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MASTER OF MILITARY STUDIES

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**Shift Fire**


*Adjusting the Marine Corps' Warfighting Philosophy for the 21st Century*

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## Executive Summary

**Title:** Shift Fire: Adjusting the Marine Corps' Warfighting Philosophy for the 21st Century

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**Thesis:** The Marine Corps can better prepare for the challenges associated with the 21st century battlefield and provide a shift in mindset following the previous two decades of war by revising its warfighting philosophy of maneuver warfare to emphasize the increasing importance of unity of effort, surprise, and combined arms and how these tenets have evolved for the current and future battlefield.

**Discussion:** The Marine Corps has embraced maneuver warfare philosophy since the release of FMFM 1, *Warfighting* in the late 1980s when it shifted from an attritionist style of fighting to maneuver warfare. This shift in warfighting philosophy altered the mindset of Marines and made the Marine Corps a more efficient fighting force. Thirty years later, the character of war continues to evolve. New technology limits the advantages the US military once maintained on the battlefield during the early part of the 21st century, and adversaries have continuously revised their doctrine to mitigate their disadvantages and to exploit opportunities in each domain, including space and cyberspace. While adversaries continue to revise their doctrine to counter what historically have been US advantages, the Marine Corps has maintained the same warfighting philosophy. This warfighting philosophy leaves room for interpretation of how maneuver warfare can be applied on the future battlefield as some of its basic tenets continue to change.

**Conclusion:** The Marine Corps needs to revise its warfighting philosophy within MCDP 1 to adapt to current and future challenges on the 21st century battlefield. These challenges are significantly different than what the current force experienced in the past two wars, and revising foundational doctrine such as MCDP 1 would assist in providing the shift in mindset needed to create a more effective fighting force against potential adversaries. The publication must continue to embrace the tenets of maneuver warfare while not providing a prescriptive set of rules, but it can better prepare the force for future conflict by expanding upon and modernizing the concepts of unity of effort, surprise, and combined arms.

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## *Preface*

I chose to conduct my research on the Marine Corps' warfighting philosophy and explore how and if it should change to meet the challenges of the 21st century. During my eleven years in the Marine Corps, I have believed in maneuver warfare as it is written in our doctrine, MCDP 1 *Warfighting*. However, there are many new challenges that the Marine Corps now faces that did not exist when it adopted the philosophy several years ago. In exploring this topic, I wanted to look at the concept of maneuver warfare and the 21st century battlefield to determine how we could better apply our warfighting philosophy to the challenges we may face in the future.

In conducting my research, I learned a great amount about the roots of maneuver warfare and gained a better understanding of some of the challenges we may encounter on a future battlefield. I think the adaptation of maneuver warfare in the 1980s was a great period in Marine Corps history, and this paper by no means is intended to discredit the works of those who influenced that monumental shift in how we fight. By writing this paper, I hope to add to the discussion on maneuver warfare and share my views of how we may be able to better prepare the force for a future fight.

I would like to thank Dr. Claire Metelits and Lieutenant Colonel Terje Bruoeygard who served as my mentors during the writing of this paper. Their constant feedback kept me on track throughout this process, and I do not think I could have finished this paper without their continued guidance and recommendations. I would also like to thank the Leadership Communication Skills Center at Marine Corps University who provided feedback on this paper and all others that I have submitted while a student at Command and Staff College. Lastly, I would like to thank my wife, Amy, who has continued to support me not only during the several hours required to research and write this paper, but throughout my career.

*Over the past 15 years, we have been continuously involved in both major combat and crisis response missions. All that time, our competitors have observed and learned much from how we operate. As a result, our future enemies will use that knowledge to oppose us in the physical and cognitive dimensions of conflict. In contrast, we have not been able to adapt at the rate of change required to ensure our success in future conflict.*

*--The Marine Corps Operating Concept (September 2016)*

## **Introduction**

The character of war continuously changes, and as the Marine Corps transitions from over fifteen years of conflict where it has grown comfortable operating from fixed positions and maintained technological advantages in weapon systems, it must now prepare the force for a fight against adversaries with near-peer capabilities. The 2018 National Defense Strategy highlights the reemergence of strategic competition by revisionist powers such as China and Russia.<sup>1</sup> These states now challenge US military advantages where each domain is contested.<sup>2</sup> In addition to near-peer competitors, the United States must remain prepared for the most likely of conflicts against proxies of these revisionist powers or non-state actors. Rapid technological advancements allow for these non-state actors to challenge the conventional overmatch to which the US military has grown accustomed.<sup>3</sup>

Throughout the past three decades, the Marine Corps has embraced maneuver warfare, a concept developed following the Vietnam War. This philosophy contributed to success on the battlefield in the late 20th and early 21st centuries. However, as society, culture, and technologies change, adversaries continue to refine their tactics, techniques, and procedures (TTPs) to counter advantages the US military has routinely displayed, specifically regarding firepower and mobility. The asymmetric TTPs used by adversaries of the United States and the ever-changing character of war pose new challenges to the future battlefield.

The Marine Corps' warfighting philosophy must continue to evolve to meet the demands of the 21st century and expand upon outdated concepts and principles that currently exist in its doctrine. As General Alfred Gray states,

War is both timeless and ever-changing. While the basic nature of war is constant, the means and methods we use evolve continually. Like war itself, our approach to warfighting must evolve. If we cease to refine, expand, and improve our profession, we risk becoming outdated, stagnant, and defeated.<sup>4</sup>

To evolve how it fights, the Marine Corps published an operating concept in September 2016 which describes how the character of war is changing and the need for maneuver warfare in both the physical and cognitive dimensions as well as employing combined arms across all domains (air, land, sea, space, and cyberspace).<sup>5</sup> This document also reaffirms the Marine Corps' stance on maneuver warfare. It states, "this warfighting philosophy was, is, and will remain our foundation."<sup>6</sup> Arguably, the Marine Corps must not allow its warfighting philosophy to remain stagnant as warfare continues to change. The Marine Corps can better prepare for the challenges associated with the 21st century battlefield and provide a shift in mindset following the previous two decades of war by revising its warfighting philosophy of maneuver warfare to emphasize the increasing importance of unity of effort, surprise, and combined arms and how these tenets have evolved for the current and future battlefield.

