EXPERT DIALOGUE

Assessing the State of Military Communications

New Possibilities, New Challenges, and New Competitors

Introduction

Communications technology is constantly evolving. New developments, such as artificial intelligence, cyber capabilities, 5G networks, and the Internet of things, are rewriting the landscape of military communications. The speed with which the United States can adapt to and leverage emerging technologies might determine how we compete with potential adversaries. This qualitative research campaign attempts to reveal what we can expect from the future of military communications.

Research Methodology

The Government Business Council (GBC), in partnership with Viasat, launched a research survey[1] in October, 2020 on the state of military communications. To expand upon the survey data, GBC conducted interviews from December 2020 to January 2021 with experts from the military and federal government who provided insight on the outlook of and challenges to advancements in military communications technology. The list of featured interviewees is as follows:

SPEAKERS

Brigadier General David Abba
Director of the
Air Force F-35 Integration Office
United States Air Force

Fred Moorefield
Deputy Chief Information Officer;
Command, Control, Communications
and Computers and Information
Infrastructure Capabilities
Department of Defense

Dr. Daniel Corbin
Technical Director; Command, Control,
Communications, and Computers
division; Office of the Deputy
Command for Information
United States Marine Corps

Dr. Steve Pierce
Chief Technology Officer
U.S. Army Space and Missile
Defense Command
United States Army (Ret.)

Major General Peter Gallagher
Director of Network Cross-Functional Team
Army Futures Command
United States Army

Mike Monteleone
Director of Space and
Terrestrial Communications
DEVCOM C5ISR Center

The world's leading military powers are placing increased importance on advancements in technologies and communications, such as artificial intelligence, cyber capabilities, 5G networks, and the Internet of things. Could you describe how one or more of these is changing the future landscape of military conflict?

FRED MOOREFIELD

The 2018 National Defense Strategy sharply focused the Department [of Defense] on long-term strategic competition and the pursuit of seamless integration. Concurrent advances in artificial intelligence (AI), cognitive aiding, man-machine interface, and fifth generation (5G) mobile networks demonstrate not only the potential to expand integration along these lines, but also to improve speed, quality of decision-making, and resiliency. Innovation through careful design and implementation of enterprise command, control, and communications solutions capable of rapidly integrating new technologies will provide operational advantage in both competition and conflict by capitalizing on critical information to make timely, data-driven decisions inside adversaries' decision cycles. For example, 5G technology offers the potential for vastly improved data rates, lower latency enabling a faster battle rhythm, and dynamic spectrum coexistence to help mitigate today's electromagnetic spectrum congestion. AI and cognitive aiding offer the potential to shift warfighter attention away from data-centric tasks to higher-level reasoning and informed decision making. AI will also enhance our ability to predict, identify, and respond more effectively to cyber threats as well as expand opportunities to generate lethal and non-lethal effects in and through cyberspace.

DR. STEVE PIERCE

The Army has focused on something called multi-domain operations. In the future we can't afford to fight wars looking at land, then sea, then air, then space, and then cyber. We have to fight those all in parallel. We have to think faster, we have to communicate faster, and then most importantly we have to make decisions faster than the adversary, especially in the future. Whoever can break the code in quantum communications is going to have the advantage in the future.

MAJOR GENERAL PETER GALLAGHER

As algorithms mature, we're going to leverage artificial intelligence and machine learning as much as we can. We're going to try to accelerate the speed of decision making and make our networks much more self-healing. We also want to leverage emerging technology to accelerate integration of sensors and effects, whether it's kinetic or non-kinetic. That's everything from our large command posts all the way down to the battlefield Internet of things where you have soldiers, sensors, and sometimes robotic platforms that are capturing data and transporting that data over networks. We need to ensure that the data is secure and can be trusted by the recipient so decisions can be made with accuracy and timeliness.

