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**CSBA**

# **Special Operations Forces**

## **Future Challenges and Opportunities**

BY ROBERT MARTINAGE

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# **SPECIAL OPERATIONS FORCES: FUTURE CHALLENGES AND OPPORTUNITIES**

STRATEGY FOR THE LONG HAUL

By Robert Martinage

2008

## ABOUT THE **STRATEGY FOR THE LONG HAUL** SERIES

This report is one in a series comprising CSBA's Strategy for the Long Haul intended to inform and shape the next administration's defense strategy review.

**THE CHALLENGES TO US NATIONAL SECURITY.** Translates the principal challenges to US security into a representative set of contingencies in order to determine what resources will be required, and how they should be apportioned among forces and capabilities.

**US MILITARY POWER AND CONCEPTS OF OPERATION.** Provides the connective tissue between the threats to US security and the capabilities and force elements needed to address the new challenges confronting the nation.

**THE DEFENSE BUDGET.** Overviews the budget environment and explores a range of options to make the Services' plans more affordable.

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**MANPOWER.** Examines recruitment and retention of quality people in sufficient numbers at an acceptable cost.

**TRAINING, OPERATIONAL ART, AND STRATEGIC COMPETENCE.** Assesses the need for an overhaul of training and education of America's service personnel and the importance of strategic thinking in senior leaders.

**RESTRUCTURING THE US ALLIANCE PORTFOLIO.** Considers the nature and type of alliances the United States needs in order to meet existing and emerging security challenges.

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**GROUND FORCES.** Explores how the US Army and Marine Corps might best be organized, structured, modernized, and postured to meet existing and emerging challenges to US security.

**SPECIAL OPERATIONS FORCES.** Addresses the expansion and growing role of US Special Operations Forces.

**MARITIME FORCES.** Addresses how US maritime forces might best be organized, structured, modernized, and postured to meet existing and emerging challenges to US Security.

**AIR AND SPACE FORCES.** Explores how Air and Space Forces might best be organized, structured, modernized, and postured to meet existing and emerging challenges to US Security.

**STRATEGIC FORCES.** Examines the circumstances under which nuclear strategy and force posture decisions must be made today.

**MODERNIZATION STRATEGIES.** Explores potential modernization strategies that can best support the US defense posture in an era of great geopolitical uncertainty and rapid technological change.

**ORGANIZING FOR NATIONAL SECURITY.** Assesses how the United States Government can best organize itself to ensure effective strategic planning and execution of strategy.

**A GRAND STRATEGY FOR THE UNITED STATES.** Synthesizes the findings and insights of the study series.



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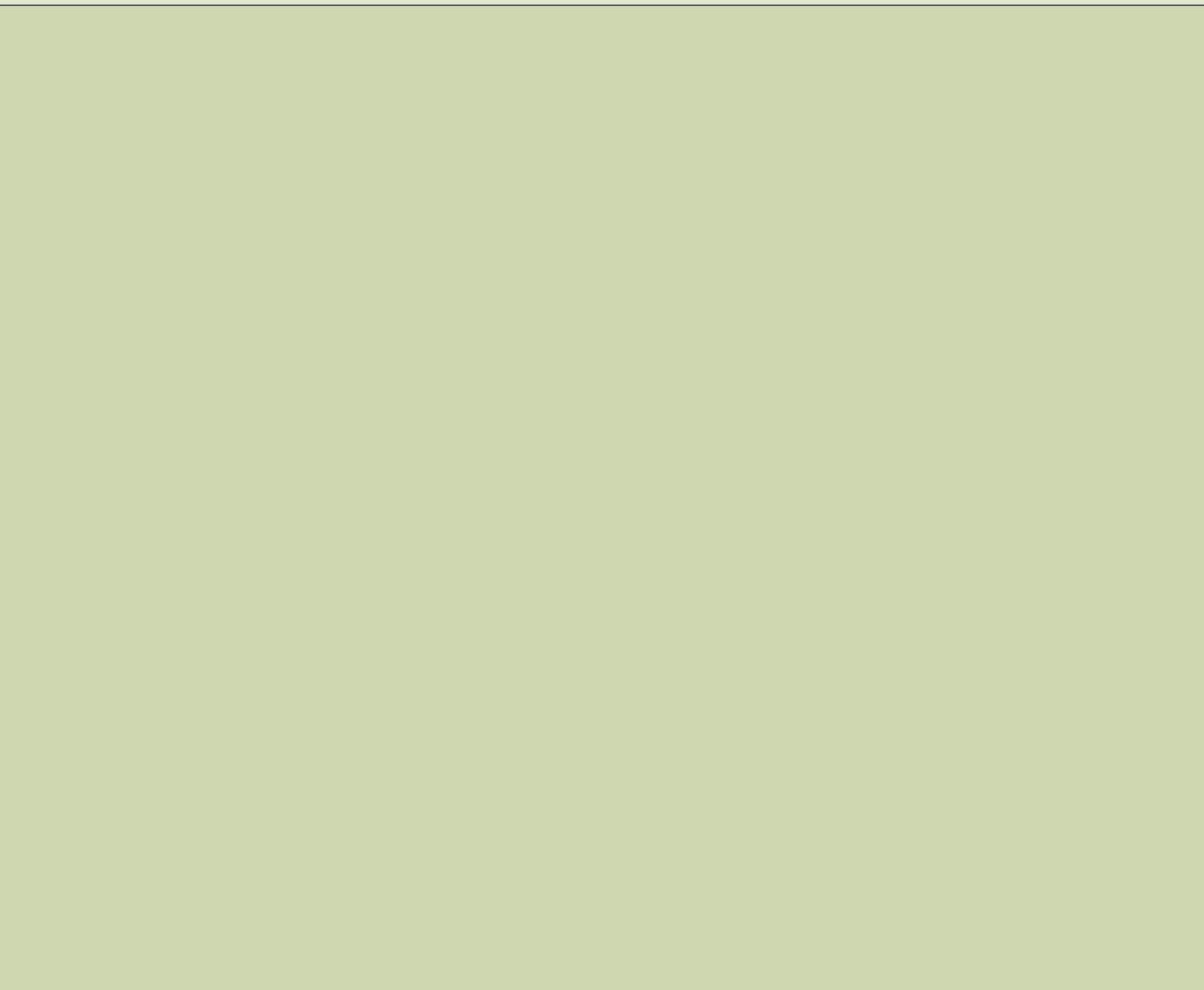
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## PREFACE

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### CHALLENGES TO US NATIONAL SECURITY

The United States faces three primary existing and emerging strategic challenges that are most likely to preoccupy senior decision-makers in the coming years:<sup>1</sup>

- > Defeating both the Sunni Salafi-Takfiri and Shia Khomeinist brands of violent Islamist radicalism;
- > Hedging against the rise of a hostile or more openly confrontational China and the potential challenge posed by authoritarian capitalist states; and
- > Preparing for a world in which there are more nuclear-armed regional powers.

Addressing these specific challenges should be at the forefront of the incoming administration's strategic calculations, particularly during the 2009 Quadrennial Defense Review (QDR), which will help shape US defense strategy, planning, and force structure over the next twenty years.

Although none of these strategic challenges, individually, rivals the danger posed by the Soviet Union during the Cold War, they are certainly graver than the types of threats that prevailed immediately after the Cold War, during the period referred to by some as the "unipolar moment," when the power of the United States was at its peak and its dominance had not yet been put to the test. They are also quite different from the threats the United States confronted throughout the twentieth century (Imperial Germany, Nazi Germany, Imperial Japan, and the Soviet Union), all of which possessed militaries that, by and large, were very similar to the US military both in terms of their structure and their *modi operandi*. For example, both the German and Soviet

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<sup>1</sup> For an overview of these strategic challenges, see Andrew Krepinevich, Robert Martinage, and Robert Work, *The Challenges to US National Security*, the first monograph of the Center for Strategic and Budgetary Assessments' series that presents a "Strategy for the Long Haul."

armies focused primarily on conducting combined arms mechanized land operations, as did the US Army. That is not the case with respect to today's threats and potential rivals, who instead focus their principal efforts on exploiting asymmetries to gain an advantage.

Radical Islamist movements, for example, use terror and subversion, engage in modern forms of irregular and insurgency warfare, and pursue weapons of mass destruction (WMD) to inflict catastrophic damage on the United States and its allies. China, who, of the three challenges, presents the military forces most similar to the US military, is emphasizing conventionally armed ballistic missiles, information warfare capabilities, anti-satellite weaponry, submarines, high-speed cruise missiles and other capabilities that could threaten the United States' access to the "global commons" of space, cyberspace, the air, the seas and the undersea, and possibly to US ally and partner nations in Japan, South Korea and Taiwan. Hostile and potentially unstable countries like North Korea and Iran have developed or may soon develop nuclear arsenals with which they could intimidate America's allies and challenge the US military's ability to protect vital national interests. Moreover, if these countries succeed in developing nuclear arsenals, they could spur others to follow suit.

## THE KEY ROLE OF MILITARY POWER

Military power is central to the United States' ability to meet these strategic challenges successfully, whether in support of diplomatic and other elements of US security policy, or used in actual conflict. It follows, therefore, that the military means must be compatible and commensurate with the nation's security ends.

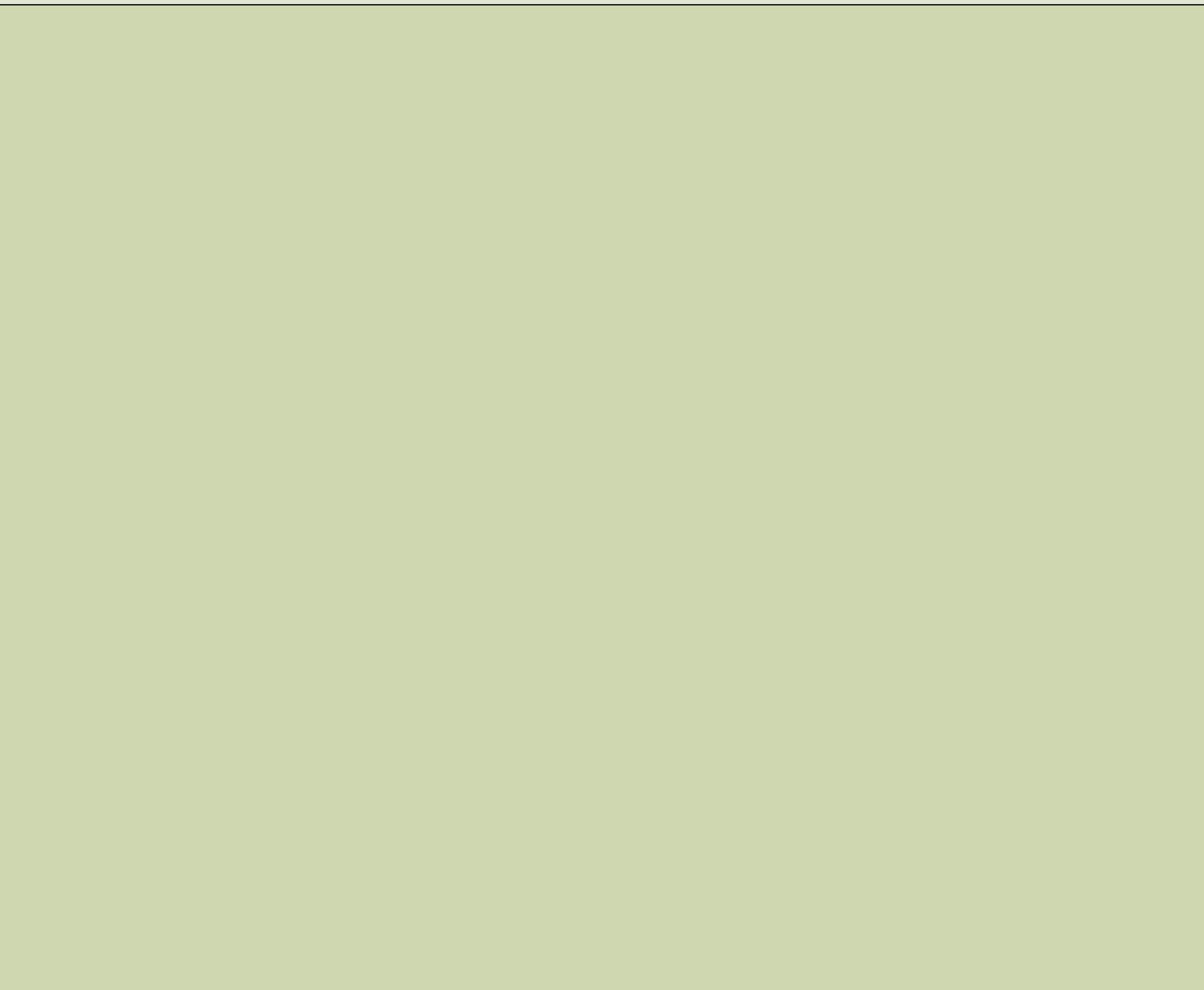
Given the long expected service life of most of its major assets, the US military force structure, which underlies the concepts of operation that drive the US "way of war," is still based primarily on the premises and experience of the Cold War and its immediate aftermath. Arguably, much of the current Program of Record (the forces the Department of Defense seeks to acquire in coming years) remains similarly reflective of that period. Yet the looming strategic challenges look to be significantly different. Thus there is a danger that many of the forces that the Defense Department plans to acquire may prove to be unsuitable for dealing with future threats.

This monograph, and several others in the series comprising the *Strategy for the Long Haul* project, examines the readiness of the four Services, the Special Operations Forces, and the strategic forces to do their parts in meeting the emerging security challenges. Each monograph:

- > Describes the current state of a Service or force;
- > Discusses what that Service or force must be able to do to help meet the emerging strategic challenges successfully; and

- > Assesses problematic areas and issues in the Service's or force's Program of Record and recommends measures to address them.

While these monographs address particular Services or forces, it must be kept in mind that the US military fights as a *joint force*. Accordingly, each Service or force must ensure that the forces it acquires and the operational concepts it employs are interoperable with those of the others, and, equally important, that there is not a major mismatch between the support one Service assumes that it can expect from another, and what is actually the case. These concerns have historically been problematic for the US military, and thus merit particularly close attention.



# EXECUTIVE SUMMARY

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Special Operations Forces (SOF) are elite, highly trained military units that conduct operations that typically exceed the capabilities of conventional forces. They have figured prominently in US military operations since 2001 and have become central to the implementation of US national defense strategy with respect to the war against violent Islamic radicalism. During the unconventional war against the Taliban and al Qaeda in Afghanistan in Operation Enduring Freedom, SOF played a pivotal role by integrating US precision air power with the operations of irregular Afghan opposition forces to achieve rapid regime change and eliminate al Qaeda's primary sanctuary. Since the fall of the Taliban, SOF have played a critical role in training and advising elements of the Afghan National Army, providing personal security for senior Afghan officials, and capturing or killing scores of senior Taliban and al Qaeda leaders and lower-level operatives. They are also currently conducting operations along the Afghanistan-Pakistan border and training elements of Pakistan's Special Service Group. In the early phases of the war with Iraq, SOF again played a central role in a special-operations-intensive campaign, providing the primary ground force element on two of three fronts, and performing a number of special reconnaissance, direct action, and unconventional warfare missions in support of the conventional campaign. Over the past five years, they have been instrumental in training and advising Iraqi security forces, as well as in hunting down high-value al-Qaeda targets in Iraq. In the broader war against violent Islamic radicalism, to the extent their constrained capacity allows, SOF are building partner capacity, collecting intelligence, hunting high-value targets, and conducting other counterterrorism operations in multiple countries across several continents. The operations tempo currently being sustained by SOF is the highest in its history.<sup>2</sup>

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<sup>2</sup> Admiral Eric T. Olson, Commander, SOCOM, Speech at National Security Leaders Forum, Center for a New American Security, March 3, 2008.

## OPERATIONAL IMPLICATIONS OF THE FUTURE SECURITY ENVIRONMENT

SOF face several challenges, as well as opportunities, in adapting to a future security environment that will likely be dominated by the continuation and possible intensification of violent Islamic radicalism, the potential rise of the People's Republic of China as a more aggressive military competitor, and the global proliferation of weapons of mass destruction (WMD) and nuclear weapons, in particular.<sup>3</sup>

Defeating Salafi-Takfiri and Khomeinist terrorist groups will require a multifaceted approach—one in which the military instrument will often be far less important than effective foreign assistance, public and private diplomacy, strategic communications, and covert action. That being said, SOF will need to be shaped, sized, and postured to:

- > Conduct proactive, sustained “manhunting” and disruption operations globally.
- > Build partner capacity in relevant ground, air, and maritime capabilities in scores of countries on a steady-state basis.
- > Help generate persistent air and maritime surveillance and strike coverage over “under-governed” areas and littoral zones.
- > Employ unconventional warfare against state sponsors of terrorism and transnational terrorist groups globally.

In the event that future US-Sino relations become characterized more by competition and periodic conflict than sustained cooperation, the US military will need to be shaped, sized, and postured differently than it is today. If done wisely, these changes could dissuade China from investing in capabilities that threaten US and allied interests in East Asia, improve crisis stability in the region, and deter future Chinese aggression. In the event that US efforts to shape Chinese behavior and bolster deterrence fail, however, there are at least four missions that SOF may be called upon to perform as part of a conventional campaign:

- > Large-scale, overt unconventional warfare operations on China's periphery to open up additional fronts.
- > Information operations focused on accessing “closed” communications and computer networks.
- > Clandestine special reconnaissance missions to locate hidden or mobile high-value targets for precision attack.
- > Direct action against key targets that cannot be disabled by other means.

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<sup>3</sup> In addition to the potential threat posed by China, the US military must also be prepared to confront the prospective rise of authoritarian capitalist states, such as Russia. It is assumed here, however, that the latter challenge is in large part a lesser included case of the former. Andrew Krepinevich, Robert Martinage, and Bob Work, *The Challenges to US National Security* (Washington, DC, CSBA, 2008).

To help prevent the spread and potential use of WMD, globally distributed SOF units involved in the war against Salafi-Takfiri and Khomeinist terrorist groups could not only provide a valuable source of intelligence collection, but could also serve as an in-situ, highly responsive force to interdict the movement of WMD-related materiel over land or sea. In addition, SOF could potentially conduct unconventional warfare to bring about regime change in states aspiring to develop WMD. They will also need to be prepared to conduct counterproliferation operations against critical WMD-related infrastructure that cannot be reliably or safely targeted by other means. Finally, a handful of specialized SOF units will be relied upon to “render safe” improvised nuclear devices or nuclear weapons that have fallen out of effective state control.

In addition to these manifold challenges, emerging strategic and operational environments could also provide SOF with a number of significant opportunities. The coupling of precision air power with SOF ground forces should dramatically increase the effectiveness and attractiveness of small-footprint unconventional warfare as a future option for US policy makers. Emerging technologies will likely allow SOF to conduct persistent surveillance over very large areas, gain access to targets that were heretofore very difficult to penetrate, and enable standoff strikes with tailored effects and great precision.