The Marine Corps should not view maneuver warfare as an unalterable philosophy within its doctrine and rely solely on publishing different concepts that describe how the philosophy applies to the current and future battlefield. If maneuver warfare will remain, as it should, the foundation of how the Marine Corps fights, it must be easily understood, discussed, and applied by all Marines. Elements of maneuver warfare existed long before the Marine Corps adopted the

philosophy and will continue to have a significant influence in future conflict. How the Marine Corps articulates its warfighting philosophy will contribute to how well it is prepared to handle the challenges on the battlefield in the next 10-30 years.

This paper analyzes the Marine Corps' current warfighting philosophy and provides recommendations on how it must evolve to meet the demands of the 21st century. First, it will examine the roots of maneuver warfare and how it is currently described in Marine Corps doctrine. Next, it will provide a broad overview of some of the challenges the Marine Corps may face on future battlefields. Lastly, it will lay out how doctrine can be updated to provide a more focused approach to its warfighting philosophy than what currently exists to meet the demands of the increasingly complex future war.

### **Maneuver Warfare**

When describing maneuver warfare and how it is incorporated into Marine Corps doctrine, it is important to first define what a warfighting philosophy is, what it is not, and the purpose of the philosophy. A warfighting philosophy is conceptually how an organization or unit (in this case, the Marine Corps) fights. It provides the framework for how to think about warfighting and serves as the foundation to how the Marine Corps applies combat power while remaining flexible to adapt to different situations. It is not and should not be a prescriptive set of rules or a checklist due to the ever-changing character of war and the uncertainty and friction associated with warfare.<sup>7</sup> A warfighting philosophy should inform doctrine and TTPs to best exploit the tenets associated with the organization's philosophy while also creating a common understanding of warfare. The Marine Corps' warfighting philosophy today is built upon the concept of maneuver warfare and is outlined in its doctrinal publications.



Elements of maneuver warfare have existed for thousands of years and its roots trace back to the beginning of warfare. However, the term was not regularly used within the US military until the 1980s. Several publications describe the background of maneuver warfare, and this section will touch on a few of the most influential to provide the reader with insight into the Marine Corps' warfighting philosophy, how it influences Marine Corps doctrine, and how it is interpreted within the 21st century.

Following the Vietnam War, Air Force Colonel and fighter pilot John Boyd studied historical battles and concepts dating back to Sun Tzu's era. Within his research, he determined that success on the battlefield was attributed to the commander who was able to make decisions and act faster than his adversary.<sup>8</sup> The central theme throughout Boyd's *Patterns of Conflict* study, was that military forces achieved success when they were able to operate inside of the adversary's observation-orientation-decision-action loop (the OODA loop) allowing them to penetrate the adversary's moral, mental, and physical being to isolate and collapse his or her will to resist.<sup>9</sup> Maneuver warfare theory is built upon the idea that decentralized command and control allows friendly units to make decisions faster, which contributes to increased friction and uncertainty for adversaries thus placing them at a disadvantage.<sup>10</sup>

Boyd's *Patterns of Conflict* research laid the framework for the Marine Corps' adaptation of maneuver warfare. This warfighting philosophy was highly debated across the Marine Corps during the 1980s preceding the release of Fleet Marine Force Manual 1 (FMFM 1) in 1989.<sup>11</sup> The ideas presented by John Boyd and other 'maneuverists' attracted leaders across the Marine Corps due to the philosophy's focus towards the adversary's mental attitude in which a properly oriented smaller force could achieve victory.<sup>12</sup> This provided a much needed mindset shift and altered how the Marine Corps should fight post-Vietnam.<sup>13</sup> During a Warfighting Discussion

Panel in 2015, General Gray acknowledged that attrition tactics during the Korean and Vietnam Wars had led to a need to change how Marines think about warfighting.<sup>14</sup>

Today, the Marine Corps addresses maneuver warfare in the successor to FMFM 1, Marine Corps Doctrinal Publication 1 (MCDP 1), *Warfighting*. It defines maneuver warfare as, “a warfighting philosophy that seeks to shatter the enemy’s cohesion through a variety of rapid, focused, and unexpected actions which create a turbulent and rapidly deteriorating situation with which the enemy cannot cope.”<sup>15</sup> MCDP 1 begins its discussion on maneuver warfare with a clarification of the term ‘maneuver’ that includes other dimensions to gain an advantage that may be psychological, technological, temporal, or spatial.<sup>16</sup> This concept was incorporated into Marine Corps doctrine to provide the shift in the mindset described by General Gray of fighting against a numerically superior adversary and achieving decisive results against the enemy at the least cost to friendly forces.<sup>17</sup>

Within MCDP 1, maneuver warfare is briefly mentioned in Chapter 2, “The Theory of War,” when describing the differences between attrition and maneuver warfare.<sup>18</sup> Many maneuver theorists argue that the two types of warfare are maneuver and attrition. Retired Army officer John F. Antal describes attrition warfare as a style of fighting that focuses solely on the destruction of enemy forces while emphasizing firepower, centralized control, and the material aspects of war.<sup>19</sup> In his essay published in *Maneuver Warfare: An Anthology*, he claims that up to Desert Storm, the United States had fought mostly attrition warfare and that this approach is focused on the science of war, which is slow-moving and predictable.<sup>20</sup> Antal describes maneuver warfare as emphasizing leadership, organization, cohesion, and morale and as using speed and surprise to exploit enemy weak spots (gaps) and avoid the enemy’s strengths (surfaces).<sup>21</sup> In his description of the two styles of warfare, he portrays warfare as either attrition

or maneuver, thus failing to identify that some sort of combination of the two were present in historical events. In contrast, MCDP 1 recognizes that all types of warfare involve some sort of combination of attrition and maneuver and that there are a variety of factors, both friendly and enemy, that contribute to which style is applied.<sup>22</sup>

In his book, the *Art of Maneuver: Maneuver-Warfare Theory and AirLand Battle*, Robert Leonhard describes how maneuver warfare has evolved and how it is focused on defeating the enemy. He argues that the main difference between attrition and maneuver warfare is that in attrition warfare, maneuver is conducted to facilitate fighting whereas in maneuver warfare, maneuver is the, “linchpin between the physics of war and the psychology of war”<sup>23</sup> (see Appendix A). He states that the physics of war consist of momentum and force, where momentum equals mass times velocity and force equals mass times acceleration.<sup>24</sup> The author describes the psychology of war as friendly morale versus enemy morale and how morale is affected through the movement of momentum (mass x velocity) and force (mass x acceleration).<sup>25</sup> Leonhard argues that the momentum and force generated by friendly units towards an adversary’s center of gravity provide a psychological impact against the morale of enemy forces.<sup>26</sup> Although MCDP 1 does not provide the identical formulas presented by Leonhard, the same concept of generating a faster tempo than the adversary to achieve a temporal advantage is inherent to the Marine Corps’ warfighting philosophy.<sup>27</sup>

