Standing Joint Forces:
Spearhead for Global Operational Maneuver

A Monograph
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**ABSTRACT**

The purpose of this study is to introduce an operating concept and an organizational structure that will empower US joint military forces to adapt to changes faster in the global security environment. It proposes that the United States conduct Global Operational Maneuver (GOM) with Standing Joint Forces (SJF) to better meet national military objectives. GOM is an operating concept with National Military Objectives (NMO) as the ends, GOM as the way, and SJFs as the means for achieving national military objectives. GOM is a theory of maneuver based on proven doctrine, transformation efforts, and a pragmatic assessment of the current global security environment. It fuses lessons from the past such as German tactical excellence, Soviet operational art, and joint operations in the Solomons and Haiti with complexity theory, maneuver warfare, information operations, adaptive planning, and advanced technology. It incorporates the breakthrough tenets of Operational Maneuver from Sea, Air Expeditionary Force, Marine Air Ground Task Force, and the Future Force and expands them to a planetary scale. SJFs arranged on a rotational basis would permit greater efficiency and availability of effects. Finally, as the master construct for DoD operations, SJF and GOM doctrine would more clearly guide the individual services in organization, training, and equipping forces for the joint fight.
Title of Monograph: Standing Joint Forces: Spearhead for Global Operational Maneuver

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Abstract


The purpose of this study is to introduce an operating concept and an organizational structure that will empower US joint military forces to adapt to changes faster in the global security environment. Further, it proposes that the United States conduct Global Operational Maneuver (GOM) and field Standing Joint Forces (SJF) to better meet national military objectives. GOM is an operating concept with National Military Objectives (NMO) as the ends, GOM as the way, and SJFs as the means for achieving the nation's military objectives. Finally, this study is based on historical analysis and a practical application of military power to balance the need for innovation and technology with the human element in war.

The events of 11 September 2001 served as a wakeup call for the United States. Even as DoD sought to perfect execution in a Cold War, digitized battle-space, entities from nation-states to terror groups clamored to fill the vacuum left by a defunct Soviet Union. Many groups pragmatically avoided the conventional spectrum dominated by the US and instead focused their efforts in other areas, such as information. A few, such as Al-Qaeda, established themselves in both the physical and virtual worlds, effectively avoided the collective security apparatus of the civilized world, and achieved a stunning victory.

Since 911, the United States’ military has been embroiled in two wars, executor of a policy of preemption, and transformation. This "perfect storm" has created a tremendous demand for expeditionary operations on a force traditionally designed for containment and conventional regional conflict. The result has been a disproportionate use of select individual service forces and inefficient utilization of the force as a whole. As the military struggles to adjust, the time for "jointness" has never been greater. Further, the need for jointness demands an operational concept based on proven military theory, doctrine, and history fused with cutting edge technology and a spirit of innovation. The DoD can better meet these challenges by organizing the bulk of its forces for rapid, expeditionary operations by conducting Global Operational Maneuver with Standing Joint Forces.

GOM is a theory of maneuver based on proven military doctrine, transformation efforts, and a pragmatic assessment of the current global security environment. It fuses lessons from the past such as German tactical excellence, Soviet operational art, and joint operations in the Solomons and Haiti with complexity theory, maneuver warfare, information operations, adaptive planning, and advanced technology. It incorporates the breakthrough tenets of Operational Maneuver from Sea, the Air Expeditionary Force, the Marine Air Ground Task Force, and the Future Force and expands them to a planetary scale. SJFs arranged on a rotational basis would permit greater efficiency and availability of effects. Combined with persistent planning, task-organized JTFs could be rapidly self-organized, continually optimized, transported anywhere in the world, and conduct preemptive attacks directly on enemy system vulnerabilities. Finally, as the master construct for DoD operations, SJF and GOM doctrine would more clearly guide the individual services in organization, training, and equipping forces for the joint fight.
There is a rank due to the United States among the Nations, which will be withheld, if not absolutely lost, by the reputation of weakness. If we desire to avoid insult, we must be able to repel it; if we desire to secure peace, one of the most powerful instruments of our rising prosperity, it must be known that we are at all times ready for war.

President George Washington

George Washington Writings
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CHAPTER ONE

INTRODUCTION

The experts in defence conceal themselves as under the ninefold earth; those skilled in attack move as from above the ninefold heavens. Thus they are capable both of protecting themselves and of gaining a complete victory.

Sun Tzu

JOINT TASK FORCE 119

BACKGROUND

In February 2003, one month before the United States' (US) invasion of Iraq, Syrian government and Iraqi Special Republican Guard agents secretly transported a significant portion of Iraq's Weapons of Mass Destruction (WMD) program to three of Syria's own WMD production and storage facilities. In addition, a smaller quantity was transported across the Middle East and North Africa to states notorious for sponsoring international terrorism. Since that time, the US and its allies have been subject to increasing biological and chemical attacks worldwide, resulting in over 100,000 civilian deaths.

15 NOVEMBER 2014

From captured Al-Qaeda operatives in Sudan, US Special Forces interdicted operations in progress to launch anthrax bio-cruise missile attacks against major US cities from several merchant freighters off the US coast on New Year's Eve. The source of weapons grade biological agents was linked directly to the underground WMD production facilities in al-Baida, Syria. Analysts predict that with Chinese and North Korean assistance, Syria will also be capable of delivering nuclear warheads via cruise missile in less than six months.

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2 The author does not recognize this as fact, rather as a strong possibility based on evidence presented by the Lebanese Association, Saddam of Iraq vs. Asad of Syria: The Twin Regimes of Terror, 2004 [database on-line]; available from http://www.2la.org/syria/iraq-wmd.php; Internet; accessed 23 November 2004.

3 While the scenario is fictitious, it is highly consistent with the data provided by, Michael E Dickey, “The World Biocruise Threat,” In The War Next Time: Countering Rogue States and Terrorists
Operation Roundhouse was a resounding success. While they had some indication of a US attack, the sheer speed, agility, and shock of JTF forces completely overwhelmed enemy decision cycles. Today, by order of the National Interagency Coordinating Group (NIACG), elements of Joint Task Force (JTF) 119, generated from Standing Joint Forces (SJF) by US Joint Forces Command's (USJFCOM) Standing Joint Force Headquarters (SJJFHQ), simultaneously captured the WMD production site located in al-Baida, Syria, and Al-Qaeda operatives in Kosha, Sudan.

As JTF 119 was in transit, USJFCOM transferred Operational Control (OPCON) to European Command's (EUCOM) SJJFHQ while the JTF's command element, the Army's 1st Infantry Brigade Combat Team (BCT), the Air Force's 421st Fighter Squadron (FS), and the Marine's VFMA-223 arrived at Sea Base 5 in the southern Mediterranean on 18 November. Air transported unit-specific modular combat packages were installed in pre-positioned Joint Combat Vehicles (JCV) while Short Takeoff and Vertical Land (STOVL) F-35 Joint Strike Fighters (JSF) were readied for Joint Air Ground Operations (JAGO). Both the infantry and joint logistics packages awaited final transport via US Army Walrus airships and US Navy fast sealift catamarans.

At 0200 hours on 20 November, as JTF 119 departed Sea Base 5, national reconnaissance platforms, Special Operations Forces (SOF), and Global Strike Task Force (GSTF) aircraft struck critical vulnerabilities in the Syrian Integrated Air Defense System (IADS), communications and command and control systems to guarantee JTF access. While the F-35's shaped the target area, the BCT's Walrus transports landed directly on decisive terrain and took the entire al-Baida

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WMD complex by complete surprise. The F-35's refueled in air, then landed at one of several pre-designated staging areas to cycle for JAGO and combat air patrol (CAP) tasks. On a much smaller scale, air and surface forces captured many of the Al-Qaeda operatives in Kosha, Sudan. They were quickly sequestered and transported via Walrus transport to Sea Base 5, then directly to Central Intelligence Agency (CIA) Headquarters in Washington.

Concurrent with the JTF mission, follow-on forces were generated by USJFCOM and are on their way to the area of responsibility (AOR). US Coast Guard (USCG) and US Reserve Component (RC) forces, national intelligence agencies, and local law enforcement authorities have quarantined the ports of major US cities and are conducting a detailed search of suspect vessels.

THESIS

From this day forward, any nation that continues to harbor or support terrorism will be regarded by the United States as a hostile regime. . . . We will come together to strengthen our intelligence capabilities to know the plans of terrorists before they act, and find them before they strike.

President George W. Bush

On 11 September 2001, the United States was thrust into the realities of a world its citizens had long ignored. The traditional cycle of intervention and isolation was destroyed in a horrific metaphor as the two World Trade Center towers fell to the ground. Nine days later, the President of the United States summarily reformed America's policy of retaliation to one of preemption, a massive shift in America's centuries old two-ocean security paradigm. Further, the enemy's coup de main may be indicative of yet a deeper shift in the fundamental conduct of war in that the attackers used the very system of the target against itself. The enemy's attack was akin to that of a virus: it used the victim's own genetic code to replicate itself and attack the host. American society unknowingly housed, fed, trained and supplied the attackers with weapons of mass

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destruction. Also like a virus, the terrorists used the host to communicate and coordinate activity, yet they had one distinct advantage. The attackers lived and operated simultaneously in two worlds, one physical and one virtual. This marriage of physical and virtual may be the fruition of what we have tentatively termed the "information revolution", the dawn of an exponentially more complex battle-space, and one to which we must adapt to survive.

The purpose of this study is to introduce an operating concept and an organizational structure that will empower US joint military forces to adapt to changes faster in the global security environment. Further, it proposes that the United States must conduct Global Operational Maneuver (GOM) and field Standing Joint Forces (SJF) to better meet National Military Objectives (NMO). Based on the President's broad directives and National Military Strategy (NMS), the Joint Chiefs of Staff's (JCS) NMOs are:

1. Protect the Untied States against external attacks and aggression
2. Prevent conflict and surprise attack
3. Prevail against adversaries

Finally, this study will base the operating concept on NMOs as the ends, GOM as the way, and SJFs as the means for achieving the President's vision.

As the ends, NMOs are the energy source that empowers joint forces to embody the vision. Without clear and concise policy objectives the system will likely stagnate or be driven into chaos. As the way, GOM is neither a new nor a revolutionary concept; rather it is envisioned as part of a current evolutionary process to fuse all aspects of national power from civil rear to effects forward in the battle-space. GOM is the military's contribution to this vision in the quest

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to adapt to information age warfare across the space, air, land, sea, and cyberspace continuum. As the means, SJFs will be discussed in terms of theory, history, and doctrinal concepts to focus on joint force operational art as the central theme.

The world has changed drastically since the fall of the Soviet Union. The collapse of the bi-polar Cold War paradigm has unleashed old rivalries, extremism, and a struggle for power across the globe. As the US finds it is both the leader and the target of world power, it must adapt and survive in a world of unprecedented potential threats and weapons of mass effect. To do so, the US must think holistically and systematically, which is the goal of GOM. Using the US Navy (USN) and US Marine Corps (USMC) Operational Maneuver from the Sea (OMFTS) theory as a basic model, GOM will use the entire planet as maneuver space for joint forces, to include space and cyberspace. With this model, joint forces need not be physically co-located in order to synergize maneuver and effects.

As forces return to the continental US (CONUS), the military must become more expeditionary in nature and must be efficiently organized to exploit the precious manpower and equipment resources for the enormous job ahead. Similar to the US Air Force's (USAF) Aerospace Expeditionary Force (AEF), SJFs arranged on a rotational basis and assigned to USJFCOM under operational control (OPCON) will greatly enhance joint force availability and effects, especially when coupled with worldwide SJFHQ planning cells. Fused with persistent planning, task organized JTFs can be generated rapidly, then transported anywhere in the world to conduct preemptive attack directly on enemy system vulnerabilities. Finally, with GOM theory and doctrine as a guide, the individual services will have a clearer direction for organizing, training, and equipping forces for the joint fight.
PAX AMERICANA

In a real sense, America now sits where Britain did in the 1890s, only the old empire is squared. Even at her apogee, Britannia had nothing like America's economic and military preponderance . . .

