



The Third Offset Strategy

and the Army modernization priorities

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“Great power competition – not terrorism – is now the primary focus of the U.S. national security”
Secretary of Defense James Mattis, January 19, 2018

Today, political, economic, social, and technological changes are creating challenges and opportunities for maintaining the Army's land power dominance. Battlefields are expanding across all domains, geographic scale, and types of actors, while at the same time, decision cycles and reaction times continue to be compressed. Furthermore, the Army of the future will operate on congested, and potentially contaminated battlefields while under persistent surveillance, and will encounter advanced capabilities such as cyber, counter-space, electronic warfare, robotics, and artificial intelligence. These dynamics are changing the character of warfare for which the Army must be prepared to face global competitors, regional adversaries, and other threats.

Great power competitors, China and Russia have implemented modernization programs to offset the United States (U.S.) military conventional superiority and the challenges they present are increasingly trans-regional, multi-domain, and multi-functional. Advanced nations are developing sophisticated anti-access and area denial (A2/AD) systems, air and missile defense, cyber, electronic warfare, and counter-space capabilities to disrupt military deployments into operational theaters. Although the Army may not face near-peer competitors directly, our adversaries are using actions short of armed conflict (gray zone¹) to challenge us. The Army will likely face their systems and methods of warfare as they proliferate military capabilities to others.

China and Russia have embarked on an energetic push to reestablish influence, security, buffer zones,

and national prestige. This is occurring in places like Ukraine, Syria, and the South China Sea. While the Army spent more than 18 years focused on operations in Iraq and Afghanistan; China, Russia, and other potential adversaries such as Iran and North Korea, have studied Army operations closely. They have used those lessons learned to develop new approaches to conflict designed to exploit the gaps and seams within U.S. military capabilities.

China, Russia, and other potential adversaries intend to use their weapons and tactics to deny military access to key terrain in theaters of operation. To accomplish this, they have developed sophisticated A2/AD systems, fires, cyber, electronic warfare, and space-based capabilities that generate layers of stand-off to disrupt the deployment of military forces, deny the build-up of combat power, and separate Joint Force and allied capabilities in time and space. By making it so difficult and costly for the U.S. to act, China and Russia are hopeful the U.S. will be deterred from even entering into a conflict and simply acquiesce to their “strategic misbehavior.”

As these near-peer competitors continue their provocations to test the tolerance of the U.S. and its regional allies, the Army must reconsider its traditional methods to set the theater for reception, staging, onward-movement, and integration and establishing and securing logistical lines of communication to sustain large-scale ground combat operations (LSGCO). The currently employed Desert Storm model of setting the theater evolved from operation DESERT SHIELD/DESERT STORM which follows the reaction to an attack on an ally, precipitating the time consuming construction of an

¹ Gray zone includes information warfare, economic coercion, and ambiguous forces.

iron mountain of armored might supported by a robust and diverse logistic network. Then, and only when reaching a prescribed threshold will the Army proceed to conduct offensive operations to defeat an enemy. This model has been examined, studied, and trained against by near-peer competitors and is further challenged by the employment of naval forces, short and medium range missiles, persistent intelligence, surveillance, and reconnaissance assets and layered A2/AD.

To offset an adversary's A2/AD, the U.S. military must live and operate within the A2/AD region. The National Defense Strategy (NDS) represents a reemphasis on forward presence – but a forward presence of a particular kind. It is not about presence for its own sake or for symbolic or reassurance purposes. Rather, it is about combat-credible forward forces – that is, forces that are or can rapidly get forward, survive a withering Chinese or Russian assault, and blunt the adversary's aggression. Both represent geographical challenges equal to none that the U.S. military has encountered.

China and Russia A2/AD strategies rely on new capabilities intended to provide overmatch against U.S. capabilities that have aged and atrophied, or that the U.S. has chosen to divest due to obligations in support of counterinsurgency investments. While potential adversaries have modernized their forces, the Army has essentially missed an entire generation of modernization. Meanwhile, the military modernization enterprise has become a Gordian knot of laws, regulations, risk averse organizations, and byzantine bureaucratic processes. These processes – along with overly ambitious requirements, technology immaturity, and scarce resources – have led to the delay and cancelation of several systems while incrementally modernizing existing systems at increasingly greater cost. The Army remains dependent upon combat systems developed during the Cold War, because it keeps changing its plans for what will be needed in the future.

