

Acquiring Targets in the Bear's Backyard

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14. ABSTRACT As the US Army continues to transition its operational focus to Large Scale Ground Combat operations, with a necessity to counter an Anti-Access/Area Denial environment and defend NATO allies against Russian activity, the doctrine, as well as Tactics, Techniques, and Procedures of the US military to conduct dynamic targeting needs to be addressed and updated to ensure success. While some may argue that the current doctrine is time-tested, strong, and flexible enough to facilitate dynamic targeting in a contested environment, their reasoning misses the mark. The fast-paced, dynamic battlefield of the future requires a shift in doctrinal emphasis away from the deliberate targeting cycle of the past to a focus on rapid dynamic targeting. At the operational level, creating Army-led Operation Centers to complement the Air Operation Centers that currently take the lead on the targeting process will be crucial to facilitate targeting during early-entry operations. Finally, at the tactical level, the Army needs to develop options to enable distributed operations to facilitate dynamic targeting capabilities.					
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Introduction

On 24 February 2022, over 100,000 Russian troops massed on the borders of Ukraine and launched an invasion despite international condemnation. However, Russia has failed to secure a quick, decisive victory due to logistical troubles, poor command and control, and high casualty rates. Flaws in the Russian military have many analysts questioning the threat the mighty Russian Bear truly poses to the United States and North Atlantic Treaty Organization (NATO) allies, specifically in the Baltic region.

The disconnect in this line of analysis is that the Russian military has developed its doctrine and weapons capabilities specifically focused on NATO force projection into Eurasia. Russian military doctrine focuses on the initial period of war (IPW), which it sees as a short and intense period of conflict lasting from a few days to six weeks. In Russian doctrine, long-range precision strikes, airstrikes, counter space strikes, and cyberattacks followed by establishing an Anti-Access/Area Denial (A2/AD) bubble characterize the IPW. The A2/AD defense integrates ground and airpower with Integrated Air Defense Systems (IADS) to make it seem that outside forces should not intervene because it would be extraordinarily costly and fruitless, a *fait accompli*.¹

While executing a *fait accompli* in Ukraine has proved difficult for Russia, NATO member states Estonia and Latvia could prove a tempting target for Russia and a dilemma for NATO to defend. At 233,031 square miles, invading the vastness of Ukraine has clearly been a miscalculation. However, Estonia and Latvia are much smaller and more feasible targets for Russia to execute a *fait accompli* and secure a sphere of influence. With Rand war games conducted in 2016 concluding that Russian forces could overrun NATO forces currently

¹ Samuel Charap, Dara Massicot, Miranda Priebe, Alyssa Demus, Clint Reach, Mark Stalczynski, Eugeniu Han, Lynn Davis, *Russian Grand Strategy, Rhetoric and Reality*, RAND Report RR4238 (Santa Monica, CA: RAND, 2021), 174.

stationed in the Baltic States in 60 hours or less,² supported by layers of S-300 and S-400 air defense systems on its own soil,³ Russia clearly continues to pose a challenge to NATO, the United States, and its traditional methods of executing warfare that the US must update.

As the US Army continues to transition its operational focus to Large Scale Ground Combat Operations (LSCO), with a necessity to counter an Anti-Access/Area Denial environment and defend NATO allies against Russian activity, the doctrine as well as Tactics, Techniques, and Procedures (TTPs) of the US military to conduct dynamic targeting needs to be addressed and updated to ensure success. The first section of this paper will present the counterargument to this thesis that the current Joint and Army doctrine is time-tested, strong, and flexible enough to facilitate dynamic targeting in a contested A2/AD environment. Next, this paper will refute that claim and argue that the US military must update its doctrine to facilitate dynamic targeting due to new technologies and our adversaries' ability to adapt their doctrine. The third section of this paper will argue that Joint and Army targeting doctrine must be updated to inverse the relationship between deliberate and dynamic targeting to put more emphasis on dynamic targeting. The next section of this paper will argue that due to the constraints placed on the Air Force by A2/AD environments, updates to the current command and control structure of targeting are necessary to allow the Army to take the lead in the process during the initial phases of conflict. The fifth section of this paper will discuss the necessity of updating the TTPs of ground-based targeting to ensure target acquisition platforms can sufficiently collect the correct intelligence in a contested A2/AD environment.