## PREPARING SOF FOR FUTURE CHALLENGES AND OPPORTUNITIES

When the new administration takes over the reins of the executive branch in January 2009, its national security team will need to begin work immediately on the next Quadrennial Defense Review (QDR). The purpose of this report is to assist them in determining how SOF should be shaped, sized, organized, and postured to address the challenges and exploit the opportunities likely to be associated with the future strategic and operational environment. While the 2006 QDR represented a major stride forward in terms of preparing SOF for the future, there is much work that remains to be done. In order to address the three core strategic challenges—the continuation and possible intensification of violent Islamic radicalism, the potential rise of the China as a more aggressive political-military competitor, and the global proliferation of nuclear weapons—this paper recommends the following steps be considered by the next administration:

### US Special Operations Command

- > Establish a Joint Irregular Warfare Command to ensure an appropriate balance, in both strategy and resources, between direct and indirect approaches to special operations.
- > Examine the possibility of increasing the rank of selected Theater Special Operations Commanders, and increasing their staffs accordingly.

- > Forge a closer relationship between US Special Operations Command and the Central Intelligence Agency.

### **US Army Special Operations Command**

- > Meet the objective specified in the 2006 QDR of standing up twenty active Special Forces (SF) battalions by 2013.
- > Reorient SF force structure geographically to better reflect requirements associated with the war against violent Islamic extremism and the shift in US national security interest toward Asia.
- > Enhance SF proficiency in relevant foreign languages.
- > Create an additional Ranger regiment.
- > Stand up an additional Special Operations Aviation Regiment by 2015 to close the current rotary-wing capacity gap and keep pace with the ongoing expansion of SOF ground forces.
- > Direct the Navy and the Marine Corps to either stand up special-operations-capable helicopter units of their own or provide pilots to fill the training pipeline for US Army Special Operations Command's 160th Special Operations Aviation Regiment.
- > Create three additional Civil Affairs Brigades and Psychological Operations Groups.

### **Naval Special Warfare Command**

- > Enhance the foreign internal defense capabilities of SEAL and Special Boat Teams.
- > Consider assigning regional responsibility for Southeast Asia to a Naval Special Warfare Group and staffing it sufficiently to serve as a Joint Special Operations Task Force headquarters.
- > Expand Special Boat Team capacity to help provide persistent reconnaissance and interdiction coverage over littoral and riverine areas that are already or could potentially be exploited by terrorists.
- > Procure additional, next-generation SEAL Delivery Vehicles for SEAL infiltration and exfiltration in denied areas.
- > Develop a new version of the Advanced SEAL Delivery System and procure at least three vessels for each of Naval Special Warfare Command's two SEAL Delivery Vehicle Teams.

### Joint Special Operations Command

- > Expand current special mission unit capacity and capabilities for distributed counterterrorism and counterproliferation operations, to include additional human intelligence capability and increased capacity to “render safe” improvised nuclear devices and nuclear weapons intercepted overseas.

### Air Force Special Operations Command

- > Recapitalize and expand the fixed-wing fleet.
- > Aggressively pursue the fielding of a stealthy SOF transport based upon the airframe of the Air Force-developed Next Generation Bomber.
- > Create additional unmanned combat air system (UCAS) squadrons.
- > Expand the number of trained UCAS pilots, sensor operators, and mission coordinators, and invest in enhanced capacity for processing, exploiting, and disseminating the information collected by these platforms.
- > Expand the 6th Special Operations Squadron into an irregular warfare wing.
- > Stand up at least three additional Special Tactics Squadrons to provide steady-state support to each Special Forces Group, Naval Special Warfare Groups One and Two, the Rangers, and MARSOC.

### Marine Corps Forces Special Operations Command

- > Shift the mission of Marine Special Operations Advisor Groups even further toward extended partner capacity building and foreign internal defense deployments in high priority countries — and away from routine, short-duration rotational activities that general purpose forces could readily handle.
- > Stop diverting resources toward the development of an unconventional warfare capability, concentrating instead on the foreign internal defense mission and, to a lesser extent, on direct action and special reconnaissance.

In comparison to the modernization programs of the conventional joint force, nearly all of the investments recommended in this paper are modest. Given that the operations and personnel tempos of all SOF units are extraordinarily high at present and are likely to remain that way for the foreseeable future, one is hard pressed to identify significant divestment opportunities. Several of the initiatives recommended above, however, will require sizable outlays. Given the relatively small size of SOCOM's budget and scant SOF divestment opportunities, it will be necessary to

offset the cost of these investments with cuts in conventional forces, including scaling back or terminating procurement programs that are a poor fit with the challenges posed by the future security environment and reducing force structure that has either been retained in excess of anticipated demand or is likely to wane in operational utility in the years ahead.

This paper does not purport to provide the definitive answer for how SOF should be shaped, sized, organized, and postured for the future, but rather to identify the critical issues that the next administration must debate and expeditiously address. To be sure, many of the detailed recommendations made in this paper will need to be modified based on operational experience and to adapt to unanticipated changes in the future security environment.





ماتوا باسمه الإلهام  
أي مقاومة هذا؟  
لماذا السكوت عليهم؟

## INTRODUCTION

Special Operations Forces (SOF) are elite, highly trained military units that conduct operations that typically exceed the capabilities of conventional forces. They have figured prominently in US military operations since 2001 and have become central to the implementation of US national defense strategy with respect to the war against violent Islamic extremism, which is likely to be increasingly fought indirectly and in countries with which the United States is not at war.

During the unconventional war against the Taliban and al Qaeda in Afghanistan in Operation Enduring Freedom, SOF played a pivotal role by integrating US precision air power with the operations of irregular Afghan opposition forces to achieve rapid regime change and eliminate al Qaeda's primary sanctuary. Since the fall of the Taliban, SOF have played a critical role in training and advising elements of the Afghan National Army, providing personal security for senior Afghan officials, and capturing or killing scores of senior Taliban and al Qaeda leaders and lower-level operatives.<sup>4</sup> They are also now actively engaged along the Afghanistan-Pakistan border and training elements of Pakistan's Special Service Group. In the early phases of the war with Iraq, SOF again played a central role in a special-operations-intensive campaign, providing the primary ground force element on two of three fronts, and performing a number of special reconnaissance, direct action, and unconventional warfare missions in support of the conventional campaign.<sup>5</sup> Over the past five years, they have been instrumental in training and advising Iraqi security forces, as well as in

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<sup>4</sup> United States Special Operations Command, *USSOCOM History: 1987–2007* (Washington, DC, USSOCOM, 2007), pp. 87–112.

<sup>5</sup> Approximately one in ten US troops in Iraq during major combat operations were special operators, a ratio higher than that of even the Vietnam War. More Special Forces Operational Detachment Alpha Teams (SF ODAs) were likewise deployed to Iraq than were deployed at the height of the Vietnam War. *Ibid.*, pp. 113–127.

hunting down high-value al Qaeda targets in Iraq.<sup>6</sup> In the broader war against violent Islamic radicalism, to the extent their constrained capacity allows, SOF are building partner capacity, collecting intelligence, hunting high-value targets, and conducting other counterterrorism operations in multiple countries across several continents. In the Philippines, for example, SOF have led an indirect approach to counterinsurgency with great success.<sup>7</sup> SOF have also sustained their key role in US counternarcotics and counterinsurgency operations in Colombia and the Andean Ridge. The operations tempo currently being sustained by SOF is the highest in its history.<sup>8</sup>

SOF face several challenges, as well as opportunities, in adapting to a future security environment that will likely be dominated by the continuation and possible intensification of violent Islamic radicalism, the potential rise of the People's Republic of China as a more aggressive political-military competitor of the United States, and the global proliferation of weapons of mass destruction (WMD) and nuclear weapons, in particular.<sup>9</sup> To ratchet up ongoing operations against Salafi-Takfiri and Khomeinist terrorist groups, SOF will need to overcome several major challenges, including: the very high concentration (over 80 percent) of available SOF manpower in Iraq and Afghanistan; poor alignment between current cultural/linguistic expertise and anticipated operational demand; capacity and capability shortfalls in several critical areas; and an organizational structure and institutional ethos that tend to favor direct over indirect action. In the event that US efforts to deter Chinese aggression fail and hostilities break out, SOF may be called upon in the future to: conduct unconventional warfare operations in border areas; penetrate into internal areas and littoral zones to gain access to closed communication and computer networks; and conduct a wide array of special reconnaissance and direct-action missions, including in denied, deep-inland areas. To address future counterproliferation requirements, SOF may not only need to develop new means of penetrating into heavily defended airspace and locating sensitive WMD-related materiel, but also to increase its limited capacity to "render safe" improvised nuclear devices or nuclear weapons that are no longer under effective state control. There is, moreover, an inherent tension between improving the ability of SOF to prevail in the "war we're in" against Salafi-Takfiri and Khomeinist terrorist groups and developing new (and costly) capabilities that may be critical to success in less certain future contingencies such as a protracted "Cold War"

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<sup>6</sup> SOF not only organized, trained, equipped, and advised the Iraqi 36th Commando Battalion and the Iraqi Counter Terrorism Force, but also formed Battalion Augmentation Training Teams to help train conventional Iraqi forces and police. *Ibid.*, pp. 122–125.

<sup>7</sup> Robert Martinage, *The Global War on Terrorism: An Assessment* (Washington, DC, CSBA, 2008), pp. 156–160; and USSOCOM, *USSOCOM History: 1987–2007*, pp. 129–132.

<sup>8</sup> Admiral Eric Olson, Commander, SOCOM, Speech at National Security Leaders Forum, Center for a New American Security, March 3, 2008.

<sup>9</sup> In addition to the potential threat posed by China, the US military must also be prepared to confront the prospective rise of authoritarian capitalist states, such as Russia. It is assumed here, however, that the latter challenge is in large part a lesser included case of the former. Andrew Krepinevich, Robert Martinage, and Bob Work, *The Challenges to US National Security* (Washington, DC: CSBA, 2008).

with China. SOF will also continue to be relied upon for myriad additional missions such as hostage-rescue and counter-drug operations unrelated to the ongoing war against Islamic terrorist groups.

In addition to these manifold challenges, emerging strategic and operational environments could provide SOF with a number of significant new opportunities. The coupling of precision air power with SOF capabilities should dramatically increase the effectiveness and attractiveness of small-footprint unconventional warfare as a future option for US policy makers. Emerging technologies will likely allow SOF to conduct persistent surveillance over very large areas, gain access to targets that were heretofore very difficult to penetrate, and enable standoff strikes with tailored effects and great precision.

To address these emerging challenges and opportunities, the 2006 Quadrennial Defense Review (QDR) asserted that SOF should be re-oriented from a force that focuses primarily on short-duration, episodic missions and reactive counterterrorism missions, to one that is shaped, sized, and postured for long-duration, steady-state operations critical to the war against violent Islamic extremism such as intelligence collection, foreign internal defense (FID), and unconventional warfare; reactive *and* proactive counterterrorism and counterproliferation missions; and high-end theater warfare as part of a joint force.<sup>10</sup> It argued that SOF will need to: increase their capacity to perform “long-duration, indirect and clandestine operations in politically sensitive and denied areas;” expand their “organic ability to locate, tag, and track dangerous individuals and other high-value targets globally;” expand their ability to “detect, locate, and render safe WMD;” and develop the capability and capacity required to conduct FID and unconventional warfare operations in “dozens of countries simultaneously.”<sup>11</sup> As a step toward realizing that vision, the 2006 QDR called for a one-third expansion of active Special Forces (SF) battalions, a significant increase in Ranger and SEAL capacity, increased Special Mission Unit (SMU) capacity, a doubling of active-duty Civil Affairs personnel, the standing up of five additional Psychological Operations (PSYOPS) companies, the establishment of Marine Corps Forces Special Operations Command (MARSOC), the creation of a single UCAS squadron, and a doubling of current capacity to train and advise foreign security personnel in the use of modern airpower.<sup>12</sup> SOCOM is already implementing most of these changes and expects to complete them, at least in part, by 2013. Several initiatives, however, will take a decade or more to carry out and will require substantial additional resources.

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<sup>10</sup> 2006 QDR Report, pp. 44–45.

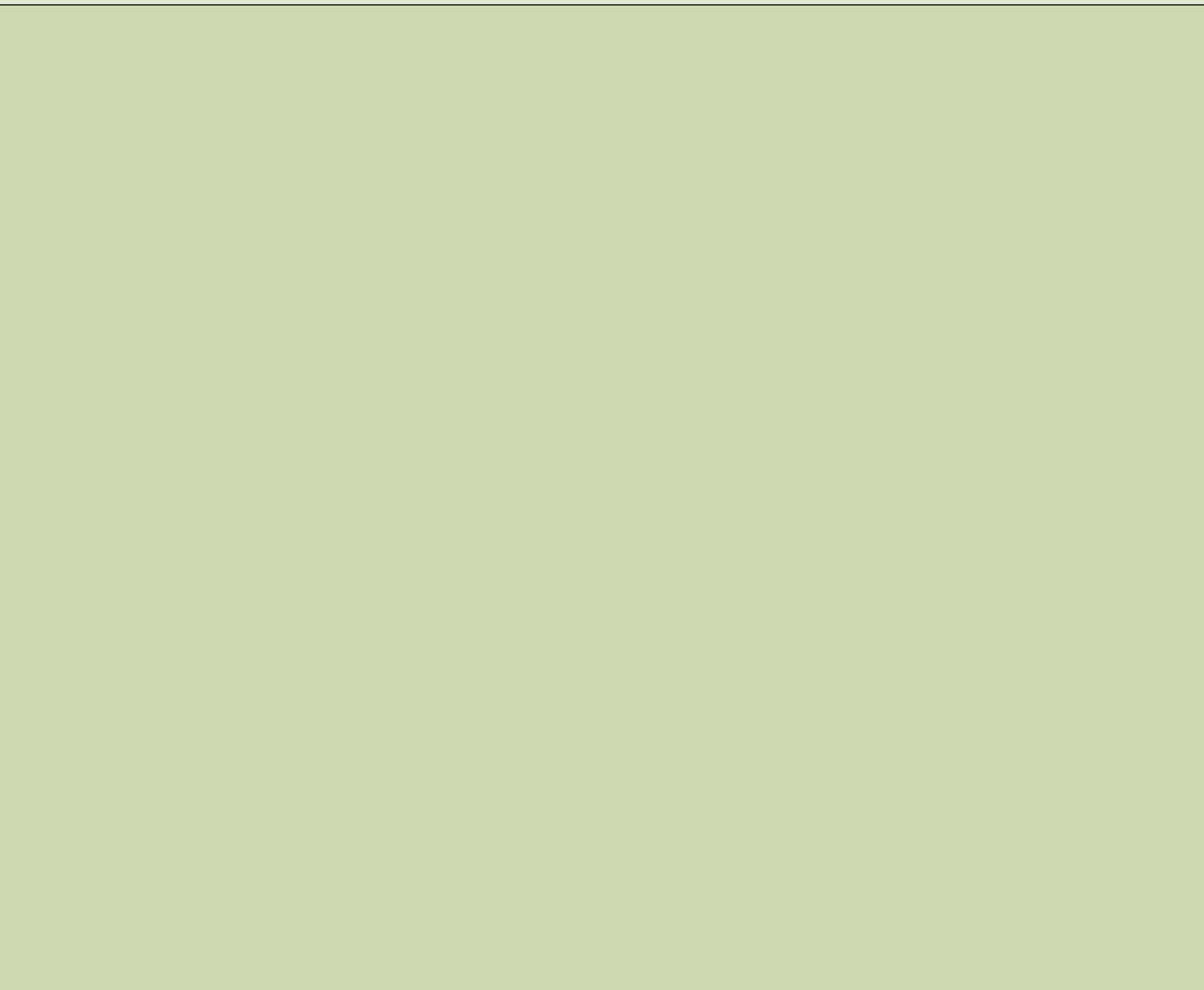
<sup>11</sup> Ibid., p. 44.

<sup>12</sup> Ibid., pp. 5–6 and 44–45; and General Bryan Brown, Commander, USSOCOM, “Current Manning, Equipping, and Readiness Challenges Facing Special Operations Forces,” Statement before Subcommittee on Terrorism, Unconventional Threats and Capabilities of the House Armed Services Committee, January 31, 2007, pp. 3–5.

When the new administration takes over the reins of the executive branch in January 2009, its national security team will immediately need to begin working on the next QDR. The purpose of this report is to assist them in determining how SOF should be shaped, sized, organized, and postured to address the challenges and exploit the opportunities likely to be associated with the future strategic and operational environment. While the 2006 QDR represented a major stride forward in terms of preparing SOF for the future, there is much work that remains to be done. A better balance needs to be struck between direct and indirect approaches to special operations with respect to strategy and resources. In several cases, the 2006 QDR did not go far enough in terms of increasing SOF capacity. A significant increase in both fixed- and rotary-wing aircraft capacity, for example, is required to transport and support already-expanding SOF ground forces. To engage effectively in the “war of ideas” against Salafi-Takfiri and Khomeinist terrorists, additional Civil Affairs and Psychological Operations capacity is needed. There are also major shortfalls with UCAS capacity, as well as in aviation and maritime foreign internal defense capacity. Moreover, there are many areas where existing and projected capacity should be re-focused—both in terms of capabilities and global posture—to better align with anticipated demand. The current regional orientation (and thus language and cultural training) of the seven SF groups (active and reserve), for example, arguably places far too much emphasis on Europe and South America, and not enough on the Muslim World and Asia.

Chapter 1 of this paper explains why SOF are “special” and what sets them apart from general purpose forces. It then provides an overview of the core tasks routinely performed by SOF, describes how US Special Operations Command (SOCOM) is organized, and explains what differentiates SOF units in SOCOM’s five major subordinate commands: US Army Special Operations Command (USASOC), Navy Special Warfare Command (NAVSPECWARCOM), Joint Special Operations Command (JSOC), Air Force Special Operations Command (AFSOC), and MARSOC. While some readers may already be intimately familiar with the composition and capabilities of these commands, this section provides a solid grounding for those who are not. Chapter 2 characterizes the myriad operational requirements for SOF in responding to the challenges and opportunities of the future strategic and operational environment. It is organized around the three strategic challenges mentioned earlier: violent Islamic radicalism, the potential rise of China as a more aggressive military competitor, and the global proliferation of WMD. Chapter 3 explores SOCOM-wide organizational and policy changes for addressing those requirements and delves into the force-planning ramifications for each of SOCOM’s subordinate commands. It concludes with a brief discussion of SOF-relevant investments within the conventional joint force.





