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MASTER OF MILITARY STUDIES

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**A Light Infantry Force:  
Returning to the Past to Confront Tomorrow's Conflicts**

SUBMITTED IN PARTIAL FULFILLMENT  
OF THE REQUIREMENTS FOR THE DEGREE OF  
MASTER OF MILITARY STUDIES

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## *Preface*

I am a logistician. From this information a logical question may arise: Why is a logistician writing a research paper on the virtues of light infantry forces and tactics? Truthfully this research journey has been long and circuitous. I was initially interested in Russian amphibious capabilities, which then morphed into the security situation within the Baltics. During my research on the Baltics and Russian military strategy I became interested in Russia's use of gray zone tactics in Crimea and Ukraine. Much of what I read on gray zone conflicts or hybrid war centered on defining and describing the problem, but very little on what could be done to counter it. As I became more familiar with the terms and the tactics associated with hybrid war and recent Russian military tactics, I came to the realization that hybrid war, a Russian resurgence, and technological parity by our future potential adversaries demanded a paradigm shift in how the Marine Corps views its infantry forces. For I believe the infantry is the Marine Corps' *raison d'être* and despite all the attention given to developing silver bullet technologies, war is ultimately fought and won on the ground by men with guns.

The belief that the Marine Corps needed to refocus its attention on its infantry forces was further reinforced during Operation PACIFIC CHALLENGE, a planning exercise conducted at Marine Corps Command and Staff College. During this exercise students were asked to develop a plan to defeat a near-peer enemy on the Malay Peninsula. Both courses of action (COA) provided to the "commander" called for swift mechanized attacks down the peninsula utilizing a couple of narrow roads, bordered on both sides by dense jungle. The COAs each looked like a replay of Operation COBRA II conducted in 2003 in the vast deserts of Iraq. Despite the obvious problems associated with conducting a mechanized attack in restrictive terrain, very little attention was given to alternative options. Had due consideration been given to the terrain

and even past military operations conducted on the Malay Peninsula during World War II, a different COA may have resulted. A COA that resulted in the umbilical cord between the Marines and their vehicles being severed that sacrificed speed but achieved security, surprise, and ultimately shock. In essence a COA that utilized light infantry tactics.

## **Introduction**

*There's a thought process out there that technology can solve our problems, it's a clean way to conduct war. I understand what people like about this...if we stand off and we throw precision missiles and rockets, and that will cause the enemy to capitulate and solve all of our problems.<sup>1</sup>*

- General Ray Odierno, U.S. Army

The Marine Corps has always prided itself as the service capable of ‘doing more with less.’ This attitude, originally attributed to the Marine Corps’ fiscal and technological responsibility, has now come to signify how the Marine Corps perceives the infantry in relation to other parts of the Marine Air-Ground Task Force (MAGTF). Indeed the ‘less’ is no longer underpinned by fiscal responsibility, but rather that of its infantry.<sup>2</sup> In 2017, speaking at the Surface Navy Association’s National Symposium, the Commandant of the Marine Corps discussed the need to develop a “Fifth Generation Marine Corps” capable of excelling in advanced cyber, information, and electronic warfare, to include the integration of unmanned air and ground systems and robots.<sup>3</sup> Noticeably absent from his speech was any mention of developing a modern infantry force. In fact General Neller further noted that making infantry, artillery, and armor Marines was “easy.”<sup>4</sup> This statement contrasts markedly from General Bob Scales (ret.) assertion that professional infantry soldiers “cannot be mass produced in a few weeks of basic training,” rather “Good soldiers, like a fine wine, take time to mature.”<sup>5</sup>

Indeed the investment of treasure on advanced technologies and niche capabilities is far removed from the Marine Corps’ primary mission as outlined in Title 10, whereby it is responsible for, “the seizure or defense of advanced naval bases and for the conduct of such land operations as may be essential to the prosecution of a naval campaign.”<sup>6</sup> This current fixation on technology within the Marine Corps is not a new phenomenon either. In 1987, General Al Gray, then the Commandant of the Marine Corps, bemoaned the large logistical tail required to maintain advanced weapons systems that negatively affected his ability to fully man his infantry

battalions.<sup>7</sup> If General Gray was concerned with the negative consequences associated with an over-reliance on technology in 1987, then the Marine Corps of today would hardly reassure him that this focus has changed, and perhaps it has become worse.

How then does the Marine Corps address the apparent need to better posture its infantry forces for the future? Interestingly, as the Marine Corps looks to the future part of the answer is found by looking to the past. As the past reveals the patriarchs of Marine Corps' maneuver warfare doctrine and *FMF1, Warfighting*, men like William Lind, the author of *Maneuver Warfare Handbook*; John Schmidt, author of *FMF1, Warfighting*; and Colonel (ret.) Michael Wyly, a prolific writer on maneuver warfare and professional military education, advanced a common solution. All of these men wrote articles in 1990 contending that developing a light infantry force is paramount in the application of maneuver warfare as originally written. With William Lind expressly stating, "For Marine infantry, the primary meaning of *FMFM 1, Warfighting*, is a requirement to transition from line to light infantry," and went on to define light infantry as an agile, lightly armed, and decentralized force that embraces infiltration tactics and an ambush mentality to defeat its foe.<sup>8</sup>

Therefore, it is the purpose of this paper is to answer the following question: After decades of fighting low-intensity, counter-insurgency conflicts, and of being forsaken for advanced programs deemed more important, can the Marine Corps posture its infantry force to confront future adversaries that will seek to utilize unconventional tactics that take advantage of a complex operating environment designed to off-set our conventional strengths? To answer to this question, this paper will examine: 1) the future operating environment; 2) differences between light and line infantry, and why it matters; 3) the costs associated with an overreliance on technology and its implications for Marine Corps infantry; 4) to what extent can the Marine

Corps develop a true light infantry force. Through this process, the central argument of this paper is that to “fight and win” in a future operating environment, the Marine Corps must return to the original interpretations of maneuver warfare doctrine, avoid an overreliance on technology, and utilize the 2016 *Marine Corps Operating Concept's* (MCOC) key drivers of change to bring about an infantry reawakening – a light infantry reawakening.

