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MASTER OF MILITARY STUDIES

**Defeating Comparable Competitors While Hiding in Plain Sight:
An Alternate Plan for an Alternate Future**

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

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Executive Summary

Title: Defeating Comparable Competitors While Hiding in Plain Sight: An Alternate Plan for an Alternate Future

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Thesis: The reliance on vulnerable bases, the apparent inability to hide within the physical domains, and the further proliferation and capabilities of A2/AD technologies by comparable competitors creates a challenging and dangerous operating environment for the Joint Force as it exists today. The Joint Force must create an alternate future operating concept that ensures it can face and defeat future comparable competitors by hiding in plain sight and operating in places without traditional bases.

Discussion: The genesis and foundation of this work lay within a central theme: the ability of current and future adversaries to confront current and future Joint Force capabilities. This theme relies on the notion that current threat capabilities will continue to develop to a point where current Joint Force capabilities are negated, thus preventing the United States from imposing its will upon its adversaries and competitors. Specifically, the threat capabilities of present and future comparable competitors will limit the ability of the Joint Force to use its established bases as critical requirements for force projection due to advanced precision-targeting and the proliferation of surveillance and sensors that limit the ability of Joint Force assets to avoid detection.

In an alternate future where comparable competitors use more overt conventional means to achieve their objectives, the Joint Force must employ an alternate strategy based upon an active and dynamic defense that will create the conditions necessary to conduct offensive actions against an adversary system. With maneuver warfare and deception as key components of this alternate operating concept, the Joint Force will plant the seeds of a competitor's destruction with maneuver elements inspired by the Expeditionary Advanced Base Operations (EABO) concept and distributed operations. For these elements to achieve full effectiveness, it will require the Joint Force to withdraw from established bases and defensive positions and to allow the enemy to overextend its own forces thus straining the ability of its A2/AD capabilities to protect its forces and leading to a desired state of enemy offensive culmination. Upon culmination, the Joint Force elements will act in concert to create gaps and seams that will allow for the defense to shift to a dynamic offense with the aim of defeating the aggressor.

Conclusion: Building on the EABO concept and the inspiration behind the development of JAM-GC, the Joint Force must develop an alternate solution to face an advanced adversary in an alternate future. This alternate solution is the framework of a future joint operating concept that includes the use of layered, self-organizing, and mutual supporting capabilities to face the layered threats presented by adversarial A2/AD and offensive capabilities. The future joint operating concept will use maneuver warfare as its doctrinal basis by incorporating physical actions to affect the physical, moral, and cognitive forces of an adversary, make the unconventional and irregular into conventional and regular, and change the manner in which the Joint Force will fight in the future. It will create bases without places and conduct the offense and the defense while hiding in plain sight.

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THE OPINIONS AND CONCLUSIONS EXPRESSED HEREIN ARE THOSE OF THE INDIVIDUAL STUDENT AUTHOR AND DO NOT NECESSARILY REPRESENT THE VIEWS OF EITHER THE MARINE CORPS COMMAND AND STAFF COLLEGE OR ANY OTHER GOVERNMENTAL AGENCY. REFERENCES TO THIS STUDY SHOULD INCLUDE THE FOREGOING STATEMENT.

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Preface

This paper is my humble attempt to generate an alternative operating concept and possible solution for the United States Joint Force as it prepares for an unpredictable future operating environment. This alternative operating concept serves as the base of the paper and is merely one part of a larger product created by a unique group of my officer peers at Marine Corps Command and Staff College seeking to find a new way to operate in “places without bases.” I generated the initial idea from my own aggravation and impatience with current operating concepts like the Marine Corps Operating Concept, Air-Sea Battle, and Joint Concept for Access and Maneuver in the Global Commons (JAM-GC). I attempted to place myself in the shoes of LtCol Pete Ellis while feeding cognitively from the likes of Clausewitz, Sun Tzu, Chairman Mao, John Boyd, and others. My hope is that the reader does not notice the cognitive schizophrenia this created for me!

I wish to acknowledge the assistance that I received from our group’s faculty advisors: Dr. Anne-Louise Antonoff and Commander Russell Evans. Their advice, mentorship, and gentle yet sharp critiques of our topics and our ideas were critical to the overall production of this concept. Additionally, this concept achieved its full measure due to the interactively complex nature of our ASP group. The other students’ work and critique of my own work kept me both intellectual honest and challenged. I hope only that I provided the same level of support to them.

I desire that you, the reader, understand the general conceptual nature of this operating concept. The intent of the work is to generate alternative thinking instead of offering a fully cogent and complete single solution to the intricately complex problem that today’s Joint Force and the Joint Force of the future may face.

Introduction

“The United States has not faced a more diverse and complex array of crises since the end of the Second World War.”¹ – Henry Kissinger

The United States and its allies face a dizzying admixture of crises, challenges, and problems. This reality exists today, it existed in the past, and it will continue to exist into the future. Unfortunately, accurate prediction of any future is impossible; however, unpredictability should not stifle imagining multiple future worlds, future threats in those worlds, and future capabilities to counter those threats. The most important challenges of the future environment are the rise of comparable competitors that challenge American hegemony, the advancement and modernization of threat capabilities that threaten the American way of war, and the inability of the Joint Force to adapt to these changing conditions.

This paper serves as merely one part of a wider effort within the Advanced Studies Program (ASP) in the Command and Staff College at the Marine Corps University. ASP is a deliberate effort to take a blank slate approach to real-world problems identified by the Marine Corps or Joint Force. Over the course of a single academic year, participating students and their mentors reframe a specific problem and attack it from multiple new directions through the application of creative thinking and without hindering themselves with the official acceptability of the ideas. The ASP group throws off the constraints of official wisdom deliberately, though it does use official products, doctrine, operating concepts, and established ideas as inspiration and a point of departure. The final ASP products are purely conceptual without the benefit of intense and high-level war-gaming or subjection to the doctrine, organization, training, material, logistics, policy, and facilities (DOTMLPF) process.

Previous ASP work merged into the Expeditionary Advanced Base Operations (EABO) concept development process. The present effort derives from the idea that the Joint Force must find a way to operate in “places without bases while hiding in plain sight.” The impetus behind this need comes from the possibility that the Joint Force will confront a comparable competitor armed with the advanced capabilities to target Joint Force bases and capabilities with advanced technologies and techniques. With this problem focus, the current ASP work serves as a starting point to support the development of a mature future operating concept to prepare a Joint Force for advanced threats in a future operating environment.

As part of the wider “Places without Bases and Hiding in Plain Sight” ASP group effort, this paper will make connections with other group members’ efforts by creating a “big picture” of an alternate future where the Joint Force requires an alternate operating concept. In so doing, the paper use creative and imaginative thinking about a future threat in an alternate future operating environment along with official doctrine, assessments, and fact-based fiction as inspiration along with some very official doctrine and assessments. With these pieces as the basis and the inspiration, this work will use avoid the use of a telescopic lens to perceive the future.

