

Mechdyne Completes “Phase One” Wide Area Virtual Environment for Uniformed Services University of the Health Sciences

- *Virtual reality facility in USA is the first of its kind worldwide in the field of healthcare; 1,000 square feet facility is also among world’s largest*
- *Mechdyne designed, installed and completed the initial prototype WAVE system*

Marshalltown, Iowa — January 7, 2013 — Mechdyne Corporation has completed the “Phase One” installation of a Wide Area Virtual Environment (WAVE) virtual reality facility at National Capital Area Medical Simulation Center (SimCenter) in Silver Spring, Md. SimCenter, a world leader in development and application of medical simulation programs, is part of Uniformed Services University of the Health Sciences (USUHS).

The WAVE facility will be utilized to educate health care professionals — including uniformed officers and other personnel in the Army, Navy, Air Force and Public Health Service — to deal with wartime casualties, disasters, and other public health emergencies. The virtual reality environment performs a key role in training active duty personnel who are supporting operations in Iraq, Afghanistan, and elsewhere.

“This facility, the first of its kind worldwide in the field of healthcare, creates a rich learning environment that integrates virtual reality, patient simulators, live actors and trainers to create a comprehensive medical team training environment,” said Dr. Gil Muniz, deputy director of National Capital Area Medical Simulation Center.

This highly customized immersive environment has a unique design which USUHS and Mechdyne nicknamed the “dog bone.” The 1,000-square foot solution includes two immersive 3-D theatres connected by a corridor. This configuration provides a setting that replicates real-life situations such as a traumatic injury during combat followed by immediate victim transport to surgery. The WAVE allows medical practitioners to simulate in-the-field medical triage followed by emergency room simulation, all in real-time.

“As the organization that designed, installed and completed the initial prototype WAVE system, Mechdyne has a long history of working with USUHS and a uniquely deep understanding of the needs for SimCenter’s mission,” said Bill Lackner, senior account manager at Mechdyne.

Dr. Muniz added that Mechdyne was awarded an additional contract in September 2012 for the project’s year-long Phase Two — installation of sensory equipment for sight, sound, smell, etc., plus motion platforms for vehicle/helicopter bucks, video and audio recording of exercises, and enhanced communication systems between the participants and control room.

Mechdyne said companies utilizing this simulation technology include military, health responders, disaster responders, fire fighters, police; U.S. military in general, especially those in medical field; and other organizations who could utilize immersive environments for training purposes.

Visit <http://simcen.usuhs.edu/Pages/default.aspx> or <http://simcen.usuhs.edu/aboutus/Pages/default.aspx> to see a Wide Area Virtual Environment (WAVE) used for medical simulations.

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About Mechdyne Corporation

Mechdyne is one of the world’s leading providers of innovative visual information technologies. The company bends technology in ways that transform complex data into insights and ideas. To ensure customers succeed, Mechdyne provides comprehensive, customized solutions that include consulting, software, technical services and hardware integration. Mechdyne, with offices around the world, serves a global customer base. Customers

include: leading government laboratories, energy companies, universities, manufacturing and design firms, U.S. armed forces, and other users of visual information technologies. Visit www.mechdyne.com for more information.

About Uniformed Services University of the Health Sciences (USUHS)

Located on the grounds of National Naval Medical Center and across from the National Institutes of Health in Bethesda, Maryland, USUHS is the nation's federal school of medicine and graduate school of nursing. The university educates health care professionals dedicated to career service in the Department of Defense and the U.S. Public Health Service. Students are active-duty uniformed officers in the Army, Navy, Air Force and Public Health Service, who are being educated to deal with wartime casualties, national disasters, emerging infectious diseases, and other public health emergencies. Of the university's more than 4,000 physician alumni, the vast majority serve on active duty and are supporting operations in Iraq, Afghanistan, and elsewhere, offering their leadership and expertise. Visit <http://www.usuhs.mil/> for more information about USUHS.

National Capital Area Medical Simulation Center is a world leader in development and application of medical simulation programs. Opened in 1999, the Simulation Center, located in Silver Spring, Md, uses high-fidelity human patient mannequins, a full-scale immersive virtual reality area, 12 patient examination rooms, and surgical simulation within operating rooms to train and assess the communication, interpersonal, professional, physical exam and diagnostic reasoning skills of learners. The center provides approximately 39,000 hours of training each academic year and is open to all uniformed medical and nursing students, interns, residents and others in the DOD community.