Karl E. Meyer

In the past decade, writers from many disciplines have advanced a wide spectrum of theory on the "new world order." A common theme many seem to recognize is that the collapse of the Soviet Union in 1989 was a catalyst for drastic change in the global environment. One effect of change has been that individual nations have aggressively pursued national interests because they are no longer compelled to choose sides in a bi-polar world order. Since 1989, 41 states have joined the United Nations, for a current total of 191, and more are added every year. In its wake, the Soviet Union left a power vacuum in which nation (and/or) states, global consortiums, international businesses, private military companies, and religious, economic, social, terrorist, etc. groups all vie to fill. In summary, one can say with reasonable certainty is that the world is a much more complex system since 1989.

While the Soviet Union disintegrated, the United States became hegemonic. In terms of sheer economic and military power, American influence is absolutely stunning. For example, the estimated US Gross Domestic Product (GDP) for fiscal year (FY) 2003 was some 10.8 trillion dollars. That amount is more than Japan, Germany, Great Britain, France and China combined. Further, US citizens comprise a mere 5% of the world's population yet produce over 25% of the world's Gross National Product (GNP). Of the GDP for FY 2003, the US spent some

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15 Barry R. Schneider, “Asymmetrical Rivals: The Enemy Next Time.” In The War Next Time: Countering Rogue States and Terrorists Armed with Chemical and Biological Weapons, 2d ed., eds. Barry
438 billion dollars on the DoD\textsuperscript{16}, which amounts to 27.5\% of world defense expenditures. Incredibly, the cost of US national defense amounts to a mere 3.69\% of the GDP, with only 0.5\% of US citizens on active duty (plus another .4\% in the reserve component).\textsuperscript{17} In fact, the average cost of US national defense (1995-2004) as a percentage of GDP is now at it's lowest since 1940, far below that of World War II, Korea, Vietnam, or the Cold War.\textsuperscript{18} In comparison, the British spent an average of 3.1\% of their GDP defending \textit{Pax Britannica} (1870 to 1913), and had 1\% of their population in arms.\textsuperscript{19}

With such incredible power, one can argue that the United States has achieved \textit{Pax Americana}.\textsuperscript{20} The US "rules its empire" directly and indirectly by dominating diplomatic, information, military, and economic (DIME) channels. America's dominance, however, may have compelled a number of autocratic regimes into semi-authoritarianism: governments that look like friendly democracies on the surface but have no intention of relinquishing their true autocratic identities.\textsuperscript{21} Many of these governments support militant and/or extremist groups that operate clandestinely throughout the world, can mass rapidly and create a wide spectrum of physical and cybernetic effects. Of most concern are those who possess or pursue WMD capabilities readily available from former Communist-bloc states. For all its great influence, America may be facing the most difficult period in its short history. Hegemonies of the past, such as Rome and Britain, were constantly at war on the fringes of the empire against those ignorant of civilized order. The new barbarians possess weapons so powerful and dogma so compelling that they will sacrifice themselves and millions of others in pursuit of utopian

\begin{footnotesize}
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\item R. Schneider and Jim A. Davis (Maxwell Air Force Base, AL: U. S. Air Force Counter-proliferation Center, 2004), 1.
\item Ibid., 23, 261, 358.
\item U.S. Office of Management and Budget, 44-51.
\item Meyer, 21-22.
\end{enumerate}
\end{footnotesize}
fantasies. The terrorist attacks of 11 September 2001 have cost America thousands of lives, several hundred billion dollars, and involvement in two wars.\textsuperscript{22} While the US can clearly overmatch any single or reasonable combination of conventional threats for the foreseeable future, it cannot afford to ignore the frightening power on the fringes of civilization ever again.

If America needs to spend a little more to accomplish its dual military missions - policing its virtual "empire" and deterring major-power adversaries-then this is still a small price to pay, considering the alternatives.

Max Boot.\textsuperscript{23}

PARADIGM SHIFTS

This strategy requires a posture of anticipatory self-defense, which reflects the need for prepared and proportional responses to imminent aggression.

U.S. National Military Strategy\textsuperscript{24}

The United States Department of Defense has initiated organizational and doctrinal changes in response to shifts in the global security environment. As such, President Bush's vision has clearly resonated within the DoD beginning with the National Security Strategy (NSS). The NSS is the:

Art and science of developing, applying, and coordinating the instruments of national power (diplomatic, economic, military, and informational) to achieve objectives that contribute to national security.

USJFCOM\textsuperscript{25}

The President's vision details an active interagency and multinational strategy to counter rogue states and terrorist organizations, especially those who possess or seek WMD. The National Defense Strategy (NDS) serves as the link between the military and other government agencies, and establishes four strategic goals. They are:

\begin{footnotesize}
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\item \textsuperscript{23} Boot, 351.
\end{itemize}
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1. Secure the United States from direct attack
2. Secure strategic access and maintain global freedom of action
3. Establish security conditions to a favorable international order
4. Strengthen alliances and partnerships to contend with common challenges

From the NDS is derived the National Military Strategy (NMS), the "art and science of distributing and applying military power to attain national objectives in peace and war." From the NMS, the JCS has established three NMOs that apply directly to the military. The first, "protect the United States," mandates a strategic defense-in-depth and the security of the lines of communication in between. The objective is to preempt threats (especially WMD) at their source through a global joint, interagency, and multinational network. The second objective, "prevent conflict and surprise attacks," relies heavily on a permanent forward presence in key strategic locations, and the ability of joint forces to assume a rotational forward presence during contingency operations. This objective again stresses the absolute necessity for US forces to rapidly deny aggression when WMD are involved. Finally, the third objective, "prevail against adversaries," focuses on quickly gaining the initiative, preventing escalation, denying sanctuary, swiftly defeating the adversary, and conducting effective post-conflict operations. It also underlines the need for US forces to conduct parallel operations supported by highly flexible transportation and logistics systems.

The DoD's apparatus to support NMO's is embodied by the 10-30-30 concept. This strategic model recognizes the need to respond quickly to multiple planned and/or contingency operations worldwide. US joint forces would be required to deploy and gain the initiative within ten days, swiftly defeat an adversary within thirty days, then reset for another swift defeat operation within thirty days. Secretary Rumsfeld has also directed the DoD to research the creation of a "global surge force pool," a concept that would strip a number of forces assigned to each COCOM and

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26 U.S. Joint Chiefs of Staff, 3.
28 U.S. Joint Chiefs of Staff, 8-13.
place them under the collective management of USJFCOM for contingency operations. The effort would begin with *synchronizing current service rotational efforts*, then allocating to training, exercises, and operations. Finally, forces traditionally considered as a strategic reserve have been re-categorized "surge forces" and are being used for ongoing operations.  

For nearly sixty years the US military organized, trained and equipped virtually the same way as it did during World War II. The old systems work well in a static setting, but have difficulty coping with the demands of the current operational environment. One reason is that while US forces have been involved in several large-scale conventional wars, the number of small-scale contingency (SSC) operations has skyrocketed. For example, from 1991 to 1997, the US was involved in forty-five SSCs, an average of one every nine weeks. In contrast, the US responded to only sixteen SSCs during the entire Cold War.  

Another change has been a significant increase in the length of deployments, especially for those with special skills. Equipment has been used heavily and in many cases has been retained far beyond the original intended service life. Finally, as a result of realignment, a greater percentage of US forces are CONUS based and must be transported to forward operating locations.

In response to the changing conditions, the services have embarked on restructuring programs and grass roots doctrinal re-evaluations dubbed "military transformation." The US Army is currently reorganizing corps, divisions and brigades into BCTs equipped as a highly deployable, full-spectrum combat systems that will rely on state-of-the art communications, intelligence, and lethality. The Army's goal is to place a BCT anywhere in the world ninety-six hours after lift-off. The USMC has adopted the concept of Expeditionary Maneuver Warfare (EMW) and the Marine Air-Ground Task Force (MAGTF) as its base organizational structure. While the Marines

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a use a rotational deployment structure, they rely heavily on the USAF and the USN for transportation. The USMC is always in high demand because of its combat experience and impressive range of capabilities.

The USAF began its restructuring program after the Gulf War when forces were organized into ten rotation based Aerospace Expeditionary Force packages. Significantly, the AEF's modular design is effects-based rather than arranged solely by types of airframes assigned to each package. The USN has concentrated their efforts on network warfare and, like the USAF, on high technology transformation. The Expeditionary Strike Group (ESG) is equipped with surface ships, an attack submarine and a Marine amphibious group, and may soon be combined with existing Carrier Strike Groups (CVSG) to create semi-permanent, full-spectrum combat capability afloat. Sea-basing (permanent staging areas afloat) offers, perhaps, one of the greatest possibilities for joint forces to forward deploy and gain permanent access to key areas from international waters.

As one of the JCS's top priorities, USJFCOM will assign a SJFHQ to each COCOM by the end of FY 2005. In addition, USJFCOM may create a specialized SJFHQ to focus on forcible entry operations; one with joint forces permanently assigned on a rotational basis and available for immediate crisis response. USJFCOM's Joint Doctrine also encapsulates the common themes of individual service transformation efforts to include: dominant maneuver, precision engagement, focused logistics, full-dimensional protection, effects-based operations, network-centric warfare, precision engagement, expeditionary operations, rotation based deployment, pre-positioning, and information dominance. Finally, with its responsibility for joint force training,

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34 U.S. Joint Forces Command, Joint Forcible Entry Operations: Joint Enabling Concept, Draft Version 0.79 (Norfolk, VA, 2003), i.

transformation, experimentation, interoperability, and the SJFHQ initiative, USJFCOM is uniquely positioned to command CONUS based, rapidly deployable, worldwide, standing joint forces on a rotational basis to better meet National Military Objectives.

Give me a lever long enough . . . and single-handed I can move the world.  
Archimedes$^{36}$

CHAPTER TWO

CASE STUDIES

Victory in war does not depend entirely upon numbers or mere courage; only skill and discipline will insure it . . . A handful of men inured to war proceed to certain victory, while on the contrary numerous armies of raw and undisciplined troops are but multitudes of men dragged to slaughter.  
Flavius Vegetius Renatus$^{37}$

CACTUS AIR FORCE

We have found that jointness flourishes in an environment of grave threat and scarce resources.  
Winnefeld and Johnson$^{38}$

The Japanese attack on Pearl Harbor set in motion long-standing US plans for the conduct of the Second World War. In 1939, a series of five US strategic options designated RAINBOW were drafted in anticipation of world conflict. In January 1941, as the strategic picture evolved, the British and Americans agreed to a basic course of action (COA) to defeat the Axis powers known as ABC-1, a plan that most resembled RAINBOW-5. In both plans, the European theater was given precedence while a strategic defensive was slated for the Pacific theater until Germany and Italy were defeated. While President Roosevelt never gave final approval to either plan, shortly after war was declared he made it clear the US would commit to the Europe first

strategy.\textsuperscript{39} What ensued was an intense struggle for resources as the US dedicated a preponderance of materiel to defeating Hitler and Mussolini while it had to keep a very capable and brutal enemy at bay in the vast Pacific battle-space. The undermanned and under-equipped Pacific forces accomplished their mission through courage, ingenuity, and a reliance on joint/combined operations.

While the Battle of Midway was a decisive naval victory, the allies still needed to halt Japanese expansion into the Solomon Islands, a location from which they could launch land-based aircraft directly against Australia and the Hawaiian Islands. Endorsed by Admiral King, Operation Watchtower was a bold plan to gain the initiative against the Japanese, who believed the US was not ready for a major ground offensive. Begun on 7 August 1942, the attack was a tactical and strategic surprise of the first order and caught the Japanese completely unprepared to defend Guadalcanal.\textsuperscript{40} The invasion was initially successful but logistics and inter-service command and control problems posed significant challenges as Japanese resistance mounted. The primary reason for this was lack of clear, concise operational objectives and an overall commander's vision. While Army and Marine commanders viewed Operation Watchtower as a joint operation with a normal division of responsibilities, Admiral (ADM) Fletcher, whose fleet was critically short of aircraft carriers, envisioned the attack as a hit-and-run operation to destroy the Japanese airfield under construction on Guadalcanal.\textsuperscript{41}

While the services did improve cooperation and achieve a great degree of synergy during the Solomon Islands Campaign, no relationship matched the one developed by the airmen of the Cactus Air Force. Named after the code word for Guadalcanal, "Cactus," the island's airpower was placed under the operational control of Rear Admiral (RADM) John S. McCain by Admiral


Nimitz shortly before the invasion began. On 20 August, Navy "jeep" carriers delivered Marine fighters and Navy dive-bombers, followed several days later by Army Air Corps (AAF) fighters and more Navy aircraft. Aircraft were assembled on the newly captured Japanese runway, renamed Henderson Air Field, and placed under command of Marine Brigadier General Roy S. Geiger, the first COMAIRCACTUS.  