Instead of a telescopic focus, one must have a panoramic view of all stars in the heavens. As John Lewis Gaddis stated in his work, *The Landscape of History*, historians create and think of history as a landscape in the Romantic sense, a work of artistic endeavor, that “lifts us above the familiar” to see with a “wider view.”² It is this “wider view” that history, works of futurist fiction, and anticipatory analysis provide to a military thinker or to anyone attempting to envision a possible future world. It is with these ideas and inspiration in mind that the Joint Force must imagine multiple scenarios and future worlds for the sake of divining future threats and of shaping future force capabilities that may meet those challenges.

The genesis and foundation of this work lay within a central theme: the ability of current and future adversaries to confront current and future Joint Force capabilities. This theme relies on the notion that current threat capabilities will continue to develop to a point where current Joint Force capabilities are negated, thus preventing the United States from imposing its will upon its adversaries and competitors. Specifically, the threat capabilities of present and future comparable competitors will limit the ability of the Joint Force to use its established bases as critical requirements for force projection due to advanced precision-targeting and the proliferation of surveillance and sensors that limit the ability of Joint Force assets to avoid detection. The bottom-line for this assessment is that the Joint Force must assume that it can no longer achieve and maintain continuous superiority in all domains because of the emerging and existing capabilities of comparable competitors and future adversaries. These capabilities will disrupt the effectiveness and deny the use of current and emerging Joint Force combat capabilities.³

The Joint Force is looking at future threats and creating concepts to adapt to those threats. The Marine Corps Operating Concept (MCO), Air/Sea Battle, and its successor, Joint Concept for Access and Maneuver in the Global Commons (JAM-GC), provide a vision for future force development.⁴ Despite their possible short-comings, they do provide the seed from which a solution to future challenges may grow. Unfortunately, each appears to seek one solution to a multitude of various and different problems. It is impossible and fruitless to expect one document to act as a guide for the development of an all-encompassing operating concept. Therefore, the Joint Force requires multiple visions of the future and multiple solutions to the puzzles and problems of these visions of the future. The ability to imagine these visions of an alternate future and to create solutions to the problems of these alternate worlds with an alternate

operating concept requires one to define that alternate and to describe the basis of the alternate concept.

With regard to the MOC as one of the proposed operating concepts for the future, the original problem to which the Marine Corps offers Expeditionary Advanced Base Operations (EABO) and distributed operations as an operating concept is based upon a key threat: a near-peer/peer adversary utilizing a layered defensive and offensive network that presents a broad frontage across multiple domains to destroy, degrade, neutralize, or deny the critical capabilities of the Joint Force.⁵ The nature of these threat capabilities prevents the Joint Force from achieving its objectives from Phase 0-3 of the Notional Operation Plan Phases.⁶ In simpler terms, this capability is accepted as Anti-Access/Area Denial (A2/AD) capabilities. A2/AD is not a unique or new challenge to the Joint Force or to militaries of the past; however, it does present a remarkable challenge to conduct the American way of domain dominance warfare with conventional means.

The challenge of A2/AD as a layered system of defensive/offensive capabilities requires the Joint Force to develop the concept to nullify an adversary's A2/AD advantage. Due to the layering of A2/AD across several domains, the Joint Force must develop an offensive/defensive capability that ensures access across all domains for injection of both positive and negative energies into an enemy's physical, cognitive, and moral dimensional forces. The focus of any future operating concept must be to facilitate operations across multiple domains with true maneuver warfare as the "way" in which the Joint Force can defeat, degrade, or deny an adversary or comparable competitor. This concept must account for the fact that weapons and technology alone do not win battles or wars, because the erosion of the Joint Force's technological advantage requires a better technique instead of a better tool. It will require the

Joint Force to wean itself from traditional bases, the worship of war-winning technologies, and the fallacy that the offensive is the strongest form of war.

The intent of this paper is to describe an alternate future world and future adversarial capabilities that challenge the ability of the Joint Force and its allies to achieve their political and strategic objectives. Additionally, the purpose of the paper is to recommend an alternate future operating concept that will generate further discussion and study into the appropriate means and ways needed to defeat a future adversary, or an array of adversaries, in a future operating environment. The guiding theme for both purpose and intent is to reflect reality and an alternate future reality. The purpose and intent account for the potential future operating environment as it pertains to a technologically advanced and lethal near-peer comparable competitor that has the ability to counter current Joint Force offensive and defensive capabilities. This ability is truly at the root of why the entire Joint Force requires the ability to operate in places without bases and to hide in plain sight.

Works of Inspiration – Historical Case Study

“There is nothing new under the sun.”⁷ – King Solomon

*“... Through wood and dale the sacred river ran,
Then reached the caverns measureless to man,
And sank in tumult to a lifeless ocean;
And ’mid this tumult Kubla heard from far
Ancestral voices prophesying war!”⁸ - Samuel Taylor Coleridge*

Carl von Clausewitz believed that historical examples of war provided clarification and an explanation of an idea.⁹ It is unknown how he felt regarding the use of historical fiction or anticipatory analysis products of think-tanks to provide that same clarification and explanation. In all likelihood, he would judge fiction, however much based on fact, as a possible source of confusion due to the misrepresentation or biased view of historical events as an eye into the future. Nevertheless, he would support the use of history to support a possibility of some phenomenon or effect.¹⁰ It is with this as a foundation, that the Joint Force must attempt to shape its multi-spectral view of the innumerable paths of the future. However, the Joint Force should take heed that “history can only approximate reality.”¹¹ Even though history may repeat or rhyme to help clarity, other examples of fictional history may provide the same level of clarification.

There are numerous historical examples of the use of future war literature to approximate reality. Their works inspired military theorists, strategists, and other thinkers to develop future concepts to address future challenges. In his book detailing the historiography of future war fiction in the nineteenth and twentieth centuries, I.F. Clarke stated that “the practice of trying to imagine the shape of things to come had grown into a European habit.”¹² Further, he described post-World War I literature and other works prophesying future war as focusing on the future effects of weapons of war instead of the specific threat actors or how and why nations may enter into a new future war.¹³ He believed this ignored the real threat by focusing on the imaginary.¹⁴ Though imagining future weapons and technology is indeed important, one must attempt to synthesize the combined threat that weapons and actors together will bring to bear on the future of war. This synthesis provides the value of history and fact-based fiction for a military thinker. To understand fully the value of such works for military thinkers, one should view the writers as

the prophets who provided inspiration and motivation to the military thinkers who must synthesis fact, fiction, and reality into a wider vision of the future. It is their efforts of synthesis that provide a valuable historical case study from which to set the stage for the development of a new alternate future and alternate operating concept.

The work of Homer Lea, with his influence on military thinkers like Pete Ellis in the early twentieth century offers a prime case of a prophet inspiring innovative concepts from a military thinker. Though it is slightly heretical to remove the label of prophet from Pete Ellis, it is evident in his lectures and writings that he received prophetic inspiration from Lea's 1909 work, *The Valor of Ignorance*. In this book, Lea provided a detailed, fact-based fictional account of Imperial Japanese strategy in a war with the United States. *The Valor of Ignorance* inspired Pete Ellis and to envision this alternate future and to create an alternate operating concept for the United States Marine Corps.¹⁵ Lea's other book, *The Day of the Saxon*, likely inspired other thinkers in the War Department and the Army to develop concepts on how to prepare for a possible future war with Germany.¹⁶ These two books served as prophecy, and inspired the thinkers and planners who developed War Plan Orange (War against Japan) and War Plan Black (War against Germany).