> **There is a monumental shift in the way that we share information. I think that the military element of this, maybe for the first time in recent history, is going to lag the commercial application space of this. It's very difficult to project, with any degree of certainty, how that's going to play out in the military space."**
>
> Brigadier General David Abba

US Northcom Commander - Gen. Terrence J. O'Shaughnessy - said "We cannot defend the nation against 21st century threats with 20th century technology." What 21st century technologies do you think are most critical to ensuring the US military has instant access to information that allows for more informed decisions?

BRIGADIER GENERAL DAVID ABBA

The ability to sense and share information and drive latency out of communications is huge. There should be a high degree of automation and aggregation to things that we have routinely and historically applied lots of manpower to. If this is going to be a competition over the ability to make better and faster decisions, you need to have higher decision quality information.

FRED MOOREFIELD

Future conflicts could well be decided by information advantage, success going to the side that transforms vast amounts of data from distributed sensors and weapons systems across multiple domains into actionable information for better, faster decision making and precision effects. Certainly AI is a future game-changer in its ability to reduce inefficiencies of manual, data-centric tasks to improve the speed and accuracy of military decision-making processes, however, AI is underpinned by other technologies. The algorithms used to inform decisions are dependent on the Department of Defense's (DoD) data and information being organized, secure, and accessible in a common cloud networking environment. The [DoD] must ensure the cloud and future networking fabric are integrated elements of a common foundation to ensure we have the computational infrastructure required to enable AI and mission-critical activities throughout the network, especially at the tactical edge. Building this common foundation has many benefits, but it also presents new risks. The consequences of a cyber breach may be larger and cause more profound effects throughout the system, so we must remain focused on building secure, defendable, and resilient network infrastructure.

MAJOR GENERAL PETER GALLAGHER

I think the most critical thing is multi-path transport. Our ability to have what we call a P.A.C.E. (Primary, Alternate, Contingency, and Emergency Communications). We want to be able to leverage all [emerging technologies] in a way that's going to give us the best connectivity. The data needs to flow over an assured network. Whether it's millimeter wave, mesh networking capabilities, or high-capacity low-latency satellites, we want to make sure the technology allows us to stay connected and get the message through without significantly highlighting our signature.

> **❝ We want to have the most robust and resilient network, but what's key is for that data to be able to transit that network and for the right data to get to the right places."**
>
> Mike Monteleone

MIKE MONTELEONE

[Network] intelligence is where I see us applying more and more of that 21st [century] technology. Leveraging multipath and diverse channels brings resiliency, but it also has to come with speed and relevance at the right time. Adding that network intelligence into how we fight is going to be key to integration, because the speed of which we have to operate must be machine speed. It can't be a human switching a dial from A to B. It has to be done rapidly and automatically.

In a GBC/Viasat survey from October this year, 22% of DoD and military respondents were of the belief that U.S. defense communications technology is falling behind that of U.S. adversaries, and 6% believe the U.S. is far behind. What do you think might be attributing to the gap respondents report between the military communications technology of the United States and its adversaries?

BRIGADIER GENERAL DAVID ABBA

[Our adversaries] have a distinct second-mover advantage in this. They're able to watch the United States, how we prefer to fight across multiple decades in multiple different theaters. They're able to design a system without the baggage of having a really mature warfighting architecture and system.

FRED MOOREFIELD

It is no secret that commercial innovations are less encumbered by bureaucracy than those developed by the government. This freedom of maneuver allows industry the ability to pivot as required to meet the demands of the customer. What [civilians] may not see are the tremendous efforts being made across the [DoD] to close any gaps and provide our warfighters' with a decisive information advantage. The [DoD] has recently updated its acquisition regulations to incorporate a more adaptive and agile acquisition framework, which we are employing and working with industry to explore and deliver the most cutting-edge capabilities.

DR. DANIEL CORBIN

We have the best universities in the world, and probably the best technologists in the world supporting us in providing the capabilities that we need. However, there are some countries that have a knack for stealing our intellectual property. That gives them an advantage.

DR. STEVE PIERCE

I don't know if I would agree that we're behind. I think that the average [American] soldier out there has much better communication means than you find with potential adversaries. In terms of leverage and capabilities that are out there, the military is always behind the commercial world, but I don't think that's a problem because the DoD has to make sure that our communications are secured.