***The Future Operating Environment: The 2016 Marine Corps Operating Concept***

*You may not be interested in War but War is interested in you.*<sup>9</sup>  
- Leon Trotsky

Before delving into a discussion concerning the requirement for the Marine Corps to develop a light infantry force it is first necessary to identify what the future operating environment might look like and how this environment is potentially applicable to a light infantry force. During the Inter-War Period, the Marine Corps used *War Plan Orange* as a catalyst for amphibious operations innovation. Much of the Marine planning effort during this period focused on solving a singular problem – war with Japan. Essentially the Marine Corps prepared to fight the most dangerous course of action. All other problems were secondary, and history proved this was the correct path to take. In fact it was doctrinal innovation that eventually drove technological innovation, and not the other way around. Today, following the doctrinal innovation model, the Marine Corps must utilize the MCOC, a comprehensive roadmap for how the Marine Corps plans to fight in the future, to re-shape its infantry.<sup>10</sup>

As opposed to the explicit pronouncements of the efficacy of light infantry by Lind, Schmitt, and Wyly in 1990, the 2016 MCOC is implicit in its call for developing a light infantry force. The implicitness of the MCOC is derived from the fact that it is relatively conceptual, as it proffers more questions than it provides answers. Despite its conceptual nature, the MCOC's characterization of the future operating environment is in close harmony with the aforementioned

authors' explicit opinions regarding the need for a light infantry force in the application of maneuver warfare doctrine.

The MCOC's key drivers of change are drawn from the June 2015 Marine Corps Intelligence Activity's *Future Operating Environment (FOE) 2015-2025: Implications for the Marines*, and are designed to appropriately posture the Marine Corps to accomplish its mission in a future operating environment characterized mainly as increasingly complex and ambiguous.<sup>11</sup> Four of the five key drivers of change (complex terrain, technology proliferation, battle of signatures, and increasingly contested maritime domain) suggest a future operating environment where light infantry forces are ideally suited.<sup>12</sup> These drivers of change are intended to be general strategic/macro-level trends in nature, but at their core have tremendous ramifications, indeed a road map, for the future of Marine Corps light infantry. Additionally, and in keeping with this paper's underlying theme that the past is prologue, history also demonstrates that an examination of past military operations is just as important when looking toward the future of Marine infantry.

### *Complex Terrain*

The future operating environment will require the Marine Corps to operate in complex terrain that negates its ability to fight as currently manned, trained, and equipped. Future enemies have seen recent Marine Corps' successes in the open terrain of the Middle East; and therefore will avoid open terrain to offset our technological advantages.<sup>13</sup> Instead they will increasingly seek to utilize the close and complex terrain associated with cities, forests, jungles, and mountains. The *Future Operating Environment (FOE) 2015-2025: Implications for the Marines* (FOE) and the MCOC emphasize the complexity of urban population growth which creates "mega-slums, which according to the MCOC, these "place a greater requirement to

conduct sustained, foot-mobile operations in and among the populations.”<sup>1415</sup> Complex terrain essentially deprives the Marine Corps of its one true advantage – mechanical mobility and overwhelming firepower. This then should compel the Marine Corps to develop an infantry force capable of thriving in terrain where our advantages cannot be brought to bear.

Even if future enemies do not make a conscious decision to utilize complex terrain to their advantage, the future increase of complex terrain vis-à-vis urban mega-slums makes it more likely that the Marine Corps will have to operate in environment unsuited to wholly mechanized or motorized forces. In 1987, despite a real possibility of confronting a large mechanized Russian army crashing through the Fulda Gap, the West German General Franz Uhle-Wettler, an ardent advocate of light infantry, argued that Central Europe was comprised primarily of complex terrain (cities, forests, swamps, and mountains), therefore a total reliance on mechanized forces was dangerous, and that developing a light infantry force was essential.<sup>16</sup> Consider during World War II the open terrain the German Tenth Panzer Army used to assemble prior to their attack out of the Amiens bridgehead, has now been replaced with a shopping mall.<sup>17</sup> Complex terrain is more dangerous to a mechanized force when coupled with an adversary armed with advanced technology. It is in this terrain that an enemy seeks to mask its location, minimize our ability to maneuver, and use advanced weapons to produce the greatest number of casualties.