Geiger was ideal for the job. A Marine Aviator, Geiger attended both the US Army Command and General Staff College (CGSC) and US Army War College (AWC), and had a deep understanding of air-ground and joint operations. His adaptive leadership style engendered initiative and air-ground synergy, and capitalized on individual service strengths. Under his command, each pilot was expected to know and perform all missions, regardless of service. With little doctrine or experience to guide them, airmen in the Cactus Air Force jointly developed Close Air Support and Air Superiority tactics from scratch, tactics that served the allies for the rest of the Pacific war. There was no specialization at Guadalcanal.  

It was not unusual for a Navy carrier pilot landing on Guadalcanal for refueling to find himself diverted to attack Japanese shipping, launch on an air defense sortie, or assist Marine ground forces with close air support. In all of this, the press of battle was such that there was no time or incentive for role and mission controversies to appear.  

Winnefeld and Johnson  

After victory at Guadalcanal, the campaign for the Solomons continued with the allied attack on fortress Rabaul. AIRCACTUS evolved into AIRSOLS, which included airmen from New Zealand. Command of AIRSOLS was rotated regularly between the services. AIRSOLS created three subordinate commands, fighter command, bomber command and strike command, to more efficiently control the increased number of aircraft and missions assigned to it. Some

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42 Winnefeld, 25-29.
44 Winnefeld, 30.
specialization naturally took place as more men and equipment arrived from the US and its allies, but the spirit of jointness remained.\textsuperscript{45}

The US experience in the Solomons Campaign highlights some very important concepts for modern joint forces. At the core of their success, the diverse accumulation of forces self-organized into effective fighting units despite the absence of clear objectives, vision, and command and control relationships at the strategic/operational level.\textsuperscript{46} The airmen, most notably, developed a very successful hierarchical combat system because of strong leadership at the tactical/operational level. Brigadier General Geiger supplied energy to the system in the form of vision, objectives, and leadership that empowered his subordinates to make tactical decisions while he concentrated on operations. His extensive inter-service knowledge quickly allowed him to make solid decisions based on his experience.\textsuperscript{47} Next, the urgency of the threat and the lack of infrastructure merged the airmen into a team because they simply needed each other to survive. The fact that three separate air forces (more later) were represented only added to the variety of ideas that could be used to produce unique and creative solutions. In terms of innovative tactics and a rich planning culture, the airmen's diversity produced a synergy the adversary could not match. "It is remarkable how good the plans were, given how quickly they had to be completed in many cases."\textsuperscript{48} The fact that so many decisions were made so often actually allowed the airmen to adjust faster to the highly dynamic and dangerous environment.\textsuperscript{49} Finally, while the Solomons Campaign was conducted over sixty years ago, the success of the Cactus Air Force was so far reaching that much of the doctrine, tactics and procedures are still used today.

"March to the sound of the guns," overcame all manner of tactical problems. One is left to ponder the predicament of the airmen's opponents, who never knew from what altitude or

\begin{itemize}
\item \textsuperscript{45} Ibid., 31.
\item \textsuperscript{46} Mitchell M. Waldrop, \textit{Complexity: The Emerging Science at the Edge of Order and Chaos} (New York: Touchstone, 1992), 33.
\item \textsuperscript{48} Winnefeld, 37.
\item \textsuperscript{49} Henry Mintzberg, \textit{The Rise and Fall of Strategic Planning: Reconceiving Roles for Planning, Plans, Planners} (New York: Free Press, 1994), 371.
\end{itemize}
azimuth the attack would come.        Winnefeld and

Johnson\textsuperscript{50}

**REICHSWEHR AND WEHRMACHT**

In the German Wehrmacht it had been found possible...to reacquire the true art of leadership in mobile operations. Individual leadership was fostered on a scale unrivaled in any other army, right down to the most junior N.C.O. or infantryman, and in this lay the secret of our success.

Erich von Manstein\textsuperscript{51}

The German *Wehrmacht* is, perhaps, the most studied yet least understood military organization of the twentieth century. Its spectacular victories have been attributed to cults of personality, superior doctrine, grand strategy, fantastic technology, and vast mechanization. When analyzed critically, the evidence for each of these explanations is lacking and does not penetrate to the heart of German success. The core reason for German success is reflected in Field Marshall von Manstein's words: training, education, initiative, tradition, and the spirit of the individual soldier. The tactical prowess of the *Wehrmacht's* soldiers was so overwhelmingly superior that it alone powered the Nazi juggernaut to incredible victories, only to be hobbled by incomprehensible sophistry at the operational and strategic levels. Although the Germans added greatly to the art of modern warfare, the rich lessons from the *Reichswehr / Wehrmacht* experience apply most to US Joint Forces at the tactical level and that of the individual warrior.\textsuperscript{52}

The German art of war is greatly influenced by the nation's geography. The nation sits in the middle of the European continent and historically has had great difficulty protecting its vast borders. German forces have therefore relied on superior mobility, maneuver, and economy of force to prosecute a two-front war. Frederick the Great, the founder of modern Germany and its military traditions, successfully defended Prussia against the great powers of Europe during the

\textsuperscript{50} Winnefeld, 38.


Seven Years War. Frederick instructed his generals in movement and firepower and emphasized quick engagements at decisive points to avoid battles of attrition.\textsuperscript{53} During the wars of German unification, Field Marshal Helmuth von Moltke (the Elder) used the vast railroad and telegraph networks to enhance mobility and communications. He insisted on superior technology, training, and \textit{bewegungskrieg} (wars of movement) to defeat the enemy by fixing him with a frontal assault followed by envelopment of the flank or rear.\textsuperscript{54}

In the late nineteenth century, Field Marshal von Schlieffen expanded von Moltke's emphasis on rapid maneuver and quick decision. Von Schlieffen further developed envelopment tactics (\textit{sichelschnitt}) to include encirclement and annihilation (\textit{kesselschlacht}) of the enemy to destroy his entire battlefield \textit{system}. However, when the Schlieffen Plan was executed in World War I, it failed for several key reasons. First, under Helmuth von Moltke’s (nephew of the Elder) poor generalship, the Germans failed to sufficiently strengthen the right wing as von Schlieffen had warned.\textsuperscript{55} Moreover, the Germans tried to extrapolate tactics to the operational level without developing the corresponding logistics or command systems needed to sustain the attack.\textsuperscript{56} This basic failure would haunt the German Army again during Ludendorff's 1918 offensive and later in Operation Barbarossa.

Lack of mobility led to the stalemate and carnage of trench warfare for the next three years of World War I. In 1915, however, French Captain André Laffargue published a pamphlet which suggested the use of small skirmisher groups to penetrate German lines. The Allies largely ignored the ideas, but the Germans procured a copy and eagerly incorporated them with the principles of “elastic defense” to produce “infiltration tactics.” Infiltration tactics relied on


\textsuperscript{55} Ibid.

intense artillery preparation to disorganize and destroy enemy lines of communication. “Pioneer”
teams of were then dispatched for probing attacks to infiltrate weaknesses in enemy lines, bypass
centers of resistance, and execute *sichelschnitt*. The next echelon attacked and eliminated
bypassed elements in support of the pioneers. As enemy command centers, artillery, and
communications were uncovered, artillery and air power eliminated them in support of
maneuver.\(^57\) Significantly, the tactics emphasized commander’s intent, mission-type orders and
liberal initiative: the genesis of *auftragstaktik*. In 1918, General von Ludendorff attempted a
theater-wide attack using infiltration tactics on an operational scale, but it failed for essentially
the same reasons the Schlieffen Plan did in 1914. Germany surrendered soon thereafter.
Infiltration tactics and a spirit of initiative were perhaps the most important German innovations
of the war, and gave them unrivaled tactical excellence when merged with *bewegungskrieg*.\(^58\)

The German military was determined to restore its honor in spite of the humiliating terms of
the Treaty of Versailles. Allowed only a 100,000 man military, General Hans von Seeckt rebuilt
the new *Reichswehr* on the principles essential to mobile warfare: maneuver, offense, combined
arms, independence, initiative, and bold leadership.\(^59\) The military began with an intense *bottom-
up* review to assimilate the lessons of war. Teams of officers, non-commissioned officers (NCO),
and enlisted soldiers debated in an open forum then trained extensively to perfect what they had
learned. Released in 1933, the capstone General Staff document of reconstruction, the
*Truppenführung* (leading troops), became the magnum opus of the German Army. It was the
philosophy of the German way of war and remains one of the most influential articles of military
document ever written.\(^60\) At the tactical level, the document guided the intense education and
training of soldiers, sailors, and airmen and engendered them with a common spirit of

\(^{57}\) Jonathan M. House, *Toward Combined Arms Warfare: A Survey of 20th-Century Tactics, 
Doctrine, and Organization*, (Fort Leavenworth, KS: U.S. Army Command and General Staff College, 
Combat Studies Institute, 1984), 34-36.

\(^{58}\) Corum, 8.

\(^{59}\) Ibid., 48.

\(^{60}\) Newland, 88.
auftragstatik. At the operational level, the General Staff developed "the most advanced operational theory of command ever created."\textsuperscript{61} They concluded that the doctrine of mobile warfare must be based on a systematic and holistic analysis of Germany's unique historical and geographic settings. To contend with a multi-front scenario, they rejected the idea of the "single-blow" victory and emphasized successive operations, freedom of action at all levels, an environment of mutual trust, and operational aims to link tactical events to strategic goals. What emerged at the end of reconstruction was an unparalleled spirit of innovation, the fusion of bewegungskrieg with technology, initiative with mobility, infiltration tactics with mechanization, and tactics with operations and strategy.\textsuperscript{62}

Upon his appointment to Reich's Chancellor in 1933, Adolph Hitler inherited one of the best armies the world had ever seen. The Reichswehr was expanded and renamed, the Wehrmacht, and the Nazis prepared for the conquest of Europe. Soon thereafter, the amazing gains made by the Reichswehr were diluted. Hitler mistrusted the intentions (and intellect) of many in the officer corps, especially the General Staff, and replaced them with those more willing to accomplish der Fuhrer's aims, but much less versed in the art of operations. Officers such as Generals Guderian, Model, and Rommel were outstanding tactical battlefield commanders, yet they were not schooled in General Staff traditions and faltered at the operational level.\textsuperscript{63} As a result, encirclement tactics were re-adapted to the operational level, and by 1939 the Wehrmacht had built a joint force around sichelschnitt and kesselschlacht tactics, known as Blitzkrieg.\textsuperscript{64}

The Wehrmacht was neither highly mechanized nor motorized, however, what it had was put to great effect. The spearhead of Wehrmacht bewegungskrieg was the Panzerkampfwagen-Sturzkampfflugzeug (Panzer-Stuka) air-ground attack team. Arranged around this core capability

\textsuperscript{61} Naveh, 116-117.
\textsuperscript{62} Ibid.
\textsuperscript{63} Ibid., 149.
were medium range bombers, fighters, motorized infantry and self-propelled guns. In preparation for a theater level attack, lead forces were arranged across a wide front in a linear fashion. While the bombers and fighters shaped the battlespace, local surface forces probed for gaps in the line and then concentrated armor to break through the gaps. Stuka dive-bombers were used as part of the maneuver force to assist armor during the irruption phase. Once the armor columns were on their way, renaissance aircraft would help direct the forces to a flank or rear area attack. The goal was either a single or double envelopment (sichelschnitt) by the armored and mechanized forces to create cauldrons of embattled opponents (kesselschlacht). The infantry would make their way to the front and neutralize the cauldron. The Wehrmacht conquered entire nations and took millions of prisoners in this fashion.

Only about 10% of the entire Wehrmacht comprised the combined arms units made famous for the armored thrusts into France and Russia while the bulk of the infantry, artillery and logistics were horse-drawn. At the insistence of armor warfare pioneers such as Heinz Gudarian, the Wehrmacht concentrated vehicle procurement in support of large Panzer armies to conduct theater-wide Blitzkrieg attacks. The result was a semi-combined arms attack with fast moving assets in the lead followed by infantry and horse drawn assets far to the rear. This lack of synergy proved the Wehrmacht's tactical Achilles Heel because the infantry was one of its greatest strengths. Operationally, Blitzkrieg was a repeat of past "single-blow" plans and failed to link tactics to strategy through sound operational art.