## CHAPTER 1 > A PRIMER ON SPECIAL OPERATIONS FORCES

### WHAT MAKES SOF “SPECIAL”?

The short answer to this question is: carefully selected, highly trained personnel that can conduct challenging missions—including in hostile, denied or politically sensitive environments—that often exceed the capabilities of general purpose forces. As a general rule, they score higher on the Armed Services Vocational Aptitude Battery and physical fitness tests than general purpose forces. Most have significant prior military experience. The schools run by SOCOM’s subordinate commands rigorously screen and assess candidates before subjecting them to arduous and lengthy training; washout rates often approach or exceed 70 percent. Afterward, candidates typically proceed to more specialized training (such as weapons, medical and language courses). Operators then spend several years with their units before achieving full proficiency. As a result, SOF units are smaller and comprise more senior personnel than their conventional counterparts. Because of their advanced training, they can also use specialized equipment and employ tactics, techniques and procedures that are unavailable to general purpose forces. SOF units typically carry out missions with much smaller numbers of personnel than conventional units, making it possible to operate clandestinely in semi-permissive or denied areas. Their higher level of training (particularly linguistic and cultural expertise), combined with their relatively higher maturity and experience, also make them the preferred force for training and advising foreign militaries, especially in politically sensitive areas.

While conventional forces can conduct elements of the core SOF tasks described below (particularly in relatively low-threat environments and when a small US “footprint” on the ground is not necessary), there are many skill sets that are unique to SOF. US Army Special Forces, for example, are specially organized, trained, and equipped to conduct unconventional warfare. Similarly, only JSOC’s Special Mission Units (SMUs) have the specialized training and equipment needed to conduct high-risk hostage-rescue missions, as well as to find and “render safe” nuclear weapons.

The rigorous and lengthy selection, assessment, and training required to create SOF, however, has a downside: small force size. A truism within the SOF community is that special operators cannot be mass-produced. Reflecting this, total SOF force structure, including active and reserve forces, accounts for only two percent of the overall joint force. Although SOCOM is slated to grow by more than 13,000 additional personnel by 2013, the general purpose forces are slated to expand by more than seven times that amount.

## WHAT DO SOF DO?

The Department of Defense defines special operations as “operations conducted in hostile, denied, or politically sensitive environments to achieve military, diplomatic, informational, and/or economic objectives employing military capabilities for which there is no broad conventional force requirement.”<sup>13</sup> They differ from conventional operations in the “degree of physical and political risk, operational techniques, mode of employment, independence from friendly support, and dependence on detailed operational intelligence and indigenous assets.”<sup>14</sup> More specifically, SOF are currently organized, trained, and equipped to conduct nine core tasks:

- > CIVIL AFFAIRS (CA): CA missions create a link between the commander and the local population or government by providing key social and governmental services when the local government cannot; by keeping civilians safely away from combat operations; by establishing programs to build trust between the US military forces and the local population; and by supporting information operations.<sup>15</sup>
- > COUNTERPROLIFERATION (CP): CP missions are offensive actions to “locate, seize, destroy, render safe, capture or recover weapons of mass destruction (WMD).”<sup>16</sup> Counterproliferation includes actions taken to prevent the development or proliferation of WMD.
- > COUNTERTERRORISM (CT): CT missions are offensive actions to “prevent, deter, preempt and respond to terrorism.”<sup>17</sup> They include intelligence operations; attacks against terrorist networks and infrastructures; hostage rescue; recovery of sensitive material from terrorist organizations; and non-kinetic activities such as information and psychological operations designed to decrease the influence of terrorist groups and their ideologies.

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<sup>13</sup> *Joint Publication 1-02*, “Department of Defense Dictionary of Military and Associated Terms,” as amended through May 30, 2008, p. 516. Hereafter cited as *Joint Pub 1-02*.

<sup>14</sup> *Ibid.*, p. 517.

<sup>15</sup> *Joint Publication 3-57.1: Joint Doctrine for Civil Affairs*, p. II-2. Available at: [http://www.dtic.mil/doctrine/jel/new\\_pubs/jp3\\_57\\_1.pdf](http://www.dtic.mil/doctrine/jel/new_pubs/jp3_57_1.pdf). Hereafter cited as *Joint Pub 3-57.1*

<sup>16</sup> *Ibid.*, p. II-10.

<sup>17</sup> *Joint Pub 1-02*, p. 131.

- > **DIRECT ACTION (DA):** DA missions are short-duration strikes and other small-scale offensive actions to seize, destroy, capture, exploit, recover, or damage designated targets of strategic or operational significance, employing specialized military capabilities. Direct action differs from conventional raids by the value of the target, the politically sensitive or hostile nature of the environment, and the need for highly discriminatory applications of force.<sup>18</sup>
- > **FOREIGN INTERNAL DEFENSE (FID):** FID missions build the capacity of partner nations to provide for their own internal security. SOF's primary contribution to FID is to organize, train, advise and assist host-nation (HN) military and paramilitary forces. It includes SOF support to any programs taken by another government to free and protect its society from subversion, lawlessness, and insurgency.<sup>19</sup>
- > **INFORMATION OPERATIONS (IO):** The integrated employment of the core capabilities of electronic warfare, computer network operations, psychological operations, military deception, and operations security to influence, disrupt, corrupt or usurp adversarial human and automated decision-making while protecting the joint force's information capabilities.<sup>20</sup>
- > **PSYCHOLOGICAL OPERATIONS (PSYOPS):** Planned operations to convey selected information to foreign governments, organizations, groups, and individuals in order to influence their emotions, motives, objective reasoning, and ultimately their behavior. The purpose of psychological operations is to induce or reinforce foreign attitudes and behavior that are favorable to US interests. Typically, this is achieved through the dissemination of information by dedicated PSYOP units.<sup>21</sup>
- > **SPECIAL RECONNAISSANCE (SR):** Reconnaissance and surveillance actions conducted to collect or verify information of strategic or operational significance, employing military capabilities and tactics, techniques, and procedures not normally found in conventional forces.<sup>22</sup>
- > **UNCONVENTIONAL WARFARE (UW):** UW operations are conducted by, with, or through irregular forces in support of a resistance movement, an insurgency, or conventional military operations. Unconventional warfare encompasses a broad spectrum of military and paramilitary operations, including: guerrilla warfare, subversion, sabotage, intelligence activities, and unconventional assisted recovery. While unconventional warfare is traditionally considered to be aimed at the destabilization or overthrow of a state, it can also be conducted against non-state actors

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<sup>18</sup> *Joint Pub 3-57.1*, p. II-4. See also *Joint Pub 1-02*, p. 161.

<sup>19</sup> *Joint Pub 1-02*, p. 214.

<sup>20</sup> *Ibid.*, p. 261.

<sup>21</sup> *Joint Pub 1-02*, p. 44; and *Joint Pub 3-57.1*, p. II-11.

<sup>22</sup> *Joint Pub 1-02*, p. 512; and *Joint Pub 3-57.1*, p. II-6.

such as transnational terrorist groups. In that application, irregular forces can be controlled by US forces directly in permissive or semi-permissive environments, and indirectly in hostile or politically sensitive areas.<sup>23</sup>

## HOW ARE SOF ORGANIZED?

**SOCOM is responsible for organizing, training, equipping and deploying SOF to geographic combatant commanders.**

Almost seven years to the day after the tragic failure of Operation Eagle Claw/Operation Evening Light at a temporary airstrip in Iran, dubbed Desert One, SOCOM was created by an act of Congress, over the strenuous opposition of the Armed Services and the Joint Staff, to improve the capabilities, readiness, and command and control of SOF. The key impetus for the creation of SOCOM was the Holloway Commission report on the failed Desert One hostage-rescue mission, which among other things highlighted poor command and control, interoperability, and readiness within and among the Services' respective special operations units.<sup>24</sup>

SOCOM, located at MacDill Air Force Base in Tampa, Florida, is responsible for organizing, training, equipping and deploying SOF to geographic combatant commanders. Furthermore, SOCOM is the "lead combatant command for planning, synchronizing, and as directed, executing global operations against terrorist networks in coordination with other combatant commanders."<sup>25</sup> In essence, SOCOM is a hybrid organization: like the Services, it is a force provider to the geographic combatant commands; and like other combatant commands, it is heavily involved in operational planning, force allocation, and, in rare cases, execution of military operations. SOCOM reviews the plans of the geographic combatant commanders associated with the war on terrorism, coordinates, deconflicts and prioritizes them, and makes recommendations to the Joint Staff and the Secretary of Defense on resource allocation and deployments. Reflecting SOCOM's unique hybrid status, it is the only combatant command with the authority to submit its own program objective memorandum to the Secretary of Defense *and* its own acquisition executive and funding line for conducting R&D and procuring materials, equipment, supplies, and services unique to special operations requirements. As will be detailed later, this authority, called Major Force Program 11 (MFP-11), is generally an advantage, but it has some drawbacks.

<sup>23</sup> Field Manual 3-05.130, *Army Special Operations Forces Unconventional Warfare*; and *Joint Pub 1-02*, p. 572.

<sup>24</sup> Within the Pentagon, one of the early proponents for the reform of SOF was Army Chief of Staff General Edward C. "Shy" Meyer, who consolidated Army SOF units under 1st Special Operations Command in 1982. In the wake of the terrorist bombing in Lebanon and command and control problems manifest during the Grenada invasion in 1983, DoD created the Joint Special Operations Agency in 1984, but it had neither operational nor command authority over SOF units. The creation of a four-star, unified command for SOF was championed in the US Congress by Senators Sam Nunn and William Cohen, and Representative Dan Daniel. *United States Special Operations Command, USSOCOM History: 1987-2007*, pp. 5-8.

<sup>25</sup> 2004 Unified Command Plan as signed by President Bush on March 1, 2005. *Ibid.*, p. 16.

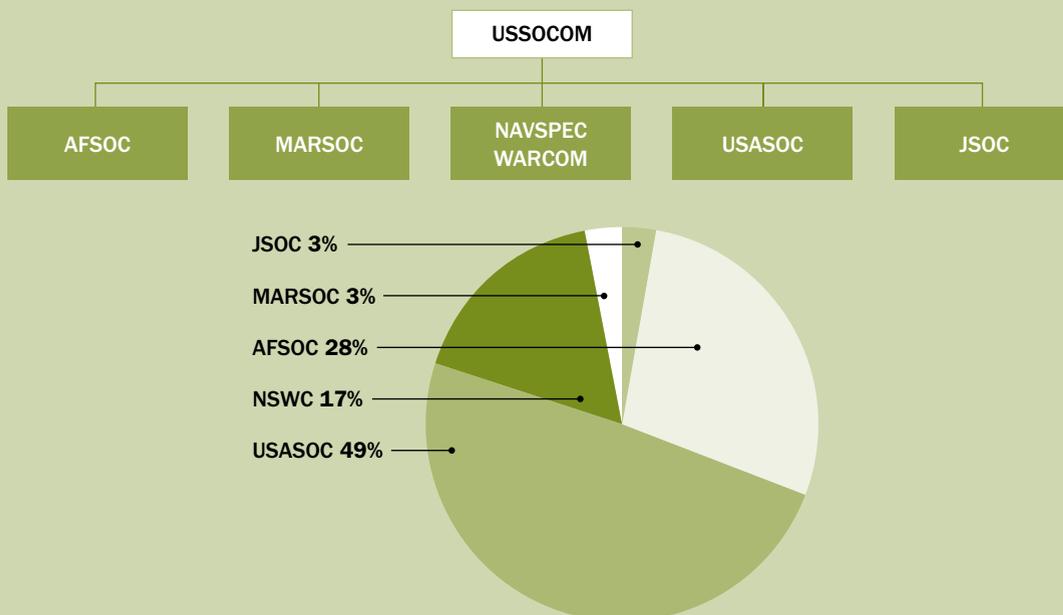
SOCOM comprises five direct subordinate commands: USASOC, NAVSPECWARCOM, JSOC, AFSOC, and MARSOC (see Figure 1 below). These five commands vary widely in size, USASOC being the largest with an active and reserve force of over 22,300 personnel and JSOC being the smallest with roughly 1,250 personnel. As will be detailed below, they also have distinctive capabilities and skill sets, and thus are called upon to carry out different primary missions.

### United States Army Special Operations Command

USASOC, headquartered in Fort Bragg, North Carolina, is responsible for training, organizing and equipping Army SOF. As Figure 1 clearly illustrates, USASOC is by far the largest command under SOCOM. It contains three major subordinate commands: the US Army Special Forces Command at Fort Bragg; the 75th Ranger Regiment at Fort Benning, Georgia, and the 160th Special Operations Aviation Regiment (SOAR) at Fort Campbell, Kentucky. It also comprises the Special Operations Support Command, the 95th Civil Affairs Brigade, and the 4th Psychological Operations Group — all at Fort Bragg.<sup>26</sup>

<sup>26</sup> As will be explained later, while both the 75th Ranger Regiment and 160th SOAR are administratively under USASOC, they are operationally assigned to JSOC.

**FIGURE 1. STRUCTURE OF USSOCOM AND SUBORDINATE COMMANDS AS PROPORTION OF THE TOTAL FORCE**



\* Graphic based on data from GAO, *Defense Acquisitions—An Analysis of Special Operations Command’s Management of Weapon Systems Programs* (Washington, DC: GAO, 2007), p. 6; and *USSOCOM Posture Statement 2007*, p. 12.

The small size of the ODAs combined with their sophisticated training allows SF to work flexibly and autonomously in hostile and politically sensitive environments.

### US Army Special Forces Command

With nearly 12,000 personnel (8,300 active duty and 3,400 reserve), US Army Special Forces Command accounts for over 60 percent of USASOC and is itself about the same size as AFSOC. It is responsible for training, organizing and equipping five active and two National Guard SF groups, each with a regional focus (see Table 1 below).

Until recently, SF groups each contained a headquarters company, a support company and three battalions. As a result of the 2006 QDR, however, the number of battalions in each active SFG is slated to increase to four (for a total of twenty active battalions) by 2013. Each battalion consists of a headquarters detachment, a military free-fall detachment, a diving detachment, and three SF companies. Each SF company contains a headquarters element and six 12-man Operational Detachment Alphas (ODAs) or “A-Teams.”<sup>27</sup> By the end of 2008, there are scheduled to be 306 active-duty ODAs in the force, building to 360 by 2013 (twenty battalions, each with eighteen ODAs). While capable of conducting almost any core SOF task, ODAs specialize in foreign internal defense and unconventional warfare. No other force within SOCOM can match the level of cultural and linguistic training of SF operators. The small size of the ODAs combined with their sophisticated training allows SF to work flexibly and autonomously in hostile and politically sensitive environments. Traditionally, SF have drawn their manpower from experienced soldiers (often Rangers) and trained these

<sup>27</sup> SF ODAs are commanded by captains, with SF warrant officers serving as the detachments’ executive officers. The remainder of the detachment consists of senior non-commissioned officers who specialize in operations and intelligence, light and heavy weapons, engineering and demolitions, communications or medical areas. There are two specialists in each area per ODA. SF companies can deploy as operational “B” detachments, and SF battalions as “C” detachments. SF companies are commanded by majors, battalions by lieutenant colonels, and groups by colonels. Army Command and General Staff College, *SOF Reference Manual*, Chapter 3: US Army Special Operations Forces, available at: [http://www.fas.org/irp/agency/dod/socom/sof-ref-2-1/SOFREF\\_Ch3.htm](http://www.fas.org/irp/agency/dod/socom/sof-ref-2-1/SOFREF_Ch3.htm).

TABLE 1. SF GROUP PEACETIME BASING AND REGIONAL ORIENTATION

Special Forces Group	HQ Location	Regional Orientation
1st	Fort Lewis, WA	East and Southeast Asia (Pacific Command)
3rd	Fort Bragg, NC	Africa ( <i>minus the Horn of Africa</i> ) (Africa Command)
5th	Fort Campbell, KY	Middle East, Central and South Asia, and Horn of Africa (Central Command)
7th	Fort Bragg, NC	Latin/Central America, Caribbean, and South America (Southern Command)
10th	Fort Carson, CO	Europe (European Command)
19th (Reserve)	Draper, UT	Southeast Asia and Southwest Asia (Pacific and Central Command)
20th (Reserve)	Birmingham, AL	Latin/Central America, Caribbean, and South America (Southern Command)

recruits extensively before sending them to groups.<sup>28</sup> In 2002, SF reactivated the 18-X program, which had been dormant since the 1970s, and began recruiting civilians “off the street” to help fill the training pipeline.

### 75th Ranger Regiment

The 75th Ranger Regiment consists of three Ranger Battalions and one Ranger Special Troops Battalion, which provides combat service and support. Each battalion currently contains a headquarters company and three rifle companies (expanding to four rifle companies at the direction of the 2006 QDR). Additional reconnaissance, military intelligence, communications, and other support functions are also being added to existing Ranger companies.<sup>29</sup>

The Rangers are elite airborne light infantry. Similar in size and organization to conventional light infantry battalions, Ranger battalions are more selective in terms of personnel assessment and maintain higher training standards. As a consequence, Rangers can conduct missions that general purpose forces cannot, such as direct action (particularly hostile airfield seizures), counterterrorism and special reconnaissance. Moreover, this capability allows the Rangers to work closely with higher echelons of SOF, such as JSOC. Equally important, the Ranger Regiment serves as a gateway into SOF for junior soldiers. In particular, the Rangers serve as a “farm team” for JSOC, with as many as 70 percent of the “shooters” in Delta Force having matriculated from the Regiment.<sup>30</sup>

### 160th Special Operations Aviation Regiment (SOAR)

The 160th SOAR contains four battalions based in the continental United States and two forward-based companies (one assigned to Pacific Command and the other to Southern Command). The battalions contain varying numbers of companies, but each contains at least two aviation companies and a maintenance company.<sup>31</sup> As reflected in Table 2 below, the 160th SOAR maintains and operates three basic types of helicopters. More

**The Ranger Regiment serves as a gateway into SOF for junior soldiers. In particular, the Rangers serve as a “farm team” for JSOC.**

<sup>28</sup> United States Government Accountability Office, “Special Operations Forces: Several Human Capital Challenges Must Be Addressed to Meet Expanded Role,” p. 15.

<sup>29</sup> General Bryan Brown, Commander, USSOCOM, “Current Manning, Equipping, and Readiness Challenges Facing Special Operations Forces,” Statement before Subcommittee on Terrorism, Unconventional Threats and Capabilities of the House Armed Services Committee, January 31, 2007, p. 3; General Robert Wagner, Commander, USASOC, Statement before the House Armed Services Subcommittee on Terrorism, Unconventional Threats and Capabilities of the House Armed Services Committee, January 31, 2007.

<sup>30</sup> Gen. Wayne A. Downing (Ret.) quoted in “Assessing U.S. Special Operations Command’s Missions and Roles,” House Armed Services Committee, June 29th, 2006, available at: [http://www.fas.org/irp/congress/2006\\_hr/soc.html](http://www.fas.org/irp/congress/2006_hr/soc.html).

<sup>31</sup> The 4th is the newest and smallest battalion, as it is the result of post-2001 growth. The eventual plan is for the 160th SOAR to have four full battalions. See United States Government Accountability Office, “Special Operations Forces: Several Human Capital Challenges Must Be Addressed to Meet Expanded Role,” p. 15.

specifically, the 1st Battalion operates AH/MH-6 “Little Birds” and several variations of the MH-60 Blackhawk utility helicopter. The 2nd and 4th Battalions operate MH-47 Chinook long-distance, heavy-lift helicopters, while the 3rd Battalion operates a mix of MH-47s and MH-60s. The 160th SOAR specializes in conducting nighttime air assaults in hostile and denied locations. Using highly modified helicopters, the 160th can refuel in flight, allowing for long-range penetrations. The AH-6 Little Bird and MH-60L Direct Action Penetrator (DAP) provide fire support (primarily for SMUs and Rangers) and direct-attack capabilities.

