United States Marine Corps
Command and Staff College
Marine Corps University
2076 South Street
Marine Corps Combat Development Command
Quantico, Virginia 22134-5068

MASTER OF MILITARY STUDIES

NAVAL EXPEDITIONARY OPERATIONS IN THE 21ST CENTURY

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

MAJOR T.G. CALLAHAN, USMC

AY 00-01

Mentor: Dr. J.M. Klinger
Approved:_____
Date:_____

Mentor: Colonel G.A. Warner, USMC
Approved:_____
Date:_____

Report Documentation Page

Report Date	Report Type	Dates Covered (from... to)
2002	N/A	-

Title and Subtitle Naval Expeditionary Operations in the 21st Century	**Contract Number**
	Grant Number
	Program Element Number
Author(s)	**Project Number**
	Task Number
	Work Unit Number
Performing Organization Name(s) and Address(es) Joint Military Operations Department Navy War College 686 Cushing Road Newport, RI 02841-1207	**Performing Organization Report Number**
Sponsoring/Monitoring Agency Name(s) and Address(es)	**Sponsor/Monitor's Acronym(s)**
	Sponsor/Monitor's Report Number(s)

Distribution/Availability Statement
Approved for public release, distribution unlimited

Supplementary Notes
The original document contains color images.

Abstract
At the advent of the 21 st century, the superior conventional capabilities of the United States military have inevitably set in motion a revolutionary change in the nature of warfare. As hostile countries can no longer directly engage the United States in a manner similar to the Iraqi campaign during the 1991 Gulf War, they are searching for alternative means to offset the sheer power of the United States. The United States must be ready to determine the nature of this new enemy and to implement innovative tactics, apply new weapons systems, and organize new force structures to meet this emerging threat successfully.

Subject Terms

Report Classification unclassified	**Classification of this page** unclassified
Classification of Abstract unclassified	**Limitation of Abstract** UU

Number of Pages
56

DISCLAIMER

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.

Illustrations

Page

Figure 1. Future conventional warfare …….14

Figure 2. Future non-conventional warfare ……..….15

Figure 3. Current association of MEUs (SOC) ……..……22

Figure 4. Proposed association of MEUs (SOC) ……..25

Maps

Page

Map 1. Lagos and Abuja Nigeria ……...20

Map 2. Operation EAGLE CLAW: Conceptual Plan ……41

Table of Contents

Page

MMS COVER SHEET ……i

DISCLAIMER ……..ii

LIST OF ILLUSTRATIONS ……iii

TABLE OF CONTENTS ……..iv

PREFACE ……v

INTRODUCTION ……1

THE STRATEGIC ENVIRONMENT OF THE 21ST CENTURY …….. 3
The Anticipated Threat …… 3
The Changing Nature of War ……8

NAVAL EXPEDITIONARY OPERATIONS IN THE 21ST CENTURY ……... 16
Naval Expeditionary Missions ……... 16
Navy and Marine Corps' Force Structure ……. 21
Navy and Marine Corps Doctrine ……. 28
New Technology and Systems ……... 32

CONCLUSION ……35

APPENDIX A: IRANIAN HOSTAGE CRISIS: CHRONOLOGY ……38

APPENDIX B: OPERATION EAGLE CLAW: TASK ORGANIZATION …… 39

APPENDIX C: OPERATION EAGLE CLAW: CONCEPTUAL DESIGN ……..40

APPENDIX D: OPERATION EAGLE CLAW: MISSION CHRONOLOGY ..….44

APPENDIX E: MILITARY STRENGTHS OF U.S., ALLIED, AND SELECTED OTHER ARMED FORCES ……..……..45

BIBLIOGRAPHY ……..46

Preface

My objective in writing this paper is to stimulate discussion and thought on the direction the Navy and Marine Corps need to take to accomplish their mission in the 21st century. In addressing this topic, my starting point assumes that the threats to be faced in the 21st century center on low intensity conflict. While I set forth a reasoned basis for this assumption, I obviously do not attempt a wholesale examination of this topic as this is itself a subject broad enough for multiple papers, or even books.

Although most analysts agree with the general proposition that the character of war will change, there is great disagreement over the nature of anticipated threats. Consequently, there is little consensus on what doctrine and future acquisition programs are needed to address these threats. Because I believe that the character of warfare will be such that sea power will remain a preeminent means for the United States to address the 21st century threat, the paper will focus on the anticipated nature of naval expeditionary operations and what they will require to be successful.

I integrate an analysis of Operation EAGLE CLAW into the paper because I believe the Operation represents an example of the nature of threats future expeditionary forces will face. Thus, an analysis of the operation may help the Navy and Marine Corps prepare to address those types of threats in the 21st century.

Although the nature of the future threat may be similar to that faced by the EAGLE CLAW joint task force, the likely military response will be different, in part, because of the operational perspective provided by the failed rescue mission. Operation EAGLE CLAW affords an exceptional instrument to study the nature of future naval expeditionary operations.

In preparing this paper, I researched several other conflicts to include the 1994 failed raid of Mohamed Farrah Aidid's headquarters in Mogadishu, Somalia, and the Israeli's 1976 raid at Entebbe. I found Operation EAGLE CLAW the best case for representing the future threat and to assist in defining the likely nature of future expeditionary operations. I believe that a renewed study of EAGLE CLAW by the Navy and Marine Corps will be paramount in understanding the predominant form of conflict in the 21st century.

A debt of gratitude is owed to several people whose guidance and wisdom served as the foundation for this paper. First, to Dr. Klinger, a faculty advisor at the Marine Corps Command and Staff College, for her invaluable assistance not only as a mentor for this project, but also because many of the ideas and analysis found in this paper can be traced back to her seminar instruction during the academic year. Any positive aspects of this paper are a reflection of Dr. Klinger's exceptional abilities and dedication as an educator. Second, to Colonel G.A. Warner, USMC, a faculty advisor at the Marine Corps Command and Staff College, whose extensive knowledge of assault support and Marine Air-Ground Task Force operations was invaluable in my analysis of Operation EAGLE CLAW. His time spent in improving all aspects of this paper is greatly appreciated. Third, to Colonel W.G. Hartig, USMC, a former commanding officer and longtime mentor, who reviewed the first draft of this paper. Colonel Hartig's insight into the theory and nature of war, and his extensive knowledge of amphibious operations was indispensable to improving the accuracy and credibility of the paper. Also, to Colonel T.S. Seal, USMC, director of the Marine Corps' Concepts Division, for reviewing my

second draft, and providing critical feedback to my work which enhanced the educational value of this project.

INTRODUCTION

At the advent of the 21st century, the superior conventional capabilities of the United States military have inevitably set in motion a revolutionary change in the nature of warfare. As hostile countries can no longer directly engage the United States in a manner similar to the Iraqi campaign during the 1991 Gulf War, they are searching for alternative means to offset the sheer power of the United States. The United States must be ready to determine the nature of this new enemy and to implement innovative tactics, apply new weapons systems, and organize new force structures to meet this emerging threat successfully.

Forward deployed naval expeditionary forces (NEFs) will likely become the preeminent choice of the National Command Authority (NCA) to meet the emerging threat and accomplish strategic objectives.[1] The domestic and international demand for a reduction in American bases abroad has created a shortfall in America's ability to maintain a credible forward presence. The mobility, versatility, and influence of sea power provides an unobtrusive means for maintaining American presence overseas, and provides the basis for success on a 21st century battlefield.

[1] Joint Publication 1-02 defines an *expeditionary force* as "an armed force organized to accomplish a specific objective in a foreign country." Joint Publication 1-02 defines *naval expeditionary warfare* as "military operations mounted from the sea, usually on short notice, consisting of forward deployed, or rapidly deployable, self-sustaining naval forces tailored to achieve a clearly stated objective." MCDP 3 defines the *naval expeditionary force (NEF),* or *naval expeditionary task force (NETF),* as a Navy and Marine Corps "force organized to accomplish a specific objective in a foreign country. They are designed to project military power ashore from the sea … and combine the complimentary but distinct capabilities of … attack aircraft, surface fire support, sea-launched cruise missiles, and special warfare forces." The NEF can contain any combination of a Carrier Battle Group (CVBG), a Marine Air Ground Task Force (MAGTF), an Amphibious Ready Group (ARG), a Maritime Prepositioning Force (MPF), a naval surface combatant force, or an attack submarine force.

This paper will outline the anticipated nature of naval expeditionary operations in the 21st century. The essay will attempt to define future threats to American security and predict the likely nature of warfare in the 21st century. Based on the assumptions of the threat, the essay will make recommendations for current Navy and Marine Corps force structure, doctrine, and acquisition plans necessary to assure military success in the 21st century.

Operation EAGLE CLAW, the 1980 unsuccessful rescue of American hostages in Tehran, will be referenced throughout the paper. Discussion of the operation is used to exemplify the future threat, and as a baseline to develop the likely response of future naval expeditionary forces. The paper's focal point is not the well-recognized lessons learned from operation EAGLE CLAW. Most of these shortfalls were remedied during the 1986 Goldwater-Nichols Defense Reorganization Act and are not relevant to this paper. The paper intends to focus the reader on the nature of the threat faced in 1980, the constraints and restraints faced by the EAGLE CLAW planners, and the tactical response of the expeditionary joint task force. Although an anomaly in 1980, Operation EAGLE CLAW could very well become a prototype for future naval expeditionary operations. Details pertaining to the planning and execution of the operation have been included in Appendices A, B, C, and D.

THE STRATEGIC ENVIRONMENT OF THE 21ST CENTURY

The Anticipated Threat

The character of warfare is undergoing changes so dramatic that they are apt to be looked upon in the future as constituting a revolution in military affairs (RMA). Although technology is playing a significant role in that RMA, the emergence of a new threat model is the key factor underlying this radical change. Consequently, our current view of warfare, and the terms we have used to define conflict, may soon be obsolete. This section of the essay will attempt to define the threat that the United States will most likely face in the 21st century.

In 1989, the collapse of the Soviet Union and the concomitant end of the Cold War heralded the spread of a belief that unlimited conventional war and large scale regional conflict were no longer likely since one of the world's two super powers ceased to exist.[2] Although the war that resulted from the 1990 Iraqi invasion of Kuwait showed that such large scale conventional conflict always remains within the realm of possibility, that war's decisive outcome further lessened the likelihood of its reoccurrence.

Operation DESERT STORM showed that a direct and symmetrical confrontation with America, or a direct challenge to its interests abroad sufficient to prompt American intervention, would likely lead to devastating defeat of the enemy. Thus, assuming the United States can retain sufficient troop strength, military capabilities, and morale to allow it to remain the world's only genuine superpower, the United States is not likely to

[2] *Marine Corp Doctrinal Publication (MCDP) 3 Expeditionary Operations,* (Washington, D.C., 1998), 9-10.

face any conventional conflicts in the 21st century.[3]

Of course, the fact that the United States is not likely to encounter a major conventional war does not preclude regional wars between second and third party states. For example, war between India and Pakistan remains a distinct possibility. Here the American strategy to remain politically engaged overseas and maintain forward deployed forces to deter conflict should prevent the majority of this violence.[4]

Without the means to compete with the United States' superior conventional capabilities, future enemies are likely to seek non-conventional means to challenge American hegemony. For instance, the enemy will seek to exploit weaknesses through asymmetric attacks on American interests at home and abroad.[5] These forces will attempt to neutralize the United States' superior firepower and intelligence capabilities through decreased size and the element of surprise.