The German Army's experience in modern warfare provides a rich venue from which to learn. First, the Reichswehr conducted a bottom-up review in their transformation program (contrary to the current US method) and gleaned valuable lessons from the soldiers who actually did the

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66 Naveh, 124-125.
67 U.S. Department of Defense, Agency Group 09, Joint Operations is Key to Transformation (FDCH Regulatory Intelligence Database, 14 June 2001).
fighting, not just the generals. The sense of ownership generated by this technique empowered the soldiers, NCO's and officers to make changes at the grass roots level and to "buy-into" the process of improvement. Next, the genius of German tactics lay in command relationships that engendered initiative, excellence, and geist (spirit) to the lowest levels. Concepts such as auftragstaktik, schwerpunkt, and fingerspitzengefühl (finger-tip feel) helped make the Wehrmacht soldier one of the very best in history. Third, the Germans used small joint teams to probe for weaknesses and penetrate enemy lines for follow-on forces. These air-ground maneuver teams were able to move faster than the enemy, make decisions quicker and produce disproportionate effects relative to their size. Finally, while the Reichswehr reconstruction period provided the avenue for tactical superiority and the basis for operational art, it bears repeating that even superior tactics, leadership, and technology alone cannot be sustained without sound strategy from policy makers and the operational objectives that link them to tactics.

SOVIET ARMED FORCES

Since it is impossible with the extended fronts of modern times to destroy the enemy's army at a single blow, we are obliged to try to do this gradually by operations which will be more costly to the enemy than to ourselves.  

Michael Tukhachevskiy

In contrast to the Wehrmacht, the Red Army is, perhaps, the least studied and least understood military organization of the twentieth century despite the fact it was the largest armed force in human history. There are several reasons are for this phenomenon. First, until recently, Soviet military theory was simply unavailable for study, and second, the depth of operational design achieved by the Russians in the early 1920s has only been attempted by the West since the mid 1980s. For over sixty years the Soviets fielded an incredibly comprehensive operational, industrial/military complex and engaged their entire state system for the conduct of war. They were the first to define operational art, "the employment of military forces to attain strategic goals

69 Naveh, 183.
through the design, organization and execution of campaigns and major operations.\textsuperscript{70} Further, while the US is just now exploring effects-based operations, Soviet system-shock (\textit{udar}) doctrine crushed the German \textit{Blitzkrieg} in 1942 and threatened the Western world for over half a century.

As with Germany, Russian military and political experience is greatly influenced by geography. Russia has vast natural resources, access to ocean and land trade routes, an extensive fertile region, and shares 1000-mile long borders with both Europe and China. In addition to presenting a tempting target, the economy of force problem experienced by the Germans was dwarfed in Russia. Therefore, to successfully defend the country, Russian military tradition evolved using the depth of the terrain as an integral part of warfare. Napoleon’s attack in 1812 clearly illustrates this point.\textsuperscript{71} In 1917-1918, Lenin confronted the daunting task of spreading the Bolshevik revolution and sustaining it during the Russian Civil War throughout the entire Russian landmass. Similar to Moltke's (the Elder) experience in 1870, the Bolsheviks used extensive railroad lines to shuttle troops between fronts, which impressed on the participants "an abiding sense of the need for strategic reserves, and forces arrayed in great depth."\textsuperscript{72} A rich intellectual atmosphere followed the revolution and military thinkers such as Frunze, Svechin, Triandafillov, and Tukhachevsky developed the concept of Deep Battle (tactical) in 1929 followed by Deep Operation in 1936.\textsuperscript{73}

The objective of the Deep Operation was to execute a synchronized, simultaneous, and sustainable combined arms attack into the entire depth of the enemy system and induce system paralysis (\textit{udar}) on an operational scale. From regiments to corps, maneuver groups were

\textsuperscript{71} Naveh, 168-169.
\textsuperscript{73} Ibid., 8.
echeloned in columns through the depth of the maneuver space.\textsuperscript{74} The attack proceeded as follows.

Infantry, led by tanks and supported by artillery and engineers, would penetrate the enemy's defenses, while other artillery and aircraft struck deeper into the enemy rear, to be followed by large, independent airborne and armored formations. To accomplish this, tanks would be organized into three different echelons; some tanks would lead the infantry penetration; others would conduct short-range exploitations of that breakthrough; and still others, operating in large combined-arms mechanized formations, would lead the pursuit and encirclement of the beaten enemy. \textsuperscript{75} Glantz and House

In the pursuit phase, the deep strike elements would execute a turning maneuver and collapse back towards the front not only to encircle the enemy, but also to cut him off from his reserves and logistics.\textsuperscript{76} Although outwardly similar to \textit{bewegungskrieg}, Deep Operations relied heavily on the synergy of all battlefield operating systems striking the enemy simultaneously, and unlike \textit{bewegungskrieg}, the infantry and armored corps were integrated. By far, the most difficult part of the operation was the synchronization of aircraft, airborne, tanks, mechanized infantry, artillery, infantry and logistics to achieve a simultaneous strike.\textsuperscript{77} In reality, the Soviets never achieved this vision during the Great Patriotic War because they failed to mechanize the infantry, develop an extensive airborne echelon, or have the training and experience to command such a sophisticated attack.\textsuperscript{78}

By the mid 1930s, the Soviet Army was the most powerful in the world with both the doctrine and hardware to conduct a massive, sustained campaign against any foe. In 1937, however, Joseph Stalin's paranoia compelled a massive purge of the Soviet military establishment. Most of Russia's greatest thinkers and nearly half of her officer corps were imprisoned or executed as “enemies of the state.” Unlike Hitler's purges of the \textit{Wehrmacht}, the Soviet officer ranks were decimated, and the revolutionary Deep Operation theory fell into the hands of amateurs. As a

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{74} Naveh, 173.
\item \textsuperscript{75} Glantz, 8.
\item \textsuperscript{76} Naveh, 191-192.
\item \textsuperscript{77} Ibid., 223.
\item \textsuperscript{78} Glantz, 11-13.
\end{itemize}
\end{footnotesize}
result, the armor corps was stripped of its motorized infantry and reassigned to infantry support. By 1940 most of the armor units were disbanded.\textsuperscript{79} More than any other event, Stalin's purge exposed the Soviet Union to the devastation of the Nazi juggernaut in which the armed forces alone sustained some \textit{twenty-nine million} casualties.\textsuperscript{80} On 22 June 1941, the \textit{Wehrmacht} launched Operation Barbarossa which liquidated almost 90\% of all Soviet mechanized forces in one week. By the winter of 1941, German \textit{Panzergruppe} came within twelve miles of Moscow before they ground to a halt in snow and ice. Stalin finally relented control to the few remaining military professionals, such as Zhukov, to restructure the armed forces based on Deep Operation theory. By summer 1942, the tide had turned irreversibly against the Germans.\textsuperscript{81}

After the defeat of Nazi Germany, Stalin once again tightened the reigns on intellectualism, and not until Krushchev's fall in 1964 was there resurgence in operational theory. From the mid-1960s to the early 1980s, a virtual renaissance in Soviet operational theory culminated in Marshall Ogarkov's operational maneuver group (OMG) structure designed to defeat the North Atlantic Treaty Organization’s (NATO) Deep Strike concept.\textsuperscript{82} Built on the same principles as Deep Operations, OMG theory added the organic airborne and mechanized infantry absent from World War II formations, and adopted a more modularized, combined-arms structure. Further, to overcome the strengths of NATO's defense in depth, the Soviets positioned a number of divisions, called Forward Detachments, directly on the border between NATO and Warsaw Pact forces. These were \textit{standing}, independent, task organized, combined-arms maneuver divisions used to prepare the battlespace for OMGs. Once the decision was made to attack, the Forward Detachments would swarm into the depth of NATO's defense and pave the way for the larger OMGs before NATO could even deploy its forces.

One motive for operating the forward detachment lay (sic) in the idea of \textit{pre-emption} or rather the tendency to deprive the operational rival of certain advantages at the initial stage of

\begin{footnotes}
\item[79] Naveh, 166.
\item[80] Glantz, 292.
\item[81] Ibid., 87-88.
\item[82] Naveh, 167.
\end{footnotes}
the operation. Since possessing the traits of velocity, stealth and independence, allowing it to seize key operational assets and hold them for some time, the forward detachment has been designed to create the essential preconditions that could be exploited by the main body's arrival into the opposing system's operational reserve . . . (emphasis mine).

Shimon Naveh

By securing key terrain and flank maneuver space, breaching obstacles, screening rear enemy formations, conducting intelligence, and linking-up with deep airborne units, Forward Detachments would greatly facilitate synchronization, continuity, and situational awareness for follow-on units. OMGs could move quicker, conserve resources, be directed to key terrain, and transition to battle formation much further into the battlespace than on their own. In many ways, OMG theory was the operational level equivalent of German infiltration tactics with Forward Detachments serving as dynamic centers of gravity to induce shock early in the campaign.

Russian operational theory has continued to evolve despite the end of the Cold War. In 1995 the Frunze Academy developed “Systems Strike” in response to the overwhelming Coalition victory in Operation Desert Storm. Similar to Deep Operations theory, Systems Strike assumes modern military systems are robust and can regenerate (self-organize) combat power quickly, however, in high-tech warfare key cybernetic nodes of self-organization become the targets. Systems Strike advocates the attack of the enemy’s key cybernetic system nodes throughout the entire depth of his operational structure. Theoretically, by effecting vulnerable subsystems such as communications, command, control, computers, information, surveillance, and reconnaissance assets (C4ISR), one could induce catastrophic system collapse. Effects would be delivered through information, precision weapons, and superior decision cycles. Russian experience in Chechnya proved, however, that there is a minimum level of sophistication required for Systems

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83 Ibid., 227.
84 Ibid., 226-227.
85 Ibid., 167.
Strike to work. They concluded that a loosely organized, low-tech foe will be far less vulnerable to catastrophic systems failure and must be dealt with by alternate means.  

Russian military experience in the twentieth century provides the most valuable basic resource for US joint force operational design. First and foremost, operational art demands a systematic continuum from the civilian rear to the military front and a linkage of tactics and strategic aims via operational goals. Next, US joint forces cannot adopt “single blow” battle strategies or simply adapt tactics to the operational level without the corresponding infrastructure. They must design operations that synergize all the best aspects of superior tactics arrayed into sustainable and holistic joint battle plans. As a warning from history, superior German tactics and tacticians were vaporized by the practice and practitioners of Deep Operations, the true basis of modern operational art. Next, the theory behind the Forward Detachment may serve as an operational blueprint for the SJF concept. Like the Forward Detachment, SJFs may become the catalyst to make JTFs faster, more efficient, and the lead formation in US full-spectrum operations deep in the battlespace. Finally, Russian system attack theory and experience serves as a fair warning to current US transformation efforts and effects-based operations. Technology and system attack theory must be used in context and not become dogma for “single blow” battle plans.

OPERATION UPHOLD DEMOCRACY

When you meet a strong inventive opponent and he counters every one of your intentions not only by defensive but also by counter-attacking measures, it is far from simple to carry out a single plan.

Kotov  

On 19 September 1994, the United States executed Operation Uphold Democracy in Haiti to restore President Aristide to power and create a stable and secure environment for democracy.

"For the first time in a peace operation, U.S. government officials produced a tangible

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87 Alexander Kotov, Think Like a Grandmaster (Trafalgar, UK: Batsford, 1971), 150.
interagency plan that set forth America's political-military policy in the crisis."88 While the US achieved its immediate goals in Haiti, the operation proved very difficult to execute due to its complex joint, interagency, and combined nature. Interagency relationships suffered from a lack of clearly defined goals and channels of communication, which lead to a degree of confusion and duplication of effort. For the JTFs involved, the planning and deployment phases demanded extreme flexibility and swift decision making because of the turbulent political and operational dynamics.89 Operation Uphold Democracy provides an excellent example of interagency, multinational and stability and support operations (SASO), however, joint contingency planning and deployment operations are of particular interest to the SJF concept.