Recently, several scholars have explored the evolution of the Marine Corps’ adaptation of maneuver warfare. Anthony J. Piscitelli in his book titled, *The Marine Corps Way of War: The Evolution of the US Marine Corps from Attrition to Maneuver Warfare in the Post-Vietnam Era*, attributes the change as evolutionary in how the Marine Corps fights and even uses recent examples of maneuver warfare in Iraq and Afghanistan.<sup>28</sup> He also recognizes that the Marine

Corps has examples of maneuver warfare throughout its history and quotes retired General and former Secretary of Defense James Mattis who states,

The Marine Corps had always allowed a great deal of freedom to tactical commanders, but at least now we had a better framework for what we were doing and it was maneuver warfare's tenets. And so it was more of an upgrading of tactical proficiency and operational art. It was not really replacing something.<sup>29</sup>

This quote reinforces the mindset change envisioned by General Gray when the Marine Corps adopted maneuver warfare in 1989, while acknowledging that some of the basic tenets of maneuver warfare existed long before this time.

Like Piscitelli, Marine Major Ian T. Brown explores the history of the Marine Corps adaptation of maneuver warfare in *A New Conception of War: John Boyd, the US Marines, and Maneuver Warfare*. In describing the practicality in maneuver warfare, he also draws upon recent examples in Iraq and Afghanistan where commanders attribute their success to applying the tenets of maneuver warfare.<sup>30</sup> However, he also describes the friction involved with the synchronization that takes place within a joint and combined force, which ultimately denied Marines the ability to maintain complete freedom of movement and exploit opportunities.<sup>31</sup> His book recognizes that warfare has changed since the Marine Corps' adaptation of maneuver warfare in 1989, but was written to provide the current generation with the fundamental roots of the theory.<sup>32</sup> Although the origins of maneuver warfare are relevant to the Marine Corps' warfighting philosophy, Marines must be able to move beyond a conceptual understanding of maneuver warfare and apply the tenets on the future battlefield.

The bulk of the discussion on maneuver warfare within MCDP 1 is outlined in its final chapter, "The Conduct of War," where it describes several characteristics of maneuver warfare

including the concentration of fires and forces at decisive points, tempo, focus, surprise, and the flexibility to cope with uncertainty.<sup>33</sup> Following the section on Maneuver Warfare within Chapter 4, additional subsections are included that reinforce the tenets of maneuver warfare while also describing how war should be conducted. These subsections include orienting on the enemy, philosophy of command, shaping the action, decision making, mission tactics, commander's intent, main effort, surfaces and gaps, and combined arms.<sup>34</sup> This chapter blends several concepts that are relevant not just in maneuver warfare, but in multiple styles of warfare or warfighting philosophies. Additionally, how these tenets are interpreted and applied must also evolve to keep pace with the changing character of war.

Many scholars continue to discuss maneuver warfare and its application on the current and future battlefield. In the *Small Wars Journal*, Russell Glenn argues that the definition of maneuver needs to be expanded to answer the demands of the 21st century. He highlights how Leonhard's concept of maneuver warfare focuses exclusively on movement and the enemy.<sup>35</sup> The Department of Defense defines maneuver as, "the employment of forces in the operational area through movement in combination with fires to achieve a position of advantage in respect to the enemy."<sup>36</sup> Glenn argues that this characterization provides too narrow a scope for future warfare as leaders now have the ability to influence the mission beyond the historical definition of fires and movement.<sup>37</sup> He also claims that advocates of maneuver warfare recently have used a more general view of fires, which in the past included mortars, artillery, or air support, but now also incorporates psychological operations, cyber warfare, and any other means of influencing an adversary.<sup>38</sup> He provides an updated definition of maneuver to attempt to solve what he perceives as the shortfall in maneuver warfare theory by defining it as, "the employment of relevant resources to gain an advantage with respect to select individuals or groups in the service

of achieving specified objectives.”<sup>39</sup> Similar to Glenn’s view on the definition of maneuver, the Marine Corps must also consider the challenges associated with future warfare and evolve its interpretation of maneuver warfare.

Maneuver warfare will continue to have relevance well into the future, but it must be easily understood and applied by all Marines. The Ellis Group claims that the Marine Corps must be able to separate the concept of maneuver from maneuver units and that it is required across all MAGTF functions, to include not only air and land, but also electromagnetic, cyber, and information warfare.<sup>40</sup> The changing character of war and the need to divorce the concept of maneuver from maneuver units as described by the Ellis Group requires once again a mindset shift that successfully reoriented the Marine Corps in the late 1980s. A revision would focus attention on new challenges and requirements and provide another reformation in how the Marine Corps applies its warfighting philosophy. Merging the MCDP 1 description of maneuver warfare with Glenn’s updated definition of maneuver, the Marine Corps can better define maneuver warfare as a warfighting philosophy that seeks to gain advantages across all dimensions through a variety of rapid, focused, and unexpected actions against an enemy while integrating all available friendly resources and capabilities towards common objectives to place the enemy in an unwinnable situation.

## **21st Century Warfare**

The factors that shape the basic nature of war such as friction, fluidity, uncertainty, and physical, moral, and mental forces remain constant, but the character of war and the means and methods used continuously evolve.<sup>41</sup> Changes in society, advancements in technology, and adaptive adversaries continue to impact how wars will be fought in the next 10-30 years.

Understanding this changing character of war and the future challenges of the 21st century is an essential step for the Marines of tomorrow to continue to have success on the battlefield.