### Civil Affairs and PSYOPS

The 95th Civil Affairs Brigade consists of a headquarters company, a command section, a civil-military operations center, a Civil Affairs planning team, and the 96th Civil Affairs Battalion. The 95th Civil Affairs Brigade will expand to four battalions by 2009.<sup>32</sup> Active-duty CA units in USASOC are smaller and less specialized than their counterparts in conventional Army reserve units. They make up for this with their ability to deploy rapidly and insert alongside SOF (including airborne insertions).

<sup>32</sup> Each battalion contains a headquarters company, a command section, a civil-military operations center and a civil affairs planning team along with four CA companies. Each company has an HQ element, a civil-military operations center and five civil affairs teams, each containing four members. Feickert, “U.S. Special Operations Forces (SOF): Background and Issues for Congress,” p. 2.

TABLE 2. PRIMARY 160TH SOAR PLATFORMS \*

Platform	~ Unrefueled Range (nm) / Speed (kts)	Ceiling (ft)	Payload	Armament
MH-47E/G Chinook	600+ / 120-170	20,000	> 28,000-lb cargo > 33-55 troops > 24 litters and 3 attendants	> 2 x door-mounted 12.7-mm machine guns
MH-60 Blackhawk / DAP	450 / 120-178	19,000	> 2,600 lb cargo internally > 9,000-lb cargo externally > 4 crew, 12 troops	> 2 x 12.7-mm machine guns > 4 x air-to-air Stinger missiles > 30-mm chain guns (DAP) > 40-mm grenade launcher (DAP) > 2.75-inch Hydra rockets (DAP) > Hellfire anti-tank missiles
AH / MH-6 Little Bird	300 / 120-150	18,000	> 1,500+ lb > Up to 9 troops (2-3 internal / 6 external)	> 2 x 7.62-mm miniguns > 2 x 7-shot 2.75 Hydra rocket pods > 40-mm grenade launcher > 2 x .50 cal machine guns > Air-to-air Stinger missiles > 4 x Hellfire anti-tank missiles

\* 160th Special Operations Aviation Regiment, “A/MH-6J Little Bird Helicopters, MH-60 Black Hawk Helicopter, MH-47 Chinook Helicopters,” Fact Sheets. Available at <http://www.campbell.army.mil>. See also: database entries provided by MilitaryPeriscope.com. Available at: <http://www.militaryperiscope.com>.

Civil-military operations centers and Civil Affairs planning teams are responsible for planning and organizing civil-military operations in the joint command, while four-person Civil Affairs teams conduct “civil reconnaissance” and carry out missions among the local population, including humanitarian aid projects. With their linguistic and cultural skills, CA team personnel often serve as liaisons between military and civilian populations, reducing friction between them.<sup>33</sup>

The 4th PSYOPS Group contains: a headquarters company; a strategic studies detachment; the 9th PSYOPS Battalion, which comprises three tactically focused PSYOPS companies;<sup>34</sup> the 3rd PSYOPS Battalion, which focuses on product dissemination; and four regionally focused PSYOPS Battalions.<sup>35</sup> The 4th PSYOPS Group exploits its cultural and linguistic abilities to support global SOF operations by using information to influence the behavior of target audiences, including both adversaries and host-nation populations.<sup>36</sup>

Given the centrality of the ideological battle or “media war” in the war against Salafi-Takfiri and Khomeinist terrorist groups, Civil Affairs and PSYOPS capability are — and will likely remain — in very high demand.

### Naval Special Warfare Command

NAVSPECWARCOM (or WARCOM), headquartered at Naval Amphibious Base (NAB) Coronado outside of San Diego, is responsible for training, organizing and equipping Naval Special Warfare forces, including Navy SEALs and Special Warfare Combatant-craft Crewmen (SWCC). As illustrated in Table 3 below, WARCOM is organized into four Naval Special Warfare Groups (NSWGs) and a single Operational Support Group. Two of the NSWGs are composed mainly of SEAL Teams, while two comprise SEAL Delivery Vehicle Teams (SDVTs) and Special Boat Teams. All four Groups contain a combat service support team that is responsible for force embarkation, load-planning, transport coordination, combat cargo handling, in-theater logistics coordination, exercise-related construction, contingency engineering, camp maintenance, and a host of other support functions.<sup>37</sup>

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<sup>33</sup> Headquarters, Department of the Army, “U.S. Army Field Manual No 3-05.40 (FM 41-10): Civil Affairs Operations,” Sep. 29, 2006, chapter 2.

<sup>34</sup> PSYOPS companies are further subdivided into a development detachment and three operations detachments. Each detachment contains three three-man teams. These teams are the “maneuver” units of PSYOPS, distributing information, either via loudspeakers or pamphlets to target populations. See: “4th Psychological Operations Group,” Global Security, available at: <http://www.globalsecurity.org/military/agency/army/4psyopgp.htm>.

<sup>35</sup> The regional POBs are the 1st (SOUTHCOM), 5th (PACOM), 6th (EUCOM) and 8th (CENTCOM).

<sup>36</sup> Headquarters, Department of the Army, “U.S. Army Field Manual No 3-05.30: Psychological Operations,” April, 2005, chapter 3.

<sup>37</sup> In addition, NSWG-1 and NSWG-2 have forward-deployed command and control organizations called Naval Special Warfare Units (NSWUs). SWG-1 has two NSWUs, NSWU-1 in Guam and NSWU-3 in Bahrain; NSWG-2 has NSWU-2, located in Stuttgart, Germany.

While SEALs are capable of traditional SOF insertions, their unique ability to infiltrate and exfiltrate clandestinely either underwater or on the water's surface allows them to conduct missions in areas that may be unreachable by other SOF.

SEAL (SEa Air Land) Teams primarily perform counterterrorism, direct action, and special reconnaissance missions, especially those that originate from, and return to, a swamp, delta, river, or ocean. Although there are currently eight SEAL Teams, the 2006 QDR directed that SEAL capacity be increased by roughly two SEAL-team equivalents by 2013 so that they may take on additional direct action missions, especially those associated with the war against violent Islamic extremism.<sup>38</sup>

Each team is notionally organized into six 16-man platoons and a headquarters element.<sup>39</sup> Operationally, SEAL platoons are frequently sub-divided into either two 8-man squads or four 4-man elements.<sup>40</sup> While SEALs are capable of traditional SOF insertions (such as helicopter or parachute), their unique ability to infiltrate and exfiltrate clandestinely either underwater (under their own power or using a self-propelled SEAL Delivery Vehicle) or on the water's surface (carried by high-speed, low-profile Surface Combatant Craft) allows them to conduct missions in areas that may be unreachable by other SOF.<sup>41</sup> Special Boat Teams, manned by Special Warfare

<sup>38</sup> In addition, two new Naval Special Warfare units, focused on intelligence and UW, are being stood up. Program Decision Memoranda III published on December 20, 2005 increased WARCOM force structure by 536 personnel, including an increase in the Naval SOF UAV program and additional personnel for Special Boat Teams. USSOCOM, *USSOCOM History 1987–2007*, p. 22.

<sup>39</sup> To accommodate QDR-directed growth, selected SEAL Teams will comprise seven platoons.

<sup>40</sup> United States Government Accountability Office, "Special Operations Forces: Several Human Capital Challenges Must Be Addressed to Meet Expanded Role," July, 2006, p. 15.

<sup>41</sup> SEAL Delivery Vehicles (SDVs), which are also referred to as Swimmer Delivery Vehicles, are submersible, electric-drive underwater vehicles designed to carry SEALs and their equipment in fully-flooded compartments. Combat swimmers are exposed to the water in transit. They can breathe using the SEAL Delivery Vehicle's onboard supply of compressed air or their own SCUBA gear. SDVs are generally launched from a Dry Deck Shelter attached atop a submarine or from amphibious assault/transport dock ships.

TABLE 3. MAJOR NAVSPECWARCOM SUBORDINATE UNITS \*

Unit	HQ Location	Major Units
NSWG-1	NAB Coronado, CA	SEAL Teams One, Three, Five and Seven
NSWG-2	NAB Little Creek, VA	SEAL Teams Two, Four, Eight and Ten
NSWG-3	NAB Coronado, CA	SDVT-1 (Pearl Harbor, HI) and SDVT-2 (NAB Little Creek)
NSWG-4	NAB Little Creek, VA	Special Boat Team-12 (NAB Coronado), Special Boat Team-20 (NAB Little Creek), and Special Boat Team-22 (St. Louis, MS)
Operational Support Group	NAB Coronado, CA	Operational Support Team One Operational Support Team Two

\* Naval Special Warfare Command "Headquarters and Components," available at: <https://www.navsoc.navy.mil/components.htm#comnavspecwarcom>; and Army Command and General Staff College, *SOF Reference Manual*, Chapter 4: US Naval Special Operations Forces, available at: [http://www.fas.org/irp/agency/dod/socom/sof-ref-2-1/SOFREF\\_Ch4.htm](http://www.fas.org/irp/agency/dod/socom/sof-ref-2-1/SOFREF_Ch4.htm).

Combatant-craft Crewmen, not only provide SEALs with transportation and fire support, but can also patrol rivers and coastal areas. Despite this robust maritime capability, the ongoing campaigns in Iraq and Afghanistan have forced the SEALs to conduct sustained ground operations.

SEAL Teams are, in theory, regionally specialized with NSWG-1 focused on the areas of responsibility assigned to Pacific Command and Central Command, and NSWG-2 focused on those assigned to European Command and Southern Command. In practice, however, SEALs do not have the same regionally-specific language proficiency and cultural training as SF.

### Joint Special Operations Command

JSOC, located at Pope Air Force Base near Fort Bragg, North Carolina, is, in theory at least, responsible for ensuring that joint special operations work seamlessly. In reality, JSOC's SMUs are the nation's primary counterterrorism and counterproliferation force. JSOC's exact structure is classified, but most sources agree that it contains the following subordinate units:<sup>42</sup>

- > 1st Special Forces Operational Detachment Delta (also known as Delta Force, or the Combat Applications Group) at Fort Bragg, North Carolina.
- > Naval Special Warfare Development Group (also known as DEVGRU or SEAL Team 6) at the Training Support Center, Hampton Roads, Dam Neck, Virginia.
- > An Intelligence Support Activity (ISA) that focuses on clandestine operations, including human intelligence and signal intelligence collection.
- > 24th Special Tactics Squadron at Pope Air Force Base.
- > Joint Communications Unit (JCU).

In addition, elements of both the 75th Rangers and the 160th SOAR are frequently under the operational control of JSOC.<sup>43</sup> JSOC units also work closely with the Central Intelligence Agency and the Hostage Rescue Team of the Federal Bureau of Investigation.

While the exact size and organization of these units are classified information, publicly available sources suggest that Delta contains approximately one thousand personnel, with over three hundred of those being actual "shooters." This latter number

**JSOC is, in theory at least, responsible for ensuring that joint special operations work seamlessly.**

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<sup>42</sup> See, for example, Feickert, "U.S. Special Operations Forces (SOF): Background and Issues for Congress," pp. 4–5; and Sean Naylor, "More than Door Kickers," *Armed Forces Journal*, March 2006.

<sup>43</sup> This is a matter of some confusion. USASOC still lists both the 75th and 160th as its subordinates, while numerous sources suggest that, at the very least, these two units are under the operational, if not administrative control of JSOC. See Feickert, "U.S. Special Operations Forces (SOF): Background and Issues for Congress," p. 4; and Sean Naylor, "More Than Door Kickers," *Armed Forces Journal*, March 2006.

**JSOC's SMUs are the nation's premier hostage-rescue forces and include the only US military personnel qualified to "render safe" a nuclear device.**

is further divided into at least three operational squadrons of approximately seventy-five to eighty operators, each organized into three "troops." DEVGRU is smaller than Delta and does not have the same number of support personnel.<sup>44</sup> All three SMUs are extremely well-resourced, possess state-of-the-art capabilities, and comprise personnel who have undergone extensive selection and training.<sup>45</sup>

JSOC primarily carries out counterterrorism, counterproliferation, special reconnaissance, and direct action missions of extreme political, operational or strategic importance. JSOC units have led the global manhunt for terrorists in support of the war against violent Islamic extremism. In addition, JSOC's SMUs are the nation's premier hostage-rescue forces and include the only US military personnel qualified to "render safe" a nuclear device. Many JSOC operators have cultural and language proficiencies in order to operate more effectively abroad. Furthermore, these units maintain relaxed uniform and grooming standards so as to blend into local populations. While DEVGRU specializes in conducting maritime missions, the demands of Iraq and Afghanistan have pressed them into more ground operations. As their names suggest, the ISA and JCU provide intelligence and communications support, respectively, to JSOC units. Personnel from AFSOC's 24th Special Tactics Squadron are routinely embedded within JSOC teams to provide on-location ground control of supporting fixed and rotary-wing aircraft, including arranging precision fire support.

### **Air Force Special Operations Command (AFSOC)**

Located at Hurlburt Field, near Pensacola, FL, AFSOC is responsible for operating and maintaining tilt-rotor and fixed-wing aircraft, as well as training, organizing and equipping Air Force SOF personnel. As indicated below in Table 4, it comprises six major active operational commands.<sup>46</sup>

In addition to the highly trained crews and support personnel required to operate and maintain this small but diverse fleet of specialized tilt-rotor, fixed wing, and unmanned aircraft (most of which have been modified from their conventional versions with varying combinations of advanced avionics, in-flight refueling capability, extended-range fuel tanks, myriad defensive countermeasures, and additional weaponry), these units also comprise special tactics forces (i.e., combat controllers, special operations weathermen, and pararescuemen) and combat aviation advisors.

<sup>44</sup> Sean Naylor, *Not a Good Day to Die: The Untold Story of Operation Anaconda*, Penguin: New York, NY, 2005, pg. 31–36.

<sup>45</sup> Andrew Feickert, "U.S. Special Operations Forces (SOF): Background and Issues for Congress," CRS Report RS21048, June 28, 2007, p. 5; and Sean Naylor, "JSOC to Become Three-Star Command," *Army Times*, February 13, 2006.

<sup>46</sup> Major subordinate commands in the Air National Guard include the 193rd Air National Guard SOW at Harrisburg, PA; the still-forming 123rd and 125th Special Tactics Squadrons; the 209th Civil Engineer Squadron (CES) at Gulfport-Biloxi MS; and the 280th Combat Communications Squadron.

AFSOC's fixed-wing fleet is currently composed mainly of variants of the aging C-130 airframe (see Table 5 below). In low-to-medium threat environments, AC-130H/U Spectre/Spooky gunships provide air support and interdiction for ground forces with their advanced targeting sensors and side-mounted weapons.<sup>47</sup> MC-130E/H Combat Talons and MC-130W Combat Spear transports provide SOF with infiltration, extraction, and resupply (and some aerial refueling), while MC-130P Combat Shadows are specially designed for aerial refueling of SOF rotary-wing assets.<sup>48</sup> AFSOC's 319th Special Operations Squadron operates a small fleet of modified Pilatus PC-12 single-engine turboprop aircraft, renamed U-28As, for transport and resupply to small, unprepared airfields, as well as other missions such as ISR and communications support. The tilt-rotor fleet consists of a handful of CV-22 Osprey tilt-rotor aircraft,

<sup>47</sup> The AC-130H is armed with 40-mm gun and 105-mm howitzer, while the AC-130U is being upgraded to a twin 30-mm single-barrel chain gun and 105-mm cannon configuration.

<sup>48</sup> The MC-130E Combat Talon I and MC-130 Combat Spear can also be used to provide limited aerial refueling.

TABLE 4. MAJOR AFSOC SUBORDINATE UNITS

Unit	Location	Primary Aircraft/Capability
23rd Air Force	Hurlburt Field, FL	> Global special operations command and control > Intelligence coordination
1 Special Operations Wing	Hurlburt Field, FL	> Predator UCAS (Creech Air Force Base, moving eventually to Cannon Air Force Base) > AC-130H/U Spectre/Spooky Gunships > CV-22 Tilt-Rotor Transport > MC-130P Combat Shadow Refueler > U-28A > 6th Special Operations Squadron (Aviation FID)
27th Special Operations Wing	Cannon Air Force Base, NM	> MC-130W Combat Spear (SOF variant of C-130H) Transport/Refueler
352nd Special Operations Group*	Royal Air Force Station Mildenhall, UK	> MC-130H Combat Talon II > MC-130P Combat Shadow Refueler > 321st Special Tactics Squadron
353rd Special Operations Group	Kadena Air Base, Okinawa Japan	> MC-130H Combat Talon II > MC-130P Combat Shadow Refueler > 320th Special Tactics Squadron
720th Special Tactics Group	Hurlburt Field, FL	> 23rd Special Tactics Squadron > 21st and 24th Special Tactics Squadrons (Pope Air Force Base, NC) > 22nd Special Tactics Squadron (McChord Air Force Base, WA) > 10th Combat Weather Squadron

\* The 352nd Special Operations Group (SOG) and 353rd SOG are currently under the operational control of Special Operations Command Europe (SOCEUR) and Special Operations Command Pacific (SOCPAC), respectively. Under the new Global SOF Posture (GSP), however, control over these units will return to AFSOC and they will be home stationed in CONUS. United States Air Force Special Operations Command, "Units," available at: <http://www.afsoc.af.mil/units/>.

which are just beginning to be fielded as replacements for now-retired MH-53 Pave Low helicopters. The 3rd Special Operations Squadron, currently stationed at Nellis Air Force Base, operates a fleet of 28 MQ-1 Predator UCAS and will likely soon begin to operate MQ-9 Reapers as well.<sup>49</sup> To process, exploit, and disseminate the data gathered by these UCASs, as well as other collection platforms, AFSOC stood up the 11th Intelligence Squadron in the fall of 2006.

As mentioned above, in addition to the crews needed to operate these aircraft, AFSOC also provides other critical special operations personnel: combat controllers who are specially trained to conduct air traffic control and coordinate precision fire support (both close-air support and battlefield air interdiction) while embedded with SOF ground units; special operations weathermen who provide accurate, local weather forecasts while forward-deployed in hostile environments; pararescuemen or “PJs”

<sup>49</sup> Roy Braybrook, “Special Air Delivery: Complete Guide,” *Armada International*, June 2007, p. 11.

