

MODERNIZATION NATION

The Newsletter for National Guard Reform

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Connecting Guardsmen to Help DOD Deliver at the Speed of Relevance

By Mr. Keith E. Buchholz, NGB J8 Programs and Resources/ Comptroller

The National Defense Strategy says “Success no longer goes to the country that develops a new technology first, but rather the one that better integrates it and adapts its way of fighting.” Helping guardsmen connect is a key component of the National Guard Reform strategy. Only by working together - across units, across state lines, and with partner nations - can we work fast enough to deliver performance at the speed of relevance.

An example of connecting National Guard members is the standup of the Additive Manufacturing (AM) Tech Hub by the Texas National Guard, led by the 149th Fighter Wing. The AM Tech Hub provides a forum for all guardsmen interested in Additive Manufacturing to connect in order to transform the Guard. AM is a potential game-changing solution to the problem “how do we mitigate long lead time supply chain shortfalls.” AM Tech Hub meetings, supported by National Guard Bureau J8 (NGB J8) and ARCWERX, have enjoyed a huge response from Guard additive manufacturing experts and users.

The Guard is making strategic investments in additive manufacturing after an AM solution won the CNGB Innovation Competition. Since then, the DOD OSD R&E has published the DOD Additive Manufacturing Strategy, which further solidifies DOD commitment to AM.

The AM Tech Hub is the first Guard Hub. Hubs are a critical component of the strategy to connect National Guard members across the 54. Hubs can be centered around a key

technological problem or Guard need. I know there are many states working to reform processes around the National Guard. National Guard Bureau J8 is ready to assist you by connecting you with other experts that can assist you!

Other states are in the process of standing up Hubs to connect Guardsmen to solve the Guard’s biggest challenges. For example, the Ohio National Guard is standing up the Holistic Fitness Hub, and the Michigan National Guard is standing up the Innovators Professional Development Hub. Along with the AM Tech Hub, these efforts show great potential, and I hope there will be many more soon.

149th Fighter Wing Jet Washing Robot



By Senior Airman Ryan Mancuso 149th Fighter Wing Public Affairs

JOINT BASE SAN ANTONIO-LACKLAND, Texas, – A new Gunfighter has arrived at the 149th Fighter Wing at Joint Base San Antonio-Lackland ... a jet washing robot. The new robot was programmed and tested at the 149th Fighter Wing under the AFWERX innovation initiative and was designed and built

as a proof of concept to potentially be rolled out Air Force-wide.

The robot is able to fully wash an F-16 in an hour, a job that typically takes a team of four people up to six hours. Total aircraft downtime is also reduced from two days, down to one. Typically, an F-16 would receive a wash every 180 days to prevent corrosion and prolong the lifespan of the airframe.

Cleaning removes any built-up dirt and grime, which includes grease, oil, and hydraulic fluids, as well as soot from the engines, smoke from firing the gun and launching weapons, and environmental debris like insects.

NY ANG Intel Officer Describes AF Ventures Experience

By Airman 1st Class Michael Janker, 107th Attack Wing / Published January 25, 2021

“Going through this experience recommitted me to the Air Force's mission.” This is how 1st Lt. Ryan Scadlock describes his recent experience attending an **AFWERX**-funded fellowship called **AF Ventures**. AFWERX is the Air Force's team of innovators that help facilitate connections throughout the industry. The AFWERX mission is to solve problems and further enhance effectiveness of service through innovation. “As a technologist and an intelligence officer, I'm being immersed into a world of innovation,” said Scadlock, who maintains cybersecurity for a global manufacturing firm in his civilian life. “I hope to take some of that and direct it to support the warfighter.” Scadlock, an intelligence, surveillance, and reconnaissance officer with the 274th Air Support Operations Squadron, of the 107th Attack Wing, New York Air National Guard, was selected through a competitive application process to join the 2020 AF Ventures fellowship. The six-week fellowship places U.S. Air Force and Department of Defense leaders into technology and business

ecosystems across Silicon Valley. Scadlock explains the group who attended the fellowship ranged from cyber operations to **Air Force Special Operations Command** pilots. The program is open to active duty and Reserve components of the U.S. military, members of the National Guard and Department of Defense civilians.

Indiana National Guard Cell Phone App

By Sgt. Tackora Hand Indiana National Guard Headquarters

INDIANAPOLIS – A new smartphone app efficiently connects Indiana National Guardsmen, their families and anyone else interested in the organization to services and information, ranging from job vacancies and education benefits to unit updates.



Hoosier Guardsmen created the app to streamline communication and information in one easy-to-use app for service members, families and civilians.

"The app is a one-stop tool for all things Indiana National Guard. It has links to an incredible number of resources and notifications of important announcements," said Command Sgt. Maj. Dale Shetler, the state's highest-ranking enlisted Soldier. "If a Soldier has a question, this app will help them get the answer. With the app, I have all of the resources of the National Guard with me at all times."

The app was built for Guard members by Guardsmen. Members of the visual information office spent most of 2020 designing, implementing and testing before releasing the free app to Apple and Google Play.

"The app offers users the ability to review every resource the Indiana National Guard offers and

information," said Sgt. 1st Class Ramon Baty, the leader of the development team and visual information office manager.

"Service members should download the app so they know what services and opportunities they have within the Indiana National Guard," said Baty. "Leaders should download the app to point their Soldiers and Airmen in the right direction."