Pete Ellis's writing of *Op Plan 712: Advanced Base Operations in Micronesia* served as the basis for the development of Marine Corps, Army, and Navy amphibious capabilities. It is doubtful that the work of the strategists and planners in those services would have achieved the same level of success if not for the work of prophets like Homer Lea. In his book, *21st Century Ellis*, B.A. Friedman argues that Pete Ellis holds the distinction of being the first operational artist in the Marine Corps and of being a prophet.¹⁷ The title of operational artist is apt; however, the distinction of prophet remains with Homer Lea.

These historical examples provide a similar source of inspiration that current military thinkers may use to envision a future and its alternate paths for the purpose of developing new concepts, doctrine, tactics, and their alternates. The purpose of historiography is not simply to learn what happened in the past, but to learn from how others interpreted it. This cumulative learning can shape current and future decisions and actions. Though it is important to know the history of battles and wars, it is the inspiration from the prophets of war and the work of the those preparing the force for battle and war that will allow today's Joint Force to envision an alternate future world that facilitates the development of alternate future concepts. In seeking to understand threats in the future operating environment., the Joint Force can draw from a plethora of literature, such as quasi-scientific forecasts and net assessments by planning staffs and think-tanks, on the one hand, and more purely fictional stories and scenarios, by authors both military and civilian, on the other.

The initial inspiration for the development of the alternate future world in this paper came from *Imagining Defeat in 2030: Mitigating Strategic Surprise to the US Army by Envisioning the Worst*, a work by the Strategic Initiatives Group at the Army's School of Advanced Military Studies. This work provides the worst-case scenario for a Joint Force that will face multiple unconventional and conventional threats in several theaters simultaneously.¹⁸ It provides the basis of fact-based fictional prophesy that one may use to develop future concepts; however, it provides merely a single-window, laser-like focus, into one possible future: a sum of all fears.

The other works that the Joint Force may find useful in imagining an alternate future are *Red Storm Rising* by Tom Clancy, *The Hundred-Year Marathon* by Michael Pillsbury, and *Ghost Fleet* by Pete Singer and August Cole. Though more than thirty years old and overtaken by geopolitical events, *Red Storm Rising* serves as an example of how fact-based fiction can inspire

military thinkers. It remains the standard by which other writers create their techno-thriller works.¹⁹ *The Hundred-Year Marathon* and *Ghost Fleet* are the more recent works that can act as prophecy for current military thinkers.

The former is a fact-based analysis of Chinese strategy. Pillsbury details Chinese plans and efforts to surpass the United States political, economically, and militarily. He predicts China will achieve their objective of usurping America's hegemony no later than 2049.²⁰ If accurate, this prophecy portends several decades of turmoil and possible disaster for the Joint Force and the United States and its allies as a whole. Though his work does not portend direct military conflict, it is wise to assume that China will not achieve dominance without overt and conventional military action in some way. It is this assumption that military thinkers must make to imagine an alternate future and alternate concepts to counter this future threat.

Ghost Fleet is strictly a work of fiction in the form of a techno-thriller novel very similar to *Red Storm Rising*. *Ghost Fleet* provides more details on technologies and material things than on strategy and tactics.²¹ With this error, it falls victim against that which I.F. Clarke warned. Despite this shortfall, *Ghost Fleet* does add a dose of fear and apprehension to military thinkers in the same manner that *The Valor of Ignorance* or *Red Storm Rising* provided to the military thinkers of the past.

With the historical basis of how imperfect prophecy may support inspired strategists and planners, the Joint Force can use contemporary prophets to support the imagining of different future worlds. This imagining will support the development of multiple options for operational concepts that will address future challenges. However, one may argue that prepping for an eventuality may be a self-fulfilling prophecy, but it is difficult to argue as one is unable to predict

the effect that actions may have on a complex adaptive system. It is pointless to argue that even thinking about an alternate future will create that same future. The snare that traps doctrine and makes it into dogma is ignoring the nonlinear nature of human interaction. Though often required, stepping into this snare will widen the gap between doctrine and reality.²² It is this snare into which one must now step.

Assumptions

*“Rational discussion is useful only when there is a significant base of shared assumptions.”²³ —
Dr. Noam Chomsky*

The creation of a shared mental model of an alternate future and an alternate future operating concept requires the ability to make valid assumptions about the current Joint Force, the environment, the comparable competitors, and their future counterparts. The assumptions below guided the imagining of the alternate future and the development of the alternate future operating concept. One must accept that many assumptions remain unstated, yet not ignored. Additionally, these assumptions remain a starting point from which to see the mental model of the alternate future world and any alternate future operating concept.

- Current security requirements will not prevent the Joint Force from resourcing innovation and seeking the doctrinal and organizational changes required to adopt an alternate operating concept.

- Comparable competitors will continue to develop layered defensive and offensive capabilities that span all elements of national power (i.e. conducting A2/AD-like activities across the diplomatic, informational, military, and economic (DIME) spectrum of national power and in all

physical domains) as a response to Joint Force offensive-dominance capabilities and technological dominance in the physical domains of air, land, maritime, space, and cyber.

- Hybrid Warfare, Ambiguous Warfare, or Gray-zone warfare will set the conditions for an adversary or comparable competitor to challenge Joint Force efforts overtly.

- These overt adversary actions include an increase in the use of “conventional” military actions to achieve strategic objectives.

- American and Allied political leadership and the Joint Force are willing to accept certain levels of strategic and tactical risks with the use of smaller, agile, and adaptable forces from Phase 0 – Phase 3 in support of any given Operation Plan (OPLAN), Conceptual Plan (CONPLAN) or other contingency.

- The Sea Services (Navy and Marine Corps) are willing to sacrifice traditional dogmas and “Golden Cows” to adapt to the future operating environment, i.e. the use of large and expensive carrier battle groups to challenge a threat directly, the use of Marine Air/Ground Task Forces (MAGTF) based on traditional amphibious shipping only, and MAGTFs no smaller than that composited around a battalion landing team (BLT).

- The Joint Force sees the value of making certain “special operations” capabilities core competencies of conventional forces. This requires the Joint Force to change the paradigm of conventional and unconventional, or regular and irregular, warfare and forces. The Joint Force must remove the artificial separation between conventional and unconventional by realizing that the unconventional and irregular are now conventional and regular.

- Joint Force commanders and their staffs will learn to exploit assets fully that are not co-located in the same theater with them. For example, a “Cyber Maneuver Battalion” in the continental United States (CONUS) may be just as much a force multiplier as a forward-deployed traditional infantry battalion, if not more so in Phase 0-2.