As society continues to change, warfare has evolved from an industrial war to a war amongst the people. In the past, the industrial war model followed the sequence of peace, crisis, war, then resolution.<sup>42</sup> British General Rupert Smith refers to six trends in wars today: the ends for which we fight are changing from the hard objectives that decide a political outcome to those of establishing conditions in which the outcome may be decided; we fight amongst the people, not on the battlefield; our conflicts tend to be timeless, even unending; we fight so as to preserve the force rather than risking all to gain the objective; on each occasion new uses are found for old weapons and organizations that are the products of industrial war; and the sides include non-state actors, usually comprised of some form of multi-national groups.<sup>43</sup> Whether fighting against guerrilla forces like those of Vietnam and Afghanistan, or battling a conventional military, the presence of civilians on the battlefield and the ability to apply restraint are factors for which the Marine Corps must be prepared. It also must be ready to fight against an enemy who manipulates technology to capture and distort friendly actions in the information environment to support its narrative. Perceptions of war, both at home and away, can be easily influenced by these actions and quickly distributed through multiple means. Failure to adapt to these new challenges in the information environment can be detrimental to the tactical and strategic levels of war.

The results of a war amongst the people are that Marines of today must be prepared to make decisions at a much lower level. While serving as Commandant in 1999, General Charles Krulak emphasized that Marines must be able to fight in the three-block war where they will conduct full-scale military operations, peacekeeping, and provide humanitarian aid all within

three contiguous city blocks.<sup>44</sup> He used the term ‘Strategic Corporal’ to highlight the fact that even at the lowest-level, actions of Marines can have strategic-level effects.<sup>45</sup> This concept recognizes the changing character of war and the transition to a war amongst the people. In Iraq or Afghanistan, a fire team leader who directed his Marines to engage an approaching vehicle could have negative impacts if the vehicle turned out to be carrying women and children fleeing the area. As technology continues to advance and the information environment becomes more extensive, the Strategic Corporal concept becomes even more applicable. The Marines on the battlefield today and in the future must understand the implications of their actions and how they could positively or negatively have effects at a much higher level.

As warfare evolves from the industrial war model to a war amongst the people, technology remains a significant driver to the changing character of war. Autonomous systems and increased lethality and ranges are becoming more prevalent to state and non-state actors. Advancements in technology likely will include autonomous systems, human/machine collaborations to process information, assisted human operations to include sensors and communication equipment, and human/machine combat teaming to employ munitions.<sup>46</sup> Even adversaries such as the Islamic State of Iraq and Syria (ISIS) have demonstrated the ability to use unmanned aerial vehicles (UAVs) for not only surveillance, but also to employ munitions.<sup>47</sup> Technology will impact changes in tactics to maintain continuous battlefield surveillance, stand-off from precision-guided munitions, cyber operations, and clandestine operations. Adversaries will most likely seek similar technological capabilities and tactics while also employing non-traditional methods guided by unrestricted ethical behavior.<sup>48</sup> Marines must continue to be guided by ethical behavior within the increasingly digital environment while also employing new technology that leverages the capabilities available to the modern force.



Today, military forces are impacted not just by the air, land, and sea domains that preceded the 21st century, but also by the cyber and space domains. Colin Gray describes these new challenges in *Another Bloody Century* stating that both the cyber and space domains have been militarized and will soon see combat.<sup>49</sup> He argues that cyberwarfare is primarily about information and highlights the fact that it is global, instant, and accessible to all.<sup>50</sup> Gray claims that cyberwarfare will, “play an increasingly important, even literally vital, role as an enabler and force multiplier for the modes of warfare that do draw blood and break things.”<sup>51</sup> The advent of cyber systems changes how Marines must think about and use combined arms. In the past, Marines employed lethal fires to include indirect fire and air support. On the future battlefield, additional lethal and non-lethal capabilities will be available at the disposal of Marines and must be employed to maximize effects on the adversary and to gain all relevant advantages.

The trends listed above all pose additional considerations for the future battlefield. To address these demands, the Army and the Marine Corps have begun exploring multi-domain operations. This concept modernizes how the armed forces conduct combined arms to now include not only the physical domains, but also space, cyberspace, and effects within the electromagnetic spectrum, the information environment, and the cognitive dimensions.<sup>52</sup> According to the Army-Marine Corps White Paper titled “Multi-Domain Battle: Combined Arms for the 21st Century,” the modern operating environment will challenge the ability of the United States to conduct decisive operations against a near-peer adversary.<sup>53</sup> Although not developed as a replacement to maneuver warfare, the concept of Multi-Domain Battle attempts to solve the complex problems the US military may face in the future (see Appendix B).<sup>54</sup> This concept recognizes the increasingly joint environment that the US military will fight in against a near-peer adversary and the importance of synchronization across all five domains (air, land, sea,

space, and cyberspace). The Army and Marine Corps can no longer expect to retain indefinite superiority across all domains, but instead seek opportunities where they can leverage the capabilities available to achieve either a physical or cognitive advantage. Knowing these capabilities, training with them, and employing them against the adversary will be critical to achieving success on the future battlefield.

Russian tactics of ambiguous warfare in Crimea can serve as a preview of what US forces may face in a future conflict. Russian Chief of the General Staff, Valery Gerasimov, revised Russian military doctrine to include a 4:1 ratio of non-military to military actions with the former used to shape the political, economic, and social aspects through subversion, espionage, propaganda, cyber-attacks, or a combination of these actions.<sup>55</sup> Russia applies six overlapping phases throughout Gerasimov's doctrine to include emergence, sharpening, initiating, crisis, resolution, and restoration, with information operations occurring throughout the conflict (see Appendix C).<sup>56</sup> Gerasimov's doctrine confirms the changing of the traditional phases of war described by General Rupert Smith's sequencing within the industrial war model of the past and the significance of the information environment on the future battlefield as presented by Colin Gray.

Upon initiation of armed conflict, Russian military forces fighting in Ukraine employed several TTPs that the United States may encounter in the future. As UAVs become more prevalent and easily accessible, Russian forces demonstrated the ability to employ the unmanned assets to conduct reconnaissance and gather intelligence.<sup>57</sup> The UAV flights were then followed by kinetic strikes within 10-15 minutes from Russian artillery and rocket launchers accounting for 85 percent of all casualties.<sup>58</sup> The Russians successfully targeted battalion-size Ukrainian forces making them combat ineffective within a single strike.<sup>59</sup> In addition to conventional

tactics, Russia demonstrated the ability to successfully operate within the information environment to influence local populations and employ unconventional methods of war such as logistical resupply units operating under the guise of humanitarian convoys.<sup>60</sup> To combat these emerging threats, Marines must have a thorough understanding of mission tactics and unity of effort to operate in an environment that requires more dispersed units, redundant command and control nodes, and strict adherence to signature management.