On 30 September 1991, President Jean-Bertrand Aristide fled to Venezuela after he was removed from power by a military junta led by Lieutenant General Raul Cedras. Over the next several years, the US military developed a series of plans to deal with the changing situation. In response to Aristide’s removal, the 82nd Airborne Division modified and prepared to execute Contingency Plan (CONPLAN) 2367, an off-the-shelf, forcible entry operation and non-combatant evacuation (NEO) of Haiti. In addition, USACOM planned for the USMC to conduct NEO operations from their base in Guantanamo Bay, Cuba. The crisis died down, however, and neither plan was executed. USACOMs plan was eventually set aside, and the US military would not be involved in Haiti again for over a year.90

In February 1993, the Cedras government began to challenge the international community. The ongoing human rights abuses and refugee problems finally convinced the US and United Nations (UN) to impose severe economic sanctions on the Cedras government until it ceded control back to Aristide. Four days after the sanctions took affect, both Aristide and Cedras met at Governor’s Island, New York, and signed an agreement to exchange power. When Cedras

89 Ibid., 177.
90 Ibid., 32.
returned to Haiti, however, he disregarded the agreement and executed Aristide’s supporters and other political opponents. The US Joint Staff then directed USACOM to create JTF Haiti Assistance Group (JTFHAG) to reform the Armed Forces of Haiti (Fad’H) and restore order under UN control. Cedras continued to murder his adversaries and incite violence while the ad hoc JTFHAG struggled to prepare.

Everything was in chaos. Planners from all services were thrown together trying to figure out what they were doing without much organization . . . whether or not it had anything to do with the plan.

Phil Baker91

On 3 October 1993, eighteen US Army soldiers were killed in Somalia, which was, perhaps, the single most influential event during Operation Uphold Democracy. Also a UN peacekeeping operation, US intervention in Somalia resulted in casualties for the 10th Mountain Division, which was later sent to Haiti. Finally after two months of preparation, JTFHAG and its interagency team finally departed for Port au Prince aboard the USS Harlan County. When the ship arrived on 11 October, it was not well received. Several small bands of Revolutionary Front for Haitian Advancement and Progress (FRAPH) soldiers opposed the landing, and the Harlan County departed within only a few days.92

On 14 October, the murder of the Haitian minister of justice set several US contingency planning operations in motion. Two days later, the UN executed a naval blockade using JTF 120, another ad hoc organization composed of SOF and a Special Purpose MAGTF, which planned the blockade and prepared for NEO and military intervention operations (MIO), on order. The JCS also directed USACOM to prepare “Jade Green,” a forcible entry operation and a political-military option approved by an interagency working group (IAWG). By January 1994, Cedras still refused to abdicate, and “Jade Green” evolved into operations plan (OPLAN) 2370 and JTF 180. In an attempt to preserve secrecy, units assigned to plan and conduct the operation were allowed only limited contact.

91 Ibid., 35.
92 Ibid., 35-41.
This compartmentalization led to coordination problems between . . . planning agencies, specifically between USACOM, XVIIIth Airborne Corps, USASOC [United States Army Special Operations Command], 82d Airborne Division . . . Kretchik, Baumann and Fishel.\textsuperscript{93}

Also of note, individual services were tasked to take care of their own logistics.

By April 1994, violence in Haiti subsided and JTF 180 was disbanded. In June, the JCS directed USACOM and XVIIIth Airborne Corps to develop a peaceful entry plan which became OPLAN 2780. The plan was passed on to the 10\textsuperscript{th} Mountain Division, which was not correctly staffed to conduct such an operation and had just returned from two years of high intensity duty in Somalia. While XVIIIth Airborne Corps retained responsibility for 2370, it also assisted 10\textsuperscript{th} Mountain in planning 2380. The USACOM commander then ordered the XVIIIth to include the 24\textsuperscript{th} Marine Expeditionary Unit (MEU) in 2370 and to reduce the number of Army units involved in the forcible entry operation. Meanwhile, Cedras continued his reign of terror.\textsuperscript{94}

In September, the National Command Authority (NCA) authorized USACOM to pre-position forces for both 2370 (JTF 180) and 2380 (JTF 190) operations. In addition, the NCA directed USACOM to design a “bridge” plan between 2370 and 2380, which became OPLAN 2375 under XVIIIth Airborne’s control. All attempts to keep the OPLANs secret were ruined when they were briefed to members of the IAWG on 11 September 1994. Within days, Cedras and the entire world were informed of US/UN intentions to remove him from power. In a final attempt to save him-self, Cedras appealed to the US for negotiations on 17 September. Former U.S. President Carter’s team was flown to Haiti even as US forces made final preparations for invasion. On 18 September at 2231 Zulu time (Z), JTF 180 received an order to execute OPLAN 2370 the next day at 0401Z. Only a few hours later with 62 combat aircraft on their way to Haiti, the Carter team reached an agreement with Cedras, and 2370 was immediately cancelled. Still concerned with the Fad’H forces on the ground, JTF commanders gave their planners two hours

\textsuperscript{93} Ibid., 45-47.\textsuperscript{94} Ibid., 48-60.
to develop bolster OPLAN 2380 in case Cedras changed his mind again. Fragmentary Order (FRAGO) 35 emerged (later known as 2380-Plus) from the planning cell, which was briefed at 0100Z and executed at 0900Z 19 September. US forces landed and Aristide was returned to power.95

Operation Uphold Democracy was a milestone for the US government and may serve as a prototype for joint force operations. It was a joint, interagency and multi-national contingency plan that rapidly inserted a JTF (generated from standing forces) directly into a critical area over long distances. Commanders at all levels exercised initiative and bold decision-making. Although the operation was successful, many things could have been done better. First, because policy from the White House was unclear, strategic aims, operational goals, and tactical objectives were equally unclear. President Clinton and the UN's indecision led directly to compressed planning processes, ad hoc arrangements, and confusion once the JTF landed in Haiti. On the other hand, US forces must anticipate indecision in a turbulent environment and arrange its capabilities to maximize flexibility and synergy. Next, concerning interagency operations:

The political-military plan for Haiti, the first of its kind, was poorly integrated with the strictly military plans. The lesson for future operations is that there is a need to develop political-military plans fully and in complete coordination with - and in such a way that they drive - the military process.

Kretchik, Baumann and Fishel96

The US military's planning process was a widely dispersed, decentralized, duplicated effort, and was not synchronized due to security concerns. Centralized planning efforts are much more efficient, and the use of the SJFHQ may help alleviate this problem. Next, in one year's time, US military planers had produced no less than four OPLANS for Haiti and still managed to generate the one they executed in less than two hours. Planning, not the plan itself is the most important

95 Ibid., 60-79.
96 Ibid., 177.
part of the process. A base plan with well-developed yet flexible branches may be the best course of action, especially in a dynamic contingency operation. Also, certain units appeared to be over-utilized, namely the XVIIth Airborne Corps, 82nd Airborne Division, 10th Mountain Division, and the USMC. In addition, the 10th Mountain division was probably a very poor choice based on their experience and duration in Somalia.\(^{97}\) Next, logistics, communications and transportation efforts were not coordinated leading to further duplication of effort. Finally, the "can do" attitude of US military members, while commendable, often leads to mission creep.

The military officer, moreover, cannot stand inaction, especially when he or she sees a potential risk for the force. In the absence of action by other interagency players, we act. We observed this phenomenon in Haiti.

Benson and Thrash\(^{98}\)

**US JOINT COMMAND HISTORY**

Without intellectual change, there is no real change in doctrine, organizations, or leaders.

Joint Vision 2020\(^{99}\)

The idea of standing joint forces is not a new one in US military history. In fact, the US has made several attempts to establish lasting CONUS based joint force commands beginning with US Strike Command (USSTRICOM). In 1961, the general-purpose CONUS based forces consisted of combat ready units in the Continental Army Command and Tactical Air Command along with lesser numbers of USN and USMC forces. While the JCS, Army and USAF Chiefs saw the need to organize joint forces into a rapidly deployable strategic reserve, the USN and USMC argued that their forces were already extensively deployed and Army and Air Force units would suffice. However, on 1 January 1962, the Secretary of Defense (SecDef) established USSTRICOM to support combatant commands with ready forces and to conduct joint training.

\(^{97}\) Ibid., 162-177.


Significantly, USSTRICOM was not given regional authority until November 1963 when it was assigned responsibility for the Middle East, sub-Sahara Africa, and Southern Asia.\textsuperscript{100}

In 1971, the JCS initiated a change to the Unified Command Plan (UCP) in order to realign forces after the Vietnam War. On 1 January 1972, USSTRICOM was stripped of its regional responsibilities and re-designated US Readiness Command (USREDCOM). It was assigned the same original charter USSTRICOM had a decade earlier and with the same limited authority. In 1975, however, it was given the additional tasks of contingency planning and designated joint task force headquarters for future operations. In 1977, President Carter ordered the JCS to establishment a rapid deployment force in light of significant threats to US oil interests in the Persian Gulf. The JCS determined that while the bulk of the forces were to come from USREDCOM, the command could rapidly deploy only a single battalion to the Middle East.\textsuperscript{101}

From 1977 to 1980, the Department of Defense (DoD) attempted to establish a Rapid Deployment Joint Task Force (RDJTF) within USREDCOM as the primary Middle East crisis response force. Although fully operational by 1 March 1981, RDJTF received neither the forces nor the authority to fully comply with the intent of its creation. By 24 April 1981, the SecDef directed the JCS to establish the RDJTF as a separate unified command assigned to Southwest Asia, while USREDCOM retained responsibility for world wide contingency response. On 1 January 1983, USREDCOM forces were transferred to the RDJTF, which became US Central Command (USCENTCOM).\textsuperscript{102} Finally, on 30 September 1987, USREDCOM was dissolved. US Transportation Command (USTRANSCOM) assumed responsibility for strategic mobility, USCENTCOM gained Southwest Asia, and USFORSCOM assumed responsibility for the ready reserve, deployment planning, and joint training.\textsuperscript{103}

\textsuperscript{100} Ronald H. Cole et al., The History of the Unified Command Plan 1946-1993 (Washington, DC: Office of the Chairman of the Joint Chiefs of Staff, Joint History Office, 1995), 32-34.

\textsuperscript{101} Ibid., 40-45.

\textsuperscript{102} Ibid., 68-81.

\textsuperscript{103} Ibid., 95-100.
Perhaps the most significant changes to US joint forces occurred between the years 1986 and 1991 due to the combined effects of the Goldwater-Nichols Act, the fall of the Soviet Union, and the Gulf War. At the end of 1991, the US was without a peer competitor, faced a large reduction and redeployment of overseas forces, and given a mandate for "jointness." General Colin Powell insisted that CONUS based forces "be trained to operate jointly as a way of life and not just for occasional exercises." After much debate, on 15 April 1993, US Atlantic Command (USACOM) assumed combatant command (COCOM) of FORSCOM, Air Combat Command (ACC), Atlantic Fleet (CINCLANTFLT), and Marine Corps Force Command Atlantic (MARFORLANT). Finally in 1999, USACOM was re-designated USJFCOM and assigned as force provider for non-COCOM assigned CONUS forces, and the lead agency for joint force training, transformation, experimentation, and interoperability.

In the past, joint force commands have suffered from a lack of commitment by the participants, a clear and concise mission, and a spirit of jointness. The tragic losses during Desert One in 1979 express these shortcomings. From USSTRICOM to USACOM, inter-service and command parochial interests have interfered with the establishment of lasting authority and true integration. Since 1991, however, the potential for success has never been greater. USJFCOM enjoys strong support from the DoD, has a clear mission, and is empowered by the requirements of the Goldwater-Nichols Act. As the number of US forces is reduced, becomes more expeditionary, and has more in common, USJFCOM is uniquely positioned to have OPCON of its own joint forces and, for the first time, to have the "authority to plan, coordinate, sequence, prioritize, and execute all aspects of the integrated, global fight."

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104 Ibid., 114.
CHAPTER THREE

CONCEPTS

Instead of being designed from the top down, the way a human engineer would do it, living systems always seem to emerge from the bottom up, from a population of much simpler systems.

M. Mitchell

Waldrop

THEORY

Published in the *Principia* in 1687, Newton's laws dominated science until the twentieth century. In 1916, however, Einstein's Theory of Relativity drastically changed science and provided a more complete understanding of a complex universe. The keys to change were sound theory and bold assertions substantiated by critical thinking and detailed empirical data. In the same manner, standing joint forces must also be built on a sound theoretical base, and complexity theory offers some very powerful concepts with which to construct this force. Further, biological systems embody complexity theory, and their adaptive processes serve as a perfect metaphor for standing joint forces.

