COL Bruce Smith
Director
Directorate of Combat Development
Future Warfare Center

Adapting & Understanding the Future of War

In late December last year the Army published the Army Capstone Concept. The concept is subtitled "Operational Adaptability: Operating under conditions of Uncertainty and Complexity in an Era of Persistent Conflict." The new concept is a guide to how the Army will apply available, yet dwindling, resources to overcome adaptive enemies, while concurrently articulating how to think about future armed conflict. This concept will serve as the foundation to drive development and modernization efforts. It provides the common framework for thinking about the conduct of future joint land operations under the conditions of uncertainty and complexity. The Army Capstone Concept helps place modernization decisions within the context of future armed conflict and establishes the conceptual foundation of our DOTMLPF (doctrine, organization, training, materiel, leader development, personnel and facilities) requirements and development.

During the last two decades many believed that the United States' competitive advantages in communications, information, and precision strike technologies produced a "revolution in military affairs" (RMA). Advocates of RMA believed that technology offered the Army a new way to fight a war that provided revolutionary abilities to find, identify, and target enemy forces with increased speed, precision and lethality. RMA promised to provide unparalleled situational awareness that would enable commanders to see through the fog and friction of war, giving them unprecedented levels of certainty and assurance. Unfortunately proponents of RMA frequently failed to recognize the limitations of these new technologies and emerging threat military capabilities. Military concepts that relied on long range targeting and robust networks often divorced war from its human context; political, cultural, and psychological. RMA and defense transformation-related thinking influenced Army doctrine, organization, manning, and modernization plans in ways that did not always reflect the reality of our forces' experiences on the ground in Afghanistan or Iraq.

Almost a decade of land combat operations has reinforced the fact that land warfare is fought in complex and uncertain environments. Political, cultural and psychological factors impact operations and cloud a commander's situational awareness in ways technology alone cannot overcome. Army forces will continue to fight under these conditions of uncertainty and complexity. The Army Capstone Concept recognizes this fact, as well as the need for the Army to prepare to modernize and operate in this evolving and ambiguous environment. Rather

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than relying on perfect situational awareness, provided by technology, future forces and leaders must strive to reduce uncertainty through a mindset of operational adaptability. Soldiers must understand the situation in depth, develop the situation through action, fight for information, and continually reassess – adapting as the situation demands. Leaders must be comfortable using their best judgement, and be willing to take prudent risks with the understanding that they will not have all the information and facts that they would like or might need. Uncertainty and ambiguity cannot be completely overcome, but operational adaptability can help mitigate their effects.

Operational adaptability is essential to developing situational understanding and seizing, retaining and exploiting the initiative. It is impossible to foresee the future, but developing leaders confident in operational adaptability will give the Army the ability to recover from surprise and exploit unforeseen opportunities. Operational adaptability requires that Soldiers master the operational art, or the ability to link the tactical employment of forces to policy goals and strategic objectives. It also demands Army forces that are proficient in tactical warfighting fundamentals and who possess common understanding of how to combine joint, Army, interagency, and multinational capabilities.

The Army Capstone Concept identifies a group of new, critical, and different capabilities that it's Soldiers and forces require to fight and win in a complex and uncertain operating environment. Although the capabilities are listed in five broad categories; Battle Command, Movement and Maneuver, Fires, Protection, and Sustainment, the underlying theme or link is greater adaptability or versatility across the force in order to cope with the future environment. Although not all inclusive, key Army required tenants or capabilities include: "mission command, train as we fight, command forward from mobile platforms, fight degraded, operate decentralized, defend networks, fight for information, and conduct reconnaissance to develop the situation." What is immediately obvious is that there are no space specific capabilities listed. In fact the Army Capstone Concept does not discuss space at all.

Does the exclusion of space from the concept mean that the Army is changing its view on the importance of space and space-based capabilities? Is the Army throwing out space as it de-emphasizes RMA and technology and promotes the concept of operational adaptability? The short answer to both questions is no. Although space-based capabilities are not specifically addressed in the new Capstone Concept it is easy to see the linkages and dependencies that space-based capabilities provide to the Army and to the concept of operational adaptability. Space is no less important to the Army in this new concept. The Army will remain dependent upon space-based capabilities such as satellite communications and position, navigation and timing to execute operations in uncertain and complex environments. Satellite communications and PNT provide the means to command forward from mobile platforms as well as operate in a decentralized manner. Space based – capabilities enable a unit to fight for information, as well as to conduct reconnaissance in order to develop the situation. Space-based capabilities and systems continue to enable Army operational capabilities within an uncertain and complex operating environment.

