



Versatile Imaging Device Relies on Stability, Performance of Ascension's Sensors

Burlington, VT (January 6, 2012) – Advanced imaging technologies supported by Ascension's sensors are now available in a portable device the size of a suitcase – and are helping improve diagnostic care in remote areas.



A technician uses the TraumaStation II to take an ultrasound scan. Ascension's 3D Guidance driveBAY sensor is mounted on the back of the ultrasound probe. Both parts are precisely calibrated, enabling Ascension's tracking system to record the local position and orientation of the ultrasound probe while the ultrasound image is acquired. With the aid of the sensor, TraumaStation II is able to generate 3D volumes from 2D ultrasound sequences.

The device – TraumaStation II offered by German-based original equipment manufacturer MedCom – integrates ultrasound, 3D tracking and teleconferencing capabilities. The battery-operated system can acquire, process, display and transfer two- and three-dimensional medical images via telemedicine, on channels ranging from Internet to satellite. The mobile, versatile nature of the system makes it possible to bring advanced imaging technology to areas with little infrastructure, such as rural regions or battlefields.

The system uses Ascension's driveBay tracker to generate 3D volumes from 2D ultrasound sequences, said MedCom CEO Georgios Sakas. "Ascension's sensors were the best fit due to their stability around metal and their small size," Sakas said. "We also received a great deal of support from Ascension's team when designing our applications." The tracking capabilities that Ascension provides are essential to bring the highest degree of precision to ultrasound, accelerate the clinical workflow and increase patient safety, Sakas said. TraumaStation II is now available in Europe and Canada, with preparations underway for FDA approval.

About MedCom

MedCom is an original equipment manufacturer (OEM) based in Darmstadt, Germany. It was founded in 1997 as a spin-off of the Fraunhofer Institute of Computer Graphics (IGD) – an R&D institution for computer graphics technologies. MedCom offers innovative and advanced imaging-based products with emphasis on cancer treatment, interventional and surgical navigation and specialized telemedicine solutions. For more information, visit <http://www.medcom-online.de/>

About Ascension

Ascension makes 3D tracking devices for medical uses such as instrument navigation in image-guided surgery, minimally invasive procedures and ultrasound-guided procedures; biomechanics and motion capture; simulation and training; real-time visualization and computer animation. Ascension's 3D trackers – featuring miniature five and six-degrees-of-freedom sensors -- are used in everything from 3D ultrasound systems to engineering research to virtual reality displays. Its newest generation of 3D tracking tools includes: driveBAY, trakSTAR and medSAFE.