MAJOR GENERAL PETER GALLAGHER

I won't say we're behind all of our adversaries as much as we're not as far along as we possibly could have been if we had a predictable, adequate, timely, and sustainable budget year after year. Because of sequestration and budget control, the Army had to make some tough choices. Since then, however, I think we've had the support of members of Congress and an alignment of resources. We're going after an approach to make our network much more expeditionary and intuitive. We're looking at adding resilience, capacity, and really converging legacy systems into more modern systems. We want to make our network and our systems much more automated and protected so we can dominate in a multi-domain environment. We're not going to get there overnight. In the world of IT and networking you're never really done because technology matures so quickly. We want to make sure that our approach to modernizing our military aligns with emerging technology and emerging threats so that we are postured to integrate new technology and remain compatible. We have to modernize based on the highest priorities that we are given from the Army senior leaders, and we have to do so with backwards compatibility in mind. We're working very closely with our science and technology teammates and with the operational force so we can keep that feedback loop open. Getting feedback from our formations out there is really key to making sure that the solutions we provide them are actually going to meet their operational needs.

What do you think the US must do to stay ahead of - or catch up to - the competition?

FRED MOOREFIELD

Our networks have to be simple enough to install, operate, and maintain under all operational conditions and be able to work in contested environments, be it spectrally-denied or space-based. We have to provide the warfighter multiple options to effectively prosecute the mission.

> " **We won't always be the first one to the field with something new. We may be forced to respond to something else that the competitors are doing."**
>
> Brigadier General David Abba

Are current US military communications capabilities prepared to defend against advancements in cyber and electronic warfare?

FRED MOOREFIELD

Of course; we want to provide our warfighters every advantage possible. The [DoD] is continuously striving to improve our capabilities to counter an ever-evolving threat. We are working to reduce the complexity of our networks, thus eliminating potential points of entry to which an enemy can exploit. We don't want to maintain separate servers and capabilities for every domain, so network consolidation is a key departmental focus and of course cyber security is incorporated into everything we are doing. We want to employ cloud-based capabilities to make the data available to warfighters at all levels to speed decision cycles and are now building electromagnetic spectrum management tools to provide our forces with a spectral situational awareness never before available, affording Commanders the ability to see the spectral environment they must operate in.

According to a GBC/Viasat survey the

#1 improvement needed in defense communications technology

is **maintaining secure connectivity** in the face of cyber attacks and denial of service attempts by adversaries

Command, control, communications, computers, cyber, intelligence, surveillance, and reconnaissance - or C5ISR- has been described as the "nervous system" of the military. Can you illustrate for our readers what the components of that nervous system looks like when it's performing at peak efficiency? What happens when there is a breakdown?

FRED MOOREFIELD

[C5ISR] technologies are the foundation of executing military operations. The [C5ISR] components must work together to effectively enable successful operations. These [C5ISR] networks collect massive amounts of data from distributed sensors and weapons systems across multiple domains and other sources worldwide. This data must be quickly fused and processed into usable information, then rapidly shared securely across the military force. When we are able to successfully integrate all the components of [C5ISR] across all domains through integrated and synchronized capability development, we ensure a competitive advantage over our adversaries. The [DoD's] effort to accomplish this is referred to as joint-all-domain command and control or JADC2. JADC2 is the "art and science" of decision-making to translate decisions rapidly into action, leveraging capabilities across all domains. The successful execution of JADC2 will require new concepts, science and technology, experimentation, and sustained investment over many years.

> " **When we are able to successfully integrate all the components of [C5ISR] across all domains through integrated and synchronized capability development, we ensure a competitive advantage over our adversaries."**
>
> Fred Moorefield

DR. DANIEL CORBIN

It's really about moving things around, just like in economics. It's about the velocity of products, the velocity of money. If those things are moving fast, the economy's good. It's the same thing with decision-making. What we're talking about here is the ability to make decisions quickly. To be able to do that, all these things have to be working together seamlessly. If a nervous system isn't sensing right, then it becomes sub-optimal. When you start to sub-optimize in any one area, the whole thing becomes sub-optimized. We are spending a great deal of energy and resources ensuring that the warfighters get the best information available to them, in the context that they're operating.