TABLE 5. PRIMARY AFSOC PLATFORMS \*

Platform	~Unrefueled Range (nm) / Cruising Speed (kts)	Primary Payload	Note
MC-130E/H Combat Talon I/II Transports	2,700 / 260	> 53 troops / 26 paratroopers (MC-130E) > 77 troops / 52 paratroopers (MC-130H)	> 10 MC-130Es are being replaced on one-for-one basis with SOF refueler variant of Air Force HC-130 replacement > 17 MC-130Hs will remain in inventory
MC-130W Combat Spear Transport	1,050 / 260	> 33,000 lbs (fuel, cargo, or troops)	> Converted C-130H Hercules transports > 12 aircraft planned, possibly growing to 17 > Helicopter refueling, but no terrain following radar
AC-130H / U Spectre/ Spooky Gunships	1,300 / 260	> Crew 12-14	> 8 AC-130Hs and 17 AC-130Us in fleet > Both aircraft to be retired as Next Generation Gunship (NGG) comes on line
MC-130P Combat Shadow Refueler	4,000+ / 250	> Aviation fuel > Crew 7	> 27 aircraft to be replaced on one-for-one basis with SOF refueler variant of Air Force HC-130 replacement (19 currently operational)
EC-130J Commando Solo EW Aircraft	2,300 / 290	> Radio and TV broadcast > EW suite > Crew of 10	> Seven aircraft in inventory
CV-22 Osprey Tilt-Rotor Aircraft	850+ / 240	> 24-32 troops or 10,000 lbs cargo	> Plan is to acquire 50 aircraft by 2017 > Four aircraft currently available
Predator MQ-1 UAVs (MALET)	400 (with 24 hrs loiter) / 70-90	> 450 lb	> 28 aircraft in inventory

\* See USAF Fact Sheets on systems listed below at <http://www.af.mil/factsheets>. See also: Major General Richard Comer, “Strategic Directions for Special Operations’ Fixed-Wing Capabilities,” in Clark Murdock et al, *Special Operations Forces Aviation at the Crossroads* (Washington, DC: CSIS, 2007), pp. 15–37; Amy Butler, “Growing Pains,” *Aviation Week & Space Technology*, July 23, 2007, pp. 52–54; and Roy Braybrook, “Special Air Delivery,” *Armada International*, June 2007, pp. 1–14.

who are specially trained and equipped to conduct conventional or unconventional rescue operations; and combat aviation advisors who train and advise foreign security personnel on the use of air power.

Special Tactics Squadrons contain a mixture of Combat Controller Teams, Special Operations Weather Teams, and PJs.<sup>50</sup> Training for Special Tactics Squadron personnel is very time-consuming, physically arduous, and mentally demanding, resulting in a relatively high washout rate. Following initial training by the US Air Force, selectees for these units conduct four to twelve months of entry-level training, followed by twenty-four months of initial qualification training and field training. The washout rate for combat controllers is typically about 60–70 percent per class.<sup>51</sup>

The 6th Special Operations Squadron is receiving increased attention due to the Pentagon's new focus on building partner capacity. It is currently the only US military unit organized, trained, and equipped to train and advise foreign militaries on the operation and employment of air assets. The squadron's aviation advisors, organized into regionally-oriented Combat Aviation Advisory flights, are focused on supporting host-nation counterinsurgency, counterterrorism, and counternarcotics efforts through the development of indigenous tactical airpower capabilities. They train both operators and support personnel.<sup>52</sup> To gain and maintain proficiency in aircraft that are commonly used by foreign militaries, the 6th Special Operations Squadron operates a small, motley fleet comprising UH-1N Iroquois helicopters, a single Soviet-era Mi-8 Hip multi-mission helicopter, a handful of C-130E transports, a single An-26 light turboprop transport, and even a 1940s vintage C-47T Skytrain transport. In 2006, it sent training teams to fifteen countries.<sup>53</sup> At the direction of the 2006 QDR, the 6th Special Operations Squadron is in the process of doubling its capacity to conduct training missions, slowly growing to an authorized strength of 225 personnel as new members work their way through a long training pipeline.<sup>54</sup> As will be discussed in Chapter 3, however, anticipated demand for combat aviation advisors far exceeds the projected capacity of the 6th Special Operations Squadron.

The washout rate for combat controllers is typically about 60–70 percent per class.

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<sup>50</sup> PJs deploy in any available manner, to include air-land-sea tactics, into restricted environments to authenticate, extract, treat, stabilize and evacuate injured personnel, while acting in an enemy-evading, recovery role. PJs are a shared asset between conventional and special operations forces. While responsibility for training, equipping, and operating PJs has alternated between the US Air Force and AFSOC, PJs are routinely assigned to the 720<sup>th</sup> Special Tactics Group. See US Air Force, "Pararescue," *Fact Sheet*, October 2007.

<sup>51</sup> This process used to take roughly twice as long, but was recently streamlined under AFSOC's Advanced Skills Training (AST) program. Michael Wooley, Commander AFSOC, Statement before the House Armed Services Subcommittee on Terrorism, Unconventional Threats, and Capabilities, January 31, 2007, p. 3.

<sup>52</sup> USSOCOM, "USSOCOM Posture Statement 2007," p. 11. Available at [http://www.socom.mil/Docs/USSOCOM\\_Posture\\_Statement\\_2007.pdf](http://www.socom.mil/Docs/USSOCOM_Posture_Statement_2007.pdf).

<sup>53</sup> Adam Hebert, "Tough Test for Secret Warriors," *Air Force Magazine*, March 2007, p. 35.

<sup>54</sup> Wooley, Statement before the House Armed Services Subcommittee on Terrorism, Unconventional Threats, and Capabilities, January 31, 2007, p. 2.

## Marine Corps Forces Special Operations Command

MARSOC, headquartered at Camp Lejeune, North Carolina, is responsible for training, organizing and equipping special operations marines. MARSOC is divided into four main operational units: the Marine Special Operations Advisor Group at Camp Lejeune; the 1st Marine Special Operations Battalion, at Camp Pendleton, California; the 2nd Marine Special Operations Battalion at Camp Lejeune; and the Marine Special Operations Support Group, also at Camp Lejeune.<sup>55</sup> MARSOC plans to have its full complement of 2,600 marines by 2009.<sup>56</sup>

Built upon what were formerly known as Foreign Military Training Units, the Marine Special Operations Advisor Group deploys in small teams to perform foreign internal defense missions with partner nations that face domestic security challenges. Under current plans, Marine Special Operations Advisor Group teams will also eventually take on some lower-level unconventional warfare missions from SF ODAs. Marine Special Operations Advisor Group personnel have some cultural and linguistic training, but are not on par with their SF counterparts. Marine Special Operations Advisor Group teams originally contained eleven marines (nine enlisted and two officers), mimicking the twelve-man SF ODA structure. Given the increased demand for foreign internal defense capacity, MARSOC recently chose to increase the size of its teams from eleven to fourteen and the number of teams from twenty-four to thirty-six.<sup>57</sup>

The extra personnel in the Marine Special Operations Advisor Group have come at the expense of the Marine Special Operations Battalions, which have lost one company (from nine to eight). Moreover, the remaining companies will be slightly smaller and organized around fourteen-man teams to maintain interoperability with the Marine Special Operations Advisor Group and other SOF units.<sup>58</sup> Marine Special Operations Battalions deploy operationally as companies with a Marine Expeditionary Unit and primarily perform direct action and special reconnaissance missions.

The Marine Special Operations Support Group provides crucial organic support for Marine SOF. It contains three companies: support, intelligence and logistics. The support company provides planning, command and control, and fires coordination. The intelligence company provides signals, human and counter intelligence capabilities, as well as the capability to fuse intelligence. The logistics company provides supplies, maintenance, engineering (including explosive ordinance disposal), transportation and medical support.<sup>59</sup> Filling many of these billets — especially intelligence, communications, and logistics — has proven challenging for the Marine Corps.

The Marine Special Operations Advisor Group deploys in small teams to perform foreign internal defense missions with partner nations that face domestic security challenges.

<sup>55</sup> United States Marine Corps Forces Special Operations Command, available at: <http://www.marsoc.usmc.mil/>.

<sup>56</sup> Feickert, "U.S. Special Operations Forces (SOF): Background and Issues for Congress," p. 4.

<sup>57</sup> Matt Hilburn, "A Work in Progress," *Sea Power*, Feb. 2008, p. 21.

<sup>58</sup> *Ibid.*

<sup>59</sup> "US Marine Corps Forces Special Operations Command: Command Brief," *U.S. Marine Corps Forces Special Operations Command*, June 2006, p.34.

Although originally envisioned to have roughly 80 percent of its personnel concentrated on direct action and special reconnaissance, MARSOC now plans to focus roughly 60 percent of its effort on foreign internal defense and unconventional warfare.<sup>60</sup> Reflecting this emphasis on foreign internal defense, small teams have already deployed to Chad, Kenya, Mali, Senegal, Mauritania, Yemen, Saudi Arabia, Kazakhstan, Kurdistan, the Philippines, Colombia, and the Dominican Republic. The unconventional warfare mission is a more challenging growth area for MARSOC because of the language and cultural proficiency needed, as well as the unique training and experience required to work effectively with irregular forces in unfamiliar, complex, foreign environments. As the commander of MARSOC, Major General Dennis Hejlik put it:

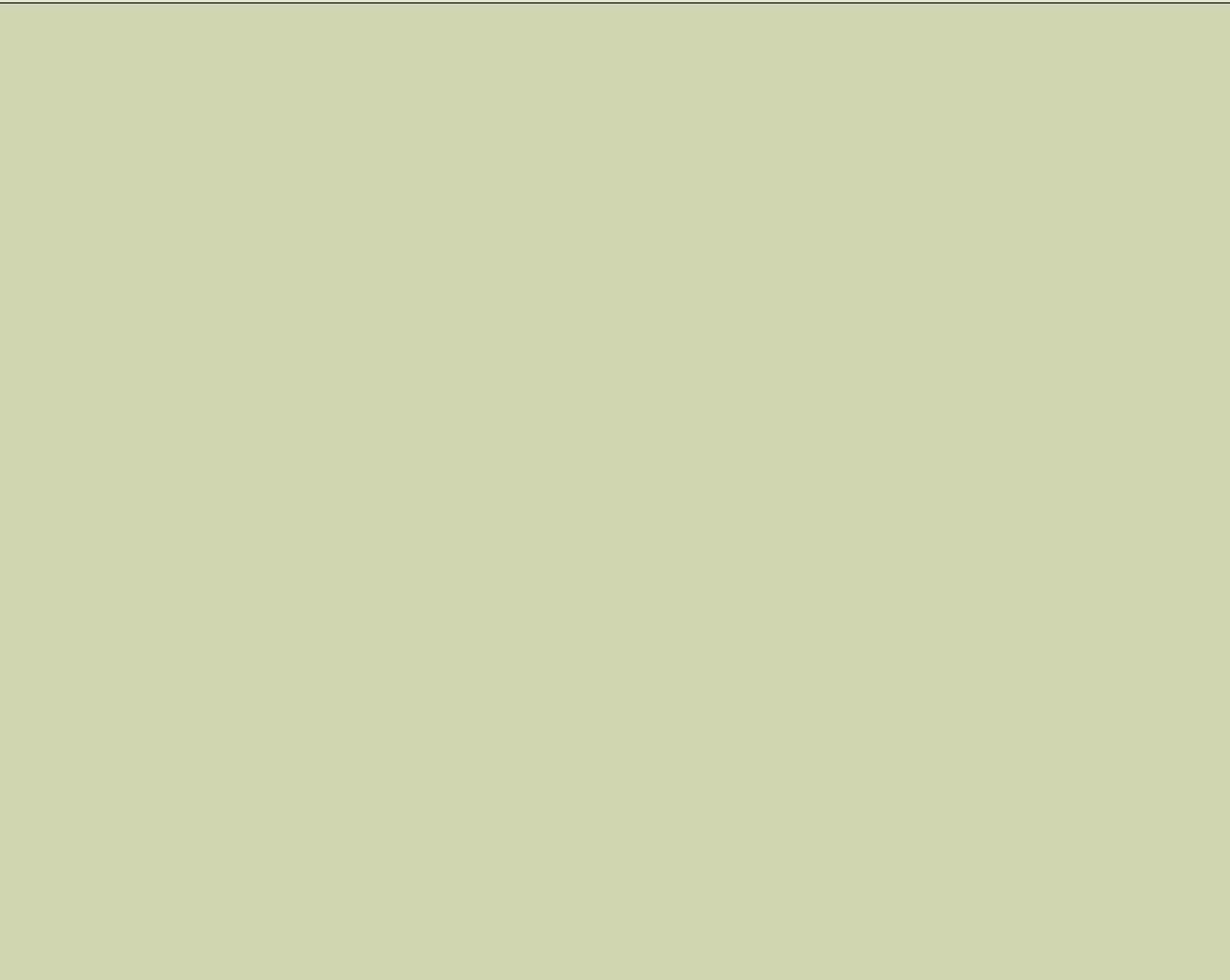
What we need to continue to work very hard on is the unconventional warfare piece... There's certain training that you've got to have and it's experience based, language-based, culture based... That will take us a little bit longer. I would see us being proficient in UW in the next five to ten years, somewhere in that timeframe.<sup>61</sup>

His estimate, however, is very ambitious. It will likely take at least ten years for MARSOC to develop a professional competency in unconventional warfare.

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<sup>60</sup> Emelie Rutherford, "Marine Special Ops to Delve More Into Unconventional Warfare, Info Ops," *Inside the Navy*, December 3, 2007.

<sup>61</sup> Zachary M. Peterson, "Capability Increases As Marine Special Operations Forces Grow," *Inside the Navy*, April 7, 2008, p. 1.



## CHAPTER 2 > OPERATIONAL IMPLICATIONS OF THE FUTURE SECURITY ENVIRONMENT

As mentioned in Chapter 1, the three core challenges that are likely to characterize the future security environment are the continuation and possible intensification of violent Islamic radicalism; the potential rise of China as a more aggressive political-military competitor (or the possible emergence of aggressive, authoritarian capitalist states); and the global proliferation of WMD, especially nuclear weapons. Each of these challenges has significant operational implications for SOF.

### DEFEATING VIOLENT ISLAMIC RADICALISM

There are two branches of violent Islamic radicalism today: heterodox Salafi-Takfiri groups within the Sunni Muslim community and “Khomeinist” Shiite groups. Both strive to impose their brand of *sharia* justice on the entire world.<sup>62</sup> Al Qaeda is an example of the former, while Iranian-backed Hezbollah is an archetype of the latter. Terrorist cells are active in more than sixty countries around the world. Moreover, there are radical Islamist insurgencies of varying stages underway in nearly a score of countries around the globe—most notably in Pakistan, Afghanistan, countries in the Maghreb and Horn of Africa, and Lebanon. The operating environment spans from Europe to the most underdeveloped parts of the world, and ranges from densely populated urban areas and mega-cities to remote mountains, deserts and jungles. For the United States, it encompasses permissive, semi-permissive, and non-permissive environments, as well as hostile or denied areas. The ability of US allies and partners to address the threat ranges from sophisticated to almost non-existent, but even in the most capable partner areas (i.e., Europe), Islamist terrorist cells have repeatedly demonstrated their ability to operate.

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<sup>62</sup> For an expanded discussion, see Robert Martinage, *The Global War on Terrorism: An Assessment* (Washington, DC: CSBA, 2007), pp. 11–130.

The United States will need to rally as many allies as possible to the cause, including non-violent Salafis who are best positioned to lure conservative Muslims away from terrorist groups.

To prevail in this war, the United States, along with its allies and partners, will need to conduct a sustained, multifaceted, global “smother campaign” to deny terrorists sanctuary whether in under-governed areas or state-controlled territory, sever the transnational links upon which they rely, impede recruitment and fundraising, track them down wherever they may be hiding and plotting, and disrupt their operations. *The United States cannot successfully wage this campaign alone.* It will be essential to build the security capabilities and capacities of as many partners—both nations and disaffected non-state actors—as possible. Conversely, it will be necessary to put additional pressure on state sponsors of terrorism. The US government will also need to shore up weak or failing states to prevent them from becoming terrorist sanctuaries. In particular, the United States will need to ensure that the “key terrain” of Saudi Arabia and Pakistan does not fall into the hands of violent Islamic radicals.<sup>63</sup> Finally, for long-term success, it is imperative for the US government to engage more aggressively in the “war of ideas” to isolate the Salafi-Takfiri and Khomeinist extremists from the mainline Muslim community, divide these violent movements internally, and undermine their ideological appeal. To do so, the United States will need to rally as many allies as possible to the cause, including non-violent Salafis who are best positioned to lure conservative Muslims away from terrorist groups. Most critically, the US government must avoid making statements or taking actions that legitimize the call to defensive jihad. It should also take steps to ameliorate the social, economic, and political plight of the Muslim world and other so-called “root causes” of radical Islamic terrorism.<sup>64</sup> In short, defeating violent Islamic extremism will require a multifaceted approach—one in which the military instrument will often be far less important than effective foreign assistance, public and private diplomacy, strategic communications, and covert action. That being said, SOF will need to be shaped, sized, and postured to:

- > Conduct proactive, sustained “manhunting” and disruption operations globally;
- > Build partner capacity in relevant ground, air, and maritime capabilities in scores of countries on a steady-state basis;

<sup>63</sup> Saudi Arabia is “key terrain” because it contains the two holiest sites in the Muslim world, Mecca and Medina, and possesses 25 percent of the world’s proven oil reserves (about 262 billion barrels of oil). The propaganda value and fundraising-recruitment potential of controlling Mecca and Medina for the Salafi-Takfiri movement would be incalculable. Control over Saudi oil, moreover, would give violent Islamic radicals a practically inexhaustible source of revenue for ramping up “jihad” operations globally and could be leveraged to conduct strategic economic warfare against the West. Pakistan represents “key terrain” for two reasons: first, as a Sunni-dominated Islamic republic with a population of roughly 165 million, it would provide an ideal state-sponsored sanctuary for the Salafi-Takfiri movement; and second, it is currently the only majority-Muslim state armed with nuclear weapons. In the event of serious internal instability, the United States would have strong incentives to, at a minimum, secure Saudi oil infrastructure and Pakistani nuclear weapons. Department of Energy, EIA-Country Analysis Brief—Saudi Arabia, August 2005; and Robert S. Norris, Hans M. Kristensen, and Joshua Handler, “Pakistan’s Nuclear Forces, 2001,” NRDC Nuclear Notebook, *Bulletin of the Atomic Scientists*, January-February 2002, pp. 70–71.

<sup>64</sup> For an expanded discussion of this strategy, see: Martinage, *The Global War on Terrorism*, pp. 237–276.

- > Help generate persistent air and maritime surveillance and strike coverage over “under-governed” areas and relevant littoral zones; and
- > Employ unconventional warfare against state sponsors of terrorism and transnational terrorist groups globally.