Although new technology can be expected on the future battlefield, the human dimension will remain a critical component in future warfare. Admiral Alfred Thayer Mahan claims that, “historically, good men with poor ships are better than poor men with good ships.”<sup>61</sup> As innovation continues to occur, a simultaneous effort must be made to provide training to individuals and modernize doctrine to best employ and integrate the new technology to achieve the desired effects. In the past, wars were won primarily by mobility and firepower, products of the industrial age. Gray argues that in the information age of warfare, the military must not view technology as weapons that win wars, but as weapons with which wars are won.<sup>62</sup> What he means is that there will not be a tank, aircraft, or some other technological breakthrough that will win the next war. The adversary of the future may have similar capabilities and, in some instances, may even have certain advantages. The winner will be determined by who can better employ and coordinate the effects of the capabilities at their disposal.

The battlefield of the future will look significantly different from what the Marines of today experienced in Iraq and Afghanistan where they maintained advantages in technology and superiority in each domain. This future operating environment begins to level the playing field through instantaneous and widespread access to information and the continued proliferation of surveillance equipment that is capable of identifying physical and electromagnetic signatures. In

their Center for Naval Analysis report on Russia's ambiguous warfare, Mary Ellen Connell and Ryan Evans state that, "success in this environment demands Marines to consider how to apply their warfighting principles on a battlefield that may include the instantaneous loss of air, fire [power], and information superiority."<sup>63</sup> The Marine Corps can begin to take the steps necessary to prepare for this future environment through a revision of MCDP 1 that better describes its warfighting philosophy on the modern battlefield.

### **Revising MCDP 1**

Understanding the multi-domain battle and potential actions by adversaries, similar to the Russians' Gerasimov Doctrine, can help modernize the way the Marine Corps fights in the future. Releasing new operating concepts and white papers to describe how it must apply its warfighting philosophy to the current and future challenges only begins to create the dialogue needed to provide a shift in how Marines think about and execute maneuver warfare. A greater impact would be made across the Marine Corps through a revision of MCDP 1, *Warfighting*. In his Forward to the 1997 revision of MCDP 1, General Charles Krulak states that, "military doctrine cannot be allowed to stagnate, especially an adaptive doctrine like maneuver warfare. Doctrine must continually evolve based on growing experience, advancements in theory, and the changing face of war itself."<sup>64</sup> The world has changed significantly since the last revision of MCDP 1, and the time is again right to reset how the Marine Corps looks at applying the tenets of maneuver warfare to prepare for future challenges.

Many aspects of MCDP 1 should be retained and only those tenets necessary to better describe how maneuver warfare has evolved should be revised. The publication should continue to provide the broad guidance envisioned during the initial version of *Warfighting* to allow for

the judgement and initiative vital to maneuver warfare to continue. One of the main goals for the 1997 revision was to clarify some of the maneuver warfare concepts such as commander's intent, main effort, and center of gravity/critical vulnerabilities.<sup>65</sup> These concepts are critical to the Marine Corps' warfighting philosophy and should remain within Chapter 4 of MCDP 1, "The Conduct of War." What is needed, however, is a modernized approach to how the Marine Corps applies unity of effort, surprise, and combined arms in the 21st century without providing a prescriptive set of rules.

The first area that should be revised when describing maneuver warfare is highlighting the importance of unity of effort. Several areas within the current publication imply that unity of effort is critical; however, a more detailed description should be included now that warfare has expanded to include the cyber and space domains along with the traditional domains of air, land, and sea. MCDP 1 provides a brief overview of the need to focus efforts to maximize effects through striking quickly and boldly.<sup>66</sup> It also touches on the subject of unity of effort when it describes mission tactics and achieving "harmonious" initiative.<sup>67</sup> It falls short in describing the importance of unity of effort across domains, a concept critical to the 21st century where technology will be distributed to lower levels on a battlefield that will require increasingly decentralized execution while potentially operating in a communication-degraded environment.

Marines of today and the future must consider other additional factors that did not exist twenty years ago. As discussed in the previous section, the concept of the Strategic Corporal emphasizes how decisions and actions are now being made at a much lower level. Multi-domain operations describe the increasingly joint, interagency, intergovernmental, and multi-national environment that requires greater coordination across domains and integration across warfighting functions. This demands detailed synchronization of all forces operating together that

maximizes friendly capabilities in both the physical and cognitive dimensions to achieve a common objective and decisive results against the adversary. The Marine Corps will be required to fight across domains and its foundational doctrine should provide an overview of each domain similar to how MCDP 1 describes the tactical, operational, and strategic levels of war. In addition to introducing the different domains, a subsection to maneuver warfare should expand upon the importance of unity of effort to highlight the need to synchronize actions and to provide the shift in mindset needed for the Marine Corps to be successful on the future battlefield.

The next principle that should be revised to meet the challenges of the 21st century is the element of surprise. MCDP 1 provides only a short paragraph on surprise within Chapter 4, but it also describes surprise and boldness in detail within Chapter 2, “The Theory of War” where it lists three ways to achieve surprise: deception, ambiguity, and stealth.<sup>68</sup> These three concepts remain critical to warfare but should be re-emphasized as the application on the future battlefield will be significantly different than what Marines of today experienced in Iraq and Afghanistan.

Technological advancements coupled with the transition to a war amongst the people have made it extremely difficult to achieve surprise. While fighting in Iraq and Afghanistan, Marines primarily achieved surprise through ambiguity such as switching up patrol routes and times. The Marine Corps fought from fixed positions with little to no consideration to physical or electromagnetic signatures. Fighting against a near-peer competitor will require Marines to rely not only on ambiguity but on deception and stealth as well. As the Russians demonstrated in Ukraine, to be detected is to be targeted and killed. Marines must have a disciplined approach in the application of all three means of achieving surprise to stay alive on the future battlefield and maneuver to a position of advantage across domains. The ability to achieve surprise--either through ambiguity, deception, or stealth--will undoubtedly play a major role in the execution of

maneuver warfare. The description of surprise within Chapter 2, “The Theory of War” should be moved to the final chapter when describing maneuver warfare to highlight the renewed importance of this tenet in an environment where each domain is contested. The element of surprise is a critical component of how the Marine Corps can gain an advantage; therefore, moving this tenet to Chapter 4, “The Conduct of War” would reinforce its relevance against a near-peer competitor.