In a GBC/Viasat survey, nearly all respondents have experienced at least one communications blackout, with

97% of respondents claiming a complete loss in connectivity at some point while working in the military

MAJOR GENERAL PETER GALLAGHER

We see that nervous system as a network that will enable us to fight and win in a contested environment against a peer adversary … Line of effort number one for us, our network transport, is a unified network end-to-end that allows us to have that multi-path assured connectivity. There's a breakdown today because we have single points of failure. We're trying to deliver a network that gives us multiple options to get the message through … With the right optimization of compute, storage, data, and applications, we can create an environment that helps us accelerate the speed of decision making. The ability to sense, understand, decide, and act at a speed that allows us to move quickly … We also have to ensure that we're interoperable with our joint partners and accessible to our coalition partners. Whether it's a bilateral relationship with one partner or a multilateral arrangement, we have to ensure that our network will allow us to fight in that coalition environment.

How important are satellite communications and wireless networking systems to creating a force multiplier advantage for the US military?

FRED MOOREFIELD

Satellite Communications (SATCOM), both military and commercial, are critical across our many warfighting missions. SATCOM has enabled the United States and its allies to maintain an advantage over our adversaries by giving us the global reach and rapid agility to command and control our forces. The US ability to deliver global SATCOM is unprecedented, and our joint warfighters rely on this capability at all levels and across the range of military operations. … Modernized SATCOM combined with the promising future of 5G wireless capability becomes an even greater force multiplier when you mix in AI and harness the power of cloud computing. We are putting all of this together in support of the [DoD's] JADC2.

MAJOR GENERAL PETER GALLAGHER

Line of effort number one: all things transport. For the Army to move with speed and to do what it needs to do, we need to have terrestrial line-of-sight systems. We have to be able to operate with satellite systems that allow us to leverage low-earth orbit, mid-earth orbit, and geosynchronous orbit constellations. That's our number one priority. All of our [science and technology] efforts and all of our research and development has really been aimed at ensuring that assured transport. Wireless and space-based assets are absolutely key and essential to that.

DR. STEVE PIERCE

We are not a force like many other forces out there. We are much much more of a global type of force, and we find ourselves in areas where the infrastructure is not there. We often find ourselves in areas where there is no communication structure. In cases like that, we are very much depending upon satellite communication or high altitude type communications.

> **" There are clear advantages in opportunities when [satellite communications] are available, but you don't want to be so dependent on them that you fail if they're not there."**
>
> Dr. Daniel Corbin

Funding for communications, sensors, and electronics is projected to increase over the next two years. How will this impact the future of military communications?

FRED MOOREFIELD

Increased DoD investment in an agile, resilient, transparent, seamless, and secure IT infrastructure and services is essential if we are to maintain information superiority during conflict, particularly in the face of a growing cybersecurity threat. Close collaboration among DoD, its industry partners, and non-DoD mission partners will help DoD decision-makers understand how to focus IT spending to field solutions that meet warfighter needs.

> **" Broadly speaking, all elements of the JADC2 umbrella construct that support sensor-to-shooter data flow are candidates for sustained or increased Department funding."**
>
> Fred Moorefield

MAJOR GENERAL PETER GALLAGHER

Every year we're making the best recommendations we can to get the best value network possible to army senior leaders … I think we have the support of Congress based on our transparency and our outreach. We are constantly trying to balance the readiness of our fight-tonight capability with modernizing for that future fight. We're really trying to field equipment that's going to allow our soldiers to be modernized and optimized for that future fight based on balancing mission requirements and whatever funding that we have in the year of execution.