These four operational tasks are critical to the formation of what is sometimes referred to as a global combating terrorism network (GCTN). SOCOM, for example, describes the GCTN as a “loosely organized affiliation of people and organizations and capabilities that are generally connected by a common desire to contribute to a global environment that is inhospitable to terrorist activity.”<sup>65</sup> The idea is that, with time, this network will become so expansive and dense that transnational terrorist groups will no longer be able to operate effectively. The underlying goal is to increase dramatically the anticipated costs of conducting terrorist acts, convincing would-be terrorists that the probability of successfully orchestrating a major plot is very low, while punishment would be painful, swift and certain. In theory, by influencing the cost-benefit calculus associated with terrorism, the GCTN will deter terrorists from acting—and in the event deterrence fails, it will effectively disrupt terrorist plots before they are hatched. For the United States, the key to this strategy is to work indirectly through partner states and non-state actors, shifting as much of the cost of maintaining the GCTN as quickly as possible. The desired end-state is a world in which US partners can effectively suppress terrorist activity in their territory and regional neighborhoods with little or no American assistance. Until those partner capabilities can be developed, however, the United States will need to assume a disproportionate burden in creating and sustaining the GCTN. While SOF can make an important contribution to this GCTN, its backbone will likely be human and physical infrastructure developed by the CIA’s National Clandestine Service.

The key to this strategy is to work indirectly through partner states and non-state actors.

### Conducting Manhunting and Disruption Operations Globally

In close cooperation with the other government agencies (primarily the CIA), SOF will help locate, track, and capture or kill terrorists and their leaders in hostile, state-controlled territory (e.g., Iran and Syria), under-governed areas (e.g., the tribal areas of Pakistan), and densely populated cities from Beirut to Mindanao. They will also be relied upon to interdict the movement of critical supplies and destroy terrorist infrastructure (e.g., training camps, communications, and weapon/supply caches).

These operational tasks have two major implications for SOF posture. First and foremost, SOF will need to build and maintain a persistent, low-visibility ground presence in several known or suspected terrorist operating areas around the world, as well as in expansive, under-governed areas that are vulnerable to terrorist exploitation

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<sup>65</sup> Admiral Eric Olson, Commander, SOCOM, Speech at National Security Leaders Forum, Center for a New American Security, March 3, 2008.

An on-the-ground presence is essential not only for collecting tactical intelligence and developing local situational awareness, but also for supporting partner security forces and responding rapidly when high-value terrorist targets are identified and located.

(e.g., the Trans-Saharan region of Africa, the Sulu/Sulawesi Seas littoral, and large swaths of Central Asia). Second, SOF will need to be prepared to conduct clandestine operations (most likely unconventional warfare) and support CIA-led covert activities against state sponsors of terrorism, including those armed with significant anti-access capabilities.

An on-the-ground presence is essential not only for collecting tactical intelligence and developing local situational awareness, but also for supporting partner security forces and responding rapidly (either unilaterally or in a combined operation) if and when high-value terrorist targets are identified and located. Currently, however, over 80 percent of SOF capacity is allocated to just two countries: Iraq and Afghanistan. Secretary of Defense Robert Gates has indicated that the SOF commitment to those countries will probably not decline significantly over the next several years, even as conventional forces withdraw from Iraq. As he remarked in May 2008:

The eventual drawdown in Iraq is not the end of the mission for our elite forces. Far from it. Even as our regular troops reduce their presence and are replaced by Iraqis, special operations force levels will remain fairly constant and be the connective tissue for the overall mission. They will be in Iraq and Afghanistan for an extended period of time—a force to hunt and kill terrorists, and also as a force to help train Iraqis and Afghans.<sup>66</sup>

The opportunity cost of that commitment, however, has been a significant reduction in SOF presence in other countries, including several terrorist “hot spots” in Africa, Central Asia, and Southeast Asia. Admiral Eric Olson, commander of SOCOM, summarized the unfortunate situation: “we’re going to fewer countries, staying for shorter periods of time, with smaller numbers of people than historically we have done.”<sup>67</sup> This limited, episodic SOF presence outside of Iraq and Afghanistan is unacceptable strategically. As will be addressed in the next chapter of this report, additional SOF capacity is needed, possibly beyond that called for in the 2006 QDR, to sustain a persistent, low-visibility ground presence in scores of areas *outside* of Iraq and Afghanistan.

In countries willing to host SOF to train, advise, and equip their security forces, this expanded presence could be generated relatively easily. Personnel assigned to the overt foreign internal defense mission could leverage their in-country access for collecting tactical intelligence, making contacts with local government officials and civilians, and conducting a host of other preparation-of-the-environment activities. Additional SOF and other government personnel (i.e., CIA officers) could be embedded with foreign internal defense units, as necessary. This in-situ force could respond quickly to counterterrorism tasks, either with or without the host nation’s approval, within its assigned area of influence. A large number of relatively small, overt foreign

<sup>66</sup> Robert M. Gates, Secretary of Defense, Speech delivered at Special Operations Forces International Conference, Tampa, Florida, May 21, 2008.

<sup>67</sup> AP, “SOCOM Says Forces Spread Thin,” May 6, 2006.

internal defense teams distributed around the world would make an important contribution to the above-mentioned GCTN. To support these teams adequately, DoD will need to invest in logistical infrastructure, additional ISR collection and TPED (tasking, processing, exploitation, and dissemination) capacity, intelligence analysis, secure communications capabilities, and “on-demand” precision fire support.

Developing a low-visibility ground presence in countries that are not willing to host SOF will, of course, be more problematic. To support expanded clandestine military operations, SOF will need to invest in myriad capabilities to enable specially trained personnel to infiltrate into, exfiltrate from, and conduct operations within semi-permissible and denied areas. Among other things, they will require new cover mechanisms and means for defeating modern biometric identity verification technologies. It will also be necessary to develop new tools, as well as supporting tactics, techniques, and procedures, in order to collect relevant tactical intelligence, especially with respect to locating and tracking high-value terrorist targets (and possibly WMD-related material) in what may often be very cluttered environments.

Finally, SOF must be prepared to conduct clandestine military operations against state sponsors of terrorism such as Iran. In addition to unconventional warfare operations, which will be discussed below, this could entail manhunting operations against key terrorist leaders/operatives, as well as direct action against critical terrorist support infrastructure (e.g., training camps).

### Building Partner Capacity

Given finite US counterterrorism capacity, the impracticability of conducting US military (or even covert) operations in several relevant places around the world, and the political/diplomatic need to avoid the perception of a unilateral American war against Islam, it is essential to train, equip, and advise foreign security forces—including air and maritime forces as well as ground forces—in as many countries as possible. If the United States is successful in this regard, more and more partner states will, in time, become fully capable of suppressing or eliminating terrorist threats within their own territory. Not only will this create the conditions for a gradual reduction of the US military’s commitment abroad, it could also facilitate more effective counterterrorism operations since these partners have unmatched advantages with respect to cultural intimacy and language proficiency. As Secretary of Defense Robert Gates testified to Congress in April 2008, “As borne out by Afghanistan, Iraq, and in other theaters large and small, success in the war on terror will depend as much on the capacity of allies and partners in the moderate Muslim world as on the capabilities of our own forces.”<sup>68</sup> Similarly, as the late General Wayne Downing, former commander

**It is essential to train, equip, and advise foreign security forces—including air and maritime forces as well as ground forces—in as many countries as possible.**

<sup>68</sup> Secretary of Defense Robert Gates, Testimony before the House Armed Services Committee, April 15, 2008, p. 2.

**While the general purpose force may reduce the foreign internal defense workload for SOF at the margins, one should harbor no illusions that it will be possible (or desirable) for SOF to divest the bulk of the foreign internal defense mission.**

of JSOC, put it, “when you fight an insurgency, the best people to do this are [in] the host country.”<sup>69</sup>

Because of their foreign language skills, cultural expertise, and familiarity with a wide range of commonly used foreign weapons, SF are the country’s premier force for training, advising, and equipping foreign security forces. In addition, MARSOC’s Marine Special Operations Advisor Group teams are developing specialized foreign internal defense-related skill sets and expertise.

Elements of this mission, however, could and should be performed by general purpose forces, freeing up SOF for missions that exploit their “special” capabilities. With modest training and basic language instruction, for example, conventional Army and Marine Corps units could train and advise conventional military forces in basic counterinsurgency tactics, techniques, and procedures in partner states that are politically willing to accept what is likely to be a relatively large American “footprint” on their territory. In countries where the disclosure of a US military presence would be politically risky for the host nation, SOF will likely be relied upon for the foreign internal defense mission. Unfortunately, given falling favorable public views of the United States over the past several years, more and more states want to keep their involvement with the US military as discreet as possible. Moreover, SOF will also be required for training and advising foreign special operations forces. This is now happening in Iraq, Afghanistan, Pakistan, and the Philippines, among other places. In short, while the general purpose force may reduce the foreign internal defense workload for SOF at the margins, one should harbor no illusions that it will be possible (or desirable) for SOF to divest the bulk of the foreign internal defense mission; it will unquestionably remain a major operational focus for SOF in the years ahead. This assessment is shared by the SOCOM Commander Admiral Eric Olson, who remarked recently:

We’d like to hand off a number of [FID] tasks to the conventional forces as they develop the capability to do it, but the reality is striking me that there are really very few countries in the world where you can put a brigade combat team to do a train and assist mission. In most countries of the world, access is gained through low-profile operations, keeping it out of the newspapers, working in small unit to small unit level kinds of engagements. We woke up in 58 countries of the world this morning, and only a couple of those where we’re engaged in a fight or where a brigade combat team could perform a significant train and assist kind of mission...That said, I’d like to see Special Operations get in the business of training Special Operations a little bit more, and in the business of training new recruits how to march in straight lines and shoot on seven-meter ranges a little bit less. But I think that the reality is that, given the skills to which Special Operations trains, the global demand will still be mostly for us.<sup>70</sup>

<sup>69</sup> General Wayne A. Downing, Testimony to House Armed Services Subcommittee on Terrorism, Unconventional Threats, and Capabilities, Hearing on “Assessing U.S. Special Operations Command’s Missions and Roles,” June 29, 2006, pp. 4, 19.

<sup>70</sup> Admiral Eric T. Olson, Commander, SOCOM, Speech at National Security Leaders Forum, Center for a New American Security, March 3, 2008.

As is the case when creating a low-visibility network for global manhunting and disruption operations, the primary challenge associated with the closely-linked requirement of building and leveraging partner capacity is a lack of available SOF force structure. While SOF conducted “hundreds of FID” missions in some fifty-six countries in 2007, they generally lasted for only a few weeks and involved a relatively small number of personnel.<sup>71</sup> With more than 80 percent of forward-deployed SOF tied down in Iraq and Afghanistan — and 99 percent of those forces committed to combat operations, Theater Security Cooperation Plan missions worldwide have fallen by about 50 percent.<sup>72</sup> This major commitment to CENTCOM has not only dramatically reduced SOF’s ability to support important activities in other areas, it has also had a detrimental effect on training for mission tasks that are not required for operations in Iraq and Afghanistan (e.g., military free fall and underwater combat operations), as well as upon foreign language proficiency in languages spoken outside the CENTCOM area of responsibility.

Developing and maintaining the global combating terrorism network will likely require the capacity to conduct training and advisory activities on a steady-state basis in at least a score of high-priority countries and carry out more episodic training activities on a rotational basis involving Mobile Training Team deployments, Military Education and Training Team programs, Joint Combined Exchange for Training exercises, and other Theater Security Cooperation Plan activities in another twenty to forty countries.<sup>73</sup> Meeting this challenge will require changes in the capabilities, capacities and postures of both SOF — especially within SF battalions and the Marine Special Operations Advisor Group — and ground general purpose forces.<sup>74</sup> As will be discussed in Chapter 3, the imperative to ramp up SOF-led training and advisory efforts globally will not only require additional personnel — more SF battalions, additional Marine Special Operations Advisor Group teams, and an expansion of AFSOC’s 6th Special Operations Squadron—but also the realignment of existing capacity to focus more attention on the Muslim world. More proficiency will be needed in languages spoken in critical “front line” areas, most notably Arabic, Pashto, Farsi, Dari,

The primary challenge associated with the closely-linked requirement of building and leveraging partner capacity is a lack of available SOF force structure.

<sup>71</sup> Admiral Eric T. Olson, Commander, USSOCOM, “Posture of Special Operations Forces,” Statement before the Senate Armed Services Committee, March 4, 2008, p. 7; and ARSOF Presentation, “Named Operations, TSCP Events, and Embassy Support 01 Oct-29 Jul 08,” July 29, 2008.

<sup>72</sup> SOF plans to conduct approximately 115 Theater Security Cooperation Plan events in 92 countries in FY 2008. As a point of comparison, SOF conducted 324 activities (including 204 JCETs) in 142 countries in 1996. ARSOF Presentation, “Named Operations, TSCP Events, and Embassy Support 01 Oct-29 Jul 08,” July 29, 2008; GAO, *Special Operations Forces—Several Human Capital Challenges Must Be Addressed to Meet Expanded Role* (Washington, DC: GAO, 2006), pp. 29–35; and USSOCOM, *United States Special Operations Command History, 1987–2007*, p. 9.

<sup>73</sup> Joint Combined Exchange Training activities are conducted overseas to fulfill SOF training requirements while also exchanging skills between US forces and host-nation counterparts.

<sup>74</sup> This will also require new authorities regarding the countries in which US military forces are allowed to operate (e.g., Indonesia), the types of forces (i.e., irregular as well as regular and paramilitary, including police, as well as military) they are allowed to operate with, and the scope of their operational relationships (i.e., equipping and combat advising, in addition to training).

Punjabi, Balochi, Bahasa, and Filipino. In addition, the train, advise, and equip mission must be embraced as a core general purpose forces mission not only by the Army and Marine Corps, but also by the Air Force and Navy.

### **Contributing to Persistent Reconnaissance-Strike Coverage over “Under-Governed” Areas and Littoral Zones**

Airborne and naval platforms can contribute to the global combating terrorism network by providing persistent reconnaissance-strike coverage over “under-governed” areas and littoral zones that currently are or are likely to be exploited by terrorist groups. This air-maritime force should be shaped, sized, and postured to accomplish the following core tasks:

- > Monitor ungoverned land areas, as well as littoral zones and maritime chokepoints, for suspicious activity.
- > Locate, track, and strike time-sensitive, high-value targets, including those in defended/denied areas.
- > Enable US and partner operations by providing actionable intelligence, communications links, and fire support, as needed.

In addition, naval assets may be called upon routinely to board and inspect suspicious vessels in cooperation with partner states; to seize vessels by force when necessary; to conduct small, quick-reaction raids against ground targets in coastal regions; and to secure critical offshore infrastructure.

Given that currently available UCASs have significantly longer unrefueled range and mission endurance than manned surveillance platforms, they appear to be the preferred platform for providing wide-area persistent, airborne surveillance and strike coverage. As will be examined in Chapter 3, it may make sense to complement them with small, affordable, easy-to-operate manned aircraft that can be more easily acquired, flown, and maintained by US partners. Meeting the need for dramatically increased maritime surveillance and strike/interdiction coverage in littoral zones will likely require a relatively large number of platforms to be permanently stationed at several regional operating bases or “fleet stations” around the world.

### **Employing Unconventional Warfare Against State Sponsors of Terrorism and Terrorist Groups**

Unconventional warfare is defined here as operations conducted by, with, and through irregular forces against non-state actors or in support of resistances, insurgencies, and major combat operations. Irregular forces or surrogates can be controlled directly by US forces in permissive environments or indirectly in hostile or politically sensitive

**Unconventional warfare is defined here as operations conducted by, with, and through irregular forces against non-state actors or in support of resistances, insurgencies, and major combat operations.**

environments. An important characteristic of unconventional warfare is that the involvement of the US government can, in theory, remain covert or at least plausibly deniable, as was the case with US support of the mujahedeen in Afghanistan in the 1980s. Even when the involvement of the US government is overt, the footprint of the US military is typically small in comparison to conventional operations. During the first phase of Operation Enduring Freedom, for example, less than three hundred SOF from several countries were on the ground in Afghanistan in the weeks leading up to the fall of Qandahar. In addition to training, organizing, and equipping indigenous forces (e.g., Northern, Southern, and Eastern Alliance factions), widely distributed SF units were very successful in locating and designating Al Qaeda/Taliban targets for precision attack.<sup>75</sup> Operating with irregular Afghan forces, SOF operators used a variety of man-portable sensors (e.g., thermal imaging, night-vision goggles, and signals intelligence systems), precision targeting systems (e.g., laser range finders and GPS), and communications equipment to find enemy targets and bring precision firepower to bear against them with tremendous effectiveness.<sup>76</sup> More recently, in Iraq, the US military employed unconventional warfare against al Qaeda, working by, with, and through disaffected Sunni tribes in Al Anbar Province in 2006–2008.

SOF's ability to conduct small-footprint unconventional warfare, to include regime change, provides US policy makers with an important option in wars with hostile states. This is important because when dealing with hostile state-sponsors of terrorism, regime change may often be the only assured means of ending the sponsorship. In Afghanistan, for example, the Taliban and al Qaeda were inextricably linked. Osama bin Laden provided the Taliban with significant funding, logistical assistance, and seasoned and loyal fighters that fought side-by-side with the Taliban against the Northern Alliance.<sup>77</sup> The CIA thus concluded that bin Laden effectively "owned and operated" the Taliban.<sup>78</sup> In return, bin Laden's Taliban co-conspirators provided him with sanctuary and operational support. In response to an ultimatum from President Bush, the leader of the Taliban, Mullah Mohammed Omar, claimed to have no recourse but to offer protection to Afghanistan's al Qaeda "guests" and absorb US

SOF's ability to conduct small-footprint unconventional warfare, to include regime change, provides US policy makers with an important option in wars with hostile states.

<sup>75</sup> See, for example: Thom Shanker, "Conduct of War is Redefined by Success of Special Forces," *New York Times*, January 21, 2002, p. 1; Dana Priest, "Team 555 Shaped a New Way of War," *Washington Post*, April 3, 2002, p. 1; and United States Special Operations Command, *USSOCOM History: 1987–2007*, pp. 87–97.

<sup>76</sup> Once a specific target was identified, a laser-designator could be used to "mark" it for destruction by a laser-guided bomb. More frequently, however, specially trained AFSOC combat controllers and SF operators determined its precise geo-location by using a laser range-finder unit linked to a hand-held GPS receiver. The GPS coordinates could then be passed by radio to aircraft loitering overhead and plugged into GPS-guided JDAMs. In some cases, connectivity between units on the ground and airborne strike assets was established with advanced digital communication systems. Vince Crawley, "Spec Ops Praised for Focus on 'Customers,'" *Army Times*, March 25, 2002, p. 18.

<sup>77</sup> Steve Coll, *Ghost Wars* (New York, NY: Penguin Books, 2004), pp. 266–572; and Lawrence Wright, *The Looming Tower* (New York, NY: Vintage Books, 2006), pp. 260–375.

<sup>78</sup> Bob Woodward, "Bin Laden Said to 'Own' the Taliban, Bush is Told He Gave Regime \$100 Million," *Washington Post*, October 11, 2001, p. A1.

attacks, arguing that it would be un-Islamic to turn over Muslims who had started “a journey on God’s path.”<sup>79</sup> Iran is almost certain to be as intransigent with respect to terminating its support to Lebanese Hezbollah and, to a lesser extent, Shiite militias and “special groups” in Iraq.