² David A. Shlapak and Michael W. Johnson, *Reinforcing Deterrence on NATO's Eastern Flank: Wargaming the Defense of the Baltics*, RAND Report RR1253 (Santa Monica, CA: RAND, 2016), 1.

³ Marcus Weisgerber, "US Officials Not Ready to Dismiss Russia's Anti-Air Missiles, Despite Shortcomings in Ukraine," *Defense One*, 10 March 2022, accessed 11 March 2022, <https://www.defenseone.com/threats/2022/03/us-officials-not-ready-dismiss-russias-anti-aircraft-missiles-despite-shortcomings-ukraine/363037/>.

The Conservative View on Targeting

Some may argue that the targeting processes outlined by current doctrine⁴ are strong yet flexible enough to facilitate effective targeting in an A2/AD environment. While Joint and Army doctrine differs on the steps of the deliberate targeting process, the six-step Joint targeting cycle and the Army's process of Decide, Detect, Deliver, Assess (D3A) allow for an iterative process that can occur parallel to other planning processes to achieve the commander's objectives as rapidly as possible.⁵ The doctrine offer considerations and tools for commanders to prepare for challenges in targeting while remaining flexible enough to adapt to dynamic situations.⁶

The current doctrine facilitates cross-domain targeting and fires to defeat near-peer and peer adversaries. ADP 3-19 specifies that success in LSCO is dependent on the Army's ability to employ fires and that the doctrine was developed with new technologies and concepts in mind but also rooted in the time-tested principles and fundamentals of targeting that have enabled US military success. The targeting processes outlined in US doctrine would allow commanders to prioritize and integrate assets across domains and converge those effects on the adversary to create seams in A2/AD defenses to facilitate power projection into contested areas.⁷

For those targets that are either identified too late or not selected for action during the deliberate targeting process, both the Joint Force and Army utilize the Find, Fix, Track, Target, Engage, Assess (F2T2EA) model to execute dynamic targeting, primarily focused on Time Sensitive Targets (TSTs) and High-Payoff Targets (HPTs).⁸ Another time-tested process, F2T2EA, allows for the rapid execution of targets of opportunity that meet the commander's

⁴ Chairman, U.S. Joint Chiefs of Staff, *Joint Fire Support*, Joint Publication (JP) 3-09 (Washington, DC: CJCS, 10 April 2019); Chairman, U.S. Joint Chiefs of Staff, *Joint Targeting*, Joint Publication (JP) 3-60 (Washington, DC: CJCS, 28 September 2018); U.S. Army, *Fires*, Army Doctrine Publication (ADP) 3-19 (Washington, DC: Headquarters Department of the Army, 12 August 2019); and U.S. Army, *Targeting*, Army Techniques Publication (ATP) 3-60 (Washington, DC: Headquarters Department of the Army, 7 May 2015).

⁵ ATP 3-60, *Targeting*, 1-2.

⁶ ATP 3-60, *Targeting*, VII.

⁷ ADP 3-19, *Fires*, V, 1-5, 1-8.

⁸ ATP 3-60, *Targeting*, A-1.

guidance to further enable maneuver forces into a position of advantage to overcome the adversary. In both deliberate and dynamic targeting, US doctrine provides flexible yet time-tested methods that allow the commander and their staff to meet the targeting challenge.

Change Begets Change

However, these arguments misunderstand how technological advancements are affecting the conduct of warfare and the changes the US military must make to the way it approaches targeting to enable success. As the US military shifts its focus from a permissive counterinsurgency (COIN) environment to the highly contested Operational Environment created by technological advances and A2/AD defenses, a shift in emphasis to dynamic targeting must occur to facilitate the engagement of fleeting TSTs. The Congressional Research Service defines A2/AD in the following manner: "Anti-Access is...any action, activity, or capability, usually long-range, designed to prevent an advancing military force from entering an operational area. Area Denial is...action, activity, or capability, usually short-range, designed to limit an adversarial force's freedom of action within an operational area."⁹ While A2/AD is not a new idea, Moscow has developed this specific response to combat the US military's impressive ability to project force and conduct precision strikes via the highly networked Command and Control¹⁰ capabilities it has developed over the past 30 years. Russia's integration of long-range mobile systems focused on deterring and limiting US power projection into the Eurasian region requires a systemic change in how the US conducts targeting.

While proponents of the current doctrine argue that it is rooted in time-tested principles, analyzing the doctrine reveals it has brought forward the wrong lessons. The 1988 FM 6-20: *Fire*

⁹ Andrew Feickert, *The Army's Multi Domain Task Force (MDTF)* (Washington, DC: Congressional Research Service, 29 March 2021), 1.