> **" Predictable, adequate, timely, and sustainable funding are key to us delivering on our strategy."**
>
> Major General Peter Gallagher

What are some of the top challenges the Pentagon faces with developing its military communications technology? Could you please expand upon the current acquisition challenges of military communications technology, if you believe there are any?

FRED MOOREFIELD

The top challenges the Pentagon faces with developing its military communications technology is overcoming its arduous acquisition processes. In the past, the DoD's bureaucracy and risk-adverse nature struggled to accommodate and integrate the rapid pace of technology innovation coming from the private sector. This caused the DoD to rely on outdated technologies and play catch up to its adversaries. Adversaries in the battlespace have worked to gain expertise in information warfare and increase their ability to exploit DoD [C5ISR] networks. The [DoD] must continuously strive to improve its technologies to counter these ever-evolving threats. Recently, the [DoD] has updated its acquisition regulations to incorporate a more adaptive and agile acquisition framework, which we are employing and working with industry to explore and deliver the most cutting-edge technologies.

> **I think we've been able to move with pretty good speed and precision over the last couple years as we've tried to prototype and rapidly field technology … We're getting better but there's still more work to be done in that space."**
>
> Major General Peter Gallagher

DR. STEVE PIERCE

I think the Pentagon is well poised to ensure that we have the communications that we need, currently, in the near future, and in the far future. I think in many cases you have to look at how technology is developing. The primary thing is to ensure that we have safe and secure communications. It's an easy thing to communicate, but it's not so easy to ensure that it's a secure network. I think the challenge is finding the balance between how much security you need versus how reliable and accessible we want in our communications systems.

> **I think in some cases, our acquisition process makes it bureaucratically complex. We have decision-makers who may be risk-averse and it's just easier to let the bureaucracy slow it down until they feel more comfortable."**
>
> Dr. Daniel Corbin

BRIGADIER GENERAL DAVID ABBA

Just speaking as an observer here, the government doesn't have the ability to declare what the outcomes of these technological innovations and competition timelines are going to look like. I think in a lot of ways, it's unrealistic to expect that the process, as it's currently designed and implemented, is going to be able to be successful in these outcomes, given the pace of change of technology.

Survey respondents say the

TOP 3 causes of defense communications technology deficiencies in their agencies are

1. limited funding
2. incompatibilities with legacy architectures
3. cultural complacency

67% of respondents agree that there is room for the military to improve its adoption of communications technology at the speed of relevance.

What role (if any) does the private sector or academia play in supporting military communications development?

BRIGADIER GENERAL DAVID ABBA

Innovation is happening at a pace much faster than what's happening with government driven innovation, just because of the nature of the competitive space as it exists in the private sector right now. Once upon a time, the government was the source of most of that innovation and it's simply not anymore. Increasingly, the military is going to have to figure out how to adapt and adopt technologies that are developed within the private sector as well as academia.

FRED MOOREFIELD

The private sector has to innovate quickly to meet the demands of their customers and to keep up with their competition. This rapid advancement in communications technology and capability is crossing over with the military more now than at any time in the past. The DoD has always had strong ties with academia as a part of our research and development capabilities, and this is also converging with the private sector as the demand for communications technology solutions grows.

> **Research and development with DoD, private sector, and academia is driving the efforts to put the most innovative capabilities into the hands of US citizens and warfighters alike."**
>
> Fred Moorefield

DR. STEVE PIERCE

One of things that I believe the Army has done very well has been shortening the distance between the military, the army, industry, and academia … because things are happening a lot faster today than they were 20 years ago. We're seeing new technologies come out almost every day. The military has to be in the forefront of all that so that we can assess what we need to get into the hands of our warfighters.

> **It's important to state that we view our industry partners as partners. It's not just a platitude. We really view them as a very important relationship."**
>
> Mike Monteleone

MIKE MONTELEONE

[The relationship between the military, the private sector, and academia] is absolutely key. We've been working with companies as their commercial offerings continue to emerge. We've been in partnerships with many of those companies to evaluate what it means in the military environment. There's a lot of incredible technologies that have come about commercially from just the worldwide deployment of things like 5G. Those technologies are now available on a wider basis and at a lower price point. [These technologies] allow us to stay at pace with the commercial side and rapidly incorporate them into the military environment.