The findings from a variety of forums over the past several years, including the Allard Commission and the Space Posture Review, recognize that space-based capabilities are increasingly vulnerable. The Capstone Concept while not specifically calling out this growing vulnerability to the Army does point out that Army forces must be able to fight degraded which includes space-based capabilities as well as degraded communications and command and control networks. The new concept also emphasizes the need for Soldiers to actively fight for

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your unit to complete the mission by working through D3SOE. You need to practice these drills at every opportunity. Take the time to work through the impacts and avoid the tendency to just acknowledge there is an impact and move on before a full assessment is accomplished.

Another recommendation: we should strongly advocate for robust, redundant capabilities in the ground, air, high altitude, space and cyber domains. Pushing for a multi-domain resilient solution to D3SOE is accomplished at the strategic level with tactical implications. However, today space officers can educate their unit commanders on this need and commanders can then call for action and support realistic training.

Some of these strategies and recommendations for dealing with D3SOE may be validated in Unified Quest 2010. Some may not. Regardless, finding, advocating and implementing the doctrinal, operational, training, leadership, materiel, personnel and facility solutions to D3SOE is going to be necessary for the 21st Century Army that GEN Casey challenges us to build.

Space is now a contested and congested domain and it will become even more so. The threats are present today and growing. And the time it takes for bad actors to access the network links between space and ground terminals and to disseminate their chaos continues to shrink as does the time we have to respond. In fact, that amount of time is approaching nil. FA40s and space enablers are empowered to be "change agents" in their units NOW! We simply cannot continue conducting business as usual; we must be proactive. The Army Space community is charged to prepare and train their units to prevail if and when enabling space capabilities are stripped away. The most critical task today for the space community is to take action to ensure that Army units can recognize when their enabling space assets have been interfered with and to quickly adapt and sustain operations in order to prevail in a denied, degraded or disrupted space operational environment.

Footnotes

[1] Casey, Jr., GEN George W., "The Army of the 21st Century," Army Magazine, October 2009

[2] We could add fourth "D" for destroyed space systems.

[3] "Beijing "opposed space arms race," Agence France-Presse, South China Morning Post, Nov 6, 2009

[4] US Northern Command Special Security Office, Security News Letter, Vol 22, #4, April – June 2009.

[5] Mills, Elinor, "US government spends over $100M on cyberattack cleanup," CNET News.com, Apr 8, 2009www.zdnetasia.com/news/security/0.39044215,62052979,00.htm

[6] Casey, Jr., GEN George W., "The Army of the 21st Century," Army Magazine, October 2009

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information, rather than making the assumption that it will always be provided and present when they need it. At the same time the concept recognizes the increasing need and importance that the Army defend its own networks in order to generate and preserve combat power.

U.S. space-based capabilities are an increasingly attractive target to our adversaries; all leaders – not just Army space leaders - must understand that there will be periods of time when space-based capabilities and systems are actively denied or degraded. Despite the recognition of our vulnerability, Army leaders have been reluctant to train in a degraded space environment. Usually the loss of SATCOM or position, navigation and timing is simulated, accompanied by the rationale that training time is too valuable to waste and that we cannot afford to deny or degrade space-based capabilities as it would detract from the main training objective. Consequently leaders and Soldiers are not trained to operate in a degraded space environment. The Army Capstone Concept provides the opportunity and rationale for rethinking this necessary training. In order to operate in a degraded environment, Army forces and leaders need to develop mitigation plans and strategies beforehand in order to successfully fight through these inevitable degradations. Army training, to include rotations at the Combat Training Centers, needs to routinely include denied or degraded space-based capabilities. Soldiers and forces should be practicing operations without satellite communications or GPS signals. They need to learn how to rapidly recognize degraded capabilities and take action to mitigate their loss, in order to preserve operational adaptability in an uncertain and complex environment.

In conclusion, the new Army Capstone Concept emphasizes operational adaptability. Leaders at all levels must have a mindset that is flexible, and they must be comfortable with collaborative planning and decentralized execution. At the same time our Soldiers must be able to tolerate and operate within ambiguous situations, and possess the ability and willingness to make rapid adjustments according to the situation. Space-based capabilities and systems enable the concepts, training and systems that make operational adaptability possible. The new concept, rather than constraining space operations, provides U.S. Army Space and Missile Defense Command and Space Operation Officers a new opportunity and foundation challenging us to further emphasize, provide, and develop space-based capabilities within the Army. Operational adaptability is dependent upon space.

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