The Future Operating Environment: Possible Alternate Future

“Eternal Peace is a dream, and not even a pleasant one. War is a part of God’s world order.”²⁴

– Feldmarschall Helmuth Graf von Moltke

The Joint Force is not in want of forecasts, predictions, and prophesies of the future. Faction writers, think-tanks, and multiple entities within the Intelligence Community produce descriptive works that provide a view of the future operating environment. Among these, the 2016 Update to 2015-2025 Future Operating Environment: Implications for Marines, 2015 Marine Corps Security Environment Forecast: Futures 2030-2045, Joint Operating Environment 2035: The Joint Force in a Contested and Disordered World, and Global Trends 2030: Alternative Worlds provide the most prevalent and relevant forecasts of use to the Joint Force. Unfortunately, Major Chris Wagner, argues that each of the four provide a narrow and limited view of the future or limit themselves due to a focus on current trends instead of anticipated future trends.²⁵ In other words, each lacks a certain level of imagination.

As part of the same Advanced Studies Program behind this paper, Wagner’s work also provides a framework from which to imagine multiple future worlds. His framework details four possible futures. The first, Mary Poppins, is a world in which resources are plenty and global order dominates. One can imagine a more peaceful and vibrant world free of large-scale great power competition. This scenario is hardly reality. The second world, The Lord of Flies,

describes a world of order with limited access to resources by all, yet one in which the strong survive. This world appears to describe current reality.²⁶

The third alternate world, Hunger Games, imagines a world of enduring competition for limited resources where the strong feed on the strong and the weak with little stabilization from world order. This world is the opposite of “Mary Poppins,” yet still plausible. Finally, the fourth world of Brewster’s Millions describes a possible future world where global fragmentation and resource abundance leads to a lower chance of lethal competition, yet a chance of further global fragmentation and disorder.²⁷ This world is perhaps the perfect world for rational anarchists.

The framework of Wagner’s future worlds will provide the template from which to create a more imaginative alternate future to support the development and proposal an alternate operating concept. Since each of Wagner’s worlds describes an absolute instead of a reality, one must strike a balance amongst the various alternate futures for the purpose of targeting possible reality. For the purpose of creating this future alternate reality, one must envision an alternate future world that spans across Wagner’s descriptions. This span will act as a “cloud of reality” in which an alternate future resides. It will serve as the basis from which to describe an alternate future. (See Figure 1 for framework and cloud of reality)

The “cloud of reality” (2025-2035) describes a world balancing on the edge of fragmentation and competition for resources. In this world, the great powers (the United States, India, China, and Russia) remain locked in a struggle for economic vitality, political influence, and military supremacy. The great powers maintain strong economic and military ties to the same set of allies each had in 2017, unfortunately those allies have the access to or control over many of the scarce resources desired by competing powers.

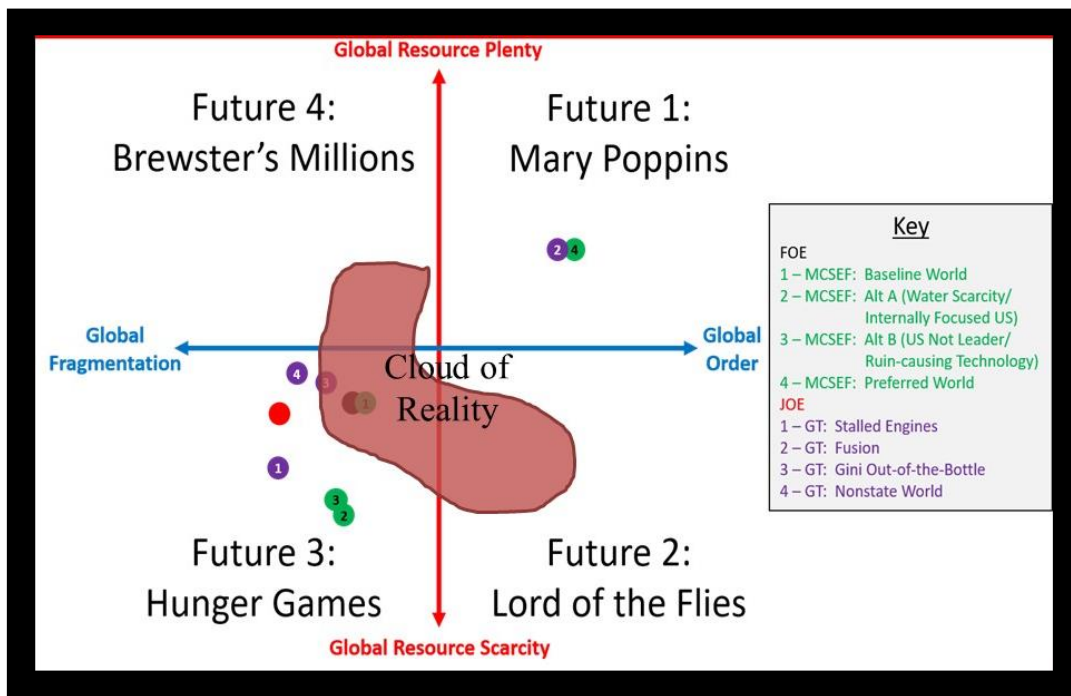


Figure 1: Wagner's Worlds and the "Cloud of Reality." (Image courtesy of Maj Chris Wagner)

The United States maintains a strong and technologically advanced military while continuing to support the growth and maturation of the militaries of its allies and security partners. On the other hand, comparable competitors maintain strong, technologically advanced defensive capabilities in the form of A2/AD with the ability to project offensive capability within their respective regions. For example, intelligence analysts assess China and Russia to have the offensive capabilities to invade regional neighbors and to defend captured territory from American counterattack. Additionally, the "Gray Zone" actions and methods of "ambiguous warfare" by the United States' comparable competitors set the conditions for more conventional and overt actions by those competitors.

In the event of limited war between the great powers, the United States would no longer hold the advantage of domain dominance. Additionally, its bases that lie within the sphere of influence for Russia and China would become critical vulnerabilities and targets for the offensive

and defensive capabilities of Russian assets and Chinese short and long-range power-projection capabilities. Any limited war that entails the capture and holding of territory by China or Russia would necessitate an escalation by the United States due to the loss of material and personnel at its bases, the loss of access to vital trade routes, and the loss of its key regional partners and allies. It is at this point where the United States would face the veritable “horns of a dilemma.”

The Problem and the Solution: An Alternate Future Joint Operating Concept

*“The soundest strategy in war is to postpone operations until the moral disintegration of the enemy renders the delivery of the mortal blow both possible and easy.”*²⁸ – Lenin

*“Concentration should be so arranged that any two parts may freely cohere, and that all parts may quickly condense into a mass at any point in the area of concentration.”*²⁹ - Corbett

This future cloud of reality is not far from the truth or outside the range of the possible. Nevertheless, it remains a hypothetical only in that it is not yet reality. The future operating environment entails the Joint Force attempting to achieve political and strategic objectives against a technologically advanced comparable competitor. These comparable competitors will present a military capability similar in nature to the Joint Force. For example, it will use conventional and unconventional technological means that can counter Joint Force core capabilities and competencies. Additionally, the capability of future adversaries will challenge the Joint Force’s ability to operate in its traditional manner, which is the use of multi-domain domination by concentrated forces operating from large static bases with the capability to inject physical means and ways into an enemy system. The bases of the Joint Force are a strength and critical requirement for success in the current paradigm, yet are its primary vulnerability. The capabilities provided from these bases must not disappear, but they must disperse to survive. The

Joint Force must find new ways to fight and to support its actions without the static base as a critical requirement.