### *Technology Proliferation*

According to the MCOC, technology proliferation, much like complex terrain will test the Marine Corps’ ability to operate as currently designed.<sup>18</sup> In 2015, Dr. Phillip Karber, President of the Potomac Foundation, travelled extensively throughout Ukraine, observing the frontlines, where he reported just how lethal a technologically advanced army could be to

mechanized forces: “In a 3-minute period... a Russian fire strike wiped out two mechanized battalions with a combination of top-attack munitions and thermobaric warheads.”<sup>19</sup> Technology proliferation is not an entirely new phenomenon. What makes it different today is its ferocity, its ubiquity, its precision, and its ability to prevent the Marine Corps’ warfighting capacity to wage war on its own terms. Consequently, technology proliferation “will make future battlefields bloodier and more dangerous for Marines, unless they can operate in new ways.”<sup>20</sup>

The Israelis learned this the hard way in 2006, when its army was stifled by Hezbollah’s prolific use of technologically advanced anti-tank guided missiles and expert application in light infantry tactics.<sup>21</sup> Realizing that they could not compete with Israeli deep strike dominance, Hezbollah instead chose to focus its attention on procuring tactical technological advancements designed to offset this overmatch. The failure of Israel in 2006 can be traced to a strategic over-reliance on technology that emphasized the supremacy of the deep fight to the chagrin of its ground forces focused on winning a close fight. This was due in large part because of the Israeli army’s endless security mission within the Palestinian territories and operational and training budgets being slashed to pay for advanced technologies for the Israeli Air Force.<sup>22</sup> An Israeli air force that believed whole-heartedly in the value of Effects Based Operations to win wars almost entirely through the use of deep strike precision fires. In the end, Hezbollah was able to undermine Israel’s strategic power through the use of proliferated tactical-level technologies. A strategy that was aimed not obtaining ground, but was intended to strike to a western-style democracies at its greatest vulnerability – dead Soldiers.<sup>23</sup>

The 2006 Israeli-Hezbollah War is a shining example of a technologically superior country focusing and winning the deep fight, but due to the under-investment in its ground forces were incapable of winning the close fight. The MCOC is partially correct when it asserts that

technology proliferation will place added emphasis on the individual Marine, rather than an individual technology.<sup>24</sup> However, the MCOC may have qualified this assertion better by replacing ‘individual’ with ‘infantry.’ Had Israel trained its ground forces in light infantry tactics to confront a light infantry enemy, the results may have turned out differently. From this assertion it is reasonable to conclude that a true professional light infantry capable of defeating a similar light infantry foe places professional warfighting development on the same plane as technological development.

### *Battle of Signatures*

A battle of signatures is closely linked to technology proliferation. Technology proliferation, especially in the area of electronic detection and location, enhances the importance and awareness of signatures. The MCOC states, “To be detected is to be killed.”<sup>25</sup> Destruction will be quick, as was the case for the two Ukrainian mechanized battalions, located via Russian unmanned aircraft systems and then destroyed within three minutes. The battle of signatures essentially calls for the Marine Corps to become comfortable with dispersion as a means to negate the increasing lethality of massed fires. Light infantry forces are synonymous with dispersion.<sup>26</sup> Although the most ardent supporters of maneuver warfare doctrine will contend that dispersion forfeits the Marine Corps’ advantage of mass. Small teams of light infantry capable of leveraging massed precision fires could produce the same effect as a massed battalion of tanks.<sup>27</sup> As General Scales attests, “mass, and massive application of killing power, is a thing of the past.”<sup>28</sup>

In 1991, Colonel Michael Wyly, wrote an article advocating the virtues of light infantry that presciently described a future where the battle of signatures would be reign supreme. He argued that the Marine Corps needed a light infantry force and mindset that could

independently operate “or else they will fall prey to the profuse automatics fire; high caliber, long-range, quick-firing artillery; precision-guided munitions; and ubiquitous aerial surveillance that characterize modern weaponry.”<sup>29</sup> Therefore, a light infantry force’s self-reliance, decentralized command and control, and tactical independence enable it to counter the proliferation of technology and mask its signatures.

This driver of change is inwardly focused and is affirmation that the Marine Corps’ embrace of communication redundancy, insatiable appetite for information, and large logistics requirements are inconsistent with future threats. The logistical iron mountains that the Marine Corps has grown accustomed to are a liability instead of a force multiplier. The MCOC calls for adaptation in how the Marine Corps fights in order to be more survivable.<sup>30</sup> This adaptation ought to be driven by developing infantry forces and commanders comfortable with dispersion and decentralized decision making, which ironically are core components of the Marine Corps’ maneuver warfare doctrine. Dispersion is designed to protect the Marine Corps’ critical vulnerability of dead Marines. There is obviously some inherent risk involved with dispersion and small forces operating far removed from senior leadership. However, some of the risk can be alleviated by developing a professional light infantry force.

#### *Increasingly Contested Maritime Domain*

At first glance an increasingly contested maritime domain does not appear to be a catalyst for developing a light infantry force. On the contrary, a contested maritime domain is exactly the kind of environment where a light infantry force is entirely suitable, if not ideal. According to the MCOC, the Marine Corps will be unable to rely on modern ports and robust airfield hubs in the future due to the increased long-range fires capability of future adversaries.<sup>31</sup> Further complications will arise from increased advancements in anti-access/area-denial (A2/AD)

measures taken by future enemies that will limit the Marine Corps' ability to conduct amphibious operations.<sup>32</sup> But here again, contested maritime domains and contested landing beaches cannot be considered a new phenomenon, nor an unheard of concern.

In the fall of 1917, the Germans conducted Operation *Albion*, an amphibious operation to seize several Russian islands in the Gulf of Riga. During this operation the Germans had to contend with a relatively large Russian navy with expertise in mine warfare, and on these Baltic islands itself were large caliber coastal batteries and a Russian army division. In the end, the German amphibious operation overcame tremendous A2/AD odds, but what is more germane to this conversation is how the Germans task organized their landing forces to achieve a quick defeat of the Russian army. To accomplish this the Germans utilized two main landing sites. The preponderance of forces landed on the hotly contested beaches of Tagga Bay. Another force, comprised of a light infantry bicycle brigade, landed on an uncontested beach 40 miles to the east, with the task of quickly moving inland to act as the anvil for the hammer of main forces attacking from Tagga.<sup>33</sup> The agility of the light infantry bicycle brigade enabled the Germans to swiftly land and in greater numbers, and then attack rapidly inland at twice the speed of the foot-mobile Russian army. The Marine Corps would do well to study the German bicycle troops of Operation *Albion* to appreciate the value of a dispersed, agile, light infantry force in conducting amphibious operations in contested maritime environment.