In the 21st century, there is likely to develop an increasing trend toward the disintegration of established nation states analogous to the break up of Yugoslavia in the

---

[3] China is the only country with the foreseeable potential to emerge as a first-rate superpower able to challenge the conventional superiority of the United States. (See appendix E for the relative military strengths among the world's armed forces). However, to reach that point China will need to develop the economic and technology bases to build and sustain a first-class conventional military force; the requisite economic and technological modernization will take a minimum of twenty years. (Douglas Lemke, "The Continuation of History: Power Transition Theory and the End of the Cold War," *Journal of Peace Research*, (February, 1997), 38; *Marine Corps' Midrange Threat Assessment, 1997-2007: Finding Order In Chaos*, (Washington, DC, 1997), 78.) Even if China were to develop military parity with the United States, the development of a second Cold War and a conventional clash between the two superpowers remains unlikely given China's traditional reluctance since the 1960s to pursue interests outside Asia. (Francis Fukuyama, "The End of History?," *The National Interest*, (Summer 1989), 17.)

[4] Annual Report to the President and Congress, (Washington, DC, 2000), 16.

[5] *Operational Maneuver From the Sea*, (Washington, DC, 1996), 4-5; *Annual Report to the President and Congress*, 19-20; *MCDP-3*, 12-14. An asymmetric attack can be any assault where the attacker employs strength against an enemy weakness. Asymmetric attacks have been employed since the beginning of recorded military history. The Spartan's (land power) siege of Athens (sea power) and devastation of Attica during the Peloponnesian War was an asymmetrical attack, as was the Athenian's coastal raids in the Peloponnesus. For the purposes of this paper, asymmetric attack is used to mean the employment of non-conventional tactics to defeat superior American conventional capabilities.

last century.[6] This breakdown of order will deprive the nation-state its traditional role as a key player in global conflict so that non-state actors can be expected to become the predominant future enemy of the United States. The face of some of these likely threats can be seen in past events that include the 1968 USS Pueblo incident, the 1975 Mayaguez rescue, and the 1976 Entebbe raid.[7] In addition, the enemy actors involved in the 1979-1980 Iranian hostage crisis offer a prime example of the likely enemy to be faced in the 21st century. The students that attacked the American embassy in Tehran can be classified as state sponsored terrorists who sought to challenge the United States' power to attain their political objectives.[8] With their actions, the Iranians successfully neutralized American conventional forces by holding hostages in a city of five million inhabitants located 6,000 miles from the United States.[9]

Countries with conventional armed forces will most likely opt to sponsor non-state actors rather than directly challenge the United States in open conflict. The difficulty for the United States in linking terrorists to a host nation and then determining the appropriate retaliatory response makes second party terrorist attacks an ideal subterfuge. Libya's orchestration of the 1988 Pam Am flight 103 terrorist attack is an example of such state sponsorship. During the Flight 103 bombing, the government of

[6] Martin Van Creveld, *Nuclear Proliferation and the Future of Conflict*, (New York, 1993), 126; Martin Van Creveld, *The Rise and Decline of the State*, (Cambridge, 1999), 417-418; *MCDP-3*, 13-14.
[7] Most recently, the attack on the USS Cole highlights the likely nature of asymmetrical attacks on American entities abroad.
[8] Cyrus Vance, *Hard Choices: Critical Years in America's Foreign Policy*, (NY, 1983), 376.
[9] Vance, 410.

Libya used second party terrorists as a means to avenge the 1986 air strikes in Libya by American air forces. [10]

Future non-state actors could come to resemble the Barbarians that were prevalent during the 4th and 5th centuries.[11] In contrast to traditional military organization, this barbaric enemy is likely to organize themselves into bands and tribes, and bring boundless chaos to the regions they dominate.[12] This threat will encourage anarchy, lack professionalism, rely on terror, and afford little protection to non-combatants. Additionally, the threat may often be driven by religious fanaticism such as the 1983 Palestinian infatida uprising in the Middle East. Given this overall nature of the future threat, these non-state actors will fall into three distinct categories.

First, terrorism is likely to become the United States' number one threat in the 21st century.[13] Terrorism depends on secrecy, anonymity, and shock effect. The openness of America's public domain, coupled with its demand for personal privacy is fertile ground for terrorism. The ability of a terrorist to remain hidden among civilians will afford protection from detection and attack, and provide the capability of striking in locations of their own choosing. Access to modern technology will improve the terrorist's intelligence capabilities and the lethality of their weapons. The American military's expanding reliance on computer linked data systems and reach back information sources will increase the United States' vulnerability to attack from cyberspace terrorists. These

[10] Although the two terrorists directly responsible for the Pan Am flight 103 bombing were tried before an international tribunal, the apprehension of terrorists and the adjudication of their cases are difficult tasks. After spending over ten years to win extradition of the Pan Am Flight 103 terrorists, only one Libyan operative was convicted.
[11] Martin Van Creveld, *The Transformation of War*, (New York, 1991), 197; Van Creveld, *The Rise and Decline of the State*, 415-416.
[12] David Willis McCullough, *Chronicles of the Barbarians*, (New York, 1998), XV.
[13] *Annual Report to the President and the Congress*, 20.

computer terrorists could also sabotage other strategic information systems such as the American stock market or nuclear power plants. A failure to neutralize the terrorist threat, particularly with regard to attacks within the United States, will have grave implications for American liberties and way of life. Americans could soon find themselves subject to biometric identity procedures, similar to the passport and identification restrictions that currently exist in the Israeli occupied areas of the West Bank and Gaza Strip.

Second, international criminals, including drug cartels, will become another major threat to global security in the 21st century. In the breakdown of the nation-state, illegal organizations are apt to attain unprecedented economic, political, and military strength. The swift and copious emergence of illegal black markets in the shattered states of the former Soviet Union serve as an excellent example of this likelihood.

America's increased dependence on foreign markets and immense national security interests abroad will magnify the importance of the criminal threat. Outlaws similar in character to Osamah Bin Laden, Pablo Escobar, and Mohamed Farrah Aidid will be able to acquire the economic, military, and political power of a small nation state, and then ruthlessly promote their criminal interests. The international consequences of these criminal acts could, to some degree, affect American economic and political interests at home and abroad. This will be particularly true in regions possessing critical natural resources such as the Middle East, South America, and southern Africa.

Third, ideologically motivated insurgents and religious zealots seeking to overthrow democratic governments abroad will present another serious threat to American interests. Blinded by religious fundamentalism, these actors will act

irrationally and thus employ highly unpredictable tactics contrary to the accepted law of war. The unsystematic attacks will bring military success against superior forces oriented on conventional tactics, techniques, and procedures.

The battle space of the 21st century will rapidly expand to a point where even the smallest enemy forces are able to establish a worldwide presence. No longer will the conflict be confined to national borders, or rear and forward areas. Attacks on the United States will possibly occur at home as frequently as abroad. The evolution of information technologies and the expanded role of information warfare will make the United States vulnerable to cyber attacks within the United States' borders.[14]

The Changing Nature of War

Although the tactics and technology of warfare continually change, Carl Von Clausewitz believed that the nature of armed conflict was invariable and immune to the forces of time.[15] Clausewitz's theories have withstood the test of time, but could there come a point in history where a revolutionary transformation in the conduct of warfare renders these ideas obsolete? Could the shift to a predominantly low intensity environment in this century be the catalyst that redefines, or at least alters, our perspective on the nature of warfare? Using the threat model developed above, this section will examine potential changes to the nature of 21st century warfare. This examination of future warfare will serve as a foundation for the following section's analysis of future naval expeditionary operations.

[14] Roger C. Molander, Andrew S. Riddle, and Peter A. Wislon, "Strategic Information Warfare: A New Face of War," *Parameters*, (Autumn 1996), 85-89; *Annual Report to the President and to the Congress*, 19.
[15] Carl von Clausewitz, *On War*, trans. and ed. by Michael Howard and Peter Paret, rev. ed., (Princeton, 1984), 75.

The foundation of Clausewitz's writings on the nature of warfare will continue to have relevance in the 21st century, but other related elements within his theory may become less relevant, or even obsolete. Asymmetric enemies, revolutionary advances in technology, and non-conventional military actions employed to defeat the emerging threat will serve as the catalysts for these changes. Only during the rare instances of large-scale regional conflicts will Clausewitz's depiction of the nature of war be entirely accurate.

In defining the nature of war, Clausewitz presented two key tenets that are apt to remain relevant in this century. The first tenet, which describes the dual nature of war, or the notion that wars can be fought for limited or unlimited objectives, will remain valid in the 21st century. In the absence of a 21st century peer competitor capable of threatening American survival interests, the United States will primarily fight actions involving limited objectives, and will employ limited means to achieve these objectives.[16] Operation EAGLE CLAW represents such an action. Total war and the Clausewitzian theories premised on high intensity conflict, are likely to become much less relevant to the 21st century battlefield.

Clausewitz's second key tenet was that the employment of force was the "continuation of policy with other means."[17] This principle will also remain relevant in the 21st century as the United States' decision to employ military force will continue to originate within the executive and legislative branches of the government. In addition,

[16] In the 21st century, the United States will continue to employ all elements of national power to attain strategic objectives, with the economic component growing in relative importance as increasing market globalization provides the United States with vast economic leverage in resolving conflicts. Military conflict will remain a response of last resort.
[17] Clausewitz, 69.

the United States' government will retain the burden of establishing political legitimacy for the employment of military force.

Clausewitz's fundamental definition of war will also remain relevant in the 21st century. This century's combatants will continue to view war as "an act of force to compel the enemy to do our will."[18] Whether engaged in a low intensity or high intensity conflict, the imposition of will on an opponent will provide the criteria for measuring the successful attainment of military objectives.

Although the three ideas above are likely to remain relevant in the 21st century, there are six other elements of Clausewitz's nature of war theory that could become blurred, or even obsolete. The nature of the emerging threat, and the revolutionary tactics and systems needed to defeat that threat, could serve to redefine the way that the nature of war is viewed in modern times.

First, within the threat model in which non-state and rogue actors flourish, the future enemy could ignore the desires of the people, be immune to the control of an organized government, and practice autocracy within its military hierarchy. Thus, America's future adversaries may well be immune to the implications of Clausewitz's paradoxical trinity and will become highly independent, unpredictable, and cold blooded.[19] The Iranian students that took the Americans hostage in 1980 could be considered non-state or rogue actors and serve as an excellent example of the dominant threat that may emerge in the 21st century. Although the Iranian government did influence the student's behavior in the later stages of the crisis, the Iranian student's

[18] Clausewitz, 75. The use of cyberspace to attack an enemy may fail to qualify as an "act of force," thereby requiring a modification to Clausewitz's definition.
[19] Van Creveld, *The Transformation of War*, 192; For further discussion of Clausewitz's paradoxical trinity see Clausewitz, 89.

initial attack of the embassy was a politically autonomous act.[20]

Second, battlefield friction will continue to be a factor in future engagements but its effect will be much less pronounced.[21] With a shift to engagements of limited objective, actions will be more direct and of relatively short duration and thus be somewhat insulated from the high degree of friction found on the larger, more chaotic conventional battlefield. Technological improvements in communications assets will facilitate centralized control of the action, thereby greatly reducing battlefield friction.