In a GBC/Viasat survey,

63% of respondents think increasing commercially developed solutions would speed up the current pace of defense acquisitions.

> **We meet with industry to try to shape an influence where we want them to invest their research and development dollars. We want them to be threat informed and provide solutions with emerging technology."**
>
> Major General Peter Gallagher

How has Covid-19 impacted your agency's ability to invest in military communications technology?

BRIGADIER GENERAL DAVID ABBA

As tragic as COVID has been, it has afforded an opportunity for us to rethink how we work, where we work and how we connect folks … With very small investments, we were able to really quickly reimagine what our work structures look like. To a surprising degree, not only did we not miss a beat, but in some ways my office has been more effective than we were before. I don't think we're alone in that conclusion.

FRED MOOREFIELD

[COVID-19] has, in part, accelerated the investment in DoD communications technology. The large scale of the DoD presented challenges to deploy and integrate a remote work environment. We have undertaken this with an urgency that we apply to any warfighting campaign … COVID-19 has pushed the [DoD] to accelerate its adoption of collaborative tools that arguably would not have been implemented for another year or two. In cases where digital modernization required travel for on-site installs, we have incurred delays. We have consistently followed federal, state and country COVID-19 guidelines for our installation teams as our priority is always the safety and health of our workforce, both civilian and military personnel.

> **As tragic as COVID has been, it has afforded an opportunity for us to rethink how we work, where we work and how we connect folks"**
>
> Brigadier General David Abba

DR. STEVE PIERCE

I think [COVID-19] forced us to [reexamine] how robust we need to make sure our communication systems are … In the future, we have to understand that we will probably be in situations where satellites will be degraded, in some cases possibly destroyed, and we need to know how to continue to communicate and fight through the loss communications that are dependent upon satellites.

MAJOR GENERAL PETER GALLAGHER

I don't think it's had a huge effect on technology investment necessarily. There have been some delays, but I don't think it's had a significant negative impact … Overall, I think from the enterprise down to the lowest tactical echelon, there's been a united effort to mitigate the impacts of COVID and provide responsive solutions to those soldiers that were actually in that fight.

> **I think if there's anything I learned from 2020, it's be prepared to manage and cope with uncertainty."**
>
> Brigadier General David Abba

Do you have any final thoughts on what the Defense One readership can expect to see in 2021 and beyond? Any opinions on how the new administration will pursue these aims?

> **I think what's going to drive a lot of what happens in DoD in 2021 is the stand up of Space Command and Space Force."**
>
> Dr. Steve Pierce

FRED MOOREFIELD

You can expect to see the [DoD's] continued focus on transforming the [C5ISR] network to better leverage cloud technologies and artificial intelligence. I would think and hope the incoming administration will continue to support and build on the progress made in improving the agility of the acquisition process enabling the [DoD] to accommodate the insertion of cutting-edge technologies from the private sector.

Survey respondents say the

TOP 3 next-gen technologies their agency must leverage to advance defense communications capabilities above that of adversaries are

1. advanced satellite communications
2. advanced analytics
3. 5G technology

MAJOR GENERAL PETER GALLAGHER

The work being done in the systems integration lab and the work being done by the [Cross-Functional Teams] with our acquisition partners is all coming to a head in a joint-focused project convergence exercise, which is going to be a major capstone event that's not only important for the network but important for all of the army's modernization priorities. Every one of the cross-functional teams will be out there in force. In 2022, the goal is to tie in our coalition teammates. It's a campaign of learning and a constant evolution to really get after the modernization goals of the Army, and to ensure that as we are on a path to modernizing our army for the fight in 2028, or the fight in 2035 against an emerging adversary. In a world where we can expect global competition, we want to make sure that we can deter, and if necessary, defeat any potential future adversary. Our project convergence campaign of learning is a key element in that.

