# Executive Viewpoint A conversation with COL. JENNIFER KROLIKOWSKI



COL. JENNIFER KROLIKOWSKI Senior Materiel Leader, Space C2, U.S. Space Force

An acquisition leader discusses why Space Force embraces datacentric apps, agile development and industry partnerships

## What is Space Force's mission, and why is creating data-centric applications essential to its success?

At Space Force, we're responsible for providing capabilities to our warfighters across the board. We are here to help support the warfighter but also to make sure we can protect and defend the assets we have in space so we can continue to provide capabilities like GPS to the warfighter and the commercial world.

We are striving toward more datadriven decision-making in the space domain, which is a lot more congested and contested than it ever has been. Having knowledge of what's going on in the space domain, being able to figure out what's normal and what's not normal, knowing how to respond, and taking action require a lot of data. We pull together information from our different sensors — both ground-based and space-based — from our commercial partners and our coalition partners and then do the analysis so that we can make data-driven decisions very, very quickly. A lot of our applications help automate those processes so we can get through them much faster than we ever could with manual processes.

# Why did Space Force partner with VMware on an agile platform for app development?

A traditional waterfall approach to acquisition had been around for a number of years. A lot of money was spent, but it didn't necessarily deliver a whole lot. When I took over a couple of years ago, we formed the Kobayashi Maru Program to modernize our apps and moved



# **We have the mindset of delivering at the speed of relevance,** and we're taking a lot of steps to better educate the workforce to do that.

toward agile development. I also wanted to bring in partners who are able to help us accelerate so that we are delivering capability at the speed of relevance.

In the past, agencies would typically hire one company to do all the applications, the platform and the infrastructure. I wanted to break that apart to get the best of breed for each of those layers to help us accelerate and be on the cutting edge of the technology in that layer.

We go after the best companies or best partnerships for each of the particular layers. Instead of having one stovepipe stack from one company, now we're able to open up our system and have it containerized so that if something in the ecosystem is not working, we can pop it out and put something else in to better optimize what we're doing. That allows us to work with different companies and diverse skill sets while we're all marching toward that common goal of delivering capability to our space warfighters, the Joint community and coalition partners.

VMware is one of those partners. The company has helped augment our team to provide the platform layer. In our teaming relationship, the government still owns our technology baseline, but now we can have the best developers create applications on that platform - it's plug and play.

#### How is that partnership helping Space Force achieve its mission goals?

The platform layer is a fundamental element of the architecture. Without a

platform, applications don't run. Think of it like your cell phone. The phone itself is the architecture, and the operating system is the platform on which all the applications run. The platform that VMware provides us is one of the key elements of our system and a key enabler for delivering domain awareness and other mission threads.

The work VMware has done to help us connect with our coalition partners has been incredible as well. We've gotten to the point now where we're able to connect directly with the space operations centers in the United Kingdom, Canada and Australia. A lot of that was made possible by the technical support we received from VMware.

## How does Space Force plan to build on its success and continue making progress on modern app development?

In Space Force and the Department of the Air Force, it's been fantastic to see this digital revolution we're experiencing right now and how we're moving toward agile development, especially in terms of software. We have the mindset of delivering at the speed of relevance, and we're taking a lot of steps to better educate the workforce to do that. We have a program called Supra Coders for folks who have an interest in coding and software. After they go through the program, they do internships at various organizations, and Kobayashi Maru is one of them.

We're really trying to raise the level of

competency and expertise we have so that we can keep that edge, move forward and expand the mindset across all of Space Force. It's very cool to see people starting to embrace agile concepts and recognize that it is viable and necessary. Having flexibility and automation in the system has been essential to responding to any threats or any changes in priorities.

In Kobayashi Maru, we just delivered our eighth application to our customers. That's eight capabilities we were able to develop and deliver in less than two years. It's been amazing to see how things are progressing and witness the journey of where we were at the beginning to where we are now. We have smiles on the operators' faces. We have a workforce that's excited and energized. And I really appreciate the industry partners who are working with us and evolving with us as we go on this journey. I value what we have been building with VMware as well as the other partnerships we have for the other elements of the stack.

We still have our challenges. I would love to see us move even faster. That doesn't always work with the processes and bureaucracy that are in place, but we're working on getting them evaluated and updated so we can see where we need to optimize in order to deliver at the speed of relevance.

The big focus is delivery. If it's not delivered and if warfighters are not using it, it didn't make any sense to do the work. Having a user-centric focus and delivery mindset has been crucial to what we've been able to accomplish.