Although the factors that led to the failure of EAGLE CLAW are often associated with battlefield friction, further analysis of the operation indicates that system and technology shortfalls were the true cause of the failure. The absence of durable long-range assault helicopters, adequate doctrine and training, and an efficient intelligence capability to accurately predict the weather were the significant factors that led to the mission's failure. After accounting for these shortfalls, battlefield friction appears to be irrelevant to the operation's outcome. Given adequate systems and technology to accomplish their missions, small expeditionary units conducting precision strike operations are likely to encounter less battlefield friction.

Third, future technologies will also provide commanders with an unprecedented situational awareness of the battlefield. Remote sensing, reach back, and network centric technologies will provide an extremely accurate and timely intelligence picture of the enemy. Sensors and automated systems that rapidly collect, process, and disseminate intelligence products will also filter the data to ensure that the commander is provided with only relevant information. Consequently, Clausewitz's ideas on the "fog of battle"

[20] Vance, 375-376.
[21] For further discussion on battlefield friction see Clausewitz, 119-121.

may become less significant in the future.[22]

Operation EAGLE CLAW demonstrates the prevalence of uncertainty in the absence of adequate intelligence. The inability to provide the EAGLE CLAW raid force with real-time weather forecasts was a significant factor in the mission's failure. Without information on the large dust storm encountered during the ingress to Desert One, the EAGLE CLAW raid force became separated which led to helicopter number five's mission abort and return to the USS Nimitz. Improvements in future intelligence capabilities will drastically reduce the "fog of battle" such as the EAGLE CLAW raid force encountered.

Fourth, offensive actions, which emphasize stealth and mobility, will prevail as the stronger form of warfare in the 21st century, and in fact, will be prerequisites for survival on the battlefield, in contrast to Clausewitz's ideas.[23] Not only will rapid advances in technology increase the accuracy of sensors employed to locate the enemy, they will increase the lethality of weapons systems, and increase the range at which weapons systems are released. These changes will render positional warfare an undesirable and fatal form of battle.[24]

Fifth, the conduct of warfare will more closely resemble the scientific execution of the 17th and 18th centuries, rather than the artful employment of combat forces during the 20th century.[25] The operational art of the 20th century involved a commander coordinating a series of tactical actions in the pursuit of a strategic goal. This

---

[22] For further discussion on the fog of battle see Clausewitz, 117-118.
[23] For further discussion on offensive and defensive operations see Clausewitz, 357-359.
[24] Joint Publication 1-02 defines positional defense as " the type of defense in which the bulk of the defending force is disposed in selected tactical locations where the decisive battle is to be fought. Principle reliance is placed on the ability of the forces in the defended locations to maintain their positions and to control the terrain between them."
[25] For further discussion on war as an art and science see Clausewitz, 148-150.

coordination of a campaign was typically executed over an extended period of time and throughout a large geographic area. Campaign planning and execution required that a commander possess intelligence, foresight, intuition, and military acumen. The short duration, centralized strategic control, and deliberate nature of 21st century warfare could place less emphasis on the commander's operational expertise, thereby greatly reducing the relevance of operational art. For example, in contrast to the artful employment of conventional forces during World War II, the 1980 raid of the United States embassy in Tehran exemplifies the precise scientific execution that will likely characterize 21st century tactical actions.

Lastly, Clausewitz's center of gravity concept may also become much less significant in the execution of expeditionary operations. The asymmetrical threats of this century are apt to be composed of small units that are strategically divided and positioned in remote locations. Consequently, determining this asymmetric threat's center of gravity, and the associated critical vulnerability may be impossible. The expeditionary force's only choice may be a direct attack on the concentration of enemy strength.[26] The enemy faced during the Iranian crisis adequately represents this potential change in the nature of warfare. The Iranian students comprised a small unit in a remote location (600 nautical miles inland), and they did not possess a critical vulnerability, thereby necessitating a direct attack by American forces.

In addition to the changes within the Clausewitzian model, the preponderance for low intensity missions in this century could radically alter the relationship between the

[26] For further discussion on the center of gravity concept see Clausewitz, 595-596; For further discussion on defeating centers of gravity by means of attack on critical capabilities (vulnerabilities) see Dr. Joe Strange, *"Perspectives on Warfighting: Centers of Gravity and Critical Vulnerabilities,"* (Quantico, 1996), 1-152, and *"MCDP-1:Warfighting,"* (Washington, DC, 1997), 45-47.

three levels of war. This transformation would then dictate the methods and means used to attain national military objectives. With respect to a future conventional threat model, one commentator has proposed that the three levels of war will merge into one. He reasoned that advances in technology, and the subsequent command and control improvements will enable operational level commanders to simultaneously synchronize a large number of tactical actions in time and space, which will result in the instantaneous attainment of strategic objectives.[27] Such analysis suggests that the result will be an expanded operational level at the expense of the tactical and strategic levels. (See figure 1.) In most cases, this hypothesis will be irrelevant to the non-conventional action that will likely dominate the 21st century.

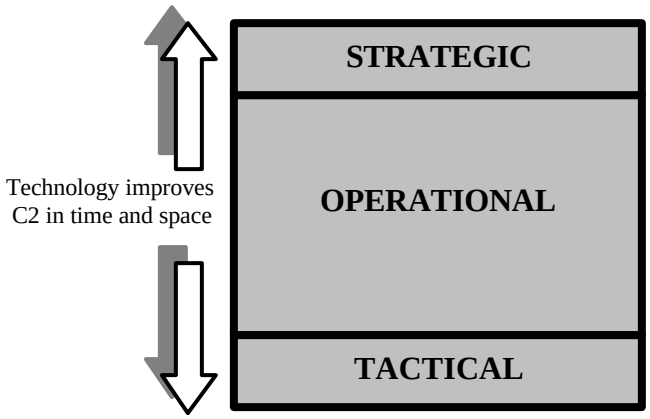


Figure 1
Future conventional warfare.[28]

In the 21st century, tactical actions will typically have a direct impact on strategic objectives. Engagements against asymmetric threats will likely be of short duration with

[27] Douglas A. Macgregor, "Future Battle: The Merging Levels of War," *Parameters*, (Winter 1992-1993), 33.
[28] Macgregor, 41.

the potential to bring the immediate attainment of strategic goals. Consequently, without the requirement to provide a link between the tactical and strategic levels, the operational level of war will become less significant.[29] (See figure 2.)

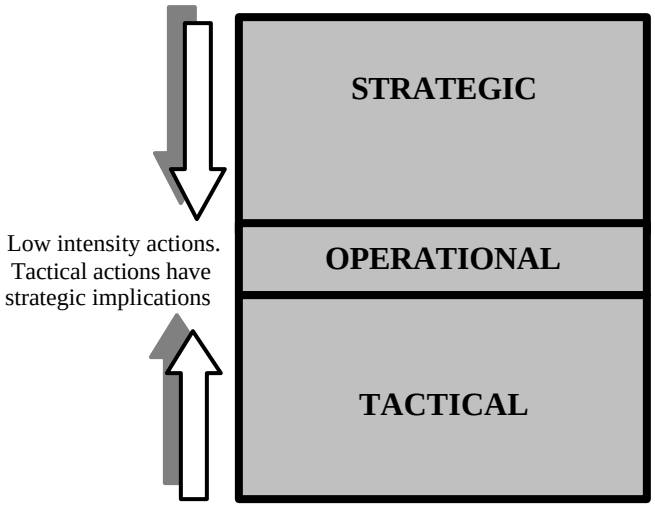


Figure 2
Future non-conventional warfare.

Operation EAGLE CLAW serves as a paradigm for the evolving relationship among the three levels of war. The operation was planned and executed on the tactical level with the strategic objective being the release of the American hostages. The NCA executed command and control of the mission from the strategic level; command and control at the operational level was insignificant.[30]

[29] Steven Metz, "The Next Twist of the RMA," *Parameters*, Autumn 2000, 51.
[30] Charlie A. Beckwith and Donald Knox, *Delta Force*, (New York, 1983), 2.

NAVAL EXPEDITIONARY OPERATIONS IN THE 21ST CENTURY

Naval Expeditionary Missions

Having assessed the future threat and the potential for change to the modern warfare paradigm, this section will establish why the use of naval forces will be the NCA's preferred employment option in the 21st century, and then examine the future missions most likely assigned to the NEF.

Forward deployed forces capable of global coverage and decisive power projection ashore will be an integral component of the United States' national security strategy for the 21st century.[31] Should the recent trend to reduce overseas bases and forward deployed forces continue, the emerging enemy will seek to attack in regions having a tangible interest to the United States, but lacking a formidable American military presence. With a less visible and defined threat in the 21st century, the United States will be forced to increase worldwide deployments to deter enemy actions. Unlike the other armed services of the United States, forward deployed naval forces are ideally suited for overseas presence and could become the preferred choice of the NCA to meet the emerging threat.[32]

There are several reasons that the NCA will likely consider the NEF to be the preferred employment option in the 21st century. First, the NEF provides the NCA with a forward deployed force capable of a timely response in a crisis situation. This is a

[31] *MCDP-3*, 22-23.

[32] Following the United States Air Force's success in Kosovo, air power proponents were quick to proclaim that Giulio Douhet was right, that air power could alone be a decisive force. These proponents often fail to recognize that United States' potential to project other service branches to the Balkans, and United States' threatened use of ground forces already staged in Macedonia, had an equal effect on the Serbian leadership in making their decision to withdraw from Kosovo.

significant point given the ongoing reduction of American overseas bases, and the lengthy response time necessary to deploy ground forces from the continental United States. Second, the NEF does not require secure ports and airfields within the theatre of operation. The employment of Army ground forces, or the deployment of air force expeditionary forces require secure receiving and staging areas within the theatre of operations. These infrastructure requirements may not be on hand, and the time needed to develop the bases may not be available. Third, in contrast with other expeditionary forces, the NEF contains internal combat service support (CSS), thus requiring a significantly smaller CSS footprint within the area of operations.[33] Fourth, the organic air, ground, and naval elements of the NEF offer the combat multiplication and leverage of a joint force. Lastly, unlike the deployment of an Army or Air Force expeditionary force, NEF deployments are programmed budget expenditures; therefore, the NEF provides a more economical solution to crisis response.