As evidenced by the dramatic changes in Iraq over the past two years, unconventional warfare can also be a potent, cost-effective tool for attacking hostile non-state actors such as Salafi-Takfiri and Khomeinist terrorist groups.<sup>80</sup> The Al-Anbar model is potentially applicable to other areas of terrorist activity including those in the Levant, South Asia, Central Asia, the Maghreb, pan-Sahel, and Horn of Africa.

SOF unconventional warfare capabilities, especially in denied areas, almost atrophied out of existence in the decade following the end of the Cold War. Fortunately, since 2001, those skills have been resuscitated. As will be discussed in Chapter 2I, however, several steps should be taken to enhance unconventional warfare capabilities and expand current capacity. Improving unconventional warfare capabilities will require additional investment in languages, area knowledge, advanced special operations training, clandestine infiltration capabilities, and low-signature support infrastructure. To ensure that unconventional warfare gets the attention it needs within SOCOM, it might also be necessary to create a sub-unified irregular or indirect warfare command to counter-balance institutionally the direct-action advocacy of JSOC.

## POTENTIAL RISE OF CHINA AS A MILITARY COMPETITOR

A critical question for US defense strategists is: how will China exploit its growing economic strength and military power? Opinions in the national security community vary widely on this question and, in particular, on whether conflict with China is inevitable.<sup>81</sup> China claims that it will rise peacefully; if that is the case, it will be in the national interest of United States to develop closer ties with China.<sup>82</sup> It is certainly plausible, however, that future US-Sino relations may be characterized more

<sup>79</sup> Partial transcript of Voice of America interview with Mullah Mohammed Omar as compiled by Washington Post Staff, September 23, 2001.

<sup>80</sup> Kirk Semple, “Uneasy Alliance is Taming One Insurgent Bastion,” *New York Times*, April 29, 2007, p. 1; Sam Dagher, “Risk US Alliances in Iraq,” *Christian Science Monitor*, July 17, 2007, p. 1; John Ward Anderson, “Sunni Insurgents Battle in Baghdad,” *Washington Post*, June 1, 2007, p. 11; Jim Michaels, “Tribes Help U.S. Against Al-Qaeda,” *USA Today*, June 20, 2007, p. 1; and Jim Michaels, “Iraqi Alliances Spread, U.S. Says,” *USA Today*, September 21, 2007, p. 1.

<sup>81</sup> For an excellent summary of the debate, see Aaron Friedberg, “The Future of U.S.-China Relations—Is Conflict Inevitable,” *International Security*, Vol. 30, No. 2, Fall 2005, pp. 7–45.

<sup>82</sup> Zheng Bijian, “China’s ‘Peaceful Rise’ to Great-Power Status,” *Foreign Affairs*, September–October 2005.

by competition and periodic conflict than sustained cooperation.<sup>83</sup> To hedge against that possibility, however remote, the US military will need to be shaped, sized, and postured differently than it is today.<sup>84</sup> If done wisely, these steps could dissuade China from investing in capabilities that threaten US and allied interests in East Asia, improve crisis stability in the region, and deter future Chinese aggression. In the event that these US efforts fail, however, there are at least four missions that SOF may be called upon to perform as part of a broader conventional campaign:

- > Large-scale unconventional warfare operations on China's periphery to open up additional fronts.
- > Information operations focused on accessing "closed" communications and computer networks.
- > Clandestine special reconnaissance missions to locate hidden or mobile high-value targets for precision attack.
- > Direct action against key targets that cannot be disabled by other.

### Unconventional Warfare Operations

While Han Chinese comprise just under 92 percent of the PRC's population, the remaining eight-plus percent includes groups of Zhuang, Uyghur, Hui, Yi, Tibetan, Miao, Manchu, Mongol, Buyi, and Korean extraction.<sup>85</sup> Several of these groups, the Uyghurs and Tibetans in particular, consider themselves to be oppressed by the current regime and demand varying measures of increased autonomy. For example, the Uyghurs, who live primarily in China's northwestern Xinjiang region, ultimately seek to establish a new republic of East Turkistan.

In the unlikely and undesirable event of a large-scale conventional war with China, SOF could be called upon to help organize, train, and equip insurgents from these disaffected communities in order to open up additional fronts and potentially tie down a substantial number of People's Liberation Army forces in manpower-intensive,

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<sup>83</sup> That being said, China's rise could be derailed by the collapse of its fragile economy or by internal fragmentation along regional lines. Chinese economic interdependence with the West and increased participation in various international organizations may also discourage military competition and confrontation. See Aaron Friedberg, et al, "Facing China," *Commentary*, February 2001, pp. 16–26; Friedberg, "The Future of U.S.-China Relations – Is Conflict Inevitable?," pp. 16–24; Friedberg, "The Struggle for Mastery in Asia," *Commentary*, November 2000, pp. 17–26; Eliot Cohen, "It's No Cold War, But China Is Our Biggest Threat," *The Wall Street Journal*, April 9, 2001; Arthur Waldron, *Statement before House Armed Services Committee*, June 21, 2000; and Arthur Waldron, "Why China Could Be Dangerous," *The American Enterprise*, July–August 1998, pp. 40–43.

<sup>84</sup> Krepinevich, Martinage, and Work, *The Challenges to US National Security*, pp. 23–41.

<sup>85</sup> CIA, *The World Fact Book: China*, available on-line at: <http://www.cia.gov/cia/publications/factbook/geos/ch.html>.

counter-insurgency operations.<sup>86</sup> This unconventional warfare mission would fall primarily to SF battalions and AFSOC, which is responsible for operating the specialized aircraft needed to infiltrate, support, and exfiltrate SF teams into “denied” areas. The obvious implication of this prospective mission for SF is the need to develop proficiency in relevant languages (e.g. Mandarin Chinese and other dialects, Altaic, Mongol, and Tibetan) and cultures. For AFSOC, this mission highlights the growing need for a stealthy, long-range SOF insertion aircraft that can penetrate undetected into and survive within heavily defended airspace. There is simply no way that an MC-130 derivative aircraft could operate at an acceptable level of risk in most of China’s border areas today — and, as will be detailed in Chapter 3, this capability shortfall is almost certain to intensify over time.

### Accessing “Closed” Networks

China has developed an extremely robust internal fiber-optic network for military command, control, and communications. In all likelihood, it has several dedicated, stand-alone communications and computer networks that are not connected to commercial networks, and are thus practically impossible to access remotely. Accordingly, SOF may be called upon to gain physical access to these networks — both in peacetime for intelligence-collection purposes and in wartime to spoof, exploit, or disable them.

During peacetime, this mission would probably be assigned to the Central Intelligence Agency. However, in remote, difficult-to-access land areas, or for cables on the seabed, SOF could play an important role. During wartime, the network-access mission could become a core responsibility for SOF.

This mission has several important implications for SOF. First, SOF need to master the skills necessary to tap into fiber-optic or other communication lines, as well as to hack into protected computer networks. This will require the creation of new information operations training programs, as well as the development and procurement of specialized network-access “tool kits.” It could even provide the impetus for the reshaping of SF ODAs and SEAL Teams — expanding or reconfiguring them to include one or more information-operation specialists. Second, it highlights once again the requirement for a stealthy SOF insertion and exfiltration aircraft. Third,

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<sup>86</sup> In the event that US-Sino relations deteriorate into a Cold War-like competition, the United States could attempt to compel Beijing to expend a greater fraction of state revenue on internal security in “peacetime” by helping to foster and intensify ethnic unrest within China. While fraught with escalatory risk, American involvement might range from offering verbal and diplomatic support for internal movements espousing improved human rights and self-determination, to making covert financial contributions to dissident groups and, at the extreme, to providing various levels of non-lethal and lethal aid to insurgents involved in armed rebellions or proxy wars. Although such activities would be both politically controversial and difficult to implement operationally (especially in a covert manner), they could provide US policy-makers with an important option for engaging in long-term competition with a hostile China.

the potential scale of the wartime mission suggests that WARCOM's current fleet of one, semi-operational Advanced SEAL Delivery System mini-submarine is wholly inadequate. Although flooded SEAL Delivery Vehicles could also be used to transport SEALs clandestinely from submerged submarines to fiber optic cables in China's littoral waters, they would be far less desirable operationally. SEALs that could come and go repeatedly from the warm and dry environment of the pressurized Advanced SEAL Delivery System using its rapid lock-in/lock-out chamber would be much better able to perform the technically challenging and time-consuming task of clandestinely tapping into fiber-optic cables on the cold sea floor.

### **Clandestine Special Reconnaissance and Direct Action Missions**

In the event of a military conflict with China, SOF would likely support conventional operations by finding and, in a more limited set of cases, attacking high-value targets. They might be relied upon, for example, to locate cruise and ballistic missile launcher "hide sites," including in deep inland areas, as well as coastal anti-ship cruise missile and surface-to-air missile launchers. To avoid revealing their location, hidden SOF units would either provide the GPS coordinates of confirmed targets using low-probability of detection communication systems or laser-designate them for precision air and missile strikes launched from orbiting aircraft and offshore ships. In rare circumstances, however, SOF might be called upon to conduct direct action missions against targets of high strategic or operational importance that cannot be reliably or safely neutralized by other means. Examples of the former could be a deep-underground command and control node or a super-hardened submarine pen; examples of the latter might be a WMD storage site or a critical target located in a densely populated area. JSOC's SMUs might also be tasked with conducting "snatch and grab" operations such as rescuing and extracting imprisoned political opposition leaders.

These are all "bread and butter" SOF tasks. During Operations Enduring Freedom and Iraqi Freedom, for example, SOF routinely performed similar special reconnaissance and direct-action missions. The major difference, of course, is the extremely high-end threat environment in China. The implications for SOF echo those already mentioned — the requirement for the development and fielding of a fleet of stealthy SOF transports to replace the aging and vulnerable MC-130 Combat Talons, and the need to field a larger Advanced SEAL Delivery System fleet.

### **PROLIFERATION OF WMD**

Preventing the spread and potential use of WMD, especially nuclear weapons, by state and non-state actors alike is likely to become an increasingly important — and

increasingly difficult—national security challenge.<sup>87</sup> SOF could potentially conduct unconventional warfare to bring about regime change in states aspiring to develop WMD. In rare circumstances, they might be called upon to undertake counterproliferation operations against critical WMD-related infrastructure that cannot be reliably and safely targeted by other means, including sites in denied, deep inland areas. SOF would likely also play a role in retaliatory attacks against those who employ WMD. Their primary contribution to the US government’s response to this challenge, however, will likely be in tracking down and rendering safe “loose” WMD material or devices.

The same globally distributed network of forward-deployed/forward-based SOF units that are conducting partner-capacity building, manhunting, and other missions associated with the war against Salafi-Takfiri/Khomeinist terrorist groups could simultaneously support the counterproliferation mission. They could not only provide a valuable source of intelligence collection, but could also serve as an in-situ, highly responsive force to interdict the movement of WMD-related materiel over land or sea. The development and fielding of improved sensors for the stand-off detection of WMD-related materiel would be extremely beneficial operationally.

Only selected JSOC units are equipped and trained in the requisite tactics, techniques, and procedures for conducting “render safe” missions overseas. Accordingly, if the US government intercepted a device, JSOC would, by necessity, be called upon to disarm it. Given the prospective need for additional capacity in this area, the 2006 QDR called for an expansion in the “number of U.S. forces with advanced technical render-safe skills,” as well as an improvement in their “speed of response.” Since the details are classified, it is impossible to say whether or not this slated increase in capacity is adequate to meet anticipated demand for this unique SOF skill set.

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<sup>87</sup> Krepinevich, Martinage, and Work, *The Challenges to US National Security*, pp. 43–55.





## CHAPTER 3 > PREPARING SOF FOR FUTURE CHALLENGES AND OPPORTUNITIES

The operational implications of the future security environment sketched out in Chapter 2 have important ramifications for the shape, size, and posture of SOF. This chapter begins by highlighting a handful of SOCOM-wide organizational and policy changes that could help SOF address future challenges and exploit emerging opportunities. It then highlights specific high-priority areas for investment or reorientation for each of SOCOM's subordinate commands. It concludes with a brief consideration of steps the conventional joint force could take to better support SOF in the years ahead.

In general, as highlighted in the 2006 QDR, SOF will need to shift from an episodic deployment force to a persistent-presence force—with more forces forward, in more places, for longer periods of time. The fight against Salafi-Takfiri and Khomeinist terrorist groups will increasingly be fought outside of Iraq and Afghanistan in countries with which the United States is not at war. Consequently, the dominant modes of operation will be indirect (working with and through allies) and covert (conducting operations in which the involvement of the US government is concealed). Accordingly, SOF will need to place increased emphasis not only upon unconventional warfare and foreign internal defense, but also upon working more closely with the CIA's National Clandestine Service. To hedge against the potential emergence of China as a more aggressive military competitor, SOF will need to acquire a few niche capabilities, such as a stealthy airlifter, and expand current capacity in a handful of areas, such as undersea SEAL delivery platforms. To prepare for a more proliferated world, the specialized search and “render safe” capabilities of JSOC's SMUs may need to be expanded beyond that directed by the 2006 QDR.

In comparison to the modernization programs of the conventional joint force, nearly all of the investments recommended in this chapter are modest. SOCOM accounts for less than 2 percent of the national defense budget. The defense budget request for fiscal year 2009, for example, includes \$9 billion in funding for SOCOM out

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of a total DoD base budget of \$518 billion.<sup>88</sup> Given that the operations and personnel tempos of all SOF units are extraordinarily high at present and are likely to remain that way for the foreseeable future, one is hard pressed to identify significant divestment opportunities. Several of the initiatives recommended below, including a major expansion in rotary-wing aviation and UCAS capacity, modernization and expansion of the fixed-wing special operations aircraft fleet, and the development and fielding of a stealthy airlifter, will require significant outlays.<sup>89</sup> Given the relatively small size of SOCOM's budget and scant SOF divestment opportunities, it will be necessary to offset the cost of these investments with cuts in conventional forces, including scaling back or terminating procurement programs that are a poor fit with the challenges posed by the future security environment (e.g., the Future Combat Systems, the F-35 Lightning II multirole fighter, and the Expeditionary Fighting Vehicle) and reducing force structure that has either been retained in excess of anticipated demand or is likely to wane in operational utility in the years ahead (e.g., short-range ground-attack aircraft squadrons and heavy brigade combat teams).

## **SOCOM-WIDE ORGANIZATIONAL AND POLICY CHANGES**

Several organizational and policy changes within SOCOM could better prepare SOF for emerging operational and strategic challenges.<sup>90</sup> Three initiatives are particularly important:

- > Achieving an appropriate balance, in both strategy and resources, between direct and indirect approaches to special operations, which may necessitate the creation of a Joint Irregular Warfare Command (JIWC).
- > Elevating the rank of selected Theater Special Operations Commanders.
- > Forging a closer operational relationship between SOF and the CIA.

### **Establish a Joint Irregular Warfare Command (JIWC)**

While the resources devoted to SOCOM's indirect capabilities have increased substantially since the terrorist attacks of September 11, 2001, the indirect warfare part of the portfolio (unconventional warfare, foreign internal defense, civil affairs, and

<sup>88</sup> DoD, *National Defense Budget Estimates for Fiscal Year 2009* (Washington, DC: DoD, 2008), p. 80; and DoD, *Fiscal Year 2009 Budget Request—Summary Justification* (Washington, DC: DoD, 2008), pp. 58–59.

<sup>89</sup> A rough cost estimate for the investments enumerated below would be in the range of \$30–40 billion over the next ten years.

<sup>90</sup> This section of the paper draws upon earlier work with Michael G. Vickers while he was the Senior Vice President for Strategic Studies at CSBA. He was nominated by President Bush to serve as the Assistant Secretary of Defense for Special Operations/Low-Intensity Conflict and Interdependent Capabilities on April 10, 2007 and was confirmed unanimously by the US Senate on July 23, 2007.

PSYOPS) is under-represented bureaucratically and, in some areas, remains under-resourced.<sup>91</sup> This imbalance between direct and indirect special operations has arguably existed ever since SOCOM was created in 1987.<sup>92</sup> Now-retired Major General Geoff Lambert, commander of US Army Special Forces between 2001 and 2003, explained the ramifications of this imbalance as follows:

With senior-level advocacy and improved resourcing, all the indirect expertise wouldn't have been forgotten by DoD and left floundering at the U.S. Army JFK Special Warfare Center and School and U.S. Army Special Operations Command (Airborne). If there had been equitable investment in all SOF, instead of just fixing Desert One for the last twenty years, where do you think counterinsurgency and occupation doctrine, human intelligence networks, cultural training, language training and language technology, indigenous technical equipment, the art of caches, biometric and historical contact records (all lost from earlier SF involvement in Afghanistan), and general-purpose force understanding of irregular warfare would have been by 9/11?<sup>93</sup>

This imbalance could be addressed by creating a three-star, sub-unified operational command under SOCOM focused on indirect warfare — a Joint Irregular Warfare Command (JIWC).<sup>94</sup> This command could be created by converting US Army SF Command from a Title X administrative headquarters into an operational command focused on providing sustained unconventional warfare, foreign internal defense, civil affairs, PSYOPS, preparation of the environment, and other support to regional combatant commanders. In addition to centralizing the management of doctrine, organization, training, materiel, leadership, personnel, and facilities associated with these SOF tasks, the JIWC would also be better able to compete for resources and advocate indirect warfare strategies at the senior-most levels within SOCOM and DoD more broadly. The JIWC would not only serve as a needed counter-balance to the growing influence of JSOC within SOCOM, but also as a proponent for special operations approaches to irregular warfare more broadly. It could provide strategic and conceptual alternatives to irregular warfare approaches promoted by general purpose forces.

The JIWC could provide strategic and conceptual alternatives to irregular warfare approaches promoted by general purpose forces.

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<sup>91</sup> Sean Naylor, "More than Door Kickers," *Armed Forces Journal*, March 2006.

<sup>92</sup> SOCOM's direct capabilities benefit immensely in the allocation of resources from their designation as special mission units, and their inclusion in a national mission force, sub-unified command. Owing to their critical importance and command advantage, SOCOM's direct capabilities also produce the preponderance of SOF officers selected for high command.

<sup>93</sup> Sean Naylor, "Support Grows for Standing Up an Unconventional Warfare Command," *Armed Forces Journal*, November 2007.

<sup>94</sup> While the title for this new command has varied (e.g., Joint Unconventional Warfare Command, Joint Indirect Warfare Command, and Joint Irregular Warfare Command), this idea has been circulating within the SOF community for several years. See Christopher K. Haas, "A Standing Unconventional Warfare Task Force to Combat Insurgency in the 21st Century," US Army War College, March 2005; Michael James, *Special Operations: Achieving Unified Direction in the Global War on Terrorism* (Fort Leavenworth, KS: US Army Command and General Staff College, 2006); and David Tucker and Christopher Lamb, "Restructuring Special Operations Forces for Emerging Threats," *NDU Strategic Forum*, January 2006.