Lastly, the Marine Corps needs to revise how it conducts combined arms as a critical component of maneuver warfare. Combined arms within MCDP 1 is discussed from the fire team to Marine Air Ground Task Force (MAGTF) level and describes only direct fire, indirect fire, and close air support to put the enemy in a dilemma.<sup>69</sup> This outdated explanation of combined arms reflects a battlefield where only the air, land, and sea domains were relevant, but today Marines must now consider the space and cyber domains to integrate new capabilities with traditional means. The current description of combined arms within MCDP 1 needs to be revised to capture the increasingly important non-kinetic capabilities that Marines can apply to make the enemy vulnerable and achieve either a psychological, technological, temporal, or spatial advantage that maneuver warfare attempts to achieve. Instead of only describing how units employ kinetic fires, MCDP 1 should also provide an example where the MAGTF employs electromagnetic warfare, cyber, and information operations to supplement the traditional view of fires and to shift the mindset of junior leaders who will integrate these new capabilities in the future.

Marines must be able to expand upon the traditional understanding of combined arms and apply modern capabilities on the future battlefield. The information environment will play a major factor in future warfare, and Marine units must be able to counter or get ahead of

adversaries who employ similar TTPs such as the 4:1 non-military to military actions employed by Russia. Multi-domain operations highlight these challenges and how combined arms should be conducted in the 21st century against a near-peer adversary. Even down to the platoon and company-level, leaders need to understand and be able to incorporate these new domains into operations in the same way units of the past incorporated artillery and close air support, especially in an environment that requires increasingly decentralized operations. The Marine Corps needs to embrace this concept not only in white papers but also in its principal warfighting publication, MCDP 1, to induce a greater understanding across the force and provide the shift in mindset needed to best employ new capabilities that will assist in placing the adversary in a combined arms dilemma.

While unity of effort, surprise, and combined arms should be revised within MCDP 1, the other tenets should remain. The decision-making cycle described by Boyd will remain vital to maintaining tempo and achieving an advantage over the adversary, and mission tactics will be even more necessary as units become more dispersed and more cautious of emitting signatures. The basic concepts of maneuver warfare are nothing new, but how they are applied on the battlefield has and will continue to evolve. A revised warfighting philosophy would serve as the framework to shape how the Marine Corps organizes, trains, and equips its force while also stimulating greater innovation as the Marine Corps gains a better understanding of what the battlefield may look like in the next 10-30 years. A revision would initiate all Marines to re-read the doctrine, discuss the changes, and better understand how the warfighting philosophy should be applied. The experience of the current Marine Corps and changing face of war described by General Krulak in the Forward to MCDP 1 has now crossed the threshold where the Marine



Corps would benefit from a revision to its current doctrine and shift the mindset of how it applies its warfighting philosophy.

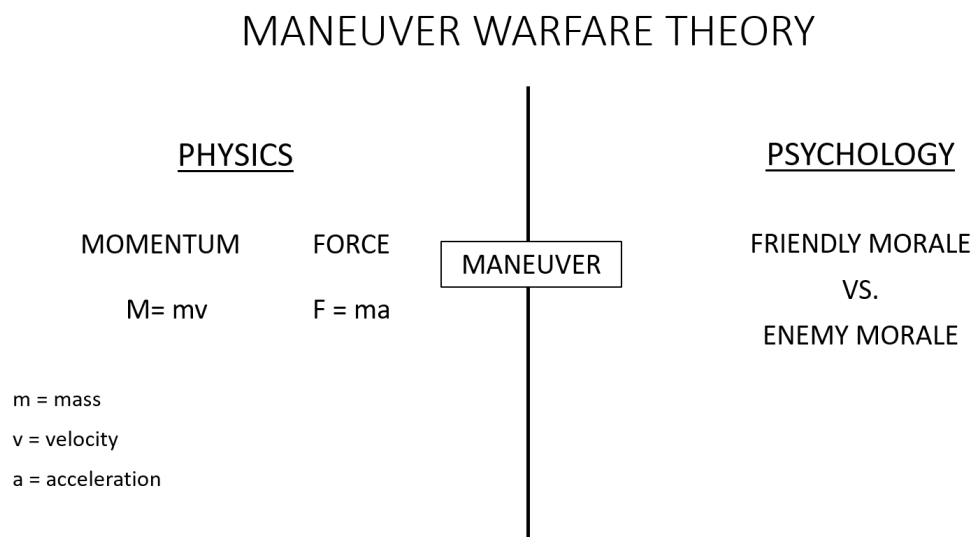
### **Conclusion**

As the Marine Corps continues to evolve and prepare for the future, it must first look at its warfighting philosophy to ensure it best meets the demands that it may encounter. Hanging on to outdated doctrinal concepts that were developed over 30 years ago leaves the current warfighting philosophy of maneuver warfare open to interpretation and only limits the shift in mindset needed to compete against either a near-peer adversary or a non-state actor with modern technology. The Marine Corps should continue to embrace the concept of maneuver warfare, but it must expand upon the current definition and tenets to better shape the force for current and future threats.

Will the Marine Corps be successful on the future battlefield if it continues to embrace maneuver warfare as written in MCDP 1? The answer is yes; the Marine Corps has always found a way to win, and it will continue to adapt while employing the same principles of war that have existed for centuries. However, revising its warfighting philosophy would provide a mindset shift that would limit some of the hard lessons learned on the future battlefield. Maneuver warfare gave the Marine Corps a much-needed doctrinal foundation that provided a shift in mindset as it transitioned from the Vietnam War. As the Marine Corps now transitions from the wars in Iraq and Afghanistan, it should once again examine its warfighting philosophy against what it may face against a near-peer competitor and revise the late 20th century doctrine to better articulate how the philosophy would be applied to meet the challenges it may encounter in the next 10-30 years.

