# Training and Doctrine Command's Big 6+1 Capabilities

**by LTC Corey B. Chassé**

Over the last 15 years of combat operations, and still today, the U.S. Army focused on winning against irregular adversaries and challenges in Iraq and Afghanistan, which has limited the Army's capability to focus on modernizing for future fights. Meanwhile, threats, enemies and adversaries continued to modernize rapidly and become increasingly capable. These conditions point to an emerging future security environment in which U.S. ground forces are increasingly likely to face tactical overmatch (meaning to be more than a match for; surpass; defeat) in some operations.

In addition, decreases to the Army's overall budget over past years have compounded the challenges of modernization. Compared to the last two drawdowns of the Army (post-Vietnam and post-Cold War) not only has the Army taken a larger percentage cut than previously, but those two previous drawdowns came after the Army had already modernized much of the force.[1] As a result of increasing enemy capabilities and the reduction in resources available for modernization, Soldiers and mission are at unacceptable risk that may continue to increase.

**Figure 1. Artist's concept of the Active Protection System (APS).**

## Required capabilities overview

To effectively meet the operational challenges and emerging threats in 2030, the Army must develop and focus on future capabilities to ensure overmatch in a multi-domain battlefield.[2] This must include the ability to operate freely in the electromagnetic spectrum, maintaining secure, reliable communications and accurate position, navigation and timing capabilities. The Army must develop advanced protection systems to protect and defend ground platforms. Conversely, to defeat progressively more technologically advanced-threat protective systems, the Army must be prepared to advance the capabilities and employment of directed energy weapons along with enhanced conventional capabilities. Future Army forces will project power by applying cross-domain capabilities from land to create synergy across all domains, ensuring joint-force freedom of movement and action. In addition to working throughout multiple domains, the Army will have to develop effective capabilities to protect friendly forces, information and systems; detect adversary threats; react to indications and warnings; and restore capabilities when challenged by adversary systems or tactics.

The Army has identified key capabilities and systems which require senior-leader oversight to increase the chances of successful delivery of capabilities. The U.S. Army Training and Doctrine Command (TRADOC) Big 6+1 Capabilities identified do not represent all the capabilities required for our Army but focus on those that allow the Army to close critical capability gaps and fight in the context of the Army Operating Concept (AOC) dated Oct. 31, 2014.[3] In addition, these capabilities provide a framework to enable the Army to focus future force development and prioritize research, development and acquisition activities.

TRADOC Big 6+1 Capabilities are:

- Future vertical lift;
- Combat vehicles;
- Cross-domain fires;
- Advanced protection;
- Expeditionary mission command/cyber-electromagnetic;
- Robotics and autonomous systems (RAS).

With a cross-cutting capability of Plus 1:

- Soldier and team performance and overmatch.

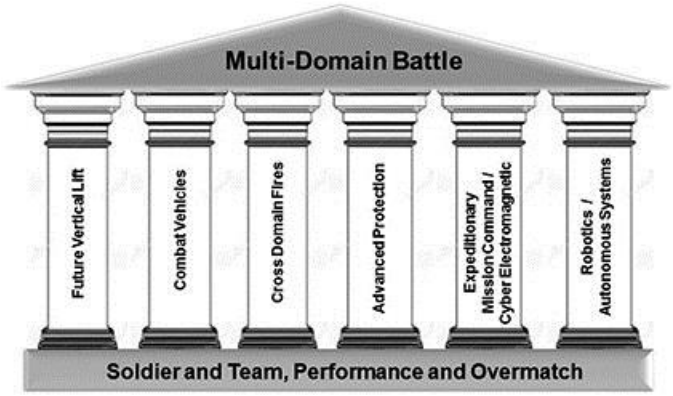


**Figure 2. TRADOC's Big 6+1.** *(Graphic by LTC Corey B. Chasse')*

The Army recognizes there are no "silver bullet" technological solutions. The Army retains overmatch through combining technologies and integrating them into changes in organizations, doctrine, leader development, training and personnel policies. The Plus 1 or cross-cutting capability of "Soldier and team performance and overmatch" requires that focus be placed on fundamental capabilities that empower the Soldier. The Army must fit machines to Soldiers rather than the other way around. The Army will pursue advances in human sciences for cognitive, social and physical development and emphasize engineering psychology and human-factors engineering in the design of weapons and equipment as well as training and leader-development activities.