**The 2009 QDR should examine the possibility of increasing the rank of selected TSOC commanders, and increasing their staffs accordingly, to give the special operations community a stronger voice.**

Using US Army Special Forces Command at Fort Bragg as the foundation, the JIWC would absorb all seven active and reserve Special Forces Groups, the JFK Special Warfare Center and School, as well as the 95th Civil Affairs Brigade and the 4th PSYOPS Group. It would also absorb a support brigade, including rotary-wing aviation capacity, from the Army. The Marine Corps component would be the Marine Special Operations Advisory Group and associated support assets. The Air Force component would be the 6th Special Operations Squadron and possibly some additional lift and ISR support assets. The JIWC would be responsible for all IW-related activities within SOCOM, including managing military liaison element (MLE) deployments, training and equipping MLEs, securing/providing cover support, and integrating MLE activities into Country Team plans.

The JIWC could be organized, staffed, and equipped to serve as a deployable, three-star command for conducting special-operations-intensive irregular warfare operations. It would also dovetail nicely with efforts to create indirect warfare career paths within SOCOM by providing more opportunities for individuals with that background to serve in senior ranks.

### **Elevate the Rank of Theater Special Operations Commanders**

Theater Special Operations Commands (TSOCs) are subordinate unified commands that advise geographic combatant commanders (GCC) regarding SOF capabilities, integrate special operations into GCC plans, provide SOF units for operational tasks, and coordinate and support in-theater special operations activities. Since operations against Salafi-Takfiri/Khomeinist terrorists are likely to be special-operations intensive, the 2009 QDR should examine the possibility of increasing the rank of selected TSOC commanders, and increasing their staffs accordingly, to give the special operations community a stronger voice in GCC deliberations and more influence relative to general-purpose force components. For example, given the high operations tempo of SOF in the Central and Pacific commands, Special Operations Command Central and Special Operations Command Pacific might be elevated to three-star commands.

### **Forge a Closer Relationship Between SOCOM and the CIA**

A key objective in the war against violent Islamic extremism is to keep terrorist groups from regaining state sanctuary. To the extent that the United States and its partners succeed in that regard, the principal battleground in that protracted struggle will occur in states with which the United States is not at war, and the principal US involvement will be indirect and low-visibility or covert. This poses a number of challenges for the effective integration of all elements of national and international power. Outside of Iraq and Afghanistan, the Department of State and CIA dominate. As a result, military capabilities that might be brought to bear are often denied country clearance, or have their operational freedom severely restricted if clearance is

granted. The current interagency system for operations in countries with which the United States is not at war too often defaults to pre-9/11 modes of thinking and ways of operating, and is very much dependent on the risk profile and policy priorities of individual US Chiefs of Mission and Station.

At its core, the war against Salafi-Takfiri/Khomeinist terrorist groups is an intelligence and special-operations-intensive war. Getting this aspect of interagency organization right and making full use of special authorities to wage the indirect and clandestine fight is essential. This will entail not only integrating CIA capabilities with those of both “black” and “white” SOF, but regularly leveraging the CIA’s Title 50 foreign-intelligence authority for SOF operations through the flexible detailing of SOF personnel to the Agency. This could begin with the SMUs, which currently enjoy the closest relationship with the Agency, and then be extended to Special Forces and SEALs. In addition to the operational advantages of such detailing, SOF would also benefit professionally from being exposed to National Clandestine Service tradecraft. Conversely, selected CIA case officers should participate in various SOF training programs to make them more “ruggedized” and proficient in using the latest SOF equipment. Such training would make them better able to defend themselves, organize irregular forces, support paramilitary operations, and conduct other covert activities in dangerous operating areas. Finally, SOF and CIA personnel should not only be able to move back and forth from assignments in CIA stations and SOF ground units, but also to compete for selected mid-to-senior level leadership positions in either organization.

Operationally, designating certain regions as “war on terrorism operational areas” and then establishing joint CIA-DoD Joint Interagency Task Forces (IATF) aligned with those areas would go a long way toward achieving unity of effort between DoD and CIA. There are a number of areas of the world (e.g., Pakistan-Afghanistan and the Maghreb-Pan-Sahel) where an integrated sub-regional approach to operations is vital. These joint task forces could be commanded by a military officer or a CIA officer, depending on the dominant character of the operations involved. Either the senior Chief of Station in a sub-region or the regional TSOC commander, for example, could be dual-hatted as an IATF commander. The IATF commander would, of course, work closely with the ambassador-led Country Teams in the sub-region, as well as geographic combatant commanders with responsibility for the sub-region.

## HIGH-PRIORITY INVESTMENTS FOR SOCOM’S SUBORDINATE COMMANDS

Although the 2006 QDR launched several important initiatives to better prepare SOF for the future security environment, it fell short in a number of areas. Looking across SOCOM’s subordinate commands, the most critical shortfalls are within USASOC and AFSOC. For the former, it is imperative to expand special operations rotary-wing capacity, as well as increase civil affairs and PSYOPS force structure. For the latter,

**SOF would also benefit professionally from being exposed to National Clandestine Service tradecraft. Conversely, selected CIA case officers should participate in various SOF training programs.**

high-priority investment areas include recapitalizing, modernizing, and expanding the aging MC-130 fleet; developing and fielding a stealthy airlifter; expanding UCAS force structure; increasing the number of Special Tactics Squadrons; and increasing the number of Combat Aviation Advisory flights available to train foreign security forces in the use of modern air power.

## USASOC

**The orientation of the current five active SFG headquarters should be changed to focus finite resources where they are most needed: in the Muslim world and Asia.**

As Michael Vickers, Assistant Secretary of Defense for Special Operations, Low Intensity Conflict, and Interdependent Capabilities (SOLIC/IC), recently remarked, “to build a global counterterrorism network of persistent presence rather than episodic presence, we’re going to need more special operators.”<sup>95</sup> As will be discussed below, while this is true across the joint SOF force, it is especially true for Army SF. It is imperative for the Army, and DoD more broadly, to make the ongoing expansion of active SF battalions a top priority over the next several years. To maximize the operational and strategic impact of this expansion, the orientation of the current five active SFG headquarters should be changed to focus finite resources where they are most needed: in the Muslim world and Asia. To close the wide and growing gap between the lift required to support SOF ground forces adequately and available capacity, expansion of the 160<sup>th</sup> SOAR must also be a top priority. Finally, given the importance of the “war of ideas” in the struggle against violent Islamic extremism, it would be prudent to invest in additional active-duty Civil Affairs and PSYOPS personnel. These, and related but lesser-priority force-design recommendations, are detailed below.

### Achieve 2006 QDR-Directed Active SF Battalion Growth

As discussed in Chapter 1, the number of active SF battalions is slated to increase by five, growing from fifteen in 2006 to twenty by 2013. The demand for SF battalions for the full array of missions associated with the ongoing war against Salafi-Takfiri and Khomeinist terrorist groups, especially building partner capacity and conducting unconventional warfare, is almost certain to remain high and could increase significantly. Moreover, SF units also need to be prepared to conduct potentially large-scale unconventional warfare, information operations (such as network exploitation and denial), special reconnaissance, and direct-action operations against nuclear-armed states equipped with anti-access capabilities (e.g., China or Iran). The opportunity cost of concentrating roughly 80 percent of available SF capacity in Iraq and Afghanistan is that too few forces are available for critical operations in other parts of the world. The personnel tempo, or the amount of time the average operator spends away from home station, of SF is unprecedented; most units are deployed at least seven months out of every year. While these personnel tempo rates have not yet caused retention

<sup>95</sup> William McMichael, “Some U.S. Spec Ops Skills Getting Rusty,” *Defense News*, June 23, 2008, p. 20.

problems, they are not likely to be sustainable. The only way out of this conundrum is either to reduce the SF commitment in Iraq and Afghanistan dramatically or increase SF end strength. The former is unlikely (and probably imprudent). Admiral Olson remarked in May 2008 that “nothing I’ve been told leads me to believe that there will be a reduction” in SOF deployment levels in Iraq over the next few years and more revealingly, that “the door is always open for an increase in demand.”<sup>96</sup> Assuming that is the case, it is imperative for DoD to place a high priority upon meeting the twenty-battalion objective by 2013. While the decision of whether or not to increase SF force structure beyond twenty battalions can be deferred to the 2013 QDR, the upcoming QDR should examine what steps might be taken in terms of recruitment, assessment, training, and retention to lay the groundwork for another significant expansion in SF force structure. Depending on the rate at which SF can be withdrawn from Iraq (which is likely to be slowly), developments in the war against violent Islamic radicalism, and the evolution of US-Sino relations over the next several years, one could certainly foresee the need for additional end-strength. According to SOCOM, a growth rate of 3-5 percent annually would be sustainable beyond 2013.<sup>97</sup>

Under current plans, one battalion will be added to each of the five active SFGs. To date, one new battalion has been created and a second is expected to become operational by the end of 2008 or early 2009. By most accounts, however, standing up the three remaining battalions by 2013 without sacrificing quality will be challenging, owing to the limited size of the recruitment pool, the still-high proportion of “wash-outs” from the assessment and training process, and anticipated difficulties in maintaining adequate retention because of growing competition from the private sector and family pressures stemming from high deployment rates.<sup>98</sup> Meeting the 2013 objective, therefore, will require continued SOCOM attention on what it terms the three “pillars” for growing the force: improved recruiting, expansion of the training base, and retention incentives.<sup>99</sup> While impressive strides have been made in each of these areas — across the force, as well as within USASOC — more could be done to fine-tune the process.

In terms of recruitment, USASOC has not only stepped up efforts to target individuals within the traditional Ranger recruiting pool, but has also taken full advantage

The upcoming QDR should examine what steps might be taken in terms of recruitment, assessment, training, and retention to lay the groundwork for another significant expansion in SF force structure.

<sup>96</sup> Ibid. Similarly, Lieutenant General Robert Wagner, commander of USASOC, observed that “When the conventional forces pull out, we’re not pulling out. We’ll be left there and become more visible and [have] a more difficult task.” Similar comments about the SOF commitment in Iraq staying relative stable over the next several years have been made by Secretary of Defense Gates, SOCOM commander Admiral Eric Olson, and Assistant Secretary of Defense for SOLIC/IC Michael Vickers. See: Stew Magnuson, “Slow Delivery—Special Operations Command: It Takes Too Long to Get Equipment,” *National Defense*, April 2008, p. 24; Robert Wagner, commander USASOC, Statement before the House Armed Services Subcommittee on Terrorism, Unconventional Threats and Capabilities, January 31, 2007; and Gates, Speech delivered at Special Operations Forces International Conference, May 21, 2008.

<sup>97</sup> Admiral Olson, speech at CNAS, March 3, 2008.

<sup>98</sup> GAO, *Special Operations Forces—Several Human Capital Challenges Must Be Addressed to Meet Expanded Role* (Washington, DC: GAO, 2006); and Sean Naylor, “The Special Ops Stretch,” *Armed Forces Journal*, October 2006.

<sup>99</sup> USSOCOM, USSOCOM—Posture Statement 2007 (MacDill AFB, FL, USSOCOM, 2007), p. 14.

Increased recruitment and training throughput, while necessary, could lead to an over-population of the ranks with junior personnel unless SF can retain mid-career and senior personnel.

of the 18-X program, which was re-activated in 2002 to recruit talented individuals “off the street.” While many SF personnel feared that 18-X recruits would lead to an influx of poorly qualified enlistees that would dilute the force, this has turned out not to be the case—at least thus far. As General Downing testified in June 2006, “I think we have got over 300 of these [18-X enlistees] now in the force, of these men, and I understand that they are performing extremely well. So that has worked very, very well.”<sup>100</sup> In fact, the program has worked so well that approximately one-third of newly formed ODAs are 18-X recruits. Another option for increasing the recruiting pool is to make it easier for personnel in the other Services who are interested in taking the SF qualification course (or Q-course) to transfer to the Army. Over the past several years, USASOC has increased its historic average of 400-450 active-duty enlisted graduates per year to more than 750 by expanding the trainer corps and redesigning the Q-course curriculum.<sup>101</sup> Increased recruitment and training throughput, while necessary, could lead to an over-population of the ranks with junior personnel unless SF can retain mid-career and senior personnel. Accordingly, SOCOM has authorized an array of retention bonuses and compensation incentives targeted at the most senior operators.<sup>102</sup> Likewise, SOCOM should consider retention incentives for mid-career personnel. Novel retention ideas should be explored as well such as extending current operator benefits (e.g., college and advanced degree reimbursement) to family members.

In addition, the Department of Defense should seek relief for SOCOM from Section 517 of the US Code (Title 10) that limits the number of active duty E-8s and E-9s in a service to 2.5 and 1.25 percent, respectively, of the total end force of any given Service. Since SF enlisted personnel typically reach the pay grades of E-8 and E-9 relatively quickly and remain at those levels for many years, Section 517 has the pernicious effect of pushing out experienced operators with years of valuable service left to give and obviously runs at cross-purposes with SOCOM’s need to retain senior personnel to counter-balance the influx of new operators. An exception to Section 517 has already been made for elements of JSOC and should be expanded to include all SOF personnel.

### Change the Regional Orientation of the Special Forces Groups

The respective geographic orientation of the current five active SFG headquarters is poorly aligned with emerging strategic challenges. Responsibility for Africa, a key

<sup>100</sup> General Wayne A. Downing, Testimony to House Armed Services Subcommittee on Terrorism, Unconventional Threats, and Capabilities, Hearing on “Assessing U.S. Special Operations Command’s Missions and Roles,” June 29, 2006.

<sup>101</sup> SOCOM Posture Statement 2007, p. 13.

<sup>102</sup> Examples include: Special Duty Assignment Pay (up to \$375 per month), Critical Skills Retention Bonus (\$150,000 for a six-year commitment for non-commissioned officers and warrant officers), Assignment Incentive Pay (\$750 per month for personnel with 25 years of service), and Aviation Continuation Pay for SOAR flight-qualified warrant officers. For more information on these retention programs, see: Wagner, Statement before the House Armed Services Subcommittee on Terrorism, Unconventional Threats and Capabilities, January 31, 2007, pp. 5-6.

region in the war against violent Islamic radicalism, is divided among the 3rd, 5th, and 10th SFGs. The 5th SFG not only has responsibility for the Middle East and Persian Gulf, but also for Central Asia and the Horn of Africa. One option to better align force structure geographically would be to stand up two additional SFG headquarters, each comprising two to four active SF battalions (see Table 6), depending on the requirements of the region. Each SFG headquarters could provide the basis for a joint special operations task force (JSOTF). There is no reason, however, to allocate each SFG headquarters equivalent force structure; indeed to do so would be highly inefficient. The primary advantage of this approach is that, with seven active SFGs, it would be possible to assign one SFG to each of seven critical areas in the world: Europe, Africa, the Middle East, Central and South Asia, Southeast Asia, Northeast Asia, and Latin America. This re-orientation would focus additional SF capacity where it is most needed: the Islamic world and Asia. The downside of this approach is that it would require a large number of headquarters slots to be filled, potentially draining manpower from combat units. As an alternative, one could retain the current five SFGs and use two SEAL Naval Special Warfare Groups (NSWGs) as the headquarters for two of

TABLE 6. RE-ORIENTATION OF PROJECTED SF FORCE STRUCTURE

SFG Headquarters	Active Battalions	Primary Operational Focus
Latin America	2	<ul style="list-style-type: none"> <li>&gt; Counternarcotics and COIN operations in Colombia, the Andean Ridge, and the Tri-Border Region</li> <li>&gt; UW (Cuba and possibly Venezuela)</li> </ul>
Europe	2	<ul style="list-style-type: none"> <li>&gt; COIN/CT/FID (Balkans, Turkey, the Trans-Caucasus, and Azerbaijan)</li> <li>&gt; CP (Russia)</li> </ul>
Sub-Saharan Africa & Horn of Africa	2	<ul style="list-style-type: none"> <li>&gt; COIN/CT/FID/Transnational UW (West African littoral, Central Africa and the Pan Sahel, the Horn of Africa, and East African littoral and South Africa)</li> </ul>
Arab World	4	<ul style="list-style-type: none"> <li>&gt; COIN/CT/FID/Transnational UW (Morocco, Algeria, Tunisia, Libya, Egypt, Syria, Jordan, Iraq, Saudi Arabia, Bahrain, Qatar, UAE, Oman, and Yemen)</li> <li>&gt; UW (Syria)</li> <li>&gt; CP/Counter-WMD (Syria)</li> </ul>
Iran & Central/South Asia	4	<ul style="list-style-type: none"> <li>&gt; COIN/CT/FID/Transnational UW (Uzbekistan, Kazakhstan, Turkmenistan, Kyrgyzstan, Tajikistan, Afghanistan, Pakistan, and India)</li> <li>&gt; UW (Iran)</li> <li>&gt; CP/Counter WMD (Iran, Pakistan)</li> </ul>
China & Northeast Asia	3	<ul style="list-style-type: none"> <li>&gt; UW (China)</li> <li>&gt; MCO (China, North Korea)</li> <li>&gt; CP/Counter-WMD (China, North Korea)</li> </ul>
Southeast Asia	3	<ul style="list-style-type: none"> <li>&gt; COIN/CT/FID/Transnational UW (Bangladesh, Burma, Thailand, Laos, Vietnam, Malaysia, Singapore, the Philippines, and Indonesia)</li> </ul>
<b>TOTAL</b>	<b>20</b>	

seven JSOTFs. Given the prominence of the maritime environment in Southeast Asia, for example, it might make sense to assign responsibility for the region to a NSWG and staff it to serve as a JSOTF headquarters.

### Improve SF Proficiency in Relevant Foreign Languages

**More language proficiency will be needed in Chinese dialects as well as in Arabic, Pashto, Farsi, Dari, Punjabi, Balochi, Bahasa, and Filipino.**

Currently, foreign-language proficiency within SF is skewed toward the Romance languages, Slavic languages, and German. While this mix is slowly changing, the overhang of the half-century-long Cold War remains. Given the current and emerging strategic challenges facing the United States, more language proficiency will be needed in Chinese dialects (as well as in the languages of neighboring states such as Kazakhstan and Mongolia), as well as in languages spoken in critical “front line” areas in the war against Salafi-Takfiri/Khomeinist terrorists, most notably Arabic, Pashto, Farsi, Dari, Punjabi, Balochi, Bahasa, and Filipino. As Assistant Secretary of Defense for SOLIC/IC Michael Vickers observed, “Even with a larger force, we’re going to need more Pashto speakers and Dari speakers and Arabic speakers than we did in the past.”<sup>103</sup>

According to Admiral Olson, “the sense that all Special Forces soldiers are fluent in some other language and can operate transparently in some other culture is a flawed one. We’re better than the rest of the Services writ large by a long shot, but we still have a long ways to go.”<sup>104</sup> There are at least two options for expanding SF proficiency in relevant foreign languages that should be explored in the 2009 QDR:

- > Expand the number of slots at the Defense Language Institute and provide significant financial bonuses to SF operators (or other SOF personnel