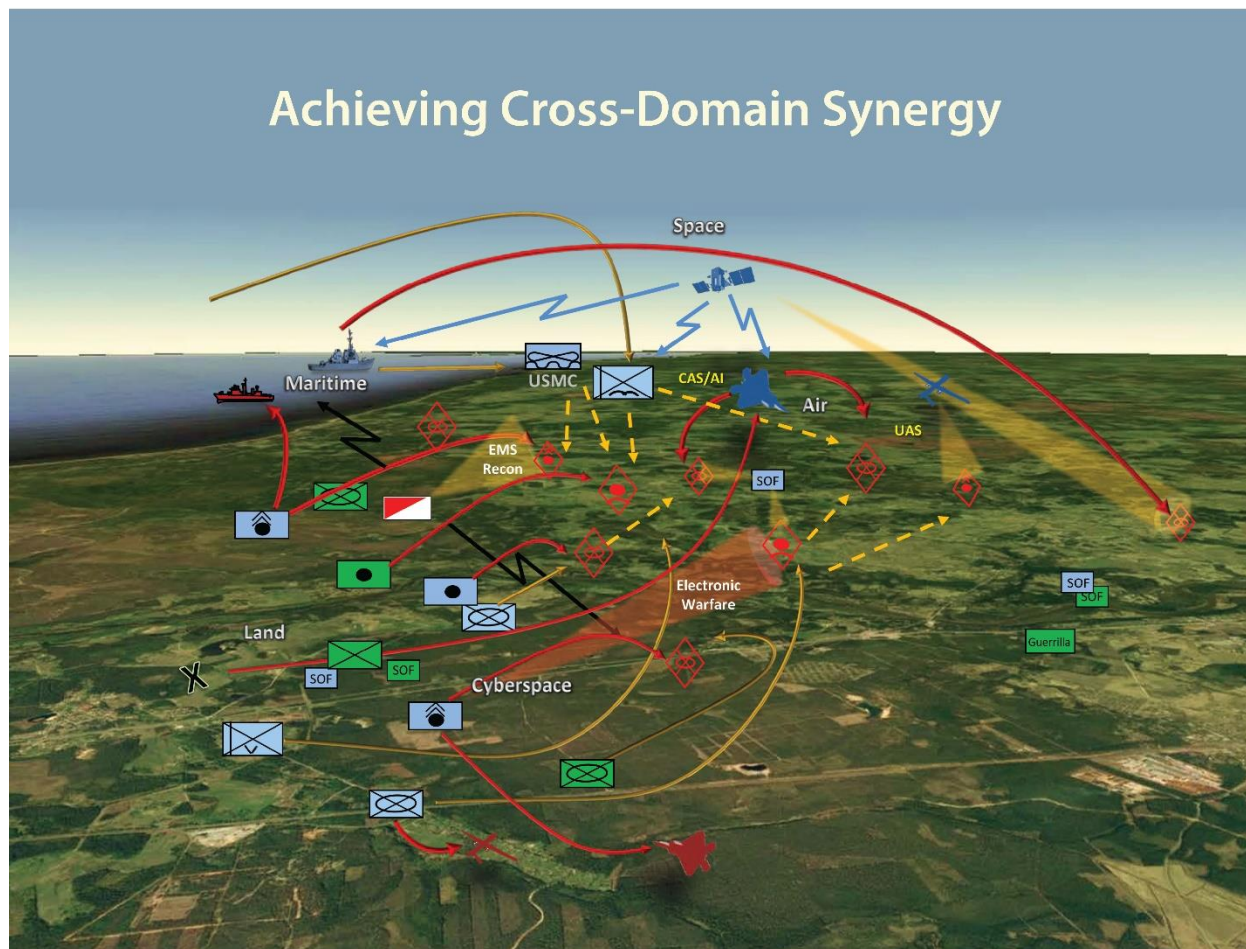
As adversaries of the future will most likely use a warfighting philosophy similar to Russia's ambiguous warfare, the Marine Corps may find itself more reactive, at parity, or even at a disadvantage once committed to battle. A more modernized warfighting philosophy that revises what currently exists in MCDP 1 and emphasizes unity of effort, surprise, and combined arms would put the Marine Corps of the future at the advantage desired in maneuver warfare, or at least put it in the best position for success to defeat an adversary with near-peer capabilities. Doctrine is intended to be updated and the Marine Corps needs to begin with its warfighting philosophy to start taking the necessary steps to trigger the discussion and change in TTPs needed to win on the future battlefield.

## Appendix A – Robert Leonhard's Maneuver Warfare Theory



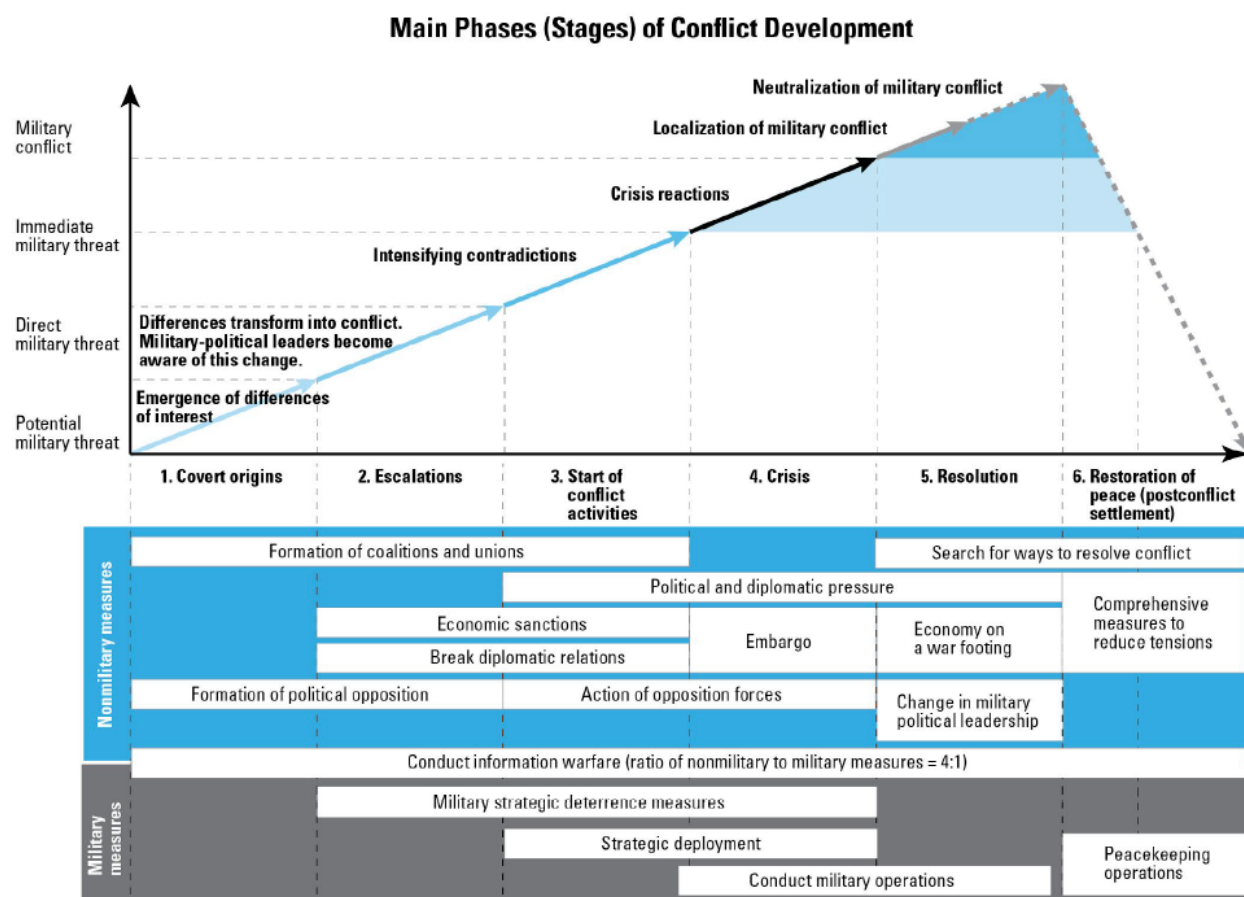
Source: Robert Leonhard, *The Art of Maneuver: Maneuver Warfare Theory and AirLand Battle*, p. 88.

