



NAWC engineers drive Special Operations innovation



Naval Air Systems Command (NAVAIR) engineers Kawila Miller, left, and Dave Morris, right, stand in front of a U.S. Special Operations Command (USSOCOM) Light Tactical All-Terrain Vehicle (LTATV) and USSOCOM Ground Mobility Vehicle (GMV) 1.0 at the USSOCOM Dirty Werx facility in downtown Tampa, Florida. Miller and Morris are NAWAIR 4.11.4 engineers assigned to USSOCOM's Family of Special Operations Vehicles Program Management Office and are responsible for command, control, communications, computers, intelligence, surveillance, reconnaissance (C4ISR) integration onto vehicle platforms. (courtesy photo)

MACDILL AIR FORCE BASE, Fla. -- Two Naval Air Warfare Center Aircraft Division (NAWCAD) employees of the Special Communications Mission Systems Division, St. Inigoes, Maryland, permanently assigned to the U. S. Special Operations Command (USSOCOM), MacDill Air Force Base, Florida, recently coordinated two high-profile events utilizing USSOCOM's SOFWERX and DirtyWerx collaboration and innovation facilities.

David Morris, acquisition program manager (APM) for command, control, communications, computers, intelligence, surveillance, reconnaissance (C4ISR) systems within the Family of Special Operations Vehicles (FOSOV) and Kawila Miller, Deputy APM C4ISR FOSOV collaborated with industry, academia, special operations forces (SOF) operators and other government agencies to further advance the technologies integrated for use by the SOF.

The first event, at SOFWERX – an institute in Tampa, Florida, that encourages collaboration between innovators and the special operations community -- brought together officials from industry, SOF, and , the Navy and Marine Corps to discuss new power and energy technologies



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that could be used on ground mobility platforms to meet ever-increasing power requirements.

“We brainstormed for a new battery system and how to meet requirements,” Morris said.

Engineers, program managers and users all collaborated to come up with best-fitting and feasible solutions to meet C4ISR power demands to extend the range of current platforms by reducing weight and increasing battery power output and storage. Crane will be following up with a full demonstration of proposed solutions at their facility in November.

The second event was a “Monster Garage”-type event that took place at the DirtyWerx facility. This facility is a hands-on space that allows for the rapid prototyping of equipment, in this case, innovative communications gear for the Light Tactical All-Terrain Vehicle (LTATV) and Ground Mobility Vehicle (GMV) 1.0.

“Our task was to take C4ISR equipment and make it smaller and more efficient,” Miller said.

Along with nine industry partners who are on a SOCOM Cooperative Research and Development Agreement or CRADA, National Laboratories, SOF users and officials from the U. S. Army Marine Corps and Navy and more, the group was able to prototype the integration of new card-based radio and computing systems, low profile antennas and magnetic inductance wireless technology to successfully demonstrate a full working system to SOF leadership.

“We also had operators with us who gave immediate feedback,” Morris said. “They could tell us what worked, what didn’t work and what was still needed, and that was helpful.”