

# **MODERNIZATION NATION**

## *The Newsletter for National Guard Reform*

### **Mr. Keith Buchholz – Supporting Reform and Modernization Across the NG**

The National Guard is a leader and proponent of modernizing our nation's security and domestic response capabilities. The Guard has always accomplished more with less through creative solutions, resource sharing and problem-solving strategies implemented at the unit and State level. I am honored to serve as the National Guard Bureau (NGB) J8 aligning these efforts across the National Guard enterprise.



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

Creative solutions to every day and challenging problems start at the unit level. It is our Soldiers and Airmen that first encounter the issues needing a new approach. As a result, NGB modernization is very much a “bottom-up” effort with strong “top-down” support.

General Daniel Hokanson, the Chief of NGB (CNGB), built modernization and reform into his strategic plan for the National Guard. My focus is to assist NGB leaders and State Joint Force Headquarters to implement and enhance CNGB's vision. By empowering leaders with knowledge and the ability to access capabilities, leaders can implement service members' ideas that drive positive change. Then NGB will capture and share these new enhancements across the force.

Communication with leaders and service members is vital to the success of our efforts. I am conducting a monthly senior leader forum called the Innovation Leaders Group. Leaders across several states utilize the forum to take on Strategic challenges facing the NG as well as share best practices and coordinate with

their neighbor states and NGB. My goal is to continue to engage and connect NG Service Members across the 54 to ensure great ideas spread quickly and transformational changes reach the Enterprise.

It is my privilege to support the NG, managing reform and change in this organization. Let me know how I can assist you.

Anyone wishing to join in the conversations should contact Mr. Clay McGuyer or Mr. Chuck Crosby of my support staff. Their contact information is listed at the bottom of this newsletter.

### **Colorado Hoist Rescue Team (CHRT), Colorado National Guard partner to save lives in high country**

**By Colorado National  
Guard Public Affairs | CONG, TAG, 2-135,  
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**CENTENNIAL, Colo.** – The Colorado Hoist Rescue Team and Colorado National Guard partnered to change the way that the military performs hoist rescues.

This innovation shortens the time required for a helicopter to hover above a scene, increasing victims' chances for survival.

The team sourced a bag-based litter system with an anti-rotational brake that is packaged into a cube with a rescuer and lowered to the victim. Once delivered, the rescuer can unfold the bag and rapidly prepare the patient for extraction.

“This innovation saves lives,” State Army Aviation Officer U.S. Army Col. William Gentle said. “The large-scale Army integration of dynamic litter hoist operations, through a combination of equipment fielding and aircrew training, will improve the safety margin of all aircrews conducting hoist operations, and act

as a dramatic force multiplier on the battlefield.”

The CONG has been using this technique and equipment since 2018. The CONG made it to the Semi-Final Round of the National Guard Innovation Competition 2020 with this hoist innovation.



A Colorado Army National Guard UH-60 Black Hawk helicopter from the Army Aviation Support Facility, Buckley Air Force Base, Aurora, Colorado, approaches a member of the Alpine Rescue Team and an injured climber in Rocky Mountain National Park Aug. 30, 2019. The Colorado Hoist Rescue Team provides hoist extraction capability to those in need throughout Colorado by incorporating civilian alpine rescue personnel and military helicopter capabilities. (Used with permission Rocky Mountain National Park / Alpine Rescue Team) (Photo by (Used with permission Rocky Mountain National Park / Alpine Rescue Team))

“The improvement of safety in dynamic litter hoist operations will benefit units throughout all services and components, both in combat and domestic support operations,” CHRT Program Manager, U.S.

Army Chief Warrant Officer 3 Clayton Horney said. "The Colorado National Guard, through the CHRT, is responsible for all hoist extraction rescues in Colorado, flying an average of 27 missions a year and saving 21 lives during 2019 alone.”

Colorado Army National Guard Aviation support to Search and Rescue (SAR) operations has existed since the CONG acquired its aviation capability due to the limited availability of civilian or state hoist-capable aircraft. Hoist operations are required when a slope is so steep that no part of a helicopter can land to retrieve victims at high altitude.

Local jurisdictions initiate SAR requests for CONG aviation assets. Requests are typically routed through the Colorado Search and Rescue Association to the Air Force Rescue Coordination Center, Tyndall Air Force Base, Florida, to the CONG Joint Operations Center in Centennial, Colorado. The Joint Task Force – Centennial Commander then directs the COARNG to support civil authorities to

save lives and reduce suffering by providing SAR services.

The COARNG and the CHRT work with elite civilian rescue organizations, both domestically and internationally, and incorporate the latest SAR equipment and techniques, to include dynamic litter operations, to safely complete search and hoist operations in the high-altitude and high-angle terrain found in Colorado.