Given the advantages of employing the NEF in a low intensity crisis situation, naval expeditionary units may find their focus exclusively on non-conventional operations originating from enemies employing asymmetric tactics and strategies.[34] Overwhelmed by the asymmetric threat, NEF operations could begin to focus exclusively

[33] The CSS internal to MEU (SOC) can sustain that force for fifteens days.
[34] In the 21st century, major regional conflict not involving the United States is still a possibility. For example, war between India and Pakistan, or war between China and Taiwan is a distinct possibility. To deter such conflict and regional instability, the DOD may need to direct the Army and Air Force to maintain their conventional capabilities, while assigning the expeditionary mission exclusively to the NEF.

on missions referred to in the 20th century as Military Operation Other Than War (MOOTW).[35]

The NEF's rapid response capability could become the preferred means to execute predominant low intensity missions such as inextremis hostage rescue (IHR), weapons of mass destruction (WMD) non-proliferation, non-combatant evacuation operations (NEOs), and maritime interdiction operations (MIOs). Precision strike operations by the air and ground forces of the NEF could become a routine means to rescue hostages, destroy WMDs and weapons manufacturing facilities, evacuate Americans from hostile regions, or enforce economic sanctions from the sea.

Operation EAGLE CLAW typifies the strike, or raid tactics necessary for the next century. Forward deployed forces that utilized a naval platform to launch the raid undertook the mission. The mission incorporated a small unit action against an asymmetric threat, integrated tactical surprise, planned for violent actions on the objective, and included a planned withdrawal. Future tactical actions seeking to achieve strategic goals are likely to possess these same raid characteristics.

The capture or assassination of rogue threats abroad could very well become a mission of the NEF in this century. Although these actions are currently unacceptable to the international community and the American public, terrorist attacks and loss of life within the United States could change these attitudes. The capture and assassination of

[35] Joint Pub 1-02 defines MOOTW as "operations that encompass the use of military capabilities across the range of military operations short of war. These military actions can be applied to complement any combination of the other instruments of national power and occur before, during, and after war." Joint Publication 3-07 defines MOOTW as "a broad range of military operations that support a variety of purposes, including: supporting national objectives, deterring war, returning to a state of peace, promoting peace, keeping day-to-day tensions between nations below the threshold of armed conflict, maintaining US influence in foreign lands, and supporting US civil authorities consistent with applicable law." FM 100-5 defines three environments: "peacetime, conflict, and war." The FM further states that MOOTW are missions typically assigned within the realm of peacetime and conflict.

terrorist leaders may become a last resort to stop bloodshed within the borders of the United States.

Future naval expeditionary operations may no longer be based on the total concept of maneuver warfare; rather, Marine Air Ground Task Force (MAGTF) operations will focus exclusively on small unit precision strike operations, such as the 1980 raid in Tehran. Maneuver warfare's emphasis on rapid mobility and operational tempo will continue to be an integral part of expeditionary operations, but future actions will be of limited duration. The precision strike operations of the 21st century will also focus the tactical action in a confined space and time, thus greatly limiting the force's opportunity and desire to conduct maneuver.

Future expeditionary operations will require a significant increase in the range of the current power projection capability. In order to avoid direct confrontation and to deprive the United States of the offensive initiative, the future enemy will position forces and high value targets beyond the projection range of the Naval Expeditionary Force (NEF). Nigeria's 1991 relocation of its capital from the coastal city of Lagos to the city of Abuja located over three hundred miles from the littoral region, serves as a contemporary example of using geography to strategically isolate potential high value military objectives. (See map 1.) Although Nigerian officials maintained that the primary reasons for the move were related to internal security concerns, the Nigerian action demonstrates the potential for future enemies to remove prospective targets from readily accessible locations.

The enormous distance between the USS Nimitz and Tehran during Operation EAGLE CLAW was a significant factor in the mission's failure, and demonstrated an inferior force's successful use of geography as a defensive measure. Operation EAGLE

Map 1.[36]
Lagos and Abuja Nigeria

CLAW suggests that power projection well past the littoral region, to the interior areas of each continent will be a prerequisite for strategic success in the next century.[37]

Given the predominance of low intensity situations, and the congruent nature of expeditionary operations in the 21st century, the Marine Expeditionary Unit (special operations capable) [MEU (SOC)] will become the premier warfighting organization of

[36] Helen Chapin Metz, *Nigeria: A Country Study*, (Washington, DC, 1991), 80.
[37] *MCDP-3* defines the world's littoral regions as that location "where land and sea meet." MCDP further states that the littorals include "straits, most of the world's population centers, and the areas of maximum growth."

the Marine Corps, and of the United States. In contrast to the Marine Expeditionary Force (MEF), and the Marine Expeditionary Brigade (MEB), the MEU (SOC) will provide the NCA with a small, flexible, and readily available precision strike capability to engage America's future asymmetric enemies.[38]

Navy and Marine Corps Force Structure

The employment of a MEU (SOC) centric strategic force in the 21st century will require the United States to expand the current number of standing MEUs (SOC) and supporting naval Amphibious Squadrons (PHIBRONs). The current Navy and Marine Corps' force structures will not support the future requirement for a continuous and all-inclusive global presence of naval expeditionary forces. Drawing on the analysis of expected conditions provided above, this section will propose four changes to Navy and Marine Corps force structure necessary to meet the strategic naval expeditionary requirements of the 21st century.

Currently, there are seven active MEUs (SOC). The 11th, 13th, and 15th MEUs (SOC) are located in Camp Pendleton, California, and are organic to the I Marine Expeditionary Force (I MEF).[39] The 22nd, 24th, and 26th MEUs (SOC) are located in Camp Lejeune, North Carolina, and are organic to the II Marine Expeditionary Force (II

[38] A MEF is a Marine Air Ground Task Force (MAGTF) comprised of a Command Element, a Marine Division, a Marine Aircraft Wing, and a Marine Force Service Support Group. A MEB is a MAGTF comprised of a Command Element, a reinforced Marine Regiment, a Maine Aircraft Group, and a Brigade Service Support Group.

[39] These associations are valid when the MEU (SOC) units are not deployed. When deployed, a MEU (SOC) is under the operational control of a unified commander based on the unit's deployed location.

MEF). The 31st MEU (SOC) is located in Okinawa, Japan, and is organic to the III Marine Expeditionary Force (III MEF).[40] (see Figure 3.)

The United States Navy currently maintains eleven supporting Amphibious Squadrons (PHIBRONs). The 1st, 3d, 5th, and 7th PHIBRONs are located in San Diego,

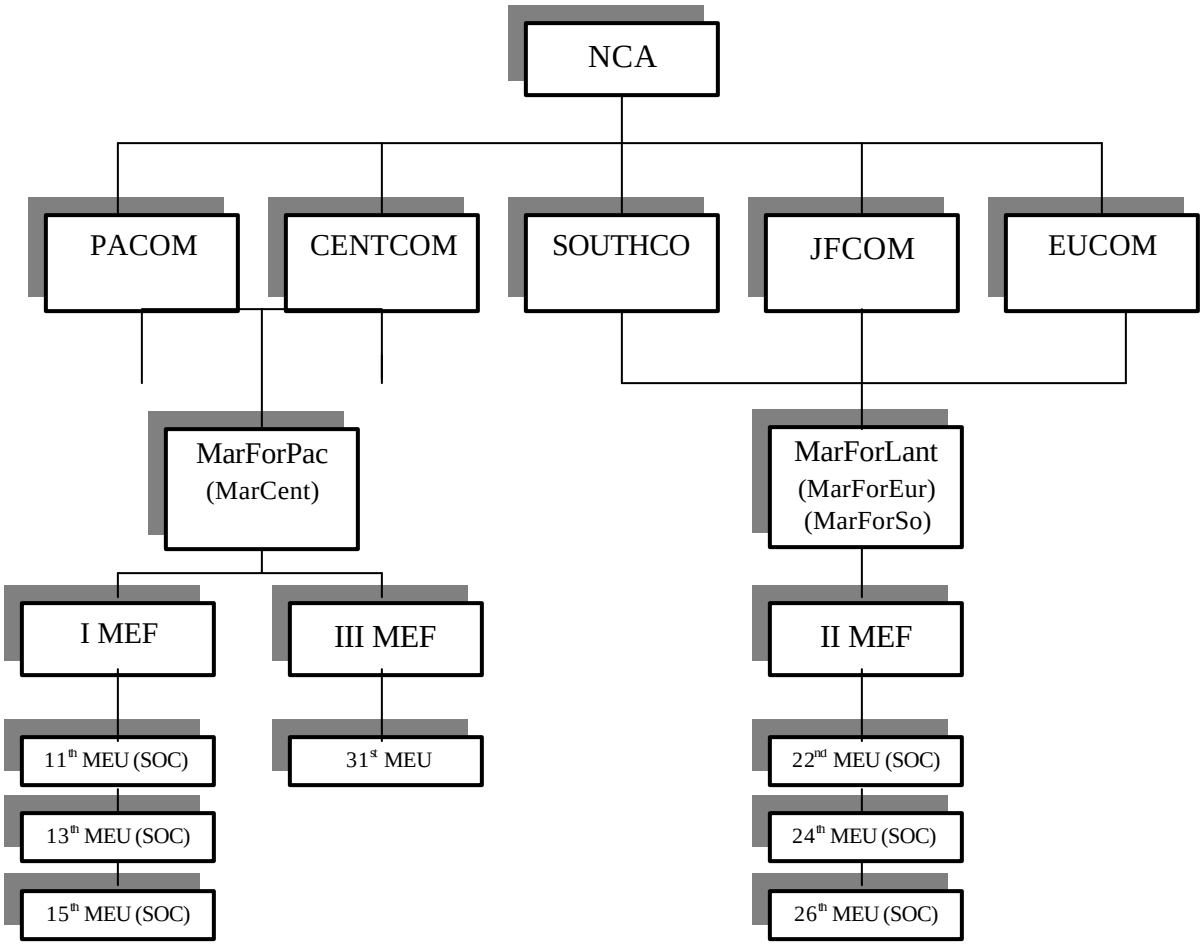


Figure 3.
Current association of MEUs (SOC).

[40] *Marine Corp Reference Publication (MCRP) 5-12D Organization of Marine Corps Forces,* (Washington, D.C., 1998), 2-4.

California, are organic to Amphibious Group (PHIBGRU) 3 and support the I MEF MEUs (SOC). The 2nd, 4th, 6th, and 8th PHIBRONs are located in Norfolk, Virginia, are organic to PHIBGRU 2 and support the II MEF MEUs (SOC). PHIBRON 11 is located in Japan, is organic to PHIBGRU 1, and provides support to the 31st MEU (SOC).

These Navy and Marine Corps forces provide the United States with the capability to deploy three Amphibious Ready Groups (ARGs) at any given time.[41] This is an inadequate number given the anticipated threat and nature of expeditionary operations in the next century. The continuous forward deployment of at least four ARGs will be necessary to meet the strategic requirements of the 21st century.

In addition to the insufficient number of MEUs (SOC) and PHIBRONs available, there is a disparity in the allocation of these units to the unified commands. The MEUs (SOC) within I MEF and III MEF are assigned to Marine Forces Pacific (MARFORPAC), which serves as the Marine Corps component for both the Pacific Command (PACOM), and the Central Command (CENTCOM). The MEUs (SOC) within II MEF are assigned to Marine Forces Atlantic (MARFORLANT), which serves as the Marine Corps component for the European Command (EUCOM), the Southern Command (SOUTHCOM), and the Joint Forces Command (JFCOM). The availability of two to three ARGs deployed at any given time is disproportionate to the needs of five geographic unified commands with widespread geographical responsibilities.