The MCOC's key drivers of change should compel the Marine Corps to develop a true light infantry force capable of thriving in an environment characterized as increasingly complex and ambiguous. Although focused on the future, the future may already be here.

### **Resurgent Russia: The Future is Here**

*There are many kinds of manouevre [sic] in war, some only of which take place upon the battlefield.*<sup>34</sup>  
- Winston Churchill

Enter a resurgent and aggressive Russian military. In the wake of the Russian annexation of Crimea in 2014, continued aggression in the Donbass Oblast of eastern Ukraine and in Syria, there is little question that Russia now seeks a return to its past glory and what it considers its rightful spot in global politics.<sup>35</sup> Recent analysis of Russia's military strategy centers on its use of soft power in order to achieve its goals in Crimea and Ukraine, and goes to great lengths to label Russia's military strategy as employing 'ambiguous' warfare, 'hybrid' warfare, or 'non-linear' warfare.<sup>36</sup> Much of the analysis further suggests that to deter Russia from its strategic visions and its embrace of hybrid war, emphasis must focus on Phase 0 and Phase 1 activities, primarily the non-military elements of national power. Consequently, this focus on deterrence fails to address the actual 'warfare' aspect of Russia's military strategy.

In February 2013, Valery Gerasimov, the Chief of the General Staff of the Russian Federation Armed Forces, wrote an article "The Value of Science in the Foresight," that enumerated the ways in which science and military science could unite to develop means capable of countering threats by utilizing all elements of national power.<sup>37</sup> In the aftermath of this article, many experts labeled it the 'Gerasimov Doctrine', and proposed that this was proof of a new Russian way of warfare – 'hybrid warfare'. This sentiment was further reinforced by Russia's 2014 operations in Crimea and Ukraine. Whereas, certainly Russia used a whole host of non-military measures to achieve its success in Crimea, in Ukraine there is no mistaking that the Russian army, as a fighting force, is heavily involved. The non-military measures (economic sanctions, disruption of political ties, information operations) of the Gerasimov Doctrine are truly important to understand, but are outside the scope of this paper. Thus this section will

focus on the recent military operations undertaken by Russia in Ukraine to highlight the urgency it requires because “[A]t a time when the U.S. military is cutting back on its conventional capabilities, Russia is looking at a similar future operational environment, and doubling down on hers.”<sup>38</sup>

A recent article in the *Marine Corps Gazette*, authored by the Ellis Group, the Marine Corps’ maneuver warfare doctrine experts, highlights the strides the Russian military has made since the 2008 Russo-Georgian War, particularly in the area of maneuver warfare, whereby they affirm that “the most dangerous current application of maneuver warfare may perhaps be Russia.”<sup>39</sup> For the Ellis Group, the Marine Corps’ maneuver warfare doctrine experts; to acknowledge Russia’s preeminence in the application of maneuver warfare is astonishing. The article describes Russia’s self-contained combined arms brigade that is task organized around three battalions of motorized infantry, and also include two battalions of self-propelled howitzers, a rocket artillery battalion, a rocket artillery battalion, a tank battalion, two air defense battalions, to include combat service support units, and an electronic warfare company.<sup>40</sup> To be sure, the fire support capability is intimidating, but what makes this such a potent force is the fact that all of these assets are organic to the brigade, which translates into greater flexibility and responsiveness.

If the Russian military has made strides in developing their conventional war-making capabilities, General Gerasimov is also interested in irregular warfare. Returning to Gerasimov’s “The Value of Science Is in the Foresight,” he mentions the “use of partisan units during the Great Patriotic War” and the “fight against irregular formations in Afghanistan and the North Caucasus” where Special Forces troops utilizing speed, surprise, and encirclement paved the way for tremendous successes.<sup>41</sup> In doing so, he may be acknowledging Russia’s relative weakness

when compared to the U.S. This opinion is further reinforced by Gerasimov's concluding remarks when he states that, "no matter how well developed [the enemy] forces and means of armed conflict may be, forms and methods for overcoming them can be found."<sup>42</sup> The means consist of 'little green men', "combined with massive salvoes of precision rocket and artillery fire targeted by UAVs, and cyber and electronic warfare capabilities designed to blind NATO."<sup>43</sup>

His statement and recent Russian tactics suggests a desire by the Russian military to develop asymmetric means to counter the U.S. perceived strengths in technology. Gerasimov's thoughts on asymmetric may have been shaped by an article that in the *Russian Journal of Military Theory and Strategy* in 2010 that called for symmetrical actions designed to defeat enemy forces in combination with asymmetric actions to inflict catastrophic damage to the other security areas.<sup>44</sup> Hence, in a future operating environment, against the Russian army, the Marine Corps must be prepared to counter both conventional and unconventional forces, to include state and non-state actors with advanced technology.

A specialized light infantry force is part of the answer to stitch together the seam between conventional and unconventional war. There is a call to counter gray zone conflicts and hybrid war utilizing strictly Special Operations Forces (SOF) as they are optimized to provide an unconventional response to unconventional problems.<sup>45</sup> While others, like Lieutenant General (ret.) David Barno, suggest that despite SOF's unique capabilities, there is simply not enough SOF forces available.<sup>46</sup> Instead, he argues that it is paramount to develop conventional forces that are lighter, specially-trained, and equipped to operate successfully in this type of conflict.<sup>47</sup> If SOF forces have become task saturated, then the Marine Corps would be keen to develop a professional light infantry force skillful enough to supplement their capabilities.