For nearly two decades, the Army deferred modernization in order to support continuous combat operations all while the global security environment has grown more competitive and volatile. The Army

must divest itself from a counterinsurgency and stability operations and prepare for the harsh realities of the operational environment associated with LSGCO. Future conflicts will influence the character of war and operational tempo when confronting the 4+1 challenges (Russia, China, Iran, North Korea, and violent extremist organizations). The Army will need to synchronize capabilities quickly and decisively across domains, geographic boundaries, functions, and authorities to maintain freedom of maneuver inside an adversary's A2/AD region. These capabilities will result from the Third Offset Strategy.

The fundamental goal of an offset strategy is deterrence and should deterrence fail, possess a military strength augmented with technological superiority to destroy an adversary in any domain (land, air, maritime, cyberspace, and space). Throughout history, the Department of Defense conducted two offset strategies, adapting technological advances to warfighters and leading to a fundamental change in how war is conducted and the tools used in its conduct.

The first offset was launched in the 1950s as a “New Look” strategy by the Eisenhower administration. Back then, the U.S. and its allies in Europe faced a significant quantitative disadvantage against Soviet conventional forces and its satellite states: 92 Allied divisions against 175 Soviet divisions. President Eisenhower ordered a new strategy that would solve this problem. The result was the First Offset: the U.S. military would reduce its manpower and rely instead on nuclear weapons and their delivery systems. This would provide the most effective offset to Soviet conventional forces and their geographic proximity to Europe. The U.S. adopted a doctrine of massive retaliation using nuclear weapons as a credible deterrent against quantitatively superior Soviet forces.²

The First Offset lasted for about two decades, until the 1970s, when the Soviets managed to catch up in terms of quality and quantity of tactical and strategic nuclear weapons. In delivery systems, the Soviet Union actually achieved a competitive advantage against the U.S. systems a decade earlier - during the 1960s. At the end of the Vietnam War, the U.S.

² Robert Martinage, *Toward a New Offset Strategy: Exploiting U.S. Long-Term Advantages to Restore U.S.*

Global Power Projection Capability, (Washington D.C.: Center for Strategic and Budgetary Assessments, 2014).



therefore initiated the Second Offset Strategy. In 1973, a small office within the Department of Defense, which later became the Defense Advanced Research Project Agency (DARPA), launched the Long-Range Research and Development Planning Program (later marked as the Second Offset Strategy). The aim was to increase the conventional military capabilities and effectiveness of U.S. forces and its allies against the militaries of the Warsaw Pact - without relying primarily on the quantity and use of nuclear weapons.

The varying conceptual, technological, and organizational innovations under the umbrella of the Second Offset Strategy became only apparent as a “Revolution in Military Affairs” in the post-Cold War era: from the Persian Gulf War (1991), through the Air War in Kosovo (1999), and subsequently, the protracted wars in Iraq and Afghanistan (2003-2010). These conflicts demonstrated the military effectiveness of U.S. precision munitions, stealth technologies, automated command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) systems, laser guided munitions, electro-optics, telecommunications and many other advanced military related technologies. In the 1980s, these technological innovations were paired with operational concepts such as the Air-Land Battle (ALB 1982) and NATO’s Follow-on Forces Attack (FOFA), which provided the U.S. and NATO a qualitative superiority over the quantitative superiority of the Soviet Union. Since the mid-2000s, however, the margin of American military-technological superiority has been gradually eroding.³

While many of the details of the Third Offset technologies and programs are classified, its baseline domains and priority areas are public, as shown in DOD budgetary requests, public affairs releases and statements. In particular, the initial phase of the Third Offset strategy, a part of the Future Years Defense Program (FYDP), consists of at least five priority

areas for research and development programs, with a budget request of \$18B for the next five years.