¹⁰ Andreas Schmidt. "Countering Anti-Access/Area Denial; Future Capability Requirements in NATO," *The Journal of the Joint Air Power Competence Centre*, ed. 23, Autumn/Winter 2016, accessed 15 March 2022, <https://www.japcc.org/countering-anti-access-area-denial-future-capability-requirements-nato/>.

Support in the AirLand Battle provides in-depth discussions of the enemy artillery and how to execute deep attacks to achieve Corps-level objectives.¹¹ Today, ATP 3-60 discusses the F3EAD methodology to address targeting challenges in a COIN environment.¹² While current doctrine discusses its ability to enable commanders in LSCO, it still focuses on the COIN fight of the past twenty years but has no discussion of the enemy on the future battlefield. Moscow is looking to leverage the tyranny of time and distance to achieve a fait accompli that could negatively affect our NATO allies. The targeting doctrine, systems, and forces are simply not in place to counterattack Russian aggression.¹³ The US and NATO allies must conduct further experiments and testing to develop new doctrine, organizations, systems, and tactics to frame how the US military will truly integrate and converge capabilities in the way current doctrine hopes it will.

Dynamic Battlefields require Dynamic Targeting: Doctrinal Shift

Despite the changing battlefield that requires a shift in emphasis to dynamic targeting, today's targeting doctrine focuses on deliberate targeting, with dynamic targeting fulfilling a secondary role as almost an afterthought. In an era when the US military has benefitted from the operational factor of time to conduct detailed planning before projecting its technologically overwhelming forces sequentially into conflict, deliberate targeting has facilitated detailed planning. The Joint Force and US Army have developed iterative and logical targeting methodologies that enable the integration and synchronization of fires with other joint functions that allow for the selection and prioritization of targets that will affect the enemy in a way that meets the commander's objectives¹⁴ and leads to battlefield success.

¹¹ U.S. Army, *Fire Support In The Airland Battle*, Field Manual (FM) 6-20 (Washington, DC: Headquarters Department of the Army, 17 May 1988), 3-11; 3-13.

¹² ATP 3-60, *Targeting*, B-1.

¹³ Charles McEnany, "Multi-Domain Task Forces: A Glimpse at the Army of 2035," Association of the United States Army, 02 March 2022, accessed 28 March 2022, <https://www.ausa.org/publications/multi-domain-task-forces-glimpse-army-2035>.

¹⁴ JP 3-60, *Joint Targeting*, VII-VIII.

Deliberate targeting can facilitate the development of targets in planning and matching weapons to those targets based on the commander's objectives, ensuring the most efficient utilization of sensors and shooters. The deliberate targeting process is focused, effects-based, interdisciplinary, and systematic to ensure unintended effects are mitigated or avoided altogether and develops all targets in the Joint Force except those that are unanticipated.¹⁵ Unfortunately for the US military, we are not the only ones who realize this or read our doctrine. The enemy gets a vote, and Russia's A2/AD capabilities will degrade the efficacy of the US Military's deliberate targeting process.

The US Military must restructure its targeting process to focus more on dynamic targeting and give it a higher priority to deal with the challenges in an A2/AD environment. The mobility of long-range ground and airpower systems and IADs and the concealment of assets in the deep battlespace will make it difficult to thoroughly plan for and assign targets to air-based assets for attack and execution the way the US Military has executed targeting in the past. These mobile, highly effective, fleeting targets of opportunity will be challenging to detect and track and require rapid responses. Dynamic targeting is typically employed in the current operations timeframe because the targets require more immediate responsiveness than deliberate targeting, executing either unscheduled or unanticipated targets.¹⁶ ADP 3-19 provides a broad overview of how peer threats will integrate fires and air defense systems into a systems warfare capability to defeat our forces in-depth but leaves it up to commanders to counter these tactics by identifying and protecting friendly vulnerabilities.¹⁷ Unfortunately, one of the critical vulnerabilities will be our ability to target the fleeting targets of opportunity that make up their defenses, and targeting

¹⁵ Ibid, X.

¹⁶ Ibid, II-2.

¹⁷ ADP 3-19, *Fires*, 1-15.

doctrine must change to focus on and enable more flexible dynamic targeting in a changing environment affected by new, long-ranging technologies.