The foregoing description of Russian tactics in the Ukraine suggests that the way Marine Corps infantry is currently manned, trained, and equipped is inadequate against an enemy seeking to reduce its technological superiority. Overlaying the MCOC's future operating environment against the Gerasimov Doctrine one is able to discern that future war will require Marine infantry to be nimble, specialized, and optimized to operate in an environment where technological superiority is not guaranteed. It is important then for the Marine Corps to use the implicitness of the MCOC coupled with recent Russian military operations in Ukraine to foment infantry innovation based on the most dangerous course of action – a resurgent Russian army. Ultimately, this will ensure that the Marine Corps can accomplish its *statutory* obligations as outlined in Title 10. Although the likelihood of confronting the Russian army is remote, it is far better to prepare for the worst case scenario than to hope for the best.

### **Light Infantry v. Line Infantry**

*My message to the troops of General Marshall's in training for this type of warfare is to go back to the tactics of the French and Indian days. Study their tactics and fit in our modern weapons and you have a solution. I refer to the tactics and leadership of the days of Roger's Rangers.<sup>48</sup>*  
General A. A. Vandergrift, *Fighting on Guadalcanal*, 1943

Marine infantry is currently a line infantry force, and thus has strayed from the tenants of maneuver warfare doctrine and the maneuver warfare vanguard who advocated for a light infantry force.<sup>49</sup> A recent search conducted by the author of this paper found that between 1916 and 1993 there were 268 articles in the *Marine Corps Gazette* with the words "light infantry" in the title, or roughly three per year, but from 1994 to present day, there were only a grand total of three light infantry articles.<sup>50</sup> Although anecdotal, these numbers perhaps highlight just how far the Marine Corps has strayed from the original interpretations of its maneuver warfare doctrine and General Vandergrift's urgent plea for light infantry training after the battle of Guadalcanal. Further these numbers suggest a lack of interest in the successful wakes of Desert Storm and in

the long wars of Iraq and Afghanistan. To be America's expeditionary force in readiness the Marine Corps must not only reinvigorate the light infantry conversation again, but embrace and implement it.

Despite claims to the contrary, today the Marine Corps is a line infantry force. The Marine Corps believes it has trained and indoctrinated its leaders with a 'maneuverist' mentality. Although the Marine Corps is extremely good at movement, it has missed the mark on the maneuver aspect of its philosophy. A recent article written by the Ellis Group, "21st Century Maneuver Warfare Marine" equally contends that "maneuver warfare is an ideal that [the Marine Corps] has yet to reach."<sup>51</sup> The reason why this ideal has not been obtained is largely due to the enemies the Marine Corps have faced. This enemy has reduced Marine infantry to forward observers for artillery and aviation assets, whereby the infantry "bumps" into the enemy, finds adequate cover, and then calls for fires to destroy the enemy.<sup>52</sup> In essence this enemy has calcified Marine infantry tactics, which has in turn led to an embrace of a line infantry force and its associated mentality.

Line infantry use tactics that are relatively calcified and rigid. According to Scott McMichael, author of *A Historical Perspective on Light Infantry*, line infantry is defined as "modern-day motorized and mechanized infantry and to the large dismounted infantry forces typical of the standard infantry divisions of World War II, the Korean War, and the Vietnam War."<sup>53</sup> To describe line infantry, William Lind uses the Greek phalanx that fought in rigid formations, followed prescribed tactics, and whose success was dependent on the group, rather than the individual.<sup>54</sup> Bruce Gudmundsson and John English in their book *On Infantry* succinctly summarize line infantry as "ordinary," whereas they depict light infantry as "elite."<sup>55</sup> Holistically, a line infantry force is a status quo force. Today's line infantry forces still use time-

honored linear tactics with modern weapons through the application of centrally coordinated and overwhelming fire power to “put steel on target.”<sup>56</sup> In fact Mr. Lind argues that the Marine Corps today is largely an attritionist force, still firmly entrenched in Second Generation War, and has not yet attained Third Generation War made famous by the German blitzkrieg and its associated motto of “bypass and collapse.”<sup>57</sup> There are recent exceptions (TF-58, OIF) to the notion that the Marine Corps is an attritionist force, however in both these instances the enemy was either almost entirely absent or relatively inept. As the Marine Corps prepares for war against a credible and determined enemy, attrition must give way to infiltration and de-mechanization.

There are numerous definitions for light infantry. Some experts contend that the most important characteristic of light infantry is strictly physical, whereby its minimalist approach to weapons and transportation gives light infantry enhanced strategic mobility that mechanized and armored divisions do not. It is what Dr. Steven Canby, an early proponent of fielding light infantry forces in the 1980s called, “line infantry made light” or the American approach to light infantry.<sup>58</sup> Whereas being light in a physical sense is important and is an easier obstacle to hurdle than being light in a cognitive sense, the Marine Corps has even fallen short in this arena as well. In 2007, the Commandant of Marine Corps General James Conway reinforced this assertion by stating that Marine Corps was in danger of becoming a “second land army, ” and must become “lighter and faster.”<sup>59</sup> To avoid becoming a second land army, being physically light is a logical first step, the second step is to develop a mindset that is light and agile as well – a light infantry mindset.