According to Robert Work, Deputy Secretary of Defense, top technological priorities described in the Third Offset include:⁴

- Learning machines: leveraging Artificial Intelligence and autonomy into an offset advantage; i.e., instantly responding against cyber-attacks, electronic attacks or attacks against space architecture or missiles;
- Human-machine collaboration: using advanced computers and visualization to help people make faster, better and more relevant decisions;
- Assisted human operations: plugging every pilot, soldier, sailor and Marine into the battle network;
- Human-machine combat teaming: creating new ways for manned and unmanned platforms to operate; and
- Network-enabled autonomous weapons: weapons platforms and systems plugged into a learning command, control, communications and intelligence (C3I) network.

Desynchronized from the Third Offset strategy, the Army has identified six enduring modernization priorities (long-range precision fires, next generation combat vehicle, future vertical lift, Army network, air and missile defense, and soldier lethality) to build a multi-domain force by 2028. The fiscal year 2020 (FY20) President’s Budget Request is the first budget in decades to begin to fully fund Army modernization priorities. The FY20 budget requests \$8.9B to support the Army’s modernization priorities, which represents a \$3.9B increase over the FY19 enacted level. Across the FYPD (FY20-24), the Army is committed to investing a total of \$51.7B to support

³ Robert Work, “The Third U.S. Offset Strategy and its Implications for Partners and Allies,” As Delivered by Deputy Secretary of Defense Bob Work, January 28, 2015. Available at: <https://dod.defense.gov/News/Speeches/Speech-View/Article/606641/the-third-us-offset-strategy-and-its-implications-for-partners-and-allies/>

⁴ Cheryl Pellerin, “Work: Human-Machine Teaming Represents Defense Technology Future,” Department of Defense News, November 8, 2015. Available at: <http://www.defense.gov/News/Article/Article/628154/workhu-man-machine-teaming-represents-defense-technology-future>.



the six modernization priorities.⁵ The Army is significantly increasing investment in its priorities to escalate the pace of technological development in areas where the Army faces the greatest capability shortfalls. The Army must aggressively pursue these initiatives in FY20 in order to start fielding the next generation of combat vehicles, aerial platforms and weapon systems by 2028, the timeframe the U.S. anticipates Russia will realize its modernization goals.

As a result of missing a generation of modernization, the Army must modernize legacy platforms or develop next generation systems to maintain overmatch of near-peer competitors. This decision will provide them with the capability to conduct LSGCO, however it still leaves a void in technological priorities outlined in the Third Offset Strategy. As the battlespace continues to become increasingly trans-regional, multi-domain, and multi-functional it's uncertain how the Army will manage the vast amounts of sensor data to support commanders' decision cycles, and the multiple sensor-shooter nodes.

The numerical superiority of the Soviet Union military precipitated the first two offset strategies. As U.S. military technological advancements / applications have proliferated to near-peer adversaries it has effectively re-balanced the battlefield. Ensuring successful implementation of the Third Offset, the DoD in concert with the U.S. Government, must agree on what we are trying to offset and how to balance these priorities against adversaries in vastly different regions and capabilities.

The employment of the Third Offset Strategy would restore U.S. power projection capability and capacity, bolstering conventional deterrence through a credible threat of denial and punishment, and imposing costs upon prospective adversaries as part of a long-term competition. The ability to balance or defeat an adversary's capability requires resources, to ensure

effective employment of the strategy we must address what we are attempting to offset.

The NDS forged from the National Security Strategy (NSS) frames the underlying principle to preserve peace through strength. This strength, once an unrivaled competitive edge, has eroded in every domain of warfare. The advancement and proliferation of technology, the negative impact on military readiness resulting from the longest continuous stretch of combat, and defense spending caps (9 of 10 years executed under a continuing resolution) have created an overstretched under resourced military.

To get back on track requires a fundamental shift in the way the Army conceives what is required for effective deterrence and defense. This is because the U.S. and its allies will be facing great powers – especially in the case of China. This is a dramatically different world than that which characterized the post-Cold War period, in which the U.S. military could focus on “rogue states” and terrorist groups due to the lack of a near-peer competitor. Today and going forward, however, China in particular will present the U.S. with a comparably-sized economy and top-tier military operating in its own front yard.