The Joint Force will face not only comparable competitors in the traditional domains, but will face the systemic and endemic problems of any hegemonic power whose intent is maintaining their version of global order for the purpose of economic and political gain. This admixture of complexities presents opportunities for other separate solutions; however, these solutions exist in the same framework as the actions the Joint Force must take to defeat or deter comparable competitors. This complex environment will support an alternative solution for the Joint Force as it provides separate theaters and energy injection points that the Joint Force may use to deter, to disrupt, and to deny a future comparable competitor.

The above alternate future scenario and its conditions present the initial framework from which to form and to understand the problem that the Joint Force will face in the future. The reliance on vulnerable bases, the apparent inability to hide within the physical domains, and the further proliferation and capabilities of A2/AD technologies by an adversary creates a challenging and dangerous operating environment for the Joint Force as it exists today. The Joint Force must create a future operating concept that ensures it can face and defeat future comparable competitors by hiding in plain sight and operating in places without traditional bases.

Building on the EABO concept and the inspiration behind the development of JAM-GC, the Joint Force must develop an alternate solution to face an advanced adversary in an alternate future.³⁰ This alternate solution is the framework of a future joint operating concept that includes the use of layered, self-organizing, and mutual supporting capabilities to face the layered threats presented by adversarial A2/AD and offensive power-projection capabilities. The future joint operating concept will use maneuver warfare as its doctrinal basis by incorporating physical

actions to affect the physical, moral, and cognitive forces of an adversary, make the unconventional and irregular into conventional and regular, and change the manner in which the Joint Force will fight in the future.

With EABO as a physical manifestation of influence, maneuver warfare and deception will act as the lead agents of cognitive and moral influence on the alternate operating concept. The concept requires three primary forces: the physical, the mental, and the moral. The physical forces exist in the form of deep-forward bastions (bastions), rear-echelon basements (flooders), and mobile maneuver bases (bases) in the close area of the operating environment. These The cognitive force exists in the form of “real” maneuver warfare. Finally, the moral force is the core function of deception. When acting in concert the physical, cognitive, and moral elements will set the inject physical energies across multiple domains for the purpose of shocking an adversary system from within and without.

The bastions, basements, and bases will act as the physical forces that operate, survive, and adapt as decentralized self-organizing systems. The story of a boy and his grandfather harvesting potatoes can provide a mental model of these physical forces. There was once a boy and his grandfather harvesting potatoes in a small patch. Using a garden hoe, the boy chopped relentlessly at the ground after pulling up the potato plants in hopes of finding more potatoes. His grandfather told him to take care and not chop so vigorously as he may damage more than he finds. When the boy became sad with that thought, his grandfather also told him not to worry about the ones he already chopped or to even worry himself with finding all the potatoes. His grandfather explained further that the damaged potatoes and the ones left behind will take root and grow more potatoes under the right conditions.

Metaphorically, these forces are similar to potatoes. One can imagine this potato strategy as a counter to the Chinese “People’s Liberation Army’s ‘cabbage strategy’ for gaining influence—wrapping targeted islands with “concentric layers of Chinese fishing boats, fishing administration ships, maritime enforcements ships, and warships.”³¹ The Joint Force will plant these physical forces before the enemy attempts to harvest, yet despite their attempts to root out all the bastions, bases, and basements, more will take root and grow.

With regard to the cognitive force, the Joint Force physical elements must rely on “real” maneuver warfare as the doctrinal basis. Real maneuver means taking actions, not to move one’s own forces, but rather to move the enemy into a position of disadvantage to himself, which one can exploit with less effort and expenditure than would otherwise have been the case. Though slightly esoteric, another way to understand the purpose and actions of “real” maneuver is to perceive it in a similar manner to twentieth-century theorist John Boyd. The Joint Force must inject the energies necessary to put the burden of difficulty on the enemy which will increase the level of entropy to which the enemy must respond and adapt. With the proper application of maneuver-driven entropy, the enemy will either adapt or reach heat-death quickly.³²

When facing the adversary described in the “cloud of reality” scenario, the Joint Force must rely on deception as a moral force. One must allow the enemy to flow their forces where they want to go, but in so doing to encourage them to go where the Joint Force needs them to go. This action will require a withdrawal of critical assets from established Joint Force bases and base clusters with a follow-on redistribution to areas that will act as mobile maneuver bases. Additionally, the Joint Force must remove the obvious target (critical requirements) and leave behind the unobvious: the bastions.

These actions will draw the enemy out from underneath the protection of its A2/AD umbrella and lessen the ability of A2/AD to reach the critical assets of the Joint Force. The Joint Force must realize that A2/AD is only effective if they choose to make it a determining factor that limits their own actions. The Joint Force cannot hope to fight weapon to weapon as this feeds into the purpose of A2/AD in the first place. Additionally, drawing the enemy into the area in which the Joint Force commanders want them to go will allow the enemy to reach his offensive culminating point, thus creating an opportunity for the withdrawn, distributed, and hidden-in-plain-sight Joint Force elements to act in concert against the enemy system. The Joint Force must find a way to “give the enemy young boys and women to infatuate him, and jades and silks to excite his ambitions.”³³ This baiting will influence or will compel the enemy to make certain decisions that the Joint Force desires, as well as draw the enemy into the trap. Thus, deception serves as an element of maneuver in support of the physical forces of the Joint Force.

Finally, elements of the Joint Force within this concept require seeding and fertilization before the initiation of direct hostilities. The bastions need time to train and to prepare to act as guerilla forces behind enemy lines. The withdrawal and re-distribution of critical assets within the pre-hostility base clusters must prepare to withdraw and consolidate as mobile maneuver bases in dispersed locations within the close area of the future operating environment. Additionally, the rear-echelon basements, or flooders, should have the ability to form and operate before hostilities to support the bastions and the mobile maneuver bases before hostilities and after initiation.

With this broad concept in mind, the individual forces of the concept deserve additional detail. One must remember that each element of the physical force cannot exist alone. Each form of the physical force must act in a dynamic and adaptive manner with the ability to move and to

inject energies across domains. Additionally, the deep bastions can shift to the close area, the close mobile maneuver bases can shift to the deep, and the rear echelon basements can shift and inject energy into the deep and close area of the operating environment. All physical forces must maintain the ability to move where the enemy is weakest when the enemy least expects it.

Bastions – Deep Forward Bastions

*Just as a frequent change of position is necessary in fishing, so a frequent shift of position is necessary for a guerrilla unit. Dispersal, concentration and shifting of position are the three ways of flexibly employing forces in guerrilla warfare.*³⁴ - Mao

The deep forward bastions are partisan-like units that act in what the Joint Force understands currently as irregular forces. The Joint Force will seed these forces in the Shaping Phase before over hostilities begin for purpose of operational maturation. This maturation will increase their level of effectiveness and their chance of survival after hostilities commence.