During the 1980s and early 1990s there was a groundswell of support for light infantry forces for the U.S. military. In 1985, the US Army Training Support Center produced the report

*Strategic Utility of US Light Divisions: A Systematic Evaluation* that provided forty salient definitions and points on the efficacy of light infantry forces. One of first points this report makes neatly underscores light infantry's ability to effectively operate in 'any clime and place':

- Inherently superior to standard formations in the Coup de Main role;
- Sufficient in low-intensity contexts where the employment of supporting artillery and heavy forces is normally unnecessary, or even counter-productive;
- Effective in high-intensity contexts as an operational complement to heavier forces in large-scale "continental" warfare, when it can be employed in favorable terrain.<sup>60</sup>

Light infantry forces provide the commander with inherent flexibility. And as our discussion on the future operating environment has shown, flexibility and agility are the cornerstones of a light infantry force.

The flexible and agile mindset of a light infantry force is what truly separates it from line infantry. According to Scott McMichael, there are four general characteristics that separate light infantry from line infantry: self-reliance, versatility, mastery of the environment, and esprit.<sup>61</sup>

Figure 4 compares light and line infantry. Though not all encompassing it dramatically underscores the intrinsic differences in their mindsets and comportments. McMichael's general characteristics and the light infantry characteristics from Figure 4 closely mirror the characteristics and overall philosophy found in MCDP 1, *Warfighting*. Thus for the Marine Corps to transition from a line to a light infantry force does not necessitate a tremendous leap, because on the contrary its foundation doctrine aligns with many, if not all the tenets of light infantry.

<b>Characteristics of Line Infantry vs. Light Infantry Forces</b>	
<b>Line Infantry</b>	<b>Light Infantry</b>
<b>Training</b>	
Mild physical demands	Extremes of physical fitness required
Weapons familiarity	Master of Weapons
<b>Operations</b>	
General purpose force	Utility limited to specific conditions
Equally suited to offense and defense	Strong offensive orientation
Operate in any terrain	Best suited for close terrain
Views difficult terrain as an obstacle	
<b>Tactics</b>	
Employs convent. Tactics per field manuals	Employs unusual tactics
Seeks 3:1 advantage in mass and firepower	Comfortable with asymmetry
Mass primary tactical principle	Surprise primary tactical principle
Achieves shock thru mass	Achieves shock thru surprise, speed, and violence
<b>Logistics</b>	
Physically and mentally dependent on fixed LOCs	Self-reliant; operates independently of fixed LOCs
Depends on robust CSS tail	Basic organization includes few CSS elements
Heavy logistics requirements	Routinely practices austerity
<b>Leadership</b>	
Centralized tactical direction	Decentralized responsibility
Values troop welfare	Practices innovation, imagination, and initiative
Adequate technical expertise	Infantry scientists

Figure 1. Source: McMichael, Scott R., *A Historical Perspective on Light Infantry*, Leavenworth, KS: Combat Studies Institute, 1987.

In 1990, only a year after *FMFM 1 Warfighting* was released, the author of the Marine Corps' maneuver warfare doctrine, William Lind, wrote the article "Light Infantry Tactics" for the *Marine Corps Gazette*. This article advanced the idea that light infantry forces are integral in the application of this new doctrine. Central to Lind's characterization of light infantry was the need to maintain an ambush mentality.<sup>62</sup> In essence, light infantry are hunters not the hunted. In the defense, the light infantry force utilizes a positional defense rather than a liner one, and "remains untargetable through dispersion and stealth."<sup>63</sup> In the offense, the light infantry force attacks using infiltration tactics that seek "unlimited objectives" designed to encircle the enemy, through its striking power derived from its ability to produce surprise and shock.<sup>64</sup> Ultimately, what makes the William Lind's article on light infantry so compelling is the fact that he wrote it at a time when the U.S. was still confronted by a massive Soviet Army, and not mired in low

intensity counter-insurgent conflict, though he also asserted that light infantry tactics were entirely suitable in this type of military operation as well, if not more so.

Although this paper aims to argue the virtues of a light infantry force for the Marine Corps in a future operating environment, light infantry does have some limitations. Notably a light infantry force is not an all-terrain force.<sup>65</sup> Light infantry is not suited for open terrain, which is another reason why the Marine Corps is a line infantry force since it has found relative success in open deserts of Iraq and Afghanistan. In other words the Marine Corps became what it has always tried not to be – America’s second land army. Understandably, the Marine Corps used these tactics because it was what the situation called for, and relatively speaking it was an easy situation to cope with. Unfortunately, the Marine Corps has become a victim of its own success. Further victimization will result from failing to understand that future battlefields will look nothing like Iraq and Afghanistan.

The future of the Marine Corps may be dependent, in part on the development of a true light infantry force. Prescient men like Lind, Wyly, and Schmitt realized this back in 1990. More recently, General Scales called for “small-unit dominance,” by developing “elite” conventional forces through rigorous training and professionalization.<sup>66</sup> The Marine Corps’ foundational doctrine is further philosophically underpinned with core tenets of light infantry. Light infantry’s austerity can be the counter-balance to technology proliferation, complex terrain, contested maritime domains, and signature mitigation. Ironically, before the Marine Corps can move forward with implementation it must first overcome an over-reliance on technology.