## Way ahead

TRADOC will continue to refine these capabilities using the think-learn-analyze-implement paradigm. Army leaders must ***think*** clearly about future armed conflict by considering threats, enemies and adversaries; anticipated missions; emerging technologies; historical observations and lessons-learned; and opportunities to use existing capabilities in new ways. Army leaders then ***learn*** about the future through Force 2025 maneuvers – the physical and intellectual activities to develop interim solutions to Army warfighting challenges (AWfC) first codified in the AOC. The Army then ***analyzes*** these solutions to establish risk-based priorities and identifies opportunities to ensure Army formations have the capability and capacity to accomplish assigned missions. This analysis supports senior-leader decisions for the ***implement*** step to deliver AWfC interim solutions that improve the combat effectiveness of the current and future force.

You may find the AOC at http://tradoc.army.mil/tpubs/pams/TP525-3-1.pdf.

## Conclusion

To ensure these capabilities are delivered to support the Army's future force, TRADOC Big 6+1 Capabilities will require intense Army senior-leader visibility and oversight. TRADOC will work with Headquarters Department of the Army in developing the specific management practices for the TRADOC Big 6+1 Capabilities identified systems.

Visit https://www.us.army.mil/suite/doc/47289745 to see the "Multi-Domain Battle, Ensuring Joint Force Freedom of Action" video, including TRADOC Big 6+1 Capabilities.