MIKE MONTELEONE

I'm pretty excited. 2021 is a big year for us. There's a lot of output in our technology development both for electronic warfare and cyber network resiliency. I think you're going to see more integrated demonstrations, evaluations, and exercises with our joint partners to focus on JADC2. … We have a science and technology project called Rainmaker and what that is doing is setting the underpinnings of a foundational data fabric. Instead of everybody bringing different systems to the table and then figuring how to integrate them at the data level, this helps knock down the need for data transformations and translations of data. It allows everybody to build essentially an application programming interface type connection into that environment. We think what that's going to do is allow systems to more rapidly share data and incorporate newer technologies quicker. This also means the ability to leverage AI on those data sources.

INDUSTRY PERSPECTIVE

Viasat believes in an enterprise approach that brings together diverse networks into a secure, resilient connectivity framework that can dynamically address mission imperatives and threats globally. Strategic initiatives like the US DoD's Joint All-Domain Command and Control, the Air Force's Advanced Battle Management System, the Army's Project Convergence, and the Navy's Project Overmatch are all driving towards modernizing the future of military communications - drastically shortening sensor-to-shooter timelines by providing seamless multi-domain operations and interoperability among formerly stove-piped systems. This approach requires embracing network, cloud and standards-based interoperability among varied solutions to create an ecosystem where a diverse set of services, industry partners, allies, technologies, and fighting domains align in machine time to support operations at the speed of relevance. Without rapid action by the US and its allies, China's increasing investments in counterspace and anti-access/area denial capabilities will credibly threaten the US's ability to operate, communicate, and dominate in modern conflicts. That's why Viasat is supportive of organizations like the Army Futures Command, US Space Force, US Space Command, and the change agents featured in this report, who are embracing innovative commercial, cutting edge technologies that will accelerate global capabilities and bring to fruition the vision of initiatives like JADC2, especially in highly contested regions like the INDOPACOM AOR

The views expressed in this qualitative report as well as in the research survey on the state of military communications spotlight the need for enhanced communications to support the evolving needs of our warfighters. It is for this very reason that Viasat has invested to incubate and mature technologies, enabling rapid development and deployment of multi-network commercial capabilities for defense communications that can help address current capability gaps and emerging threats. Our workforce, which consists of approximately 40% veterans, are passionate about supporting the US and its warfighters as we enter a new era of global competition. Our engineers, scientists, technologists, and support staff have built a culture of creativity, entrepreneurship, and non-traditional business approaches that define the cutting edge of innovation. That's why we are proud to be at the vanguard of the New Defense Industrial Base, focused on delivering game-changing technologies to the defense sector with the goal of creating flexible, dynamic capabilities that bring together formerly disparate systems and create successful mission outcomes in the most complex environments, all designed to bring our servicemen and women home safely.

Viasat

Ken Peterman
President of Government Systems
Viasat, Inc.

ABOUT GBC

Government Business Council

As Government Executive Media Group's research division, Government Business Council (GBC) is dedicated to advancing the business of government through analysis, insight, and analytical independence. An extension of Government Executive's 50 years of exemplary editorial standards and commitment to the highest ethical values, GBC studies influential decision makers from across government to produce intelligence-based research and analysis.

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ABOUT VIASAT

Viasat Inc.

Viasat is a global communications company that believes everyone and everything can be connected. That's why we're building the ultimate communication network, to enable great, global connectivity to be brought to where it's needed and wanted most: to homes all over the world, to faraway communities, to warfighters on the battlefield, and to people in the air or at sea -- to name a few.

Viasat Government Systems

Viasat believes it is our responsibility to help ensure U.S. and coalition military forces are equipped with the latest capabilities that will help our military forces be successful across the technology driven battlespace of today and tomorrow. With deep roots in defense, Viasat is a national asset - helping to foster a new era of defense technology that helps save lives, protects the integrity of information and delivers the connectivity-driven clarity needed to maintain a tactical advantage.

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CITATION

1. https://cdn.govexec.com/media/gbc/docs/the-state-of-military-comms-2019_compressed.pdf