Albert Einstein developed significant creative tension in science when he introduced the Theory of Relativity. Einstein implied that the physical world was much more complex than Newtonian laws could explain. He claimed that distance and time were not absolute, but defined by the relative conditions of a body in space. As a result, a period of discovery emerged that continues to this day. For example, physicists uncovered a universe of subatomic particles within the sphere of a single Hydrogen atom, and biologists determined the basic machinery of biological adaptation. At the core of this change was the acceptance of indeterminism, the idea

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107 Waldrop, 278.
109 Creative tension is a disconnect in logic generated by "holding a vision and concurrently telling the truth about current reality relative to that vision . . ." Senge 357.
that events cannot be completely determined by known causes, and that the universe operates by a certain degree of randomness and uncertainty, but not complete chaos.\textsuperscript{111}

The Second Law of Thermodynamics states that in a closed system, chaos (entropy) increases. Yet biological systems regularly violate the Second Law and have evolved into complex intelligent beings.\textsuperscript{112} None explains these phenomena better than complexity theory, which postulates the existence of a state between static equilibrium and chaos in which random connections spontaneously give rise to self-organizing complex adaptive systems that evolve with changing conditions through "perpetual novelty," and display life or life-like behavior. Complex adaptive systems are composed of

Many levels of organization, with agents at one level serving as the building blocks for agents at a higher level . . . (and) are constantly revising and rearranging their building blocks as they gain experience. . . .

Michael Waldrop\textsuperscript{113}

Further, they "anticipate the future" through continuous trial-and-error mechanisms and quickly adapt to dynamic environments. Complex adaptive systems are inextricably linked to constant, external energy sources and reliable feedback mechanisms. A perfect example of this adaptive process is DNA (deoxyribonucleic acid), the basic building blocks of biological adaptation.

DNA is part of a complex adaptive system and is composed of four polypeptide bases: Adenine, Guanine, Cytosine, and Tyrosine. These four bases \textit{alone} form the building blocks of all the biological diversity that has \textit{ever} existed, from virus to human being. DNA is assisted by an amazingly complex interaction of bio-molecules ultimately "powered" by the sun, and it relies on equally complex feedback systems. While the combination of bases which form pairs is limited, the combination of pairs which form sequences is infinite. Specific sequences of DNA form "genes" that correspond to traits expressed in an individual. Throughout a species, genes for each individual vary greatly, and the ones that most closely match the demands of the

\textsuperscript{111} Salmon, 37.
\textsuperscript{112} Waldrop, 286-287.
\textsuperscript{113} Ibid., 145.
environment are selected. The strength of DNA is the simplicity of its component parts, the ability to replicate and produce proteins quickly, and the infinite number of trial and error combinations used to adapt to a changing environment.\textsuperscript{114}

The United States military is also a complex adaptive system, and is composed of four services; Army, Navy, Air Force, and Marines. The DoD is also assisted by an amazingly complex interaction of government agencies and is fueled by a very powerful external energy source, the US dollar. While the DoD has increased its reliance on joint forces, each exists largely within its own system. The widely dispersed "bases" form JTFs, the "genes" of the system, only after they are needed. If the four bases were fused under one common operating system, JTFs would (potentially) be produced more rapidly, efficiently, and with greater variation in an unrestricted environment of perpetual planning and rapidly adaptive force structures.

**DOCTRINE**

War is thus an act of force to compel our enemy to do our will. \textsuperscript{115} Carl von Clausewitz

Consistent with the Wehrmacht experience, the DoD should expect that any rapidly deployable joint operation would likely be more expensive and much smaller in comparison to the size of the overall force. Further, the US must reasonably expect rapidly deployable JTFs to be outnumbered and out-resourced until augmented by follow-on forces. These possibilities strongly suggest the DoD focus on ways to magnify the combat power of its JTFs to achieve effects similar to that of a much larger force. Effects-based operations offer a mental model in which to organize concepts, identify methods, and execute operations in order to achieve the greatest leverage over the will of the adversary. Two areas of doctrine critical to balance in an effects-focused JTF are information operations (IO) and maneuver warfare.

\begin{itemize}
  \item \textsuperscript{114} Ibid., 121-122.
\end{itemize}
When considering effects, one must keep in mind that war is not just an act of force to gain influence, rather it is as Clausewitz said, a contest of wills. Unfortunately, many soldiers and statesmen do not read Clausewitz's warning which states; "The defeated state often considers the outcome merely as a transitory evil, for which a remedy may still be found . . ." Further, while one may win a military victory, the battle of wills may continue for a long time. Therefore, military power is mere potential and cannot guarantee victory no matter how "beaten" the enemy appears to be. For example, in 1945, even after two atomic weapons were dropped, the Imperial Japanese still resisted and to some degree surrendered only when the Emperor was allowed to remain in power. Later in Vietnam, after nearly a decade of US involvement, the North overcame massive US conventional superiority and broke the US public's will as a result of the 1968 Tet Offensive. Today, the US finds itself embattled with conventionally inferior opponents in Iraq and Afghanistan, yet the battle of wills rages on.

In today's world, information has become, perhaps, the most effective weapon to directly influence will. Spaced-based and/or web-based mass media allows instant access to information nearly anywhere on the planet. Cyber-nations can quickly self-organize online and mobilize the will of millions of people with the click of a mouse. So many sources and versions of "the story" exist that for many the truth is only found on one's favorite station or website, regardless of its validity. With such an incredible access to information, the US must evolve its combat paradigm and organize IO campaigns as carefully and as detailed as the most complex kinetic operations. Like bombs and rockets, information must be thought of as a weapon to be used in battles, campaigns and wars and tied directly to national policy, strategy, military aims, and operational art. Further, it must be linked with and perhaps even indistinguishable from kinetic weapons.

\[116\] Ibid., 89, 102.
Along with traditional maneuver forces, logistics and intelligence, JTF commanders must integrate IO with the operational plan, not just "add IO" once the maneuver plan is done.

In an environment where it is outnumbered and out-resourced, maneuver is absolutely critical to the success of the joint force. One of the classic principles of war, maneuver is defined as "action to place the enemy in a position of disadvantage through the flexible application of combat power." In Clausewitz's day, commanders maneuvered forces to directly attack the enemy's center of gravity (COG). Further, Clausewitz viewed the enemy's army as the primary COG, although he details other possibilities.

A certain center of gravity develops, the hub of all power and movement, on which everything depends. That is the point against which all our energies should be directed. . . . The defeat and destruction of his (the enemy's) fighting force remains the best way to begin, and in every case will be a very significant feature of the campaign. . . . Blow after blow must be aimed in the same direction: the victor, in other words, must strike with all his strength and not just against a fraction of the enemy's.

Carl von Clausewitz

Unfortunately, Western theorists advocated directly attacking the enemy's strength, resulting in massive force-on-force wars of attrition and ultimately in the carnage of World War I. Not until the very end of the war, and later during the interwar period, were the old concepts reconsidered.

The second half of the twentieth century witnessed a virtual renaissance in the art of maneuver in the West, and the definitions of both maneuver and COG have undergone significant revision. Based on the teachings of Sun Tzu and other like-minded theorists, maneuver was expanded into the concept of maneuver warfare by mid-century.

Maneuver warfare is a warfighting philosophy that seeks to shatter the enemy's cohesion through a variety of rapid, focused, and unexpected actions which create a turbulent and rapidly deteriorating situation with which the enemy cannot cope.

MCDP

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120 von Clausewitz, 720.
Instead of directly attacking his strength, maneuver warfare seeks to affect the enemy's will by attacking his weaknesses. In addition, the definition of maneuver (as well as the other principles of war) is currently under revision at the US Army War College. The proposed definition may include the concept of dislocation: relegating enemy strengths as irrelevant.

On battlefields that span the globe, American-led forces do (sic) dislocate the enemy through maneuver (or "positional dislocation), but also through technological superiority ("functional" dislocation), through attacking and neutralizing enemy leadership ("moral" dislocation), and through pre-emptive warfare ("temporal" dislocation).

Robert R. Leonard\textsuperscript{122}

Finally, the concept of COG has been further refined at the Marine Corps War College by Doctor Joe Strange. Consistent with Marine Corps doctrine, he advocates a four-part method to critically analyze the enemy's power structure and focus the attack on enemy weaknesses, not on his strengths. The four components of his construct are (CG-CC-CR-CV):

1. Centers of Gravity: Primary sources of moral or physical strength, power, and resistance.

2. Critical Capabilities: Primary abilities which merit a Center of Gravity to be identified as such in the context to a given scenario, situation or mission.

3. Critical Requirements: Essential conditions, resources and means for a critical capability to be fully operative.

4. Critical Vulnerabilities: Critical requirements or components thereof which are deficient, or vulnerable to neutralization, interdiction or attack (moral/physical harm) in a manner achieving decisive results - the smaller the resources and effort applied and the smaller the risk and cost, the better.

Joe Strange\textsuperscript{123}

Fusing the best aspects of German \textit{auftragstaktik}, Russian operational art, and high technology, maneuver warfare proponents seek to paralyze the enemy through rapid system shock and render him useless. Unfortunately, the historical record and recent operations in Iraq have shown that this may not be enough. In the future, planners must remember that the true


\textsuperscript{123} Joe Strange, \textit{Centers of Gravity & Critical Vulnerabilities: Building on the Clausewitzian Foundation So We Can All Speak the Same Language}, 2d ed (Quantico: U.S. Marine Corps University Foundation, 1996), ix.
battleground is in the mind, and that kinetic and non-kinetic effects must be balanced and used interchangeably in the overall sphere of operational art.

PLANNING

The chaos of uncoordinated actions, the general confusion which results from incoherence . . . will all disappear once a general slant is given to the goal indicated by the leader. . . . Indicating a proper goal will lead to a feverish stream of ideas and will.

Aleksander A. Svechin\textsuperscript{124}

Planning is one of the most important aspects of the operational art. As the sun powers biological systems, so planning powers military operations. If the sun's energy were too great, organisms would decompose into chaos and cease to exist. Likewise, if the sun's energy waned, organisms would languish and die. Like the sun's delicate balance with the Earth, planners must weigh their inputs with the complex system of joint operations. Too many inputs may drive the system into chaos, and too few may cause it to stagnate. As Svechin implies, clear strategic aims and operational goals are the life-blood of combat forces. The goal of planning should be to produce flexible plans that continuously communicate intent, mission, and objectives to all levels. To reach this goal, US forces must rely on adaptive organizations, planners, planning and plans.

As mentioned earlier, the SJFHQ is an adaptive planning organization and is one of the JCS's top priorities for FY 2005. The purpose of the SJFHQ is to reduce ad hoc planning and create continuity through a permanently assigned staff at each RCC. The focus is contingency and deliberate planning for rapid insertion of JTFs into the RCC structure.

The concentrated effort of the SJFHQ in this pre-crisis period provides the conditions for an RCC to potentially resolve crisis situations as they develop.

USJFCOM\textsuperscript{125}

In addition, the SJFHQ will use Operational Net Assessment (ONA), the Collaborative Information Environment (CIE), and EBO tools to perpetually investigate specific "fault lines"

\textsuperscript{124} Svechin, 74.
within each RCC’s area of responsibility (AOR). The RCC has three options for the SJFHQ during an operation: the SJFHQ can serve as the command element with RCC augmentation, rapidly transition a service component headquarters to act as a JTF headquarters, or be retained to augment the RCC headquarters. Theoretically, the SJFHQ is the ideal organization to coordinate with standing joint forces from any RCC in the world.

While the SJFHQ provides a leap in capability, it is only part of the equation. The most elaborate planning and plans are useless unless based on fact, judgment, and the realistic assessments made by the most clear-minded of thinkers.

Effective strategists are not people who abstract themselves from the daily detail but quite the opposite: they are the ones who immerse themselves in it, while being able to abstract the strategic messages from it. Perceiving the forest from the trees is not the right metaphor at all, therefore, because opportunities tend to be hidden under the leaves.

Henry Mintzberg

Effective planners recognize that the almost unthinkable complexity of the world cannot be grasped by one single human brain. They also view the world holistically, systematically, and train themselves to recognize patterns in the cyclical, gradual passage of time.

In the world of today we must learn to think in temporal configurations. We must learn that there is a lag in time between the execution of a measure and its effect . . . (and) that the effects of our decisions may turn up in places we never expected to see them surface.

Dietrich Dörner

Finally, good planners are good storytellers. They develop vision through analogies and metaphors, and lead organizations to focus on creative and intuitive thought.