The first solution to these problems will require a significant increase in the Department of the Navy's authorized force structure and procurement budget. The increases could not be realized from internal force restructuring or budget cuts. The

[41] An Amphibious Ready Group is defined as a Marine Corps MAGTF embarked upon Naval amphibious shipping.

decision to increase the number of deployed ARGs available to each unified command would need to originate from a national commitment to increase the Navy Department's force structure and budget.

The second proposed changed would be the addition of five MEUs (SOC) and seven PHIBRONs to the current force structure.[42] The three MEUs (SOC) under I MEF would support CENTCOM in the Persian Gulf and Indian Ocean regions. The three MEUs (SOC) under II MEF would support SOUTHCOM and JFCOM in the Atlantic region. Two additional MEUs (SOC) would be fielded to III MEF to provide PACOM with continuous coverage in the Pacific Ocean region. Three new MEUs (SOC) would be fielded under II MEF to support EUCOM in the Mediterranean region. (See figure 4.)

Current world events serve as an excellent template to demonstrate the need for the continuous deployment of four MEUs (SOC). The MEU (SOC) supporting EUCOM could be deployed to the Adriatic Sea to assist in stabilizing the situation in Macedonia and Albania. The MEU (SOC) assigned to PACOM could be deployed to the South China Sea in response to the American service personnel being held on Hainan Island. The MEU (SOC) in support of CENTCOM could be deployed to the Persian Gulf as a part of the United States effort to deter Iraqi aggression. The MEU (SOC) dedicated to SOCOM could be deployed to South America to support counter-drug operations, or to another region experiencing multiple crises.

PHIBGRU 3 would continue to support the MEU (SOC) units organic to I MEF. PHIBGRU 2 would continue to support MEU (SOC) units organic to II MEF. One additional PHIBGRU (four PHIBRONs) would be fielded at Norfolk to support the three

[42] Each PHIBGRU contains four PHIBRONs . Four PHIBRONs are required to support the continuo deployment of three MEUs (SOC) due to the intense maintenance demands of the amphibious shipping.

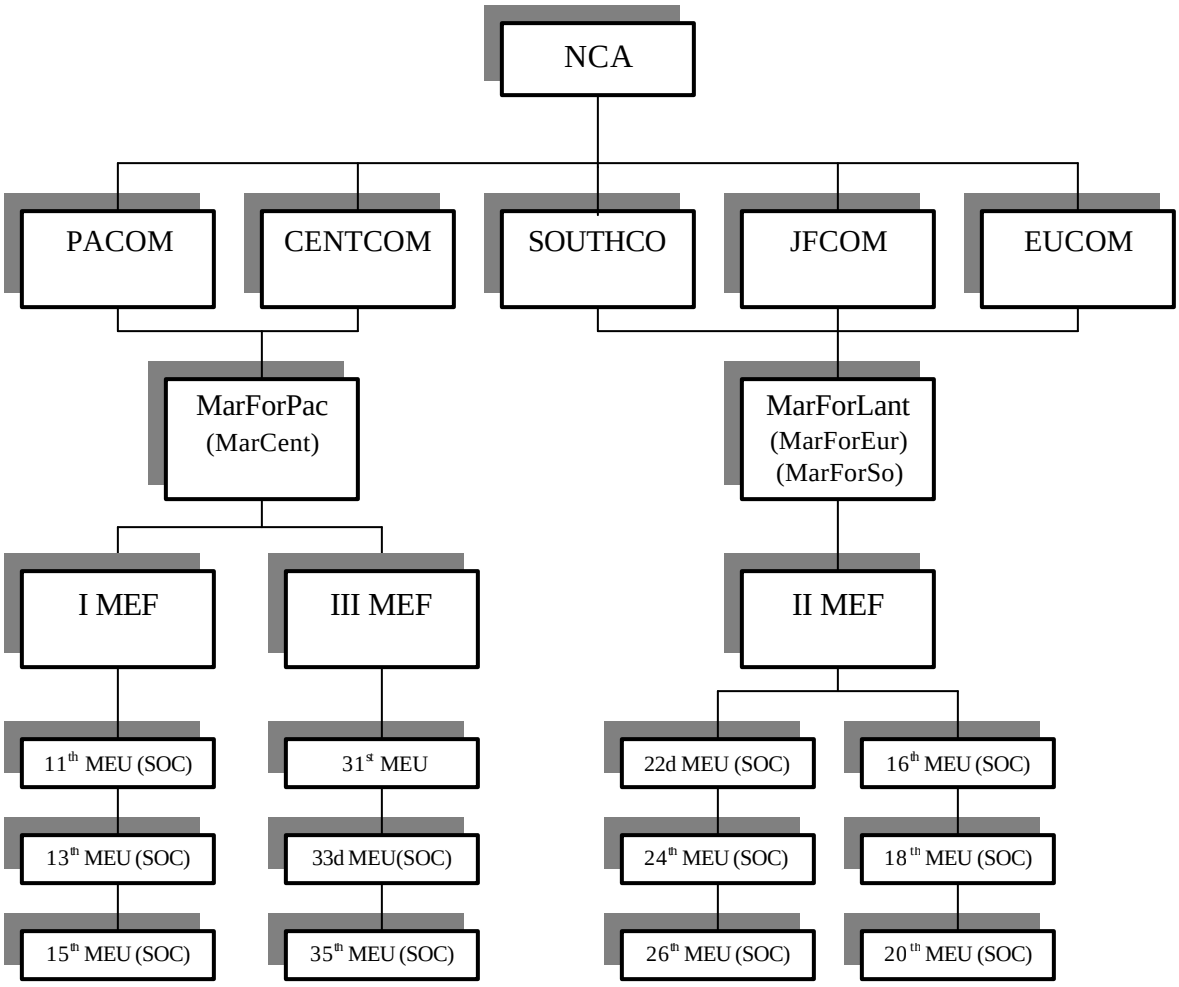


Figure 4
Proposed association of MEUs (SOC).

new MEU (SOC) units fielded to II MEF. Three additional PHIBRONs would be fielded to PHIBGRU 1 in Japan to support the additional two MEU (SOC) units fielded to III MEF.

Within the MEU (SOC), a third major change to the current force structure will also be necessary. During this century, the best means for conducting amphibious operations will be by air. Conducting airmobile ship to objective movement will provide

this century's naval expeditionary force with the speed, mobility, and range necessary to accomplish their precision strike operations. The emerging threat's ability to employ sea-based mines to neutralize beach-landing sites utilized by the small boat and mechanized companies during an amphibious raid operation will be a continuing problem.[43] The limited speed and range of the small boat and mechanized companies are additional limiting factors on their employment. Given the advantages of airmobile forces, the MEU (SOC) of the 21st century will need to reorganize the Ground Combat Element (GCE) into three heliborne companies rather than the current organization of one heliborne, one mechanized, and one small boat company.[44]

Lastly, in the 21st century, the CVBG must become an integral part of the NEF. The CVBG and ARG typically remain in close proximity while deployed, thus assuring their mutual support within the NEF.[45] Although this is an ideal deployment strategy, the shortfall of CVBG and ARG assets among the unified commands often require the CVBG and the ARG to separate when faced with simultaneous crises in different locations. The requirement for carrier support to the NEF in future operations would require that the CVBG remain tethered to the ARG at all times.

The CVBG's primary use as a strategic platform in the 20th century could change. In this century, the CVBG's predominant mission may be the projection of tactical air support to the amphibious force ashore. As the NEF's capability to project force inland improves, carrier based fighter and electronic warfare platforms will be needed to provide

[43] Mines provide inferior threat forces an inexpensive, but highly effective method of defeating the United States' superior amphibious capability.
[44] The Ground Combat Element (GCE) of a MEU (SOC) is a reinforced Marine infantry battalion, or Battalion Landing Team (BLT) consisting of three rifle companies, one weapons company, and one headquarters and service company. Each rifle company is assigned one of three specialized missions: small boat raid, mechanized raid, or heliborne raid.
[45] The CVBG will typically remain within 400 miles of the ARG.

for the security of the heliborne landing force while transiting to and from the objective. During the Tehran raid, carrier-based aircraft were to be used to provide cover for the airmobile raid force in Tehran, and during their withdrawal to Egypt. The use of carrier borne aircraft in support of the EAGLE CLAW raid force demonstrates the potential shift in the predominant CVBG role during the 21st century.

Ensuring that a CVBG is available to deploy with each MEU (SOC) centric NEF will require an increase in the number of aircraft carriers within the Navy. The Navy currently maintains eleven active and one reserve carriers. To provide continuous coverage to each of the proposed ARG deployments, the procurement of one additional active duty carrier would be necessary. The addition of one aircraft carrier would enable the Navy to designate one carrier to each existing and proposed ARG, and ensure that a designated CVBG was continuously available within each theatre of operations.

When the United States embassy in Tehran was seized, there was not a unit available to the NCA tailored to undertake the rescue mission. The shortfall in low-intensity forces available to the NCA is understandable given the ongoing Cold War and focus on large-scale conventional warfare. The force that executed Operation EAGLE CLAW was quickly assembled from among various units and armed services. This ad hoc unit lacked common operating procedures, cohesion, and adequate time to conduct collective training.[46] These organizational factors contributed significantly to the mission's failure. The United States' failure to prepare for the emerging threat, and make adjustments to the current force structure, could also lead to a military unprepared to execute future missions.

[46] Beckwith and Knox, 295.

There is a important lesson to be learned from the JTF assembled to execute Operation EAGLE CLAW. Rather than assign a standing unit from one service to conduct the mission, the NCA was compelled to ensure that the JTF contained representation from each service. This decision to field an ad hoc force from among the services contributed to the JTF's ambiguous chain of command, absence of unit cohesion, lack of common operating procedures, and very limited opportunities to train for the mission. Although the 1986 Goldwater-Nichols Defense Reorganization Act made significant improvements to the unity of effort and joint capabilities of the armed forces, underlying parochialism and self-promotion within each service cannot be ignored. The organization and relationships within the NEF will be immune to this service parochialism and will assist in ensuring success during similar mission requirements.

Navy and Marine Corps Doctrine

Since the end of the Cold War, a great deal of effort has been put forth to analyze the strategic requirements necessary to defeat the 21st century threat. The Department of Defense (DOD) has examined this problem from a joint perspective, and each individual branch has contemplated future requirements from a service perspective. The results of these studies not only predict the future threat environment, but also establish new doctrine believed to be necessary for strategic success in the 21st century. The predominate documents related to the future employment of American military force is *Joint Vision 2010 (JV 2010),* and the follow-up publication entitled *Joint Vision 2020 (JV*

2020).[47] *JV 2020* was developed by the Joint Staff in 1996 and provides a framework for the employment of joint forces in the year 2020.

