough approach to developing graphical information shown on cockpit displays. Instead of employing outdated code generation methods, the IData toolset outputs data defining the HMI's graphics and behavior. This approach can significantly reduce the time and expense in each phase of the embedded display lifecycle, from prototyping and simulation through development and deployment of the embedded target application. The tools re-define how HMI rapid prototyping can be done by allowing engineers to try new HMI behaviors and "looks" without ever stopping the target system or needing to recompile code. Feedback is instantaneous and changes are literally made "on the fly."

Lockheed Martin Systems Integration in Owego will use the HMI toolset to more rapidly develop tactical and situational awareness information that is graphically displayed to military pilots and crew aboard a range of rotary wing and fixed wing aircraft. The company has more than 40 years of experience integrating mission systems aboard military aircraft, including the submarine hunting helicopters used by the U.S. and British navies.

The IData HMI toolset is a key component of the IData tool suite, a complete embedded display development environment for primary flight displays, digital moving maps and synthetic vision applications. The toolset has a processing engine with a full [DO-178B](#) certification package that can run on any embedded real-time operating system or real-time executive. In addition, it offers fully certifiable plug-ins for digital moving maps and 3D scene generation.

"When we embarked on the development of the IData tool suite, we looked to the gaming and simulation business to see how they achieve their extremely high graphics performance," said Mark Snyder, director



Operators aboard the Royal Navy's upgraded Merlin Mk 1 helicopter will perform their mission using IData generated tactical operator displays. (Photo Courtesy of Lockheed Martin)

—more—

of Development for IData. “What we discovered was that these applications achieve their performance by tailoring graphical rendering to each platform, an approach that is not possible with graphics code generation. The HMI Specification Language is really graphical behavioral data that is processed by a very high-performance, small footprint, processing engine that is optimized for each target system.”

About Quantum3D

Quantum3D, Inc. is the leading developer and manufacturer of Commercial-off-the-Shelf (COTS) open-architecture real-time visual computing solutions. Quantum3D combines the most advanced hardware and software systems for graphics simulation in a variety of markets and implementations—image generation; tactical computing for avionics, vehicle, and man-wearable applications; synthetic environments; graphics subsystems; and other COTS solutions. Quantum3D is a privately held company headquartered in San Jose, California. For more information about Quantum3D real-time visual computing solutions, please visit www.quantum3d.com.

###

Quantum3D, the Quantum3D Logo and IData are trademarks, or registered trademarks, of Quantum3D, Inc. All other trademarks are the property of their respective owners.