The US military must update its targeting doctrine NOW with a shift in focus to dynamic targeting. Currently, JP 3-60 covers dynamic targeting in 14 pages of a 134-page document, and ATP 3-60 covers it in six pages of a 122-page document. At the same time, ADP 3-19 states, “during large-scale combat operations, it might be challenging to prioritize the detection of targets and could require the opening of windows...for specific collection...in support of fires.”¹⁸ TSTs and HPTs acquired in an unanticipated and unscheduled manner as on-call targets that have been thoroughly planned but not for a specific platform or time because they are difficult to find will characterize the future battlefield.¹⁹ While the targeting process of the future will still require detailed planning during the Decide step of Army targeting, the Detect, Deliver, and Assess steps will have to occur during the current operations timeframe due to the fleeting nature of long-fire systems and mobile IADs. The current 72-hour ATO and targeting cycle will not succeed in a contested and dynamic battlespace. Doctrine and training must be updated to emphasize dynamic targeting and facilitate a faster kill chain that can be executed through changes at the operational level. While the deliberate targeting process has been highly beneficial to the US military and its allies, the future battlefield already being described in the current doctrine requires a shift towards dynamic targeting to maintain a competitive advantage in future warfare.

ADOCs to Complement AOCs: Operational Shift

Coinciding with doctrinal change, the Joint Force must update its current reliance on the Air Force and its Air Operation Centers (AOCs) as the lead command and control element in

¹⁸ ADP 3-19, *Fires*, 3-8.

¹⁹ JP 3-60, *Joint Targeting*, I-10, II-2.

executing the Joint Targeting Cycle. Today, Joint doctrine requires the Army to nominate critical targets to the Joint Force Commander's staff to facilitate the development of the Joint Integrated Prioritized Target List (JIPTL). At the same time, the Air Force controls and manages the targeting cycle and processes the nominations from the Army and other Services for inclusion on the JIPTL. The Air Component Commander, and his staff, are the supported commander for the overall target interdiction effort, act as the airspace control authority,²⁰ and allocates the air sorties to support the services based on their interpretation of the Joint Force Commander's guidance and priorities.²¹

Developed in support of AirLand Battle plans of the 1980s, in which the US was able to dominate the air and bring to bear overwhelming might on a lesser adversary, these processes facilitated exceptional targeting. The US conducted uncontested and detailed ISR operations to help establish the concept of operations and critical targets, establish forward bases of operations, and followed up with long-range strikes from air forces and missiles before launching a large-scale ground invasion.²² However, Russia has seen the US's ability to project force sequentially and developed layered defenses to deter such activity. The US can no longer rely on air superiority at the outbreak of a conflict to facilitate detailed and deliberate targeting. A shift to more dynamic targeting will be essential in a contested battlefield.

Russia has created a network of air defense systems that will contest US Air Forces and force them to shift their focus from targeting in support of ground forces to the air battle during the opening stages of conflict. Utilizing its territory as strategic depth, S-300s, and S-400s can shoot and scoot within Russia and the Kaliningrad Oblast and be integrated with electronic

²⁰ Michael Jacobson, "In the Opening Days of War, Let the Army Lead on Targeting," War on the Rocks, 17 October 2019, accessed 25 March 2022, <https://www.ausa.org/publications/multi-domain-task-forces-glimpse-army-2035>.

²¹ ADP 3-19, *Fires*, 2-3.

²² Terrence Kelly, David Gompert, and Duncan Long, *Smarter Power, Stronger Partners, Volume I: Exploiting US Advantages to Prevent Aggression*, RAND Report RR1359 (Santa Monica, CA: RAND, 2016), 71.

warfare capabilities to make NATO air and seaports inaccessible while also deterring airborne surveillance systems, including the F-35, from operating within effective ranges.²³ Russia's integrated A2/AD defenses pose an obvious problem in locating and striking enemy targets through sensing and firing systems at ranges²⁴ that the current C2 structure with the Air Force in the lead cannot solve. Russian Air Forces will tie up NATO Air Forces with air-to-air activity, leaving ground forces to create seams in the A2/AD defenses for rapid airstrikes and long-range fires, which would be more easily facilitated by an Army-led operations center that can better enable dynamic targeting.