JV 2020 anticipates a future asymmetric threat that will challenge American superiority on the low end of the conflict spectrum. The document further states that this type of enemy will be the most serious threat to American interests in the 21st century.[48] The document then advocates full spectrum dominance through the joint employment of dominant maneuver, precision engagement, focused logistics, and full-dimensional protection.[49] The incongruity between the perceived most likely threat, and the commitment to full spectrum dominance is a significant flaw in *JV 2020.* Although *JV 2020* makes a good argument for remaining prepared for high intensity conflict, the greater likelihood of future low intensity conflict indicates that the emphasis on preparing for joint operations should be at the low end of the conflict spectrum.

The primary Department of the Navy publications related to future operations are the white paper *Forward from the Sea*, and the complementary Marine Corps document entitled *Operational Maneuver From the Sea* (OMFTS). Published in 1997, *Forward from the Sea* and OMFTS responds to the directive nature of *JV 2020* by specifically addressing the employment of Navy and Marine Corps forces in the 21st century.

The overriding fault in the OMFTS document is the Marine Corps' focus on amphibious operations during large-scale regional conflict and during conventional conflict with competing super powers. The OMFTS publication, and the Marine Corps' recently published "Strategy 21" document, centers on the employment of the Marine

[47] Further reference to *JV 2020* in this paper will include the content of both *JV 2010* and *JV 2020*.
[48] *Joint Vision 2020*, (Washington, D.C., 1996), 6-7.
[49] *Joint Vision 2020*, 3.

Expeditionary Brigade (MEB), the Marine Expeditionary Force (MEF), and the Maritime Prepositioning Force (MPF) [50] Given the anticipated nature of the future threat, and the predicted dominance of low intensity conflict, the operational level maneuver of large combat forces seems less likely. The Marine Corps' focus at the operational level of war may become obsolete and compromise their preparedness against the emerging 21st century threat.

The Navy and Marine Corps' fixation on the littoral regions of the world indicates that the OMFTS and Forward From the Sea documents may have misinterpreted the nature of the future threat. The Navy's emerging "Street Fighter" concept is just one example of the Navy Department's disconcerting preoccupation with the littoral region.[51] The future enemy is apt to counter the superior capability of NEF by deliberately locating its forces in areas inaccessible to America's forward deployed naval presence. The threat of land based anti-ship missiles will further increase the required standoff necessary to protect American ships, thus further reducing the tactical inland reach of the NEF.[52] Positioning high value targets within urban areas could also make the attack of the enemy extremely difficult. Positioning forces well within the interior of a host country, as the Iranian students did in 1980, would be the enemy's most effective defense. In this case the enemy would remain outside of the NEF's range and thus exploit the Navy and

[50] *OMFTS*, 11-12; *Strategy 21*, 3.
[51] The Street Fighter concept will entail a new class of light, heavily-armed, and high speed surface ships that provide the Navy a limited ability to conduct ground strike operations in the littoral region. For more information on the Street Fighter concept see "Cebrowski: Today's Thinking Won't Do For Tomorrow's Navy," by Hunter Keeter, *Defense Daily*, 03 November 1999, 1-3.
[52] Center for Strategic and Budgetary Assessments, *The Revolution in Military Affairs*, (Washington, DC, 1999), 7.

Marine Corps obsession with the littoral region. A more comprehensive document that addresses operations well beyond the littoral region is necessary.[53]

OMFTS philosophy contains the idea that the changing threat model and new technology will not change the nature of future war.[54] Throughout history the development of new tactics and technology has radically changed the conduct of war.[55] To dismiss the possibility of a 21st century RMA that alters the nature of warfare is irresponsible and dangerous.

The use of the Marine Expeditionary Force (MEF) as the Marine Corps' primary warfighting organization may be ineffective in dealing with the emerging threat.[56] The reduced possibility of future large-scale conventional actions may subordinate the MEF to smaller units tailored to fight in a low intensity environment. In that case, doctrine would need to be developed that places greater emphasis on the employment of the MEU (SOC).

In 1979, the absence of any doctrine to deal with the Iranian hostage crisis was a fatal shortfall. The ad hoc unit established to execute Operation Eagle Claw was given less than six months to develop the tactics, techniques, and procedures necessary to attack an asymmetric threat inside a major city and within the interior of the Asian continent. Our failure to learn from the Iranian rescue mission, and develop doctrine that addresses a mission requirement well beyond the littorals, could have devastating consequences either tactically in execution, or strategically in the view of the world's public eye.

---

[53] *The Revolution in Military Affairs*, 27.
[54] *OMFTS*, 1.
[55] Metz, 41; *The Revolution in Military Affairs,* 1-2.
[56] For further information on the MEF as the Marine Corps' primary warfighting organization see MCDP-3, 73-74.

New Technology and Systems

To meet the anticipated expeditionary requirements of the 21st century, the Navy and Marine Corps will need to improve current capabilities through the procurement of new systems and technology. Technological innovation will be a critical component in the force multiplication of the smaller units landed ashore in the 21st century. This section will suggest technological and system improvements necessary for meeting the NEF's future requirements.

The failure of Operation EAGLE CLAW can be attributed to the lack of capable and sufficient aircraft available to execute the mission. The naval minesweeping helicopters used during the operation required mechanical modifications, lacked the required range, and proved to be less than reliable in the execution of the mission. The loss of the eight RH-53D helicopters during the failed rescue mission accounted for one third of the Navy's mine sweeping capability.[57]

A new system to improve the expeditionary force's airlift capability and ship to objective range will be a critical requirement. Today's forward deployed MEU (SOC) has the capability to project a limited amount of power out to a range of approximately 125 miles.[58] Various refueling methods during a mission can extend this range, but these methods typically require a large support force ashore, detailed coordination, and a permissive threat environment.

[57] Ryan, 86.
[58] Paul Jackson, *Jane's All The World's Aircraft*, (Alexandria, VA, 2000), 774-775. The MEU (SOC) deploys with a composite squadron of CH-46 and CH-53E helicopters. The 125 mile range is based on a single leg of the CH-53E helicopter. The CH-46 has significantly less range.

The acquisition of the MV-22 Osprey will increase the NEF's ground combat radius to approximately 260 miles.[59] Using the 600-mile distance between the USS Nimitz and Desert One during Operation EAGLE CLAW as a comparison, even the Osprey's range appears to be insufficient for future NEF requirements.[60] The MV-22 will be able to refuel in flight with the KC-130 or KC-10, but this procedure requires host nation support near the objective area, detailed coordination, and the forward basing of aircraft or long delays during the deployment of the KC-130 aircraft from the United States. These requirements may not be available, or may not support the time constraints placed on the expeditionary force. The Marine Corps will need to develop refueling technology, systems, and procedures internal to the NEF in order to greatly increase the MV-22's range.

The NEF of the 21st century will also require fire support systems possessing greater range, accuracy, and lethality inherent in the Navy and Marine Corps current capabilities. The acquisition of new fire support technology and systems will act as a force multiplier ashore, thereby increasing the MAGTF's efficiency and survivability. Although the EAGLE CLAW raid force never reached their objective, the lack of overwhelming fire support able to range Tehran could have been a tremendous shortfall.

Should the Navy receive the requisite funding, their acquisition of the DD-21 will satisfy the requirement for improved surface fires in support of the landing force. The DD-21 will contain a variety of new weapons systems to include the Advanced Land Attack Missile (ALAM), Tactical Tomahawk (TACTOM), and the Advanced Gun

[59] Jackson, 587.
[60] Paul B. Ryan, The Iranian Rescue Mission: A Case Study, Washington, DC, 1985), 23.

System (AGS) firing Extended Range Guided Munitions (ERGM).[61] Carrier based naval aircraft operating as an integral component of the NEF will complement the DD-21's capabilities and bring further lethality and range to the forces ashore.

To meet the NEF's future command and control (C2) requirements, the Navy will need to realize their conceptual plan of network centrism. The network centric warfare concept will provide common data links throughout the NEF. Data communications will link all units and ships, and various sensors utilized to locate the enemy will be directly linked to weapon systems within the NEF. The network centric system will greatly facilitate the command, control, communications, computers, and intelligence (C4I) within the NEF, as well as provide immediate and accurate fire on known enemy positions.

Given the small size of the MAGTF forces that may be employed, NEFs of this century will need greatly improved intelligence capabilities. The ability to diminish the fog of battle and improve situational awareness during planning and execution, has the potential to serve as a force multiplier for the NEF. The development and acquisition of reach back technologies will afford the forward deployed NEF the access to national and theatre level intelligence assets. The improvement of Unmanned Aerial Vehicles (UAVs), and the acquisition of a tilt-rotor UAV capable of operating from ARG shipping, will provide readily available and real time intelligence to NEF mission planners.

Given the probable nature of future expeditionary operations and the increased reliance on air assets, the Marine Corps' commitment to fielding the Advanced Assault Amphibian Vehicle (AAAV) may be counterproductive to mission preparedness. The

[61] *Vision…Presence… Power: A Program Guide to the U.S. Navy*, (Washington, DC, 2000), 52.

AAAV lacks the requisite speed, range, and mobility for the precision strike operations anticipated in the 21st century. The enemy's increased use of sea-based mines to deny the NEF a beach landing may also make the AAAV an obsolete system.

The tragic outcome of Operation EAGLE CLAW can in part be attributed to the lack of adequate combat systems available to accomplish the mission. The mission planners did not have access to information technology that could have provided critical intelligence about the weather, the Desert One landing site, and the raid objective. The EAGLE CLAW task force also lacked adequate air assault helicopters and fire support assets to accomplish their mission.

Conclusion

The end of the Cold War, and the emergence of the United States as the world's sole superpower, is causing radical change in the nature of conflict. America's involvement in global war, or large-scale regional conflict, has become a remote possibility. Through innovative technologies and tactics, future enemies are developing asymmetric methods of attack to defeat the United States' superior conventional forces. Military historians of the 21st century are likely to look back upon these changes as a revolution in military affairs.

This emerging threat could very well provide a catalyst to change the world's perspective on the nature of warfare. Many elements within the Clausewitzian model of warfare used throughout the 19th and 20th centuries could be altered, or become obsolete in this century. These changes will drive the change in tactics and technology required to successfully conduct naval expeditionary operations in the 21st century.

In the future, naval forces employing limited and precision strike tactics will most likely offer the best solution to meet America's asymmetric threats. The flexible and potent character of forward deployed NEFs will enable the United States to react quickly and decisively against all enemies. The emphasis on precision raid operations conducted by relatively small and highly mobile forces will make the MEU (SOC) centric NEF the NCA's primary employment option.

To meet this requirement, several changes to the MEU (SOC) force structure will be necessary. A commitment at the national level to activate additional MEUs (SOC), and supporting PHIBRONs, will be imperative. This change will provide each unified commander with an associated MEU (SOC) capability on a continual basis. The addition of two heliborne companies at the expense of the mechanized and small boat companies will provide the MEU (SOC) with the requisite mobility, speed, and range to accomplish their mission.

Changes to the current amphibious and naval expeditionary doctrine will also be necessary. Dominance throughout the entire conflict spectrum must be replaced with a doctrine that focuses on threats and missions at the low end of the spectrum. Operational level maneuver publications must be replaced with a doctrine that centers on the employment of the MEU (SOC) during precision raid operations, and other MOOTW missions.