## The Costs of the Marine Corps' Overreliance on Technology

*On the battlefield, technological overmatch is an advantage, but is no panacea.*<sup>67</sup>  
- Aaron Bazin

Bill Lind's staunch support of light infantry was heavily influenced by the book *Battlefield Central Europe: Danger of Overreliance on Technology by the Armed Forces*, written by retired West German Brigadier General Franz Uhle-Wettler in 1987. Uhle-Wettler contended that over-reliance on technology adversely affects a nation's ability to develop a professional infantry force.<sup>68</sup> He went on to list eight costs associated with a military's over-reliance on technology, and argued that an army should instead raise large numbers of light infantry forces largely divorced from technology (See Figure 2).<sup>69</sup>

<b>The Cost of Technology</b>	
<b>The Costs</b>	<b>Brief Explanation</b>
Fighters Become Rare	Inverted Tooth-to-Tail Ratio. More CSS troops required.
Fighters Become Poorer in Quality	More intelligent troops do not become infantrymen.
Increased Dependence on Resupply	Most soldiers located in CSS units. LOCs blocked by refugees and enemy action creates resupply nightmare.
Specialized Mobility	Complex terrain negates advantages of mechanized/motorized forces.
Specialized Firepower	Complex terrain negates advantages of long range, flat trajectory weapons.
Difficulty with Replacement of Major End Items	Difficult to replace advanced technology equipment prone to maintenance problems and destruction by enemy.
Armies Becoming Smaller	Immense costs associated with fielding advanced technology.

Figure 2. Source: Uhle-Wettler, Franz, *Battlefield Central Europe: Danger of Overreliance on Technology by the Armed Forces*, 1987

Remarkably, Uhle-Wettler's associated costs listed in 1987 appear analogous to the Marine Corps' current infantry troubles in 2017. It highlights some of the pitfalls associated with the Marine Corps over-reliance on technology, and ultimately demonstrates that the biggest obstacle confronting the Marine Corps' development of a light infantry force is its fondness for technology.

According to Michael Wyly, a retired Marine Colonel and faithful advocate of light infantry, there are two theories of how to prepare and wage war. First, the Technological

Superiority Theory, “holds that high-performance aircraft, smart bombs, long-range missiles...will deter any less sophisticated foe.”<sup>70</sup> The second, the Mental Agility Theory, “suggests that any technological barrier can be circumvented by a determined enemy dispersed so that he is less of a target, fighting at close quarters.”<sup>71</sup> What Wyly envisioned was a large, agile, well-trained force capable of sustained operations with the ability to win the close fight.<sup>72</sup> The Marine Corps and the U.S. military both conform to the Technological Superiority Theory, which has both advantages and drawbacks. Technological superiority is great for the deep fight, but even this has its drawbacks. In a fight against a near-peer competitor with a myriad of deep operational and strategic targets, the U.S. may also find that its stockpiles of precision guided munitions being depleted rather quickly.<sup>73</sup> Subsequently, the Marine Corps must develop an infantry force capable of operating in an environment where on-call precision fires is not an absolute.

The Marine Corps, despite its espousal of maneuver warfare, has fallen short of its own warfighting ideals.<sup>74</sup> Much of this is due the lengthy and ongoing conflicts in Iraq and Afghanistan; but it is also a result of focusing too much on developing weapons for shaping the deep fight that are largely dependent on advanced technology. In a recent speech, Lieutenant General H.R. McMaster, now the National Security Advisor, asserted that “we spend a long time talking about long range missile duels,” in the future “you’re probably going to have a close fight...Increasingly, close combat overmatch is an area we’ve neglected, because we’ve taken it for granted.”<sup>75</sup> Indeed a better balance must be struck between the deep and close fight. This balance will be achieved when the same time, effort, and money that goes into developing the F-35 is spent equally on developing technologies for the close fight. Although General Scales book *Scales on War*, is underpinned by the supremacy of the individual and small units, he is

also steadfast in his opinion that “After fourteen years of war the ground services, the Army and Marine Corps, remain starved for new, cutting edge, lifesaving material.”<sup>76</sup> In the future the Marine Corps cannot assume it will win the deep fight and consequently must place added emphasis on the close fight – the last three hundred meters, where ultimately operational success is won or lost. The Marine Corps is capable of fighting, but winning in the future means investing where the ‘winning’ actually takes place – on the ground with the infantry.

### **The Way Forward**

*We are not likely to get the future right. We need to make sure we don't get it too wrong.*<sup>77</sup>  
General James N. Mattis

The Marine Corps has always been at the forefront of infantry innovation. During World War II Marine assault groups developed techniques to defeat heavily fortified Japanese bunkers.<sup>78</sup> The Marines in Vietnam established the *Stingray* Program. This program utilized small four to six man, foot-mobile strike teams clandestinely inserted into the jungles of Vietnam to locate an elusive enemy, and then utilizing artillery and aviation fires to destroy them.<sup>79</sup> Despite the smallness of these teams they had three relative advantages over larger units: greater attrition of the enemy on a per-man basis; their decentralization actually decreased their vulnerability; and the ability to cover more terrain.<sup>80</sup> Then in April 2005, the Commandant of the Marine Corps, General Michael Hagee signed “A Concept for Distributed Operations.”<sup>81</sup> This concept was designed to “create an advantage over an adversary through the deliberate use of separation and coordinated, interdependent, tactical actions enabled by increased access to functional support, as well as by enhanced combat capabilities at the small-unit level.”<sup>82</sup> All three of these infantry innovations were designed around the tenets of maneuver warfare doctrine and are essentially synonymous with the characteristics of light infantry defined within this paper. Strangely, none of these innovations became doctrine, but were “overtaken by more rigid

positional or linear doctrine, patterned after the more definable schematics...by something that could be diagrammed in books, controlled nicely, and often practiced on the drill field.”<sup>83</sup>

Herein lies the crux of the problem in developing a true light infantry force – overcoming the intrinsic line infantry mindset of the Marine Corps.