The core elements of these forces are military personnel from the regional allies of the Joint Force. For example, in Japan, members of the Japanese Self-Defense Force will comprise the core force structure. The Joint Force will provide advisors, trainers, and specialty personnel that may include political advisors, experts in sabotage, subversion, surveillance, and communications specialists. These Joint Force augments will provide the training, the continuity, and the connection to the other forces within the Joint Force operating concept.

When hostilities commence, the bastions will act as the remain behind force and conduct kinetic and non-kinetic actions to shock the enemy internally. Essential tasks for these forces may include sabotage and subversion against enemy forces and capabilities, as well as, surveillance and targeting in support of the capabilities resident in the mobile maneuver bases

and the rear-echelon basement flooders. Creating gap and seams within the enemy system is the primary intent and purpose for their actions.

The actions of Soviet partisans and the use of French *maquis* by the Allies in World War II are appropriate historical examples with which to picture the bastions. Soviet partisans and the French *maquis* provided surveillance, conducted espionage, and attacked the occupying German forces internally. Their efforts provided the Allies with opportunities to exploit distracted German forces, as well as, deceive German commanders and planners in support of Allied planning efforts. Unfortunately, it is debatable whether these partisan elements achieved a full-measure of success or reached their full potential. This short-fall was due to the lack of pre-planned preparation for use of partisans and irregulars by either the French or the Soviets.³⁵

The success of partisans and irregulars in World War II proves the utility of such elements within the enemy system; however, the future Joint Force must compensate for their historical short-fall. Utilization of bastions will require the Joint Force to plan for their use beforehand and to find unique ways to maintain support to them and to preserve a means of communication with the elements during hostilities. Addressing this short-fall will increase the ability of the bastions to create the gaps and seams required for the rear-echelon basements and mobile maneuver bases to exploit. Additionally, this action will provide the Joint Force the ability to make the irregular into regular and the unconventional into conventional.

Basements – The Flooders

“The only situation a commander can know fully is his own: his opponent’s he can know only from unreliable intelligence.”³⁶ - Clausewitz

While the bastions shock the enemy internally, their supporting “fires” will come in the form of the rear-echelon basements. The alternate operating concept terms these elements “flooders” as a metaphor for what they do to the enemy system: flood it with information and with shock effects. The Russians called the overabundant intake of information a *potok* (flood).³⁷ This flood is the intent and primary purpose of the basement flooders. The primary essential task of these forces is to overwhelm an enemy’s cognitive abilities with a flood of information through denial, deception, and attack across the cyber domain.

The composition of these basements includes what the Joint Force views and organizes currently as “cyber forces.” The future alternate concept requires these forces to expand their organizational reach and scope. An example of this type of unit is a CONUS-based cyber-maneuver battalion or smaller echelon unit that has the ability to conduct shock operations within the cyber domain. These operations will apply shock against enemy sensors, communications, and its own cyber domain to achieve emergences and effects within the physical, cognitive, and moral dimensions.

Additionally, these basement flooders will serve as sensor deceivers. If one of the primary threats facing the Joint Force of the future is sensors that can see Joint Force elements, then the rear-echelon basements will use their energies to flood those sensors with information, thus denying the enemy clear information and disrupting his ability to observe and orient on the bastions and the mobile maneuver bases. This flooding will support the bastions and mobile maneuver bases in their efforts to hide in plain sight.

The recent work by Major Jennifer Phillips provides a viable cyber domain-based capability that nests within this future operating concept. Though her initial work focuses

primarily upon the ability of these forces to disrupt and enemy system, her research suggests the opportunity by the future Joint Force to deceive an enemy through the Internet of Things.³⁸ This capability will prove critical to the bastions conducting actions within the enemy system and to the mobile maneuver bases preparing to exploit the seams and gaps that the bastions and basements create.

Bases – The Mobile Maneuver Bases

“Take him unaware by surprise attacks where he is unprepared. Hit him suddenly with shock troops.”³⁹ – Sun Tzu

The bastions and the basements exist primarily as initial and medial shock elements. It is both unlikely and preposterous to think that the shock actions of these elements would lead to a decisive engagement or decision on the part of the enemy or the Joint Force, especially since single decisive engagements do not exist. Therefore, the bastions and basements require what some might term a more traditional and conventional shock and surge capability. The mobile maneuver bases will serve as the final and “decisive” arms, body, and legs of the alternate future operating concept.

The composition of these forces derives from the re-distributed forces from the initial withdrawal in conjunction with Joint Force elements from other CONUS or outside CONUS (OCONUS) locations. One may imagine these forces compositing within the “world’s greatest maneuver space...[and] the world’s biggest truck parking lot”: the sea.⁴⁰ At its heart, the mobile maneuver bases are sea bases that exists as “bases without places.” The work of Major M.O. Ogden provides an ideal example of this composited entity as a Special Purpose MAGTF (SPMAGTF) that has the ability to use speed and a range of operational capabilities to strike an

enemy system nodes in multiple locations while avoiding detection from adversary A2/AD sensors.⁴¹ Additionally, this example provides for support from other mobile maneuver bases that some might describe as the existing Carrier Strike Group or an Amphibious Ready Group larger than a SPMAGTF.

With regards to capabilities, the mobile maneuver bases must serve as the primary Joint Force elements that will deliver the preponderance of its energies against an enemy system during Phase 3 (Dominate), if using the Notional Operation Plan Phases. The mobile maneuver bases will exploit the gaps and seams as opportunities for dominating shock. The creation of these gaps and seams comes from the efforts of the bastions and rear-echelon basement flooders. Additionally, the composition and capabilities of the organized and concentrated elements mobile maneuver bases will provide any additional logistical and fire support that the bastions may require during Phases 1 and 2. Where the mobile maneuver bases provide an element of typical style of American warfare, the bastions and basements may appear as a disorganized rabble. Despite this perception of disorganization and possibly difficulty of coordination, an historical example illustrates the potential and the effectiveness of blending disorganized units and capabilities with more conventional elements.

The British Expeditionary Force efforts against the Ottomans in Palestine, Syria, and the Arabian Peninsula in World War I displayed the effectiveness and requirement for this blending. The success of British General Allenby's forces against the defensive entrenchments of the Ottomans would not have achieved the same level of success without the efforts of the Arab Revolt and T.E. Lawrence.⁴² The Arab irregulars supported by Lawrence and other British officers with British equipment and funding provided internal shock to the Ottoman system across the Peninsula, Syria, Jordan, and parts of Palestine which allowed Allenby to confront the

Ottomans in a more conventional manner.⁴³ Despite the appearance of a rabble of Arab Bedouins and irregulars, Lawrence, Allenby, and a multitude of others behind the scenes set the conditions for success and ensured the loose, yet effective, coordination of offensive efforts that led to the defeat of the Ottomans in Palestine and their eventual submission across the Near-East.⁴⁴ It is this level of coordination and style of fighting and support required from the basements and bastions to support the kinetic offensive capabilities of the elements within the Mobile Maneuver Bases.