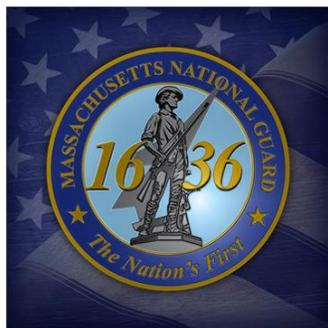
Designing and launching the application isn't the last step for the development team.

"If you download the app and don't find what you're looking for, fill out the feedback form," said Baty. "We will continue to make updates to ensure we provide the best app possible for our service members."

"Life is busy," said Shetler. "We are all looking for a way to make life easier and information more accessible. This app can do that for you. Stay up to date, excel as a Soldier, and download the app today."

Massachusetts National Guard Innovation Team Seeks Original Ideas from All Levels

Story by Sgt. Tricia Andriski, Massachusetts National Guard



The Massachusetts National Guard's greatest strength is its people. Ingenuity and problem solving abilities are what senior leadership is seeking, from members at all

levels, to build an organization capable of meeting the complex challenges of the future. The Patriot Pitch competition held at the start of the fiscal year is one of the most recent events aimed at encouraging meaningful contributions from the force.

Maj. John Macuga, Manager for the Massachusetts National Guard Innovation Team, described how this program is truly leading from the front.

"Building on the Massachusetts National Guard's success at the 2020 *Chief* of the *National Guard Bureau's* Innovation Challenge, with the 104th Fighter Wing's F-15 panel repair idea, MANGIT held a joint, state-level, Shark Tank-style competition, in November, called "Patriot Pitch." MANGIT collaborated with the National Security Innovation Network to create an online submission portal and host the virtual Patriot Pitch event. The effort generated a pipeline for likely Massachusetts National Guard submissions into the 2021 CNGB Challenge," said Macuga. "Soldiers and Airmen, Officers, NCOs, and junior enlisted are all welcome to apply for membership on the innovation team," said CPT Triolo. "There are many ways of getting involved with the innovation team, from serving as a Unit Innovation Advisor, to supporting the core team as an SME, to bringing an idea to a hackathon or Patriot Pitch. We want MANGIT to be a way for anyone to improve the organization."

Brig. Gen. Peter Green, Assistant Adjutant General-Air and Chairperson for MANGIT, has emphasized how important the program is to the National Guard. "The Massachusetts National Guard Patriot Pitch initiative puts Soldiers and Airmen at the forefront of innovation and is designed to encourage and support our Army and Air National Guard personnel to submit their innovation ideas. These field-generated innovations are focused on improving overall mission readiness, efficiencies in current operations and our modernization efforts. They assist in our execution the Adjutant General's "empowering innovation" priority, to drive innovation in all areas of our Massachusetts National Guard," said Green.

Soldiers and Airmen are encouraged to apply and submit ideas that will innovate and improve the National Guard. [Innovation Team \(massnationalguard.org\)](http://massnationalguard.org)

Michigan National Guard boosts partnership with Latvian National Armed Forces

By Bruce Huffman, Michigan National Guard
March 17, 2021

Since January, the Michigan National Guard has collaborated with the University of Michigan and leaders from the Latvian National Armed Forces to find ways to strengthen Latvia's defense and deterrence capabilities. A work group at the Kelly Johnson All Domain Innovation Center (KJJADIC) was formed in January to explore innovative possibilities to improve Latvia's security profile. Guided by the innovation techniques of Jeff DeGraff, a University of Michigan professor, the think tank began analyzing the situation in Latvia and coming up with as many out-of-the-box solutions as they could fit on dry erase boards.

Grouping the team members by personality types and having them list their ideas elicits imaginative and diverse thinking, according to DeGraff. "In a larger mixed group, it's possible for a few individuals to take control and hijack the thought process," he said.

While the groups filled the whiteboards with their ideas, DeGraff floated thought-provoking encouragement around the room. "The solution already exists; we just have to find it," he said. "What if the answer to our problem isn't starting something new, but stopping something old? What is your innovation getting rid of?"

Latvia and Michigan plan to continue innovation collaboration and joint force all-domain training with Latvian joint terminal attack controllers and joint fire observers and expand Latvian combat engineer and artillery capabilities. "We couldn't have done this without the support of the University of Michigan, the Latvian soldiers, and the Latvian Ministry of Defence personnel who participated in this non-traditional innovation project aimed at strengthening Baltic security," said Maj. Gen.

Paul Rogers, adjutant general and director of the Michigan Department of Military and Veterans Affairs. "This pilot project was successful in demonstrating the potential of our new innovation center and the ability of a small team to follow a proven innovation process."

The Michigan National Guard and Latvia have been partners under the National Guard Bureau's State Partnership Program since 1993.

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Information:

Modernization Nation Homepage:
<https://gko.portal.ng.mil/joint/J8/SitePages/Reform.aspx>

National Guard Innovation Portal:
<https://unum.nsin.us/ngb>

Innovation Toolbox:
<https://gko.portal.ng.mil/joint/J8/SitePages/Reform.aspx>

Partners and Associates:

ARNG Innovation:
<https://innovatedefense.net/arng>

National Guard Professional Education Center
Innovation Workshop: *coming soon*

AFWERX: <https://www.afwerx.af.mil/>

Defense Innovation Unit: <https://www.diu.mil/>

National Security Innovation Network:
<https://www.nsin.us/>