

# DEFENSEWERX

NEWSLETTER



## Contents

**SOFWERX - p.2**

**Cyber Fusion Innovation Center -p.3-4**

**MGMWERX - p.5**

**ERDCWERX - p.6**

**Doolittle Institute - p.7**

# SOFWERX

## Lightweight Machine Gun-Medium (LMG-M) Virtual Industry Day



On 18 February 2021, SOFWERX, in concert with USSOCOM PEO-SOF Warrior (PEO-SW), hosted a Lightweight Machine Gun-Medium (LMG-M) Virtual Industry Day to discuss and refine ammunition specifications for the LMG-M. Out of 136 requests to attend, Government Stakeholders selected 24 Industry partners from 11 organizations to participate in the discussion. During the event, Warfighters and Program Managers informed Machine Gun Industry partners of ammunition specifications, desirements, and future needs of Special Operations Forces (SOF) Operators. This session was also utilized to incorporate pertinent Industry inputs into the Request for Proposal (RFP) development process and for USSOCOM to gain a better understanding of recent machine gun Industry developments. The ammunition and weapon specifications will be finalized and released to Industry for the opportunity to submit solutions for the LMG-M ammunition in the upcoming quarter.

## KEF Robotics Phase I



SOFWERX, in partnership with USSOCOM, and in collaboration with KEF Robotics, developed a proof-of-concept visual autonomy system. By the end of the project, this technology had the capability to integrate visual navigation quickly and easily in both commercial off-the-shelf (COTS) and government furnished equipment (GFE) unmanned aerial system (UAS) platforms. The outcomes resulted in a follow-on Phase II project to further develop a UAS agnostic, visual navigation and target identification system for GPS denied environments. Discussions have begun to kick-start Phase III during the next fiscal year. Additionally, an Air Force Phase II SBIR was awarded to adapt the technology to medium altitude intelligence, surveillance, and reconnaissance (ISR) platforms for autonomous navigation and target identification.







## The Publicly Available Information Tools, Analytics, and Visualization Assessment Event



The Cyber Fusion Innovation Center (CFIC) team is nearing the final demonstrations as part of its first formal event under their agreement with U.S. Army Cyber Command (ARCYBER) Technical Warfare Center (TWC). The Publicly Available Information Tools, Analytics, and Visualization Assessment Event, also known as GABRIEL PANTHER among the CFIC/ARCYBER team, will connect 23 potential solution providers with ARCYBER subject matter experts to evaluate capabilities during a virtual demonstration event at the end of April. The initial call asked for submissions addressing needs in data acquisition, data structuring, data analytics, and data visualization capabilities to allow real-time, near real-time, and historical analysis of publicly available information (PAI) posted on various social media platforms.

CFIC had a successful turnout of 122 total submissions through the innovation scouting platform known as Vulcan. The ARCYBER team ultimately selected 23 solutions to move forward to the demonstration phase. Those 23 companies received an invitation to a one-on-one demonstration session with the Government evaluation panel to pitch, demonstrate, and discuss their solutions. Successful invitees may be invited to participate in a follow-on prototyping cycle to have their capability further evaluated for feasibility and military utility.

CFIC encourages those who would like to learn more about ARCYBER opportunities to join their ecosystem and sign up to receive updates and announcements at [Cyberfic.org](https://www.cyberfic.org).



## Marketing and Events Manager, Stacie McBride



CFIC is pleased to introduce the newest addition to the team, Stacie McBride, CFIC's Marketing and Events Manager. Stacie is a proud Augustan, where she was born and raised and where the CFIC office is located. She is a graduate of Augusta University where she earned her Bachelor of Arts in Communication with a concentration in Marketing and a Minor in Nonprofit Management. After college, she began her career at a well-known local advertising agency. During her career, she has worked with a variety of industries and clients ranging from higher education, restaurants, professional sports, nonprofits, financial institutions, and a variety of others. Beginning in account management, Stacie was soon asked to focus her efforts on the agency social media department where she structured, implemented, and launched the social media division which earned her a promotion to the title of Senior Social Media Strategist. It was during this time she found her passion for Digital marketing and strategic efforts across different industry landscapes and platforms. Stacie is best described as a multimedia strategist with high detail in creating, engaging, and formulating strategic content for various platforms and strong client interaction during a variety of integrated branding and marketing projects. Stacie loves a challenge and has jumped right in on learning this new world of innovation while applying her marketing foundations to CFIC!