The bastions, the basements, and the bases provide the physical forces to support the cognitive and moral forces needed to disrupt and to defeat a comparable competitor and advanced adversary in an alternate future. This alternate future operating concept requires coordination between the different physical forces to achieve the efforts needed to shock and enemy system into paralysis. However, in this alternate future operating concept, these physical, cognitive, and moral forces are not the only tools and techniques available to the Joint Force. Additionally, the enemy's system agents in the captured territory are not the only targets of these forces. The Joint Force may use some of these forces against a vital peripheral interest of the enemy to achieve a level of shock that may deter the enemy from certain actions.

Horizontal Escalation: Another Option

“A sudden powerful transition to the offensive – the flashing sword of vengeance – is the greatest moment of the defense.”⁴⁵ - Clausewitz

The United States Department of Defense created the concept of “horizontal escalation” in the late 1970s as an effort to deter the Soviet Union from taking or maintaining aggressive actions against a vital American interest in a foreign nation. For example, if the Soviet Union

made an aggressive and provocative move to seize oil fields in Iran, the United States would respond with threatening actions against a Soviet satellite interest in Cuba, Africa, or East Asia. These acts would presumably force the Soviet Union to cease any undesirable actions against Western interests while also avoiding the threat of nuclear brinksmanship. Horizontal escalation provided a non-nuclear deterrence option to the Defense Department.⁴⁶

Though not in the immediate theater of operations against an aggressive and offensive threat, horizontal escalation is a potential option for the Joint Force as an elemental force of deterrence, as well as, an opportunity to assume the offensive in one theater while remaining on defense in another. Depending on the specific threat nation in any given scenario, the Joint Force must appreciate the enemy system holistically before hostilities begin. This view will allow the Joint Force to determine points of leverage within which it can apply energies that may deter further aggressive actions by an adversary or compel them to withdraw forces already engaged in hostilities. If horizontal escalation fails to deter an enemy, the Joint Force may maintain the defense in the primary theater while assuming offensive operations in the periphery with the intent and purpose of weakening an enemy's alliances or vital economic interests.

Whether such horizontal escalation of the conflict plays more to friendly or enemy advantage will depend upon the geopolitical conditions and circumstances of that time and space. These conditions include resource competition, regional hegemonic aspirations of the target nations for horizontal escalation, and the actual level of interest the primary comparable competition nation has in the targeted periphery. Once determined by the Joint Force pre-hostilities, a range of targets should present themselves for horizontal escalation as required.

Within the same ASP project that served as the basis for this future concept, the recent work of Major Jane Oren provides a situation and set of conditions that may arise within China's system of foreign relations and economics. In her work, she details the increasing amount of Chinese economic investment and political and military interest in the African continent.⁴⁷ If the alternate future entails an aggressive and offensive-minded China as the primary threat nation, then its interests in Africa may serve as possible targets for horizontal escalation. Though it is difficult to measure whether their interests approach the level of vital is unknown; however, one must analyze the future level of Chinese commitment and economic or social ties to Africa in the future. The effectiveness and efficacy of horizontal escalation requires the threat nation to fear losing those vital interests enough to return to a less aggressive posture. If those vital interests exist in the future, then Chinese interests in the continent will become primary targets for escalation.

Requirements for Adoption and Implementation

*"When the time comes...all parts must act."*⁴⁸ - Clausewitz

This alternative operating concept may appear too complex and difficult to adopt and to implement, much less achieve, for several reasons. The most difficult aspect of the concept appears to be the requirement for adaption, self-organization, and creation of an interactively supporting nature of all the elements with the concept. All elements in the concept must work together to shock the adversary system and to create the desired conditions for achieving its strategic objectives. The problem of comprehensive implementation in the Joint Force is both systemic and genetic.

The physical and cognitive nature of the current Joint Force does not provide the appropriate conditions or environment for implementation. This nature prevents the Joint Force from not only perceiving alternative capabilities, but seeing the possibility that it may not have the ability to defeat a comparable competitor in an alternate future operating environment. Additionally, the current and near-term political environment of the United States and its allies displays certain constraints and restraints that may prevent the US and its allies from accepting the risks inherent to an alternative strategy and operating concept.

Adopting this alternate future operating concept will require significant changes to doctrine, an enhancement of irregular warfare training, a reorganization of many elements within the different branches and services of the Joint Force, and the creation and experimentation with both conventional and unconventional technologies and equipment to support all the warfighting functions. The Joint Force will require a change in strategic and tactical thinking as well. Additionally, national leadership within the US and allies must also change its perception of the current and future operating environment, the threats it will face, and the capabilities it wishes to bring to bear in facing these threats. National leadership must also understand and accept the risks it must take and the sacrifices it must make to face and to defeat a pernicious and advanced comparable competitor in the future. The following recommendations are a few examples of what the Joint Force requires to achieve the ability to adopt and to implement the recommended alternate future operating concept.

Doctrine is the foundation of the Joint Force and how it will fight. In order to adopt and to implement the future operating concept as an alternate option, the Joint Force requires a massive overhaul of its doctrine, as well as, a re-write of existing service doctrines. The two

primary concepts that require overhaul and correction are the Joint Force's understanding and application of maneuver warfare and deception.

Current doctrine creates a false dialectic argument between attrition and maneuver warfare. It creates the perception that attrition is antithetical to maneuver warfare. This idea cannot be further from the truth. The misunderstanding that one can achieve destruction of an enemy without attrition of some type of fantasy. Attrition of an enemy's will and moral requires the ability to attrite his physical capabilities. is required to achieve all objectives. The attrition of moral, physical means, cognitive skills, and will using actions across multiple domains is the basic intent of maneuver warfare. This understand must find its way into Joint doctrine.

With regards to deception, it appears that Clausewitz's believe that a commander can achieve deception through tactical surprise rings true in Joint doctrine. Joint doctrine does not provide a coherent doctrine on deception that would support the level of deception required for an alternate future operating concept. The United States Army provides an excellent publication for the understanding of tactical techniques of deception, yet it remains to receive an update for more than twenty years. Adopting and implementing this alternate future operating concept requires an update and a wider acceptance of deception as a necessary warfighting function of the Joint Force.

The current organization of the Joint Force does not support the adoption of this operating concept. For example, the cyber maneuver elements within the basement flooders described above do not exist at any echelon. Achieving the desired capabilities of basement flooders, the reorganization of existing cyber elements or creation of new units is required.

Additionally, the Marine Corps may require reorganization into smaller, more flexible and agile units to achieve the level of capability described in the SPMAGTF of the mobile maneuver bases. This reorganization may include reverting the Marine Corps back to a true Fleet Marine Force. The basis of this argument is to define how Joint Force can task organize smaller elements than a Marine Expeditionary Unit and Company Landing Team that can operate from multiple non-traditional naval vessels, i.e. non-traditional meaning not amphibious shipping like the littoral combat ships, Joint High-Speed Vessels, destroyers, etc. The purpose of these forces would be to act as the elements that are available as mobile maneuver elements within the future Joint Force. Another way to see these elements are as “mini-MAGTFs” that can consolidate as required depending on mission/phase of an operation. Adopting this concept will require a more detailed and in-depth study of all elements of Joint Force organization.