To meet future requirements, the NEF of the 21st century will need to procure new systems and technologies. These innovations will serve as a force multiplier to the small units landed ashore, and provide the MEU (SOC) with greater tactical capability to include increased range, precision, situational awareness, and firepower.

Although conducted over twenty years ago, Operation EAGLE CLAW may have been a watershed event with regard to the 21st century. Future naval expeditionary operations are very likely to face similar threats, and assigned strikingly similar missions to those present during the Tehran rescue mission. The study of this action may become key to understanding the nature of future warfare, and the required composition of NEFs in the 21st century.

In the future, unpredictable and extremely lethal non-state actors will seek to challenge American authority both at home and abroad. Unless the American military establishment is able and willing to understand this paradigm shift, and develop the systems and technology that are consonant with this change, America's adversaries will be extremely successful in attacking American interests at home and abroad. Henry Kissinger once noted that many recognize future planning as nothing more than "the extension of the familiar into the future." Failure of the Navy and Marine Corps to recognize the current RMA and correctly anticipate future requirements could lead to a major American defeat, or worse.

APPENDIX A

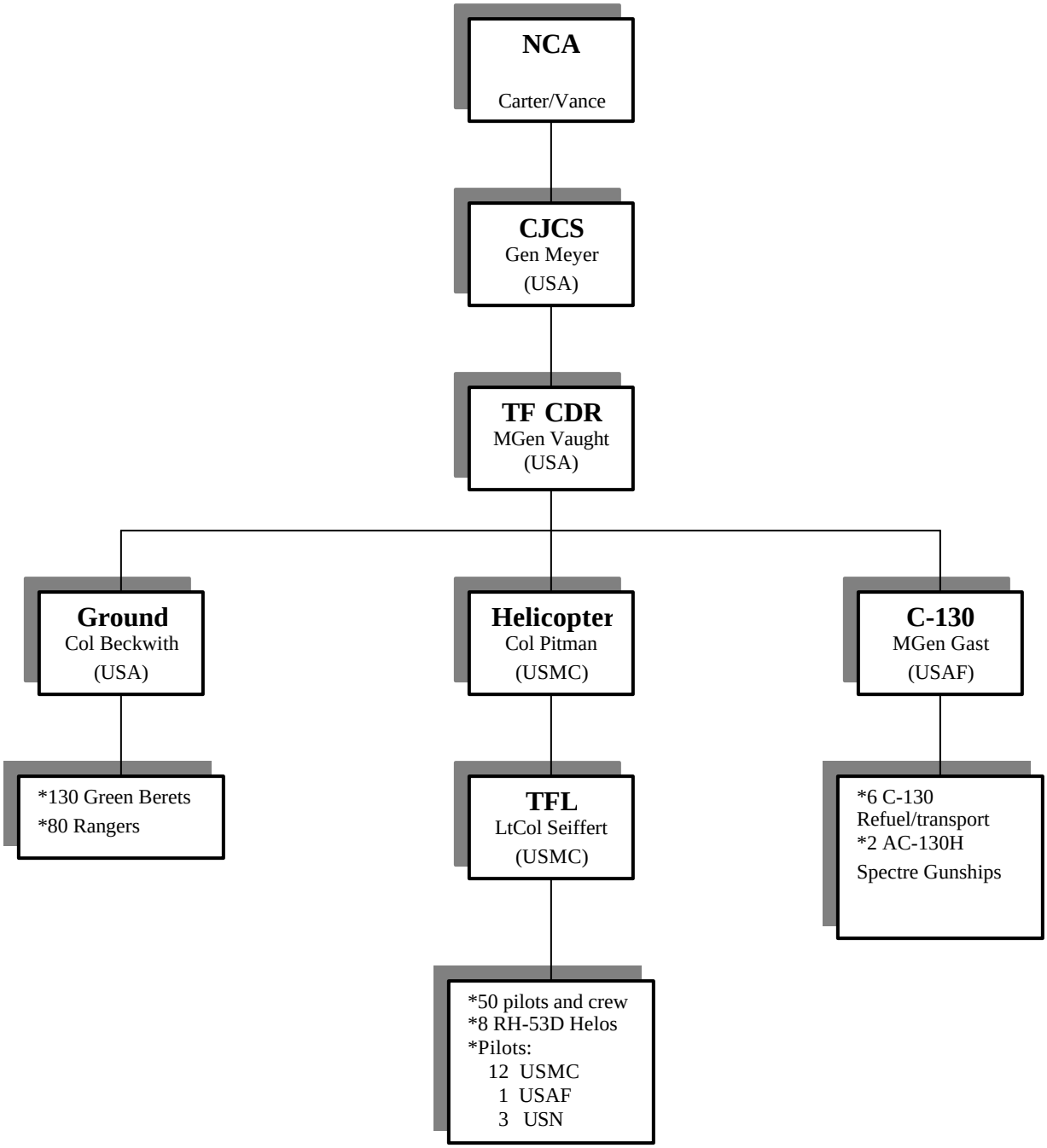
THE IRANIAN HOSTAGE CRISIS: CHRONOLOGY[62]

14 February 1979	Rioters storm embassy. Take 70 hostages but later release them.
04 November 1979	U.S. Embassy stormed. 53 Americans taken hostage.
06 November 1979	Bazargan government collapses. Kohmeni consolidates power.
06 November 1979	JCS initiate planning for a rescue mission.
17 November 1979	Iranians release 13 women and black Americans.
04 December 1979	Resolution 457 is passed in the UN. The resolution calls for the immediate release of the hostages.
15 December 1979	Shah leaves the U.S. and enters Panama.
24 December 1979	Russians invade Afghanistan.
31 December 1979	Resolution 461 presented to UN. Call for economic sanctions against Iran.
07 January 1980	Soviets veto UN Resolution 461
23 March 1980	Shah leaves Panama and enters Egypt.
07 April 1980	U.S. breaks diplomatic relations with Iran. Institutes unilateral economic sanctions against Iran.
24 April 1980	Operation EAGLE CLAW conducted.
25 April 1980	Secretary Vance resigns.
27 July 1980	The Shah dies.
20 January 1981	Hostages released.

[62] Vance, 1-410.

APPENDIX B

OPERATION EAGLE CLAW: TASK ORGANIZATION[63]



[63] Ryan, 1-128.

APPENDIX C

OPERATION EAGLE CLAW: CONCEPTUAL DESIGN

On 04 November 1979, militant students loyal to the Iranian Revolutionary Council stormed the United States embassy in Tehran and took fifty-three Americans hostage. The student's objective in taking the hostages was to win popular support for the newly formed revolutionary council. Kohmeni believed that the student's actions would isolate secular authorities within Tehran, while at the same time serve as a rallying point for the Council's consolidation of power.[64]

Over the next several months, American diplomatic initiatives were taken with moderate leaders within the Iranian government in an attempt to win release of the hostages. After the diplomatic negotiations failed, and the United States was unable to garner world support for diplomatic and economic sanctions against Iran, President Carter made a decision to conduct a rescue of the hostages by using military force.

Lacking a specially trained and standing force to conduct the hostage rescue, the Joint Chiefs of Staff (JCS) assembled a composite force from among the armed services. *(See appendix B)*

The conceptual design of the operation was complex and incorporated a great deal of risk. In November 1979, eight RH-53D Sea Stallion helicopters were transferred to the USS Nimitz. Six C-130 aircraft were subsequently positioned in Qena, Egypt. The plan called for the RH-53Ds to transport 130 Green Beret soldiers to a rally point in the

[64] Vance, 376.

Dasht-e-Kavir Desert 600 nautical miles from the USS Nimitz's position in the Arabian Sea, and 265 nautical miles from Tehran. At this rally point, designated Desert One, the

Map 2.[65]
Operation EAGLE CLAW: Conceptual Plan

helicopters and assault force would link up with the C-130 aircraft flying from Egypt to refuel for the next leg of the mission. Eighty Rangers on board the C-130s would provide security at Desert One.

Once refueled, the helicopters would launch from Desert One and fly to a second rally point, designated Desert Two, which was a remote mountain hideout 50 nautical miles from Tehran. The helicopters and Green Beret soldiers would remain in hiding at

[65] Otto Kreisher, " Desert One," *Air Force Magazine*, (January, 1999), 23.

Desert Two until the next evening, at which time they would conduct a heliborne raid on the United States' embassy in Tehran.

The plan called for the Green Beret soldiers to storm the American embassy, immobilize the Iranian guards, and take control of the hostages. A smaller force would move to the United States' foreign ministry where the American Charge D'affaires was being held. Two AC-130H Spectre gunships were to be positioned over Tehran to provide support to the Green Berets, and to prevent any Iranian military aircraft positioned at the Tehran airport from taking off. The rescue force then planned to move the hostages to a nearby soccer field for extract by the RH-53Ds.

In concert with the raid on the embassy, the C-130 aircraft were to fly to an abandoned airstrip at Manzariyeh, just 35 nautical miles south of Tehran. The 80 Army Rangers would secure this airfield and await the arrival of the rescue force and the liberated hostages. Once at Manzariyeh, all personnel would board the C-130 aircraft for a flight back to Egypt. Aircraft aboard the USS Nimitz would destroy the RH-53Ds left at Manzariyeh. *(See Map 2)*

The rescue mission was aborted after weather and mechanical malfunctions prevented two of the RH-53Ds from reaching Desert One, and one helicopter was deemed inoperable upon its arrival at Desert One. Upon the force's retrograde from Desert One, a RH-53D collided with a C-130 plane resulting in the death of eight American servicemen.

Compounding the tactical failure, classified documents were left aboard the helicopters at Desert One. This information was later recovered by the Iranians and used to identify United States' operatives in Iran. The bodies of the servicemen killed in the

aircraft mishap were also left behind. Additionally, Navy aircraft were unable to destroy the helicopters abandoned at Desert One due to the proximity of Iranian nationals that had been immobilized by the rescue force.

The Iranians subsequently released the hostages on 20 January 1981, almost nine months after the failed rescue attempt.

APPENDIX D

OPERATION EAGLE CLAW: MISSION CHRONOLGY[66]

November 1979	8 RH-53Ds moved to Diego Garcia by C-5 aircraft, then flown aboard the USS Nimitz.	
31 March 1980	U.S. light reconnaissance aircraft lands at Dessert One for site survey. Remote navigation devices implanted. In one hour, 6 civilian vehicles drove by the landing site.	
24 April 1980	1800	First C-130 aircraft with Green Beret and Ranger soldiers take off from take off from Qena Egypt.
	1930	8 RH-53D helicopters launch from the USS Nimitz.
	2130	Helicopter #6 experiences rotor blade failure. Lands helicopter and leaves aircraft intact. Crew is picked up by helicopter #8.
	2200	First C-130 carrying the Delta Force and Army Rangers arrive at Desert One.
	2215	Rangers stop a civilian bus passing in the vicinity of Desert One. 44 Iranian bus passengers are detained.
	2225	Rangers attempt to stop a civilian fuel truck. The fuel truck attempts to flee. The Rangers fire an anti-tank rocket setting the fuel truck on fire.
	2230	Remaining 7 helicopters experience a huge dust storm in the Iranian desert. Pilots are forced to fly on instruments. All the helicopters become separated.
	2245	Helicopter #5 loses navigation and flight control systems. Aborts mission and returns to the Nimitz.
25 April 1980	0100	Last RH-53D arrives at Desert One (85 minutes behind schedule).
	0110	Upon arrival at Desert One, the crew of helicopter #2 determines that their aircraft has experienced a hydraulic malfunction and that the helicopter is inoperable
	0130	Ground force commander determines that the 5 remaining helicopters are insufficient to rescue the hostages and decides to abort the mission.
	0200	Helicopter #3 collides with a C-130 while repositioning the aircraft during refueling. 8 men are killed and 3 seriously wounded.
	0230	The entire force boards remaining C-130s for extraction. RH-53Ds are abandoned. Bodies of KIA are left behind. Classified material on RH-53Ds is left behind.
	0330	Force arrives back in Qena, Egypt.