Planning is a literal art. The planner's palate is prepared with an assortment of colors, the people and equipment to be used in the plan. His canvas is the AOR, and his brush the OPORD

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126 Ibid., i-iii.
127 Mintzberg, 256.
128 Senge, 12, 22-23.
129 Mintzberg, 326.
131 Klein, 198-199.
used to transfer the colors to the canvas. If the paint is always kept in separate tubes, the artist has no choice but to dispense colors one at a time. Yet if each is carefully prepared on the palate, the artist can quickly mix an infinite number of shades and apply them creatively to the canvas. Similarly, the planner must use a mixture of techniques in order to produce the plan. The Military Decision Making Process (MDMP) is, perhaps, the most widely used planning tool in US military operations. Outlined in Field Manual (FM) 5-0, the MDMP is a seven-step, “rational choice” model based on detailed analysis, development, selection, and implementation of the selected COA. While extremely thorough, rational choice models are often truncated or ignored by practitioners who simply act on the first option they think of.

The assumptions of the rational choice strategy are usually too restrictive. Rarely is there time or the information needed to make this type of strategy work.

Gary Klein

Further, the linear sequence of the MDMP may actually exclude critical data that emerges during the planning process itself, or emergent strategy. These weaknesses are addressed by "naturalistic behavioral" decision models at the other end of the planning spectrum.

The Recognition Primed Decision (RPD) model is a promising naturalistic behavioral decision model currently under evaluation by the armed forces. RPD is a decision strategy that operates by “selecting the first option that works,” and relies primarily on intuition and experience. Further, intuition is the result of experience gained by training, simulation, and actually doing the job. The more experience one gains, the more intuition one will have to make rapid, skillful decisions and thereby improve “the picture” with emerging data. However, if one does not have experience, then RPD appears to break down. Back at the canvas, the operational artist must use multiple techniques with the wide spectrum of colors before him. At one end of the palate, MDMP seems to be best suited for deliberate planning with inexperienced people, while RPD

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132 Ibid., 103.
133 Mintzberg, 24.
134 Klein, 20.
appears best suited for crisis situations with an experienced staff. If the key variables in planning are experience and time, the planner must tailor techniques to each specific situation.

Every manager needs to be able to analyze problems systematically. Every manager needs also to be able to respond to situations rapidly, a skill that requires cultivation of intuition and judgment over many years of experience and training. The effective manager does not have the luxury of choosing between "analytic" and "intuitive" approaches to problems. Behaving like a manager means having command of the whole range of management skills and applying them as they become appropriate.

Herbert Simon\textsuperscript{135}

Despite the best planners, planning, and plans, one should never underestimate the ability of human beings to ignore critical data and deceive themselves. Because the mind cannot adequately grasp the complexity of the world, it protects itself from uncertainty by preemptively excluding "marginal" possibilities.\textsuperscript{136} For example, because the US military was told to expect the full support of the Iraqi people and a quick redeployment, the thought of insurgency was not seriously considered. However, a quick study of history reveals a frighteningly similar experience by British forces in Iraq from 1914 to 1924 with nearly the exact same cultural and religious issues the US is now facing.\textsuperscript{137} It appears that despite their best efforts, planners and senior political/military leaders ignored some very important data. Denial has inevitably resulted.

Self-protection - the need to preserve a sense of our own competence - plays a role here. It is difficult for us to admit to ourselves that, despite the best of intentions, we have failed. Such failures suggest that our understanding of the prevailing conditions is inadequate.

Dietrich Dörner\textsuperscript{138}

What is important for planners, then, is to develop plans with maximum flexibility and a reasonable amount of options to deal with change. "The planners, in other words, need enough scenarios to cover not only the probable but also the important possible contingencies, yet few

\textsuperscript{136} Mintzberg, 250.
\textsuperscript{138} Dörner, 69.
enough to be manageable.” Finally, planners must try to keep a holistic view of history, review the lessons from the past, and realize that history will almost certainly repeat itself.

What has been will be again, what has been done will be done again; there is nothing new under the sun.

King Solomon

In addition to human psychological frailties, the ability to communicate intent, mission, and objectives to all levels is severely limited by sequential, Industrial Aged processes. Planners typically follow a sequence of events, which culminate in "the plan" which is then briefed to the commander in its entirety. The COA is the result of intense "data mining," planning, and wargaming, each with a designated beginning and end point to allow a linear progression to the next step. But what if each step had its own separate but dependent cycle and was allowed to evolve and build upon itself? This type of system would merge facts, assumptions, and emerging data on a perpetual basis as the situation evolved. Emerging technology may revolutionize this type of persistent, collaborative planning.

In Steven Spielberg's, *Minority Report*, Detective John Anderton leads the elite Precrime Unit, which uses “precognitive” information to capture would-be criminals before they commit their crimes. Anderton “cybernetically” connects to a massive virtual-reality database allowing him to access all known information. Further, through a complex man-machine interface, he is able to see every event, piece of data, and connection that may assist him in determining a course of action. Seemingly fantastic, this type of technology already exists. Virtual interactive displays allow engineers, doctors, and scientists to "see" their tasks and rapidly communicate with others. In addition, Internet search engines and "wiki" technologies have already created virtual "hive

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139 Mintzberg, 248.


141 Steven Spielberg, *Minority Report* (Twentieth Century Fox Film Corporation, 2002).
minds” and the genesis of a collective virtual consciousness.\textsuperscript{142} Perhaps someday soon, the vaunted, two dimensional Power Point presentation will be replaced by a commander’s self-briefing from an interactive hive mind, followed by virtual war-gaming with a "Prewar" staff. The commander's intent, mission, and objectives could be continuously updated and available to everyone, drastically speeding up the OODA Loop of the entire operation. Finally, plans as we know them may disappear altogether and instead become a perpetually evolving palate of COAs, pre-distributed on a central database and ready for immediate execution.

CHAPTER FOUR

\textbf{CONSTRUCT}

No one arm wins battles. The combined action of all arms and services is essential to success. The characteristics of each arm and service adapt it to the performance of its special functions.

\textit{Antoine Henri Jomini}\textsuperscript{143}

\textbf{FORCE STRUCTURE}

I don't want the best players. I want the right players.

\textit{Herb Brooks}\textsuperscript{144}

The Standing Joint Force construct is a complex adaptive system that merges the capabilities of its smaller building blocks into that of a virtual living organism. Like DNA, the SJF will array its components in an easily accessible, interconnected system and serve as a template from which action agents (JTFs) can be rapidly produced. JTFs will preempt adversary activity through adaptive planning systems and rapidly tailor COAs and formations to meet the demands of

\begin{itemize}
  \item \textsuperscript{142} "A group of individual organisms that together share a single unified mind, distributing thought and communicating with each other through telepathic means. This is somewhat analogous to how colonies of social insects such as ants, bees and termites can seem to behave as if they were a single collective organism." For further explanation, see James Wales, “Hive Mind,” \textit{Wikipedia} (December 2004), [database on-line]; available from http://en.wikipedia.org/wiki/Hive\_mind; Internet; accessed 14 December 2004.
  \item \textsuperscript{144} Eric Guggenheim, \textit{Miracle} (Walt Disney Productions, 2003).
\end{itemize}
dynamic environments. Models for the SJF capabilities and structures are already available within individual military service sub-structures. They are:

1. USN: Operational Maneuver from the Sea
2. USAF: Aerospace Expeditionary Force
3. USMC: Marine Air-Ground Task Force
4. USA: Future Force

OPERATIONAL MANEUVER FROM THE SEA

In 1992, the USN fielded *From the Sea* in response to a drastically changing post-Cold War strategic environment. The purpose of this strategy was to improve the USN's ability to operate close to the littoral areas and project USMC and/or joint forces ashore. The USN fielded Amphibious Ready Groups (ARG) and more recently, Expeditionary Strike Groups, with traditional Carrier Strike Groups as combined arms forward forces afloat. In this way, the Navy could "provide the U.S. with the ability to maintain global presence and project power in the littorals without the requirement for land-based forward presence." OMFTS builds on these concepts with a detailed assessment of the current operating environment and the strategic implications of assuring access to littoral areas from the world's oceans.

The USN defines the littorals as those areas accessible to the farthest striking distance of naval forces, about 650 nautical miles (NM) from the coastline. Since nearly 70% of the world is covered by ocean and the same percentage of the world's population lives in the littorals, the USN has a tremendously large AOR with which to contend. To economize the force and magnify effects, the USN and USMC have designated the ocean itself as maneuver space to directly access the CG-CC-CR-CV structure without first establishing a support intensive lodgment ashore. A further USMC refinement of OMFTS, Ship to Objective Maneuver (STOM), allows

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146 Ibid.
Marines to conduct maneuver warfare directly from the sea and to thrust "forces ashore at multiple points to concentrate at the decisive place and time in sufficient strength to enable success." \(^{147}\) OMFTS also eliminates restrictions associated with permanent land bases and over-flight, and provides assured, persistent access for joint forces almost anywhere in the world.

The USN is currently expanding OMFTS through a concept called Sea-basing. Sea-bases are essentially "portable islands" that can be parked off the coast of key littoral areas in international waters to serve as staging areas for aircraft, ships, personnel and logistics. Using Sea-bases, the USMC calculates it “can put up to 15,000 Marines, with all their equipment, with sustainability, anywhere in the world, in 10 to 12 days.” \(^{148}\) Sea-basing will greatly facilitate joint operations as both the USAF and US Army equipment will easily transition to such a large platform. Aircraft, traditional shipping, and high-speed sealift (HSS) capable of thirty to forty knots, will serve as maneuver and sustainment “connectors” for STOM and littoral support operations from the Sea-bases. Finally, the Maritime Pre-positioning Future Force (MPF(F)) will enhance arrival and assembly operations using selective offload and replenishment capabilities at sea. \(^{149}\)

**AEROSPACE EXPEDITIONARY FORCE**

Similar to the Navy, the Air Force experienced deep cuts and substantial restructuring after Operation Desert Storm. Since 1989, the Air Force has cut nearly 36% of its active duty manpower and reduced the number of fighter wings from 36 to 20. \(^{150}\) While infrastructure declined, the number of contingency operations and associated deployments skyrocketed. Since 1992 the USAF has supported six to seven contingencies per year, averaging twenty-five fighter aircraft each. Also, based on a limited understanding of aircraft capabilities, RCC commanders


\(^{149}\) MCDP 1-0, 2-17/18.

continued to demand only certain types of aircraft for their operations. Needless to say, some aircraft and associated specialists were over-utilized and capabilities suffered.  

To balance the workload, the USAF modularized units and established a rotational deployment structure in January 2000, called the Aerospace Expeditionary Force. Combat, mobility, and support units were allocated to one of ten separate AEFs, based primarily on the effects each could produce. Each AEF currently has about 150-175 aircraft, and 15,000 people, can respond to a contingency within 72 hours, and typically deploys for 120 days every 20 months. RCCs now have on-call effects-based airpower ready for rapid deployment, and the Air Force has a system which more efficiently balances its infrastructure. Originally, two additional Air Expeditionary Wings (AEW) were assigned as quick reaction task forces until the AEF concept was perfected. However, AEWs lacked the organic air base, tactical missile, nuclear-biological-chemical defenses systems and sufficient logistics support normally provided by the Army. In its place, the high-technology Global Strike Task Force will require minimal support.

The GSTF is designed as America's "kick-down the door" force, capable of extremely rapid deployment from CONUS to anywhere in the world to ensure aerospace access for joint forces.

GSTF is a rapid-reaction, leading edge, power projection concept that will deliver massive around-the-clock firepower. It will mass effects early, from longer ranges, and with more precision than our current capabilities and methods of employment; it will give adversaries pause to quit . . .

John P. Jumper

B-2 bombers, F/A-22 fighters, and various ISR and space-based assets will be on call for immediate deployment to "roll-back" adversaries defenses for follow-on forces. Though

\begin{itemize}
  \item[153] Curlett, 11.
  \item[154] Jumper, 33.
\end{itemize}
potentially very effective, the GSTF is based on a very small number of assets that tout the ability
to attack many targets per sortie versus many sorties per target.\textsuperscript{155}

\textbf{MARINE AIR-GROUND TASK FORCE}

As a modular organization, the MAGTF is tailorable to each mission through task organization. This building block approach also makes reorganization a matter of routine.

MCDP 1-0\textsuperscript{156}

For all practical purposes, the US already has a standing, full-spectrum combat force: The US Marine Corps. Marines have developed an unmatched expeditionary and joint air-ground capability within the MAGTF, and are proficient in the full spectrum of military operations. The MAGTF structure and mission serves as the ideal basic model for SJFs and JTFs.