With regards to training, the primary example one may see needing revision is the acceptance that “conventional” forces can train and serve in an “unconventional” capacity. The alternate future operating concept will require an increased investment in what the Joint Force now views as “special” forces. This may require an increase in training for Marine or Army elements to enhance their core competencies on the level with Special Operation Force (SOF) core competencies. If this training does not require the same level of skill, then Marine Corps and Army units can serve as a bridge between SOF actions in the Phase 0/1 portions of an operating and the large-scale combined force actions of the mobile maneuver bases in Phase 3.

A change in doctrine, organization, and training will support the maturation of the Joint Force and enhancement of its abilities to adopt the proposed future operating concept; however, each physical force within the concept requires the equipment to support such a bold evolution. The dispersed and disparate bastions will require the ability to receive supplies, to communicate

with the mobile maneuver bases and the basement flooders, and to increase their probability of survival. Additionally, the mobile maneuver bases and the basement flooders will require the ability to apply energy and fires into the enemy system from afar. These capabilities will necessitate the acquisition of new means of transport, surface and subsurface connectors, and unique methods of re-supply.

Doctrinal, organizational, training, and equipment changes are for naught without the political wherewithal to support the creation of a strategy that assumes a high-level of risk. The risks inherent in the alternate future operating concept include the appearance of weakness to allies and voters, the potential loss of massive amounts of personnel and material, and the alienation of allies who may not accept the idea of being “speed bumps” that stall an enemy’s advance. Not accepting these risks presents an element of half-heartedness and the lack of understanding strategy, this “[w]oe to the government, which relying on half-hearted politics...,”⁴⁹ Political leaders must understand their role in providing objectives to the Joint Force and understanding the risks inherent in any required strategy to achieve those objectives.⁵⁰ If they do not then they are truly “[t]hose unable to understand the dangers inherent in employing troops are equally unable to understand the advantageous ways of doing so.”⁵¹

Though the above are merely a few recommendations for change, their adoption, or at least consideration for adoption, will start the process of evolution in Joint Force and in the political environment to a point where the alternate future operating concept can become more than a concept.

Conclusion

“[D]efense is simply the stronger form of war, the one that makes the enemy’s defeat more certain.”⁵² – Clausewitz

“Audentis Fortuna iuvat.” Fortune favors the bold. – Virgil

The reliance on vulnerable bases, the apparent inability to hide within the physical domains, and the further proliferation and capabilities of A2/AD technologies by comparable competitors creates a challenging and dangerous operating environment for the Joint Force as it exists today. The alternate future operating environment does not differ much from those visions provided in existing factional works or Joint Force assessments; however, it does portend a more dangerous and risky alternative. In the face of this alternate future, the Joint Force must create an alternate future operating concept that ensures it can face and defeat future comparable competitors by hiding in plain sight and operating in places without traditional bases.

In an alternate future where comparable competitors use more overt conventional means to achieve their objectives, the Joint Force must employ an alternate strategy based upon an active and dynamic defense that will create the conditions necessary to conduct offensive actions against an adversary system. With maneuver warfare and deception as key components of this alternate operating concept, the Joint Force will plant the seeds of a competitor’s destruction with maneuver elements inspired by EABO concept and distributed operations. For these elements to achieve full effectiveness, it will require the Joint Force to withdraw from established bases and defensive positions and to allow the enemy to overextend its own forces thus straining the ability of its A2/AD capabilities to protect its forces and leading to a desired state of enemy offensive culmination. Upon culmination, the Joint Force physical force elements

in deep-forward bastions, rear-echelon basement flooders, and mobile maneuver bases will act in concert to create gaps and seams that will allow for the defense to shift to a dynamic offense with the aim of defeating the aggressor.

This alternate solution is not the only solution as it serves a point of departure for continued discussion and debate on alternatives. It serves as the framework of a possible alternate future joint operating concept that includes the use of layered, self-organizing, and mutual supporting capabilities to face the layered threats presented by adversarial A2/AD and offensive capabilities. The future joint operating concept will use maneuver warfare as its doctrinal basis by incorporating physical force actions to affect the physical, moral, and cognitive elements of an adversary, make the unconventional and irregular into conventional and regular, and change the manner in which the Joint Force will fight in the future. It will create bases without places and conduct the offense and the defense while hiding in plain sight.

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- ³⁵ For more specific historical information on the capabilities, composition, and actions of Soviet partisans and other European partisans in support of Allied efforts see: Jay Jakub, *Spies and Saboteurs: Anglo-American Collaboration and Rivalry in Human Intelligence Collection and Special Operations, 1940-1945* (New York: St. Martin’s Press, 1999); Edgar M. Howell, *The Soviet Partisan Movement, 1941-1944* (Washington, DC: Department of the Army, 1956); and Max Hastings, *The Secret War: Spies, Ciphers, and Guerrillas, 1939-1945* (New York: Harper Collins, 2016).
- ³⁶ von Clausewitz, *On War*, 84.
- ³⁷ Beaumont, *War, Chaos, and History*, 23.
- ³⁸ Jennifer Phillips, “Working Paper – Cyber Maneuver in the Future,” May, 2017.
- ³⁹ Sun Tzu, *The Art of War*, 133.
- ⁴⁰ Geoffrey Till, *Naval Transformation, Ground Forces, and the Expeditionary Impulse: The Sea-Basing Debate* (Carlisle Barracks: Strategic Studies Institute, 2006), 16.
- ⁴¹ M.O. Ogden, “The Need for Speed: SPMAGTF Employment to Defeat A2AD in Modern Warfare” (master’s thesis, Marine Corps University, 2016).
- ⁴² T.E. Lawrence, *The Seven Pillars of Wisdom: A Triumph* (New York: Anchor Books, 1991). Told from the perspective of Lawrence, he describes the role he and others played in supporting the Arab Revolt and how it fit with the overall British strategy.
- ⁴³ Matthew Hughes, *Allenby and British Strategy in the Middle East, 1917-1919* (New York: Routledge, 1999). Told from an historical perspective that provides further details on the use of the Arab Revolt as a distraction against Ottoman forces.
- ⁴⁴ Scott Anderson, *Lawrence in Arabia: War, Deceit, Imperial Folly and the Making of the Modern Middle East* (New York: Random House, 2013). Told from several different perspectives from the British, German, Ottoman, and Arab side. Provides vivid account of each side’s actions during the Palestine campaign.
- ⁴⁵ von Clausewitz, *On War*, 370.
- ⁴⁶ R.W. Komer, Undersecretary of Defense, to Secretary of Defense, memorandum for SECEF, October 10, 1980. <https://www.archives.gov/files/declassification/iscap/pdf/2010-073-doc1.pdf>.
- ⁴⁷ Jane Oren, “Working Paper – Unknown Title,” May, 2017.
- ⁴⁸ von Clausewitz, *On War*, 213.
- ⁴⁹ Ibid, 219.
- ⁵⁰ Aleksandr A. Svechin, *Strategy*, trans. and edited by Kent D. Lee (Minneapolis: East View Information Services, 1991), 101.
- ⁵¹ Sun Tzu, *The Art of War*, 73.
- ⁵² von Clausewitz, *On War*, 380.

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