The Army's recent development of Multi-Domain Task Forces (MDTFs) and their joint All-Domain Operations Centers (ADOCs) may be the solution during the early phases of conflict. To successfully beat back Russian aggression against a NATO ally, a sophisticated and intimate C2 synergy between air, ground, and sea forces will be necessary to target and strike critical targets.²⁵ The Army contends that the Space Force and Air Force's updated Advanced Battlefield Management System (ABMS) "cannot be the sole solution, because it doesn't account for, in some cases, the scale or unique requirements of all the other services."²⁶ As a redundant and complementary C2 node, ADOCs would allow the Army to take the lead on C2 and targeting in an integrated and joint manner until the Air Force can re-take the targeting initiative in support of ground operations.

Analyzing the contested environment the US Military will face in defending a NATO ally reveals that a change to the current C2 structure is necessary. The Army recently stood up its

²³ Jacobson, "In the Opening Days of War, Let the Army Lead on Targeting."

²⁴ Kelly, Gompert, and Long, *Smarter Power, Stronger Partners, Volume I*, 80.

²⁵ Shlapak and Johnson, *Reinforcing Deterrence on NATO's Eastern Flank*, 9.

²⁶ Sydney Freedberg, "ABMS Can't be Sole Solution for Joint C2-Exclusive," *Breaking Defense*, January 22, 2020, <https://breakingdefense.com/2020/01/abms-cant-be-sole-joint-c2-solution-army-tells-airforce-exclusive/>," quoted in Nishawn S. Smagh, *Intelligence, Surveillance, and Reconnaissance Design for Great Power Competition* (Washington, DC: Congressional Research Service, 04 June 2020), 11.

second MDTF in Europe, with the first in Washington, both focusing on contesting A2/AD defenses. To integrate the diverse components that make up an MDTF, the Army is developing ADOCs to serve as the command nodes for the MDTFs with a focus on jointness, fully networked and integrated across the joint interorganizational multinational spectrum from the start. While it is not yet clear at what level of command the Army will implement ADOCs,²⁷ V Corps and the 56th Artillery Command, the Theater Fires Command, were recently re-activated in Germany to bolster the forces under General Cavoli, who would serve as the Joint Force Land Component Commander (JFLCC) in conflict. These elements should be combined to exercise the operations of an ADOC complementarily to the AOC in Ramstein, Germany, for operations in Eastern Europe. As the inside force, the JFLCC and his ADOC will be better suited to manage a rapid decision and targeting cycle at scale comparable to the AOC to create seams in the ground defenses that contest American forces in all domains. Enabled by a joint and integrated operations center, the Joint Force will be able to engage fleeting targets rapidly and successfully in a way it cannot through the current targeting cycle.

Exercises should test the ability of the ADOC to execute C2 and lead on targeting during early-entry operations into a contested environment until the Air Force attains a certain level of air superiority. During this stage, the Army should be the lead element in the Joint Targeting Cycle and be the supported commander for target interdiction efforts through allocated air sorties and long-range fires provided by the Joint Force to enable rapid decision making and execution. The JFLCC should have the authority to develop and execute TSTs and HPTs to execute responsive, dynamic targeting based on the Army's access to the zone of conflict and the speed at which Joint Forces will need to execute targets. Once the Joint Force neutralizes enemy air

²⁷ McEnany, "Multi-Domain Task Forces: A Glimpse at the Army of 2035."

defense and long-range artillery assets, the Army can hand C2 and lead targeting back off to the Air Force, who can then bring the might of its capabilities from the air.

The Difficulties of Target Acquisition in a Contested Environment: Tactical Shift

Corresponding and innovative changes at the tactical level must also occur to facilitate dynamic target acquisition in Russia's A2/AD defenses to enable the Joint Force. The first initiative requires a continued emphasis on partner development and exercises to develop an inside-out force that can overcome the A2/AD capabilities and reduce the technological advantages targeting US force projection with precision strike assets.²⁸ The Army's MDTF in Europe is an experiment in deploying an inside force within the reaches of Russia's A2/AD systems to work with allies and partners as a signal of US resolve. The MDTF conducts regular land force experiments and exercises with allies and partners to develop an established land power network to deter and, if necessary, defeat Russian aggression.²⁹ Via the C2 provided by its ADOC, these forces can take the lead on dynamic targeting during the initial phases of conflict.