Stacie also brings a passion for teaching which began in her previous position where she implemented and managed the agency internship program. Her goal is to create a Cyber Marketing class that can be offered at Augusta University to support CFIC activities in the local Augusta innovation ecosystem. Stacie plans to fuse her passion for marketing with the growing and exciting world of cyber innovation based in Augusta into one for young marketers eager to be in the cyber world and what better place to realize her plan than from working with ARCYBER partners within the Georgia Cyber Center!

Along with her strong professional credentials and experience, Stacie is also dedicated to her local community. She serves on the Augusta Sports Council Board as well as the Georgia Cyber Center Advisory Board and in the process of joining Leadership Augusta. She is hopeful her extensive involvement in many areas in her local community will play a part in growing connections and community support for the CFIC Mission.

When Stacie is not at CFIC, she enjoys running, playing with her dog, Benson, a glass of Pinot Noir and doing social media for local golf organizations and boutiques.







## SmarterReality Named Challenge Winner by MGMWERX & Air University



MGMWERX recently wrapped up a challenge for Air University seeking technology to facilitate virtual education for the Air & Space Operations Center (AOC). Of the submissions, SmarterReality provided the winning solution during the Design Challenge, a competition hosted by MGMWERX on behalf of Air University.

"Among all of the proposals submitted, SmarterReality's solution provided the best, most cost-acceptable resolution for Air University," stated Steve Werner, past Director of MGMWERX.

Submissions featured many educational enhancements for Air University students. Of those submissions, prospects included utilization of organization, component functions, and operations AOC while utilizing virtual reality workspaces.

"At MGMWERX, we helped define the key requirements for the solution, marketed and executed the challenge, and maintained open communication, such as Q&A sessions, to help assure that prospective winners had the best possible information and therefore, potential solutions," explained Werner.

"Because of these actions, we were able to facilitate a contract with the winning vendor, SmarterReality, and coordinate and manage delivery of the solution to the Air University and Air Force end-user."

MGMWERX ran the challenge twice to thoroughly scout out the best solutions for Air University. Because of MGMWERX's dedication to partnering with the best of the non-military experts and Air University professionals, Air University is provided best practices across all sectors.

*MGMWERX was created under a Partnership Intermediary Agreement to align with the education initiatives of Air University. MGMWERX augments ongoing Air University programs, through events like Pitch Night, to enhance the production of high-quality, innovative research and ideas that span issues of importance to the Air Force. This includes, but is not limited to, doctrine, strategies, capability needs, operational concepts, training, education, and science and technology.*



DEFENSEWERX

Challenges are opportunities



## Tech Challenge for Road Repair Work Tool Attachments

ERDCWERX, in collaboration with the U.S. Army Engineer Research and Development Center (ERDC), recently held a Road Repair Work Tool Attachments Capability Assessment to encourage the submission of product information for work tools that attach to compact track, backhoe, or front-end loaders for use in the removal and placement of roadway materials.

The tech challenge, announced in March, encouraged industry, academia, national labs, individual innovators, and other parties to submit product information in the form of a hyperlink, company flyer, or white paper to meet certain requirements as outlined in the project announcement. Submissions, accepted through April 15, will be evaluated by ERDC.

The objective of the Road Repair Work Tool Attachments Capability Assessment is to identify technologies for removing destructive roadway, preparing the repair area, and placing materials for rapidly hardening in-place solid or unbound pavement material, thereby increasing structural capacity and expediting vehicle maneuver across degraded or under designed infrastructure.