## Appendix B – Multi-Domain Battle



Source: Gen. David G. Perkins, "Multi-Domain Battle: Driving Change to Win in the Future,"  
*Military Review* July-August 2017.

## Appendix C – Russia’s Ambiguous Warfare (Gerasimov Doctrine)



Source: Connell and Evans, “Russia’s Ambiguous Warfare and Implications for the U.S. Marine Corps,” p. 5.

## Endnotes

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- <sup>2</sup> US Department of Defense, *Summary of the 2018 National Defense Strategy of the United States of America*, 3.
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- <sup>7</sup> William S. Lind, *Maneuver Warfare Handbook*. (Boulder, CO: Westview Press, 1985), 7-8.
- <sup>8</sup> Lind, *Maneuver Warfare Handbook*, 6.
- <sup>9</sup> John R. Boyd, "Patterns of Conflict." Unpublished briefing, (last modified in 1986): 185. Retrieved from <http://www.dnipo.org/boyd/pdf/poc.pdf>.
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- <sup>12</sup> Ian T. Brown, *A New Conception of War*, (Quantico, VA: Marine Corps University Press), 108-109.
- <sup>13</sup> General Alfred M. Gray, Lieutenant General Paul K. Van Riper, Major John F. Schmitt, "Warfighting Panel Discussion (transcript, Quantico, VA, February 24, 2015), <https://grc-usmcu.libguides.com/pme/qpme/history-of-mcdp-maneuver-warfare>.
- <sup>14</sup> Gray, "Warfighting Panel Discussion," 3.
- <sup>15</sup> Headquarters US Marine Corps, *Warfighting*, 73.
- <sup>16</sup> Headquarters US Marine Corps, *Warfighting*, 72.
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- <sup>18</sup> Headquarters US Marine Corps, *Warfighting*, 36-39.
- <sup>19</sup> John F. Antal, "Thoughts About Maneuver Warfare," in *Maneuver Warfare: An Anthology*, ed. Richard D. Hooker, JR., 57-75 (Novato, CA: Presidio Press, 1993), 61-62.
- <sup>20</sup> Antal, "Thoughts About Maneuver Warfare," in *Maneuver Warfare: An Anthology*, 61-63.
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- <sup>22</sup> Headquarters US Marine Corps, *Warfighting*, 39.
- <sup>23</sup> Robert Leonhard, *The Art of Maneuver: Maneuver Warfare Theory and AirLand Battle*, (Novato, CA: Presidio Press, 1991), 88.
- <sup>24</sup> Leonhard, *The Art of Maneuver: Maneuver Warfare Theory and AirLand Battle*, 80-87.
- <sup>25</sup> Leonhard, *The Art of Maneuver: Maneuver Warfare Theory and AirLand Battle*, 88-89.
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- <sup>27</sup> Headquarters US Marine Corps, *Warfighting*, 72.
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- <sup>29</sup> Piscitelli, *The Marine Corps Way of War*, 204.
- <sup>30</sup> Brown, *A New Conception of War*, 190-191.
- <sup>31</sup> Brown, *A New Conception of War*, 190.
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- <sup>33</sup> Headquarters US Marine Corps, *Warfighting*, 72-76.
- <sup>34</sup> Headquarters US Marine Corps, *Warfighting*, 76-95.
- <sup>35</sup> Russell W. Glenn, "Meeting Demand: Making Maneuver Relevant to the 21st Century," *Small Wars Journal* (2018) <http://smallwarsjournal.com/jrnl/art/meeting-demand-making-maneuver-relevant-to-the-21st-century>.
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- <sup>52</sup> Edwin B. Werkheiser, "Multi-Domain Battle: Combined Arms for the 21st Century," *United States Army-Marine Corps White Paper*, (Fort Eustis, VA: U.S. Army Training and Doctrine Command, 2017), 6.
- <sup>53</sup> Werkheiser, "Multi-Domain Battle: Combined Arms for the 21st Century," *United States Army-Marine Corps White Paper*, 2.
- <sup>54</sup> General David G. Perkins, "Multi-Domain Battle: Driving Change to Win in the Future," *Military Review*, (Army University Press, July-August 2017).
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- <sup>57</sup> Connell and Evans, "Russia's Ambiguous Warfare and Implications for the U.S. Marine Corps," 11.
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- <sup>60</sup> Connell and Evans, "Russia's Ambiguous Warfare and Implications for the U.S. Marine Corps," 11.
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- <sup>64</sup> Headquarters US Marine Corps, *Warfighting*, Forward.
- <sup>65</sup> Headquarters US Marine Corps, *Warfighting*, Forward.
- <sup>66</sup> Headquarters US Marine Corps, *Warfighting*, 74-75.
- <sup>67</sup> Headquarters US Marine Corps, *Warfighting*, 88-89.
- <sup>68</sup> Headquarters US Marine Corps, *Warfighting*, 42-45, 75.
- <sup>69</sup> Headquarters US Marine Corps, *Warfighting*, 94-95.

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