The US Military can also leverage allies to create a "Blue A2/AD" system. By providing partners in the region with extended-range sensors, target identification and tracking capabilities, precision guidance, IADs, and integrated C2 systems, the costs and risks in Russian calculations regarding aggression in the region would increase tremendously,³⁰ as can currently be seen in Ukraine. As US Force numbers decline, continuing to emphasize the importance of partners, sharing more technologies, and regularly conducting joint exercises in the region are all options the US can take to improve the targeting challenge without any significant change to the current force structure. Enabling and training with partners will increase and protect target acquisition

²⁸ Schmidt. "Countering Anti-Access/Area Denial; Future Capability Requirements in NATO."

²⁹ McEnany, "Multi-Domain Task Forces: A Glimpse at the Army of 2035."

³⁰ Kelly, Gompert, and Long, *Smarter Power, Stronger Partners, Volume I*, XVII.

platforms, which will enhance dynamic targeting capabilities if conflict should arise in Eastern Europe.

Another way the US Army can improve dynamic target acquisition in a contested environment is to look at the dispersed operations ideas the Navy and Marines are currently exploring. Recently, the US Army has removed the Combat Observation and Lasing Team (COLT) from Army doctrine.³¹ However, recent exercises at the Joint Multinational Readiness Center in Hohenfels, Germany, reveal US Army Brigades improvised Joint Fire Support Teams (JFiSTs) manned by two Army Fire Observers, a Scout, and one Air Force Joint Terminal Air Controller. This modern-day COLT operated in a contested environment exercise to facilitate deep and dynamic observation and targeting due to inclement weather and enemy Air Defense systems grounding air reconnaissance assets.³² These JFiSTs are incredibly similar to the long range-reconnaissance COLTs of the Army's past and need to be resurrected to facilitate improved dynamic targeting in an A2/AD environment.

Augmenting the current Army force structure of Forward Observers with unmanned systems could further facilitate dispersed operations and enable successful dynamic targeting in a contested environment. Unmanned, remotely crewed ground vehicles from the Army's Project Origin initiative that Special Operations Forces are currently testing for long-range reconnaissance, concealment, electronic warfare, and autonomous resupply operations³³ could easily be modified to carry the optics and laser range finders human observers utilize to increase and disperse the number of friendly sensors to enhance dynamic targeting. With the support of

³¹ ADP 3-19, *Fires*, VI.

³² Samuel Nirenberg, "Faithful and True: Lessons Learned at Combined Resolve XVI," *From the Green Notebook*, 31 January 2022, accessed 15 March 2022, <https://fromthegreennotebook.com/2022/01/31/faithful-and-true-lessons-learned-at-combined-resolve-xvi/>.

³³ Jerome Aliotta, "Army Special Operations Forces use Project Origin Systems in latest Soldier Experiment," US Army News Service, 9 March 2022, Accessed 16 March 2022, <https://www.army.mil/article/254558?linkId=155814101>.

the Air Force, Forward Observers could be supplied and resupplied with the necessary additional equipment using the Joint Precision Air Drop System, which allows cargo aircraft to remain above low-altitude air defenses and still deliver loads up to five tons within 30-50 meters of the designated landing point via GPS.³⁴ Increased ground-based sensors, both human and machine, will facilitate a dispersed network of sensors that can dynamically acquire targets across the battlespace and move before they can be targeted by enemy systems focused on our high-value assets to create the necessary seams in A2/AD defenses to allow the total weight of the US military to come to bear.

Conclusion

In conclusion, as the US Army continues to transition its operational focus to LSCO, its doctrine and TTPs to conduct dynamic targeting must be updated. First, due to changing technology and the dynamic battlefield of the future, a shift in emphasis away from deliberate targeting to a focus on dynamic targeting must occur. Additionally, the contested environment the Air Force will deal with in the opening days of a conflict with Russia requires the development of Army-led ADOCs to complement the Air Force's AOCs and take the lead in targeting during that initial phase of conflict. Finally, the TTPs of ground-based targeting need to be updated through the enhancement of partners and allies, the re-invigoration of COLTs, and the augmentation of Forward Observers by unmanned, remotely crewed ground vehicles to facilitate dispersed sensors that can conduct dynamic targeting in an A2/AD environment. By nesting these initiatives at echelon, the Joint Force, enabled by the Army, will be better suited to acquire and execute targets on a dynamic battlefield to create the necessary seams in A2/AD defenses that will be required to win.

³⁴ John Gordon IV and John Matsumura, *The Army's Role in overcoming Anti-Access and Area Denial Challenges*, RAND Report RR-229-A (Santa Monica, CA: RAND, 2013), 29.

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