ERDCWERX also invites prototype concepts related to Infrastructure Maintenance, Repair and Reconstruction Technologies as described in ERDC's Military Engineering Broad Other Transaction Authority Announcement. Details can be found at [www.erdowerx.org/military-engineering](http://www.erdowerx.org/military-engineering).

To receive notifications of tech challenges and other project opportunities launched in conjunction with the ERDC, visit [www.erdowerx.org/join-our-ecosystem](http://www.erdowerx.org/join-our-ecosystem).

## ERDCWERX Invites Prototype Concepts in Cybersecurity and High Performance Computing

ERDCWERX is offering another opportunity to submit prototype concepts to ERDC. In addition to seeking prototype concepts in Military Engineering (ME), ERDC is now requesting white paper submissions in response to prototyping opportunities in Engineered Resilient Systems (ERS). Non-traditional defense contractors are encouraged to submit, at no cost, their prototype concepts for funding consideration.

One of ERDC's five major areas of research and development, ERS combines advanced engineering techniques with high performance computing and includes cybersecurity and other critical applications. Selected white papers may receive an invitation for a solution pitch, demonstration, or a Request for Prototype Proposal. Evaluation feedback from ERDC is typically supplied within 60-90 days of the submission in any one of the seven focus areas:

Cybersecurity, High Performance Computing (HPC) Enabled Advanced Manufacturing (AdM), High Performance Data Analytics, System Engineering Techniques, High Performance Computing (HPC) Enabled Development of Surrogate Models and Data Analytics, Leveraging HPC Capabilities for On-the-Edge Computing, Computational Material Testing and Validation

ERDC helps solve the Nation's most challenging problems in civil and military engineering, geospatial sciences, water resources, and environmental sciences for the Army, Department of Defense, civilian agencies, and our Nation's public good. ERDC's staff of approximately 2,100 employees and contractors manage an annual research program exceeding \$1 billion at seven laboratories in four states.

To learn more about ERS and ME prototype opportunities, visit [www.erdowerx.org/prototype-opportunities](http://www.erdowerx.org/prototype-opportunities).







## HBCU University Day

The Doolittle Institute hosted a virtual Historically Black Colleges and Universities (HBCU) University Day on 11 February 2021. The Doolittle Institute, as part of a relationship with AFRL, sought potential collaborators who are currently researching, or have already completed research, in machine learning, additive manufacturing, and advanced manufacturing.

The Doolittle Institute received 47 abstract submissions from twelve schools, including institutions in Alaska, Washington D.C., and the U.S. Virgin Islands. The bulk of abstracts selected to present were from Florida Agricultural & Mechanical University (FAMU), though notable schools also included University of Arkansas at Pine Bluff, North Carolina A&T State University, and North Carolina Central University. The majority of submissions were for Novel Sensing and Detection in Extreme Environments, a topic on which seven researchers presented.

AFRL/RW continues to review presenters' research and provide feedback. Seedling funding, CRADAs or EPAs, or Summer Fellowships will be offered to selected winners.



## AIR2021

The Doolittle Institute facilitated the launch of the Team Eglin Weapons Digital Enterprise in March's Armament Industry Roundtable (AIR2021). AIR2021 introduced industry leaders to relevant points of contact from the Air Force Life Cycle Management Center (AFLCMC), the Air Force Research Laboratory (AFRL), and the 96th Test Wing.

Sponsored by the AFLCMC, the AIR2021 event provided a series of discussions explaining the new weapons acquisition model, its system architecture, and the Air Force's technical vision. Lt. Col. Justin Smith and Maj. Madeleine Jensen, both of AFLCMC, led the industry engagement "Ask Me Anything" session. Headlining speakers included Brig. Gen. Heath Collins, PEO Weapons Director of the Armament Directorate; Col. Gary Haase, Commander and Director of the Air Force Research Laboratory Munitions Directorate; and Brig. Gen. Scott Cain, Commander of the 96th Test Wing.

AIR2021 registrations maxed out, and 39 people attended in-person over the two-day event. Live streaming audience members included industry leaders such as Pratt-Whitney, L3 Harris, Boeing, Raytheon, Lockheed Martin, and Kratos Defense.

