Ascension Supports Virtual Reality Training System for UK Armed Forces

Burlington, VT (June 20, 2011) – Ascension sensors are now being used in a virtual reality parachute training system for Britain’s Royal Air Force. It enables parachute troops to gain valuable jump skills in a safe environment—before they take the plunge.

Manufactured by virtual reality specialists Maelstrom, in partnership with Pennant Training Systems, the system tracks sensors on a parachutist’s head and hands to correlate human movement with parachute control.

“We are thrilled to support this new training aid that reduces costs and can save lives,” said Jack Scully, Ascension’s vice president of new product development. “Maelstrom is a leader in the virtual reality industry; their real-time visualization technology is ideally suited for education and training products.”

The new system – which debuted earlier this year at the Parachute Training School at RAF Brize Norton in Oxfordshire, UK – is a significant advance on previous simulators of this type, using physical movement and new technologies to create a truly immersive experience. Parachute students – up to eight at a time -- strap on a virtual reality headset and are suspended from a harness. Everything they see simulates a real jumping experience – from the views of the environment below, to the weather conditions to the parachute canopy above them.

Instructors can deploy each parachutist in the same shared environment -- or vary their environments, choosing from a variety of weather conditions and times of day or night. Instructors can also alter the altitude and aircraft speed, among other factors. Originally designed to educate students about malfunctions and canopy failures, the software supports training of up to 14 malfunctions on six different canopy types, and runs a range of emergency situations. Students’ performance can be recorded on video for further review and feedback.
Graham Patten, director of Maelstrom, said Ascension’s 3D tracking is a perfect fit for the parachute virtual reality trainer. “With immersive virtual reality applications, it is essential the technology be very fast to prevent any lag in the headset,” Patten said. “And when using multiple sensors on a single user, the tracking must also be accurate and drift-free. These attributes are present in abundance on the 3D Guidance trackers from Ascension.”

Maelstrom has a long history with Ascension, having used a number of its systems in the past. “We have absolute trust in their ability to deliver and support our requirements,” Patten said.

**About Ascension**
Based in Vermont, Ascension Technology Corporation is a professional 3D tracking company and a world leader in magnetic motion tracking solutions for real-time visualization, medical and industrial applications. Its 3D sensors track head, hands and 3D pointers for interaction with large scale and immersive displays. For more information, visit [www.ascension-tech.com](http://www.ascension-tech.com)

**About Maelstrom**
Based in Leicester, UK, Maelstrom specializes in the production of custom-made virtual reality applications and systems for a variety of industries. In the last 13 years, it has earned a reputation for developing innovative systems, winning awards for marketing and product design, and a European grant for product development. For more information, visit [www.maelstrom.com](http://www.maelstrom.com)

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