

Photo by Spc. Danielle Carver. Illustration by Rick Paape, Jr.



Army looks to do more with what it has

By Jen Judson

The U.S. Army must figure out ways to keep its aging aircraft flying, its vehicles driving and its networks streaming, all while addressing emerging capabilities fielded by creative, near-peer enemies who have invested heavily in defense.

Budget unpredictability has deeply stressed the Army's ability to modernize its equipment and processes — the service has taken roughly a 33 percent cut since the start of the decade.

As a result, the Army is in the process of taking stock of its current capability and in many cases has borrowed a page from the Greatest Generation's resourcefulness, coming up with innovative

ways to stay ahead of a long list of threats around the world, using what it already has resident within the branch.

"As your budget goes down, it forces creativity and innovation," Army Secretary Eric Fanning told Defense News in an interview shortly before the Association of the United States Army's annual convention. "There are lots of examples where we are having to think creatively about how we might tweak what we have, or integrate differently or combine differently capabilities that we have."

The Army is doing just that when it comes to addressing some of its most pressing capability gaps. For instance, observing Rus-

sia's incursion into Ukraine has shown the U.S. Army it isn't where it wants to be in: electronic warfare, defense against cruise missiles and unmanned aircraft systems as well as cyber protection, long-range precision Fires, lethality in combat vehicles, active protection systems and mobile protected fire power.

The Joint Light Tactical Vehicle (JLTV) is currently under consideration to also serve as a Light Reconnaissance Vehicle (LRV), something the Army has said it needs in the near-term as part of the combat vehicle modernization strategy unveiled at AUSA one year ago.

"Because we have faced budget pressures, ideally you would go out and you would buy or build a new reconnaissance vehicle," Lt. Gen. Michael Williamson, the Army acquisition chief's military deputy, said in an interview with Defense News at the Pentagon in late September. "But what we were able to do through the work of the acquisition community, the work of the requirements community and the operators is come to a solution that takes one of the variants of the JLTV, add both weapons and reconnaissance, intelligence and those types of things, and give us a solution that will allow us to add capability to our forces."

Army acquisition chief Katrina McFarland noted in a separate interview that the JLTV as the LRV is not yet set in stone, but was under serious consideration.

The Army is also working to add a 30 mm cannon onto Stryker armored fighting vehicles for the 2nd Cavalry Regiment in Europe because the formation is currently deemed to be outgunned by its Russian counterparts.

On the aviation side, the Army made major changes to its fleet in the controversial Aviation Restructure Initiative (ARI) that moved to retire the OH-58 Kiowa Warrior armed scout helicopter and instead of buying something new — after failing to do so three times — opted to use AH-64 Apache attack helicopters teamed with Shadow and Gray Eagle aerial drones to fill the armed reconnaissance mission.

Also part of ARI, the service took LUH-72A Lakota light utility helicopters used in non-combat missions and, instead of competing and buying a brand new training helicopter when it decided to retire its TH-67 trainers, opted to use the Lakota for its basic rotary-wing training.

The service has also taken components across its inventory to create entirely new capabilities like the Integrated Fire Protection Capability Inc. 2-I (IFPC) to counter unmanned aerial systems and cruise missiles.

Originally developed to counter rockets, artillery and mortar (RAM) threats, the Army changed its focus to first develop a counter-UAS and counter-cruise-missiles capability due to threats cropping up in various conflicts like Russia in Ukraine and the Islamic State in Iraq and Syria.

The Army took its Sentinel radar, AIM 9x Sidewinder missiles and developed a multi-mission launcher internally, using current technology to build the IFPC system.

In addressing the counter-UAS threat, Lt. Gen. H.R. McMaster, Army Capabilities Integration Center director, said the Army took existing capabilities down to Fort Sill, Okla. last year, and tried things out. For example, the Army combined a software-modified radar with a vehicle from its inventory, giving the resulting mash-up technology to units for experimentation.

The Army also tested a counter-UAS prototype at its annual Network Integration Evaluation in May this year. The C-UAS mobile integrated capability combines a vehicle already used by the

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service's fire-support teams, the Q-50 Counterfire Radar System, the Lightweight Laser Designator Rangefinder (LLDR) and Northrop Grumman's Venom mast, which transmits Q-50 radar information and supports the LLDR.

McMaster noted the Army has identified that its network is vulnerable, along with all communications systems, as threats in the cyber and electromagnetic domain are on the rise. "So we have to use existing capabilities differently," McMaster said, because the Army can't operate like it did in Iraq and Afghanistan, where it could broadcast on high-powered frequencies continuously.

"That's a bad idea," he said.

McFarland said there are several domains where the Army is very active in re-using capabilities already in the force. "Take a look at sensors as a simple one," she said. "Sensors do not care what they are tracking. ... So the data can be utilized by more than one asset in the battle space. So when we think of sensors neutrally and we think of them in terms of function, I should be able to change my architecture of the data and where it is distributed to cover more than one user of that data."

The result is a reduction in cost and burden to the Army, McFarland said. "It makes our Army more not only situationally aware, but tactically aware. ... If you just mentally expand your look, I can put that into missiles, I can put that into command or control, I can put that into sensors across the spectrum of the field."

A couple of organizations have been set up in recent years to help the Army look at its current capabilities with an eye on new uses.

The Strategic Capabilities Office, for example, is looking into new applications for the aging Army Tactical Missile Systems. The Rapid Capabilities Office, an initiative triggered by the new Army secretary in August, also will study repurposing existing equipment.

Jen Judson is the Defense News land warfare reporter. Judson has covered defense for over five years. Prior to joining Defense News, she was a defense reporter at Politico Pro and before that she covered Army aviation and missile defense at Inside Defense.com.