

STS Brings the Realism to Medical Training

Some recent key contract awards serve to highlight the niche that veteran-owned business STS International (Booth 2712) has carved for itself.

Involvement in medical modeling and simulation for more than 25 years, STS International now offers a range of services to the Pentagon in the areas of engineering and integration, enterprise and logistics management, and simulation and training.

As STS Vice President and COO Dave Morgan explained to the *Show Daily*, the company's more recent pedigree was providing simulated environments to the Services to carry out practical medical training prior to deployment.

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"So, that live practical training for medics and soldiers as they were getting ready to deploy insures that their medical skills were up to military standard prior to deployment," Morgan explained.

"We are providing that live training environment, where we are able to do simulated effects, battlefield effects. But then at the same time we are able to ingest into the command and control application, the physiological status of the patient simulators that they were working with.

"So, if the patient was presenting a certain set of medical conditions, whether it was breathing or heart problems, things like that, we'd be able to monitor the physiology of the mannequins and then be able to change, dynamically on the fly, what was happening to the mannequins."

By recording the students in real time, the company is able to adjust the mannequin's reactions based on the actions taken for more realistic training and useful debriefing.

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In September, STS International announced

its involvement with the Air Force and Navy Medical Modeling and Simulation Training (AFMMAST) programs, working alongside SA-LUS Group and prime contractor PowerTrain.

The aim of the AFMMAST program is to improve medical education and training by employing competency-based training activities using multimodal modeling and simulation technologies, advanced blended learning, and sound educational strategies. "We provide the training instructors located all across the US and overseas in training hospitals and in educational facilities in order to be able to train and ensure competencies on skills using patient simulators while really focusing on higher patient outcomes," Morgan explained.

"So, critical skills that they may not typically use on a day-to-day basis or they need refreshing on can be rehearsed. They're also trying to ensure that medical providers - that may be either novices or experienced providers - are able to get practical instructions in a simulated environment to ensure that their skills are kept up to the highest level. This is right across the US and we have just under 70 people that are on the program right now. And we are also in UK, Germany, Italy, and Japan doing the same thing."

The same month, it emerged that following the US Army's decision to recompute all elements of its Warfighter Field Operations Customer Support (FOCUS) program, STS International won a place on the Enterprise Training Services Contract (ETSC) in partnership with Trideum Corporation.

Trideum and STS will provide the Pentagon with training and advisory assistance for military and civilian related subjects to include instruction in both classroom and field environments; exercise planning, management, and support; and training systems support services.

"The US Army had already made the decision they wanted to break Warfighter FOCUS up into smaller components to allow additional competition and we're really happy about doing that," Morgan said.

"There's going to be a whole litany of differ-

ent types of training that will come out of that contract - from aviation trainers to ground vehicle training centers. So, we're working quite closely with them to do that."

In addition to highlighting its involvement with these key contracts, at I/ITSEC 2018 the company plans to focus on emerging technologies surrounding augmented reality, using prescriptive analytics.

"That's the focus of where the company is pushing forward in the next several years - we're going to be looking at augmented reality and using prescriptive analytics to tie back to performance on systems. So, people's ability to train and operate the systems and then being able to show cost savings to the government on how to train and operate the equipment that the warfighters are using to ensure their mission capability is the highest priority. Operational readiness is at the highest availability for them to be able to execute their mission," he explained.

He argued that currently, most training systems do not utilize the data to assess whether the training is being performed adequately.

"Infusing that with the system data, whether or not the system is performing well, and then



looking at the human performance ability of that - that's going to be, I think, the next generation of training where you're going to see different learners learning in different ways. But there's very little ability at a data analytics level to be able to see what other measures of performance, the measures of effectiveness that are truly being retained by the students.

"So that's where we think there's going to be growth areas, especially in merging the human performance analytics and system performance analytics. That's where I think there's going to be a lot of great progress being made in the next five years and that's where we're focusing our efforts."