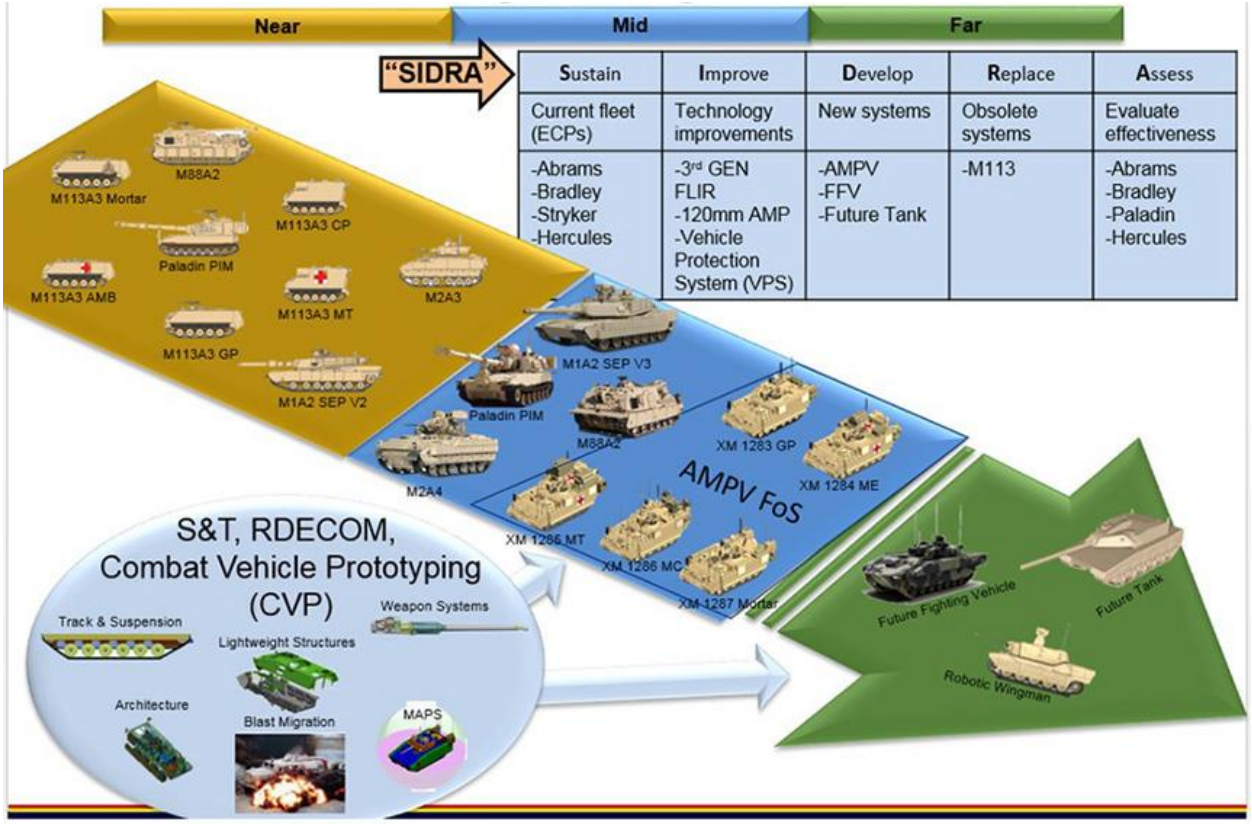


**Figure 3. Armored brigade combat team capability transition.**

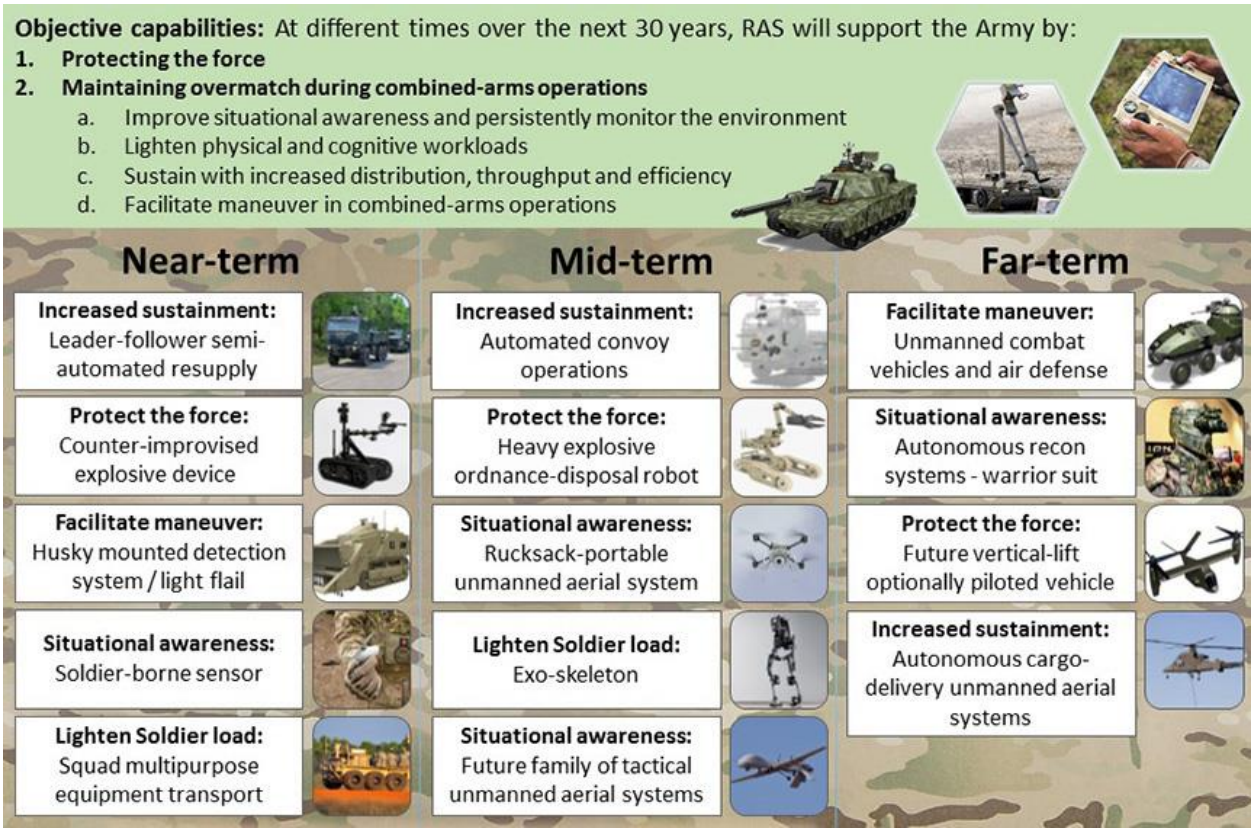


**Figure 4. RAS strategy.**

**Figure 5. 196th Infantry Brigade Stryker with APS.** (*U.S. Army photo by Rodney Jackson*)

*LTC Corey Chassé is a force-management officer (Functional Area (FA) 50) and TRADOC Big 6+1 capabilities chief at TRADOC headquarters' Army Capabilities Integration Center, Fort Eustis, VA. LTC Chassé is a prior enlisted Marine now serving as an active-duty Army Soldier with more than 36 years' service, including tours in Afghanistan*

*(Operation Enduring Freedom) and Kuwait (Operation Spartan Shield). Previous assignments include Paladin integration management and Excalibur action officer for TRADOC Systems Manager-Cannon in 1st Battalion, 30th Field Artillery, Fort Sill, OK; operations officer, Headquarters and Headquarters Battery (HHB), 3-112 Field Artillery, New Jersey Army National Guard; commander, Battery B, 3-112 Field Artillery; and battalion fire-support officer for Detachment 1, HHB, 3-112 Field Artillery. His military education includes Officer Candidate School, Field Artillery Officer Basic Course, Field Artillery Officer Advanced Course, Capabilities and Capabilities Development Course, U.S. Army Command and General Staff College and FA 50 Force-Management School. LTC Chasse' holds a bachelor's of science degree in psychology from Liberty University and a master's of arts degree in psychology statistics from Fairleigh Dickinson University. His awards and honors include four Meritorious Service Medals.*