[66]William M. Steele, The Iranian Hostage Rescue Mission, (Washington, DC, 1984), 1-326; Ryan, 1-128.

APPENDIX E

MILITARY STRENGTHS OF U.S., ALLIED AND SELECTED OTHER ARMED FORCES[67]

	Active Troops	Reserve Troops	Heavy Tanks	Armor Infantry Vehicle	Air planes	Heli-copters	Major War Ships	Amphi, Mine, Spt Ships	Military Budget (Billions)
U.S.	1,547,000	2,045,000	10,900	32,545	11,189	7,925	239	164	$265
France	409,000	337,000	890	4,553	1,563	811	60	69	$38
Germany	340,000	415,000	2,988	6,396	820	779	31	82	$32
U.K.	240,000	260,000	541	4,054	1,147	710	52	52	$33
Australia	56,000	38,000	71	710	297	153	15	21	$7
Japan	240,000	48,000	1,130	940	946	674	80	63	$45
South Korea	633,000	4,500,000	2,110	2,520	618	621	44	41	$16
Cuba	105,000	135,000	1,575	1,100	208	90	4	18	<$1
Iran	513,000	350,000	1,440	950	476	613	7	40	$3
Iraq	383,000	650,000	2,700	2,900	473	500	1	7	$3
Libya	80,000	40,000	2,210	1,990	749	200	6	23	$1
North Korea	1,128,000	550,000	3,400	2,200	1,139	283	28	32	$5
Sudan	89,000	--	280	570	95	36	--	--	<$1
Syria	423,000	650,000	4,600	3,750	599	257	5	13	$2
China	2,930,000	1,200,000	8,250	4,500	6,100	513	117	340	$32
India	1,145,000	950,000	3,500	1,507	1,501	473	45	54	$8
Pakistan	587,000	513,000	2,050	850	656	180	20	9	$4
Russia	1,520,000	2,400,000	17,650	28,330	5,674	2,903	299	868	$48
Vietnam	572,000	3,000,000	1,300	1,400	322	103	8	48	$1
Belgium	47,000	276,000	334	1,031	314	86	2	15	$3
Canada	71,000	38,000	114	1,858	485	146	23	10	$8
Denmark	33,000	72,000	353	618	99	40	8	17	$3
Greece	171,000	291,000	1,735	2,324	548	228	22	40	$4
Italy	329,000	584,000	1,164	2,954	626	543	40	56	$20
Netherlands	74,000	131,000	734	1,353	181	122	20	35	$8
Norway	30,000	255,000	170	223	113	36	16	18	$4
Portugal	54,000	210,000	186	354	164	40	14	14	$2
Spain	206,000	420,000	698	2,059	487	258	24	48	$7
Turkey	508,000	379,000	4,280	4,116	939	328	36	59	$6

[67] Center For Defense Information, "Military Strengths of U.S., Allied, and Selected Other Armed Forces," URL: http://www.cdi.org/issues/wme/oob.html, accessed 01 March 2001. Information taken from a 1996 study. This chart does not address technologic and economic capacity as a factor of military strength.

BIBLIOGRAPHY

Alberts, David, S. The Unintended Consequences of Information Age Technologies. Washington, DC: NDU Press, 1996.

Alberts, David, John Garstka, and Frederick Stein. *Network Centric Warfare.* Washington, DC: Center for Advanced Concepts and Technology, 1999.

Allard, Kenneth. *Somalia Operations: Lessons Learned.* Washington, DC: National Defense University Press, 1995.

Becker, Howard, S. *Writing For Social Scientists.* Chicago, IL: The University of Chicago Press, Ltd., 1986.

Beckwith, Charlie A. and Donald Knox. *Delta Force.* New York, NY: Harcourt Brace Jovanovich, Inc., 1983.

Bowden, Mark. *Black Hawk Down.* New York, NY: Atlantic Monthly Press, Inc., 1999.

Center for Strategic and Budgetary Assessments. *The Revolution in Military Affairs*. Washington, DC: 1999.

Department of the Army, *FM 100-5, Operations.* Washington, DC: 1993.

Department of Defense, *Joint Vision 2010 (JV2010).* Washington, DC: U.S. Government Printing Office, 1996.

Department of Defense, *Joint Vision 2020 (JV2020).* Washington, DC: U.S. Government Printing Office, 2000.

Department of the Navy, *Forward…From the Sea.* Washington, DC: 1997.

Department of the Navy, *Naval Doctrine Publication 1, Naval Warfare.* Washington, DC: 1998.

Department of the Navy, *1994 Posture Statement by the Secretary of the Navy.* Washington, DC: 1994.

Department of the Navy, *Vision…Presence…Power: A Program Guide to the U.S. Navy.* Washington, DC: 2000.

Dworken, Jonathan, T. *Rules of Engagement (ROE) for Humanitarian Intervention and Low-Intensity Conflict: Lessons Learned From Restore Hope.* Alexandria, VA: Center For Naval Analyses, 1993.

Fukuyama, Francis. "The End of History?" *The National Interest*, Summer 1989.

Headquarters United States Marine Corps, *Marine Corps Doctrinal Publication 1, Warfighting.* Washington, DC: 1997

Headquarters United States Marine Corps, *Marine Corps Doctrinal Publication 1-1, Strategy.* Washington, DC: 1997.

Headquarters United States Marine Corps, *Marine Corps Doctrinal Publication 1-2, Campaigning.* Washington, DC: 1997.

Headquarters United States Marine Corps, *Marine Corps Doctrinal Publication 1-3, Tactics.* Washington, DC: 1997.

Headquarters United States Marine Corps, *Marine Corps Doctrinal Publication 2, Intelligence.* Washington, DC: 1997.

Headquarters United States Marine Corps, *Marine Corps Doctrinal Publication 3, Expeditionary Operations.* Washington, DC: 1998.

Headquarters United States Marine Corps, *Marine Corps Reference Publication 5-12D, Organization of Marine Corps Force.* Washington, DC: 1998.

Headquarters United States Marine Corps, *Marine Corps Doctrinal Publication 6, Command and Control.* Washington, DC: 1996.

Headquarters United States Marine Corps, *Marine Corps Strategy 21*. Washington, DC: 1999.

Headquarters United States Marine Corps, *Marine Corps Warfighting Publication 0-1, Marine Corps Operations.* Quantico, VA: 1999.

Headquarters United States Marine Corps, *Operational Maneuver From The Sea.* Washington, DC: 1997.

Headquarters United States Marine Corps, *Strategy 21*. Washington, DC: 2000.

Headquarters United States Marine Corps, *United States Marine Corps Warfighting Concepts for the 21st Century.* Washington, DC: 1996.

Holloway, III, J.L. *Special Operations Review Group: Rescue Mission Report.* Washington, DC: 1980.

Jackson, Paul, editor. *Jane's All The World's Aircraft 2000-2001*. Alexandria, VA: Jane's Information Group, Inc., 2000.

Keeter, Hunter. "Cebrowski: Today's Thinking Won't Do For Tomorrow's Navy." *Defense Daily*, 03 November 1999.

Kreisher, Otto. "Desert One." *Air Force Magazine*, January 1999.

Kyle, James, H. *The Guts to Try*. New York, NY: Orion Press, 1990.

Laswell, James, A. "Future Technology Solutions for Today's Sea-Based Power Projection Problems." *The Maine Corps Gazette*, January 1999.

Lemke, Douglas. "The Continuation of History: Power Transition Theory and the End of the Cold War." *Journal of Peace Research*, February 1997.

MacGregor, Douglas, A. "Future Battle: The Merging Levels of War." *Parameters*, Winter 1992-93.

Marine Corps Intelligence Activity. *Marine Corps' Midrange Threat Assessment*. Washington, DC: 1997.

McCullough, David,Willis. *Chronicles of the Barbarians*. New York, NY: History Book Club, 1998.

Metz, Helen, Chapin. Nigeria: A Country Study. Washington, DC: Library of Congress Press, 1991.

Metz, Steven. "The Next Twist of the RMA." *Parameters*, Autumn 2000.

Office of the Chairman, Joint Chiefs of Staff, *Joint Publication 1, Joint Warfare of the US Armed Forces*. Washington, DC: 1991.

Office of the Chairman, Joint Chiefs of Staff, *Joint Publication 1-02, DOD Dictionary of Military and Associated Terms.* Washington, DC: 1991.

Office of the Chairman, Joint Chiefs of Staff, *Joint Publication 3-02, Joint Doctrine For Amphibious Operations.* Washington, DC: 1991.

Office of the President of the United States, *National Security Strategy for a New Century*. <http://www.whitehouse.gov/media/pdf/nssr-1299.pdf>, accessed 25 September 2000.

Office of the Secretary of Defense, *Report of the Quadrennial Defense Review (QDR), May 1997*. Washington, DC: 1997.

Office of the Secretary of Defense, *Annual Defense Review (ADR) 2000*." URL: <http://www.dtic.mil/execsec/adr2000>, accessed 25 September 2000.

Office of the Secretary of Defense, *Annual Report to the President and Congress.* Washington, DC: 2000.

Powell, Colin, L. "U.S. Forces: Challenges Ahead." *Foreign Affairs*, 1999.

Ryan, Paul, B. *The Iranian Rescue Mission.* Annapolis, MD: Naval Institute Press, 1985.

Steele, William, M. *The Iranian Hostage Rescue Mission: A Case Study.* Washington, DC: The National War College, 1984.

Strange, Joe. *Perspectives on Warfighting: Centers of Gravity and Critical Vulnerabilities.* Quantico, VA: 1996.

Vance, Cyrus. *Hard Choices: Critical Years in America's Foreign Policy.* New York, NY: Simon and Schuster, Inc., 1983.

Van Creveld, Martin. *The Transformation of War.* New York, NY: The Free Press, 1991.

Van Creveld, Martin. *The Rise and Decline of the State.* Cambridge, United Kingdom: Cambridge University Press, 1999.

Van Creveld, Martin. *Nuclear Proliferation and the Future of Conflict*. New York, NY: The Free Press, 1993.

Von Clausewitz, Carl. *On War*. Ed. and trans. by Michael Howard and Peter Paret. Princeton, NJ: Princeton University Press, 1984.