The threat isn't limited to China solely. The NDS states the long-term strategic competition with China and Russia are the principal priorities for the DoD, and require both increased and sustained investment, because of the magnitude of the threats they pose to U.S security and prosperity today, and the potential for those threats to increase in the future. Concurrently, the DoD must sustain its efforts to deter and counter rogue regimes such as North Korea and Iran, defeat terrorist threats to the U.S., and consolidate gains in Iraq and Afghanistan while moving to a more resource-sustainable approach.⁶

China and Russia represent quite distinct challenges. Russia is not a peer or near-peer competitor but rather a well-armed rogue state that seeks to subvert an international order it can never hope to dominate. In

⁵ Office of the Under Secretary of Defense (Comptroller)/Chief Financial Officer, “Defense Budget Overview,” US DOD Fiscal Year 2020 Budget Request. Available at: https://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2020/fy2020_Budget_Request_Overview_Book.pdf

⁶ Summary of the 2018 National Defense Strategy of The United States of America, Sharpening the American Military's Competitive Edge.



contrast, China is a peer competitor that wants to shape an international order that it can aspire to dominate.⁷ Both countries seek to alter the status quo, but only Russia has attacked neighboring states, annexed conquered territory, and supported insurgent forces seeking to detach more territory. Russia interferes in foreign elections, subverts foreign democracies, and works to undermine European and Atlantic institutions. In contrast, China's growing influence is based largely on more-positive measures: trade, investment, and development assistance. Among permanent United Nations (UN) Security Council member nations, China has even become the largest contributor to UN peacekeeping operations. These attributes make China a less immediate threat, but a much greater long-term challenge.⁸

As the U.S. looks ahead, it must ensure that it has the right concepts, capabilities, and organizations to deter China, Russia, and other rising powers from any potential aggression. The Army concepts and capabilities must be fully integrated and built based on how we will fight, not on how we would like to fight. Additionally, the Army must do this while growing and maintaining its readiness to ensure it always retain the advantage. The U.S. must make it very clear that it can defeat A2/AD, and it will neither stop, nor rip apart the fabric of our alliances. This will be accomplished by executing the Army multi-domain operation (MDO) concept. The MDO concept informs Army modernization and details how the Army, as part of the joint force, continuously and rapidly integrates cross-domain capabilities to defeat an adversary's efforts to create stand-off. The Army as an element of the Joint Force, conduct MDO to prevail in competition. Specifically, Army forces penetrate and disintegrate enemy A2/AD systems, exploit the resultant freedom of maneuver to achieve strategic objectives, and force a return to competition on favorable terms.⁹

The U.S. Army does not have the luxury of time. The arduous task to amass equipment, personnel, and logistics in an area of operation takes a significant

amount of time and resources. During this period the other elements of national power (diplomatic, information, and economic) along with Joint and Coalition partners must continue to apply pressure to degrade and destroy strategic targets to provide an adversary a moment of pause to contemplate if they want to continue along the path of conflict continuum and face the destructive force of the U.S. Army.

In summary, Army modernization is driven by the impetus of increasingly capable near-peer competitors with advanced capabilities. While in the past the Army focused on equipping for the near-term at the expense of preparing for the future, this will no longer suffice. Today's Army modernization efforts are linked directly to challenges outlined in the NDS, and are focused on the enduring Army modernization priorities. However, to maintain a credible strategic deterrence to counter any near-peer aggression, the Army must incorporate the technologies of the Third Offset Strategy to regain overmatch to operate and close with to destroy the enemy in a multi-domain contested environment.

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⁷ Michael J. Mazarr, Timothy R. Heath, and Astrid Stuth Cevallos, *China and the International Order*, Santa Monica, Calif.: RAND Corporation, RR-2423-OSD, 2018.

⁸ James Dobbins, Howard J. Shatz, and Ali Wyne, *Russia is a Rouge, not a Peer; China is a Peer, not a Rogue*, Santa Monica, Calif.: RAND Corporation, 2018.

⁹ Statement by LTG James F. Pasquarette, Deputy Chief of Staff of the Army, G-8, for Subcommittee on Airland Committee on Armed Service, on Army Modernization, April 2, 2019