This mindset problem stems from the Marine Corps’ inability to truly articulate what its infantry forces are designed to be. Through the 2014 *Expeditionary Force 21* and over the course of the past eight years the Marine Corps has labeled itself a “middleweight force” that is “light enough for rapid response and heavy enough to prevail in the littorals.”<sup>84</sup> Absent from this discussion is what exactly this label means. While the Marine Corps MAGTF as a whole may be a “middleweight force” there is still room for the Marine Corps to develop a light infantry force that complements the fires capabilities inherent in other parts of the MAGTF. Indeed a light infantry force modeled after the German storm troop tactics used during World War I that was designed to quickly infiltrate and then break apart enemy formations is ideally suited for the MAGTF. If the German storm troopers had had the technology and capability to leverage coordinated and accurate fires, to include aviation fires, like Marine Corps infantry has today at its disposal the results of the war may have been different. A complementary light infantry force that is not only physically light, but most importantly exhibits a light infantry mindset is exactly what the MAGTF is missing.

Despite the apparent rigidity of the line infantry mindset, the Marine Corps today seems ready to reinvigorate and place added emphasis on its infantry forces. At a recent meeting with Lieutenant Colonel Gordon Miller, the Marine Corps’ infantry advocate, much of the discussion centered on technological and organizational developments at the company-level and below that have the ability to transform the Marine Corps’ line infantry into a true light infantry force.

Specifically, the Marine Corps' infantry advocate seeks to strengthen the Marine Corps rifle squad and by extension the squad leader, by providing them the same capabilities as the platoon and company commanders, albeit at a smaller scale. However, largely absent from the conversation was how these technological and organizational improvements would transform tactics. To the careful observer these improvements seem to suggest the Marine Corps is trying to engineer their way out of the problem – in other words the Marine Corps is putting the cart before the horse.

Indeed the horse (doctrine/mindset) should be buoyed by a tactical and mental transformation that coincides with same passion that technological transformations receive. Highlighting this doctrinal malaise is the fact that *Marine Rifle Squad*, MCWP 3-11.2, a publication that “provides basic guidance to enable the rifle platoon squad leader to fight and lead his squad in combat” has not been updated since 1997.<sup>85</sup> It goes on to define the mission of the Marine rifle squad is to “locate, close with, and destroy the enemy by fire and maneuver, or repel the enemy's assault by fire and close combat.”<sup>86</sup> Is this mission statement still germane to today's operating environment? Of course there will always be a need to “locate and destroy the enemy,” but as this paper has demonstrated the future operating environment will require Marine Corps infantry to be equally agile, stealthy, and dispersed. Mr. Lind in his advocacy for light infantry tactics would argue that in the offense, “the attack is by infiltration, not of closing with and destroying the enemy, but getting behind it,” while on the defense Marine infantry “would draw the attacker in, then cut him off with an unexpected counterattack deep in his rear.”<sup>87</sup> Thus a new mission statement for the Marine rifle squad may be in order to address both the forthcoming technological innovations and a future enemy hell-bent on attaining them as well. Failure to do so will result in further rigidity of the line infantry mindset, just with newer toys.

Both the Marine Corps and the Germans during the Inter-War Period developed the doctrine largely devoid of the technology they would use during World War II. Today the Marine Corps is beset with the need to win the nation's future battles in an operating environment characterized as increasingly ambiguous and complex. Unlike the Inter-war Period, the Marine Corps today has placed a greater premium on technology to the detriment of doctrinal development. The time is now for infantry doctrine to close this gap. It can accomplish this not through the development of concepts, but of doctrine – a light infantry doctrine. A doctrine that is not entirely novel, and in fact is implicitly underpinned by the Marine Corps' current maneuver warfare doctrine, and explicitly advocated by the forbearers of the very same maneuver warfare doctrine.

### **Conclusion**

*Whatever weapon dominates the battlefield, there will always be times when and places where vehicles cannot travel, shells and missiles cannot reach, and electronic sensors cannot sense. There will moreover, always be men who for reasons of poverty or strategy, prefer to fight their battles at the retail rather than the wholesale level. For this reason, there will always be a place for first-class infantry.<sup>88</sup>*

- Dr. Bruce I. Gudmundsson, *On Infantry*

The Marine Corps' warfighting philosophy, foundational doctrine, operating concept, coupled with the future operating environment, and the sage counsel of the men who authored MCDP 1, *Warfighting* all either implicitly or explicitly herald a light infantry renaissance. For too long Marine infantry has played second fiddle to technological innovations far removed from the original Marine Corps' philosophy of fiscal austerity and its Title 10 responsibilities to "seize, defend and conduct of such *land* operations as may be essential to the prosecution of a naval campaign." All of these tasks require infantrymen on the ground. Technological developments and certain niche capabilities is and will continue to be an important part of how the U.S. military fights in the future. However, the Marine Corps must not attempt to supplant sister Services capabilities, but rather supplement them with an elite, professional light infantry

force. In his Foreword to the 2016 *Marine Corps Operating Concept*, General Robert Neller seems to share many of the arguments made in this paper, specifically the need to refocus attention back on the infantry, by writing,

Even in a world of ever-increasing technology, we must continue to provide combat formations capable of closing with and destroying the enemy. This imperative drives us to demand physical toughness and resilience in our Marines and Sailors, and expect their brilliance in the fundamentals of warfighting.”<sup>89</sup>

This imperative must then be derived from the future operating environment; the fundamentals of warfighting outlined in General Neller’s statement above; and the maneuver warfare doctrine from which the Marine Corps’ warfighting philosophy springs. The brilliance will be realized when the Marine Corps, as the Nation’s expeditionary force in readiness, develops light infantry forces capable of winning our Nation’s battles, and are “husbanded like the irreplaceable national treasures they are.”<sup>90</sup>

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