Marines are in high demand because Marines are good at what they do. All Marines go to the same basic school which engenders a common \textit{esprit de corps} not apparent in the other services. Their training emphasizes the proven tenets of \textit{auftragstaktik}: decentralized command and execution, bold leadership, mission-type orders, and fierce individual initiative. Marine Corps Doctrinal Publication 1 (MCDP) illustrates this point succinctly: "We will not accept lack of orders as justification for inaction; it is each Marine's duty to take initiative as the situation demands."\textsuperscript{157} Marines also develop implicit communication skills: a mutual understanding and anticipation of action developed by rigorous training and a common purpose.\textsuperscript{158}

Coupled with Expeditionary Maneuver Warfare, the MAGTF functions as the basic framework for USMC operations. EMW focuses MAGTF operations on joint/multinational enabling and \textit{strategic agility} for “rapidly and fluidly transitioning from pre-crisis state to full operational capability in a distant theater.”\textsuperscript{159} MAGTF structure assimilates four elements under one operational level commander: a command element (CE), a ground combat element (GCE), an

\begin{itemize}
\item \textsuperscript{155} Ibid., 24-33.
\item \textsuperscript{156} MCDP 1-0, 3-13.
\item \textsuperscript{157} MCDP 1, 58.
\item \textsuperscript{158} Ibid., 78.
\item \textsuperscript{159} MCDP 1-0, 2-14.
\end{itemize}
aviation combat element (ACE), and a combat service support element (CSSE). The spotlight
tenets of the MAGTF are modularity, full-spectrum operations, and its capacity to attune the four
elements to the situation at hand. In addition, forces afloat provide a persistent presence at the
littorals and act as a conduit for follow-on forces.160

The USMC embodies the best aspects of operational art and its framework is echeloned for
expeditionary operations. Within the MAGTF structure, three standing Marine Expeditionary
Forces (MEF) perform as the principle USMC warfighting organizations. As large as an Army
Corps, each MEF deploys a forward detachment, a Marine Expeditionary Unit Special Operations
Capable (MEUSOC), “on a continuous basis to provide forward presence and crisis response
capabilities to the combatant commanders.”161 Further, within each MEF are Marine
Expeditionary Brigades (MEB) which can operate as stand-alone JTF headquarters, or as the lead
element for the MEF. Along with imbedded MEUSOC anti-terrorist (AT) forces, the 4th MEB
serves as a standing rapid deployment AT brigade. Finally, each MEF employs an air
contingency force (ACF), a task-organized alert force that can deploy within eighteen hours of
notification either independently or with any other stratum of the MEF.162

FUTURE FORCE

In 1999, then Chief of Staff of the Army, General Eric Shinseki, announced plans for Army
Transformation in the Objective Force white paper. His purpose was to outline a colossal change
in the Army from a heavy conventional force to a modular, adaptive, and deployable force.

The Objective Force is our full spectrum force: organized, manned, equipped and trained to
be more strategically responsive, deployable, agile, versatile, lethal, survivable and
sustainable across the entire range of military operations . . .

Objective Force163

General Shinseki began transformation immediately. Using off-the-shelf equipment, he created
Stryker Brigade Combat Teams (SBCT) as concept and technology test-beds to serve in actual

160 Ibid., 3-10 - 3-15.
161 Ibid., 3-16.
162 Ibid., 3-19 - 3-20.
163 Objective Force, iv.
combat. Army Transformation is absolutely crucial for any standing joint force initiative because the US Army comprises the bulk of America's surface combat power and logistics capabilities.

One of the biggest challenges associated with Army Transformation is transportation. According to the white paper, one of the goals is to “deploy a brigade combat team anywhere in the world in 96 hours after liftoff, a division on the ground in 120 hours, and five divisions in theater in 30 days.” While ambitious, this proposal is definitely achievable when combined with the transformation efforts of the other services, particularly the United States Navy. To meet the challenge, the Army has conducted extensive experiments with fast sealift, airlift, and even airships. In 2002, the service successfully tested a shallow-draft, catamaran-hulled transport that can haul 30 to 40 Strykers (or a mix of other equipment) and 400 soldiers, 600 nautical miles at a speed of 30 to 40 knots. Further, the Army has contracted with Millennium Airship Incorporated to build the "SkyFreighter", a heavy-lift airship that can fly directly to key terrain, and requires minimal infrastructure.

OPERATING CONCEPT

Our prevailing norm will be expeditionary operations. These operations will be characterized by rapid deployment with little or no-notice, contingency operations in austere theaters, and incomplete information to support planning.

R.L. Brownlee and P.J. Schoomaker

Assuming the DoD adopts Global Operational Maneuver and the Standing Joint Force structure, United States Joint Forces Command is the ideal agency to lead this effort. First, USJFCOM needs to determine desired effects, and then establish a baseline SJF structure to

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164 Ibid., 9.
achieve them, just like an AEF. Based on current service expeditionary efforts, a sustainable baseline capability may include:

1. Deployment: Forces in place in 96 hours (HSS and airships when available)
2. Sustainment: 30 days of joint logistics and pre-positioned assets (MPF(F) when available)
3. Surface power: Special Operations Group, 2 BCTs or 1 MEB
4. Aerospace power: 3 fighter squadrons (STOVL when available), GSTF, ISR, Space assets
5. Sea power: USCG, CVSGs and ESGs deployed (Sea Bases when available)

Once the force structure is finalized, USJFCOM will assume OPCON and train the SJF and SJFHQ network for service. The normal duty cycle would comprise six months of training and three months of SJF duty. In addition, halfway through the cycle, the next SJF will begin its preparation. Developmental events should focus on joint exercises, war-gaming, simulations, cross service exchanges, and leadership preparation. Training should emphasize operational art, *auftragstaktik*, systems analysis, adaptive planning, and most importantly, *esprit d' corps*. Leadership must create the spirit that "will lead to a feverish stream of ideas and will." When the SJF has completed its training cycle, it can be placed on alert status and while it must be ready for immediate deployment, simulation exercises and proficiency training will also continue throughout the duty cycle.

The next step for the SJF is JTF generation and movement to the area of responsibility. Because the SJF will be very potent, planners must consider every deployment in terms of need. Leadership will (potentially) be tempted to use JTFs for situations best handled by other means, and each situation must be considered very carefully. NSS, NMS, NMO, as well as clearly defined policy will be crucial to employing the SJF correctly. USJFCOM must educate political/military leadership and use the SJFHQ network to ensure feasibility through perpetual planning. Once planners determine a JTF is needed, they must task-organize forces based on the ability to accomplish multiple COAs. SOF is an ideal *forward detachment* for the main JTF body.

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168 Svechin, 74.
and should be deployed within hours of a decision. Once SOF is in place, the JTF command element can be transported to the AOR and given complete authority to accomplish the mission.

When initial staging is complete, the JTF will conduct Global Operational Maneuver to focus effects in the AOR. As in Operation Uphold Democracy, JTF commanders should expect a chaotic environment and be prepared to adapt their forces to a dynamic situation. They must establish multiple avenues of attack, use surprise and deception, and synchronize echelons to achieve simultaneous action at the objectives. JTF commanders must exploit all media (land, sea, air, space, and cyberspace) to focus effects on critical vulnerabilities in the adversary system. Once forces are in place, commanders will employ focused logistics, information operations, and maneuver warfare to maintain the initiative and achieve operational goals. Even as a JTF is en route to an AOR, the SJFHQ staff can update COAs, add and/or delete forces, and generate follow-on forces to either augment or relieve the JTF in place. Once the mission is complete or the JTF is relieved, it will "re-cock" and return home.

CHAPTER FIVE

CONCLUSION

By knowing things that exist, you can know that which does not exist. Know well this spirit, and with forthrightness as the foundation and the true spirit as the Way, enact strategy broadly, correctly and openly.

Miyamoto Musashi

SUMMARY

The purpose of this study was to introduce an operating concept and an organizational structure to empower US joint military forces to better adapt to changes in the global security environment. Further, it proposed that the US conduct Global Operational Maneuver and field Standing Joint Forces to better meet National Military Objectives. It envisioned NMOs as the ends, GOM as the way, and SJFs as the means for achieving the president's vision. GOM and SJF were postulated as part of a joint evolutionary process to more effectively transmit national military power into the battle-space using information to fuse dispersed elements of national
military power for global maneuver. Finally, this study was based on historical analysis and a practical application of military power to balance the need for innovation and technology with the human element in war.

The events of 11 September 2001 served as a wakeup call for the United States. For over a decade, the US reaped the benefits of a so-called "peace dividend" and (arguably) ignored the reality of a changing world. Even as DoD sought to perfect execution in a Cold War, digitized battle-space, entities from nation-states to terror groups clamored to fill the vacuum left by a defunct Soviet Union. Many groups pragmatically avoided the conventional spectrum dominated by the US and instead focused their efforts in other areas, such as information. A few, such as Al-Qaeda, established themselves in both the physical and virtual worlds, effectively avoided the collective security apparatus of the civilized world, and achieved a stunning victory.

Since 911, the United States’ military has been embroiled in two wars, executor of a policy of preemption, and transformation. This "perfect storm" has created a tremendous demand for expeditionary operations on a force traditionally designed for containment and conventional regional conflict. The result has been a disproportionate use of select individual service forces and inefficient utilization of the force as a whole. As the military struggles to adjust, the time for "jointness" has never been greater. One is reminded of the Cactus Air Force in 1942, which began with a tenuous hold on Guadalcanal and evolved into a victorious joint brotherhood of airmen. Further, the need for jointness demands an operational concept based on proven military theory, doctrine, and history fused with cutting edge technology and a spirit of innovation. The DoD can better meet these challenges by organizing the bulk of its forces for rapid, expeditionary operations by conducting Global Operational Maneuver with Standing Joint Forces.

GOM is a theory of maneuver based on proven military doctrine, transformation efforts, and a pragmatic assessment of the current global security environment. It fuses lessons from the past such as German tactical excellence, Soviet operational art, and joint operations in the Solomons and Haiti with complexity theory, maneuver warfare, information operations, adaptive planning,
and advanced technology. It incorporates the breakthrough tenets of Operational Maneuver from Sea, the Air Expeditionary Force, the Marine Air Ground Task Force, and the Future Force and expands them to a planetary scale. SJFs arranged on a rotational basis, OPCON to USJFCOM, would permit greater efficiency and availability of effects, especially when coupled with SJFHQ cells. Combined with persistent planning, task-organized JTFs could be rapidly self-organized, continually optimized, transported anywhere in the world, and conduct preemptive attacks directly on enemy system vulnerabilities. Permanent SJFHQ contingency staffs would provide continuity, expertise, and improved operations security for US plans and forces. Finally, as a master construct for DoD operations, SJF and GOM doctrine would more clearly guide the individual services in organization, training, and equipping forces for the joint fight.

RECOMMENDATIONS

The fall of the Soviet Union removed the impetus for a bipolar global order and set the world on a new course in the struggle for power. Many nations, states, and sub-state organizations co-opted under the Cold War paradigm were quickly freed to pursue their own interests, and have aggressively done so through asymmetric means. Information has allowed many organizations to quickly adapt to old paradigms and create new channels to garner power and influence. While some have thrived through peaceful means, others have pursued and succeeded by violent ends. As the world’s remaining super-power, the United States is both a leader and a target of this competition, yet it must help guide the world in a peaceful transition using all aspects of national power. In particular, the US military must organize its forces to efficiently and effectively synergize combat power, and to quickly perform joint, full-spectrum operations anywhere in the world. With September 11, 2001 as a gruesome warning, the United States clearly cannot wait for violent adversaries to make the first move again, and preparations must be made now. Based on the analysis and conclusions of this study, the author recommends the following:
1. DoD adopt Global Operational Maneuver and Standing Joint Forces as an operating concept
2. DoD assigns USJFCOM as the lead agency for SJF and GOM doctrine and force development
3. DoD amends the Unified Command Plan and assigns COCOM to USJFCOM for SJF
4. USJFCOM field an operable joint contingency response system within the next decade
5. USJFCOM direct technology development to enhance joint expeditionary forces
BIBLIOGRAPHY

BOOKS


**UNITED STATES GOVERNMENT PUBLICATIONS**


**ARTICLES**


articles.html/function/view/categoryid/164/documentid/2407/history/3,2360,656,164,2407.


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