For more than 160 years, the men and women of the Colorado National Guard have served our nation in wartime and as the first military responders in support of civil authorities during state emergencies. The CONG’s 5,500 Citizen-Soldiers and Airmen are Always Ready, Always There.

## Tennessee Air National Guard Leads the Way with New Training Technology

### MOTAR (Member, Operations, Training, Analysis, Reporting)

The world is changing. New technologies arise, be it XR (eXtended Reality), streaming video, Artificial Intelligence, or cloud analytics; all of these technologies are changing the way we work and train. The Air Force did not have the capability to implement these



technologies on a large scale. We needed a new way to distribute, track, and analyze our training and operational data. MOTAR grew from that need.

MOTAR is a platform designed to combine learning management, operational software, and XR experiences for use in the Air Force enterprise.

## MODERNIZATION NATION

MOTAR is a secure data infrastructure for frictionless user experience across applications, XR tools, and legacy training systems. The system takes a student-centered learning approach, reducing instructor burden while improving analytics.



As we move into new training environments and modernize the way we deal with legacy training systems, MOTAR will allow the USAF to seamlessly deliver training and operational content on the same platform and standardize the user experience for the airmen.

MOTAR was chosen as the ANG Spark Tank winner for 2018 and was chosen by Secretary Wilson as her choice on the main stage at AFA. Through the AFWERX mixed reality challenge, and the Small Business Innovative Research (SBIR) process, the platform was built out and put to the test with Maintenance Next (MXN) at Shepherd AFB. MOTAR was also chosen as the winner for the AFWERX Recruiting Re-imagined winner and the Combat-Ready Aviators challenge.

MOTAR has also been chosen by AFLCMC (Air Force Life Cycle Management Center) to be the backbone of the new Lightweight Sims Ecosystem (LSE) to deliver simulation content to the new generation of VR (Virtual Reality) and MR (Mixed Reality) simulator systems throughout the USAF. AFLCMC will be rolling out that capability over the next year, improving the connectedness, and efficacy of lightweight simulators in the ecosystem.

## Barnestormers presented with Massachusetts 2020 Innovator of the Year Award, Air Force Achievement Medal



*Photo by 2nd Lt. Amelia Leonard  
104th Fighter Wing/Public Affairs*

**WESTFIELD, Mass.** - Col. Tom Bladen, 104th Fighter Wing commander, and Brig. Gen. John Driscoll, commander of the Massachusetts Army National Guard, stand alongside Master Sgt. Bob Oleksak, 104th Maintenance Group fabrication element supervisor, and Leo Burbee, 104MXG structural maintenance supervisor, and their families following a small ceremony where they were presented with the 2020 Massachusetts Air National Guard Co-Innovator of the Year Awards and Air Force Achievement Medals Nov. 14, 2020, at Barnes Air National Guard Base, Massachusetts.

MSgt Oleksak and MSgt Burbee finished in the final four of the National Guard Innovation Competition 2020, with their technique to replace F15 maintenance panels quicker and cheaper. The CNGB elected to fund their idea, and now the appropriate equipment is on order for every F15 wing in the National Guard.

## The AFVentures SBIR Open Topic

Does your command have a problem that could be solved with an innovative idea? Is this problem an Air Force problem, or does it have a potential Air Force tie? If so, your unit may be able to partner with a startup or a small business on a Small Business Innovation Research (SBIR) grant, to enable the commercial partner to experiment or develop a solution to your command's problem.



Printing to protect: 3D printed face shields help joint fight against COVID-19

Air Force, Army, and Marine Corps service members on Oahu joined forces to help health care professionals at Tripler Army Medical Center by using 3D printers to make face shields.

AFWERX is a great Air Force organization, dedicated to helping to rapidly solve Air Force problems. One of their major efforts is the Air Force Ventures Program. This program links commercial solutions to military problems. A unique way they go about business is the AF Ventures Open Topic, which is held three times a year. With the Open Topic, AF Ventures leverages a portion of the SBIR budget to enable the Air Force to develop and adopt commercially viable innovations while providing a competitive edge to the U.S. entrepreneur and technology ecosystem. You bring the problem; AFVentures helps to find a solution.

A surprising number of problems can be applied across the joint force. So, even if you are an ARNG Soldier, if your problem can be applied to Air National Guard units as well, you might be able to move forward with AFWERX. We encourage you to contact one of you Air National Guard units in state to gain their partnership. For more on this organization, please go here:

<https://www.afwerx.af.mil/sbir-for-airmen.html>

### NGB POCs and Links:

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### Information:

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

National Guard Innovation Portal:  
<https://innovatedefense.net/ngb>

### Partners and Associates:

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

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/>