## Notes

[1] Edwin F. Williamson, "A Comparison of the Post-Cold War Defense Budget Reduction to Prior Post-Conflict Reductions after World War II, Korea and Vietnam," Sept. 23, 1993, http://oai.dtic.mil/oai/oai?verb=getRecord&metadataPrefix=html&identifier=ADA273230.

[2] Definition of multi-domain battlefield: Cross-domain operations in context of joint combined-arms maneuver that create temporary windows of superiority across multiple domains and allow joint forces to seize, retain and exploit the initiative.

[3] http://www.tradoc.army.mil/tpubs/pams/tp525-3-1.pdf.

## Acronym Quick-Scan

*(Includes acronyms in the graphics not used in the text)*

**AMB –** ambulance
**AMP –** advanced multi-purpose (120mm)
**AMPV –** Armored Multi-Purpose Vehicle
**AOC –** Army Operating Concept
**APS –** Active Protection System
**AWfC –** Army warfighting capabilities
**CP –** command post
**ECP –** engineering change proposal
**FA –** functional area
**FFV –** Future Fighting Vehicle
**FLIR –** forward-looking infrared
**FoS –** family of systems
**GP –** general purpose (vehicle)
**HHB –** headquarters and headquarters battery
**MAPS –** Modular Active Protection Systems
**MC –** mission command
**ME –** medical equipped
**MT –** medical transport
**PIM –** Paladin integrated management
**RAS –** robotics and autonomous systems
**RDECOM –** (U.S. Army) Research, Development and Engineering Command
**S&T –** science and technology
**SEP –** system-enhancement program
**SIDRA –** sustain, improve, develop, replace, assess
**TRADOC –** (U.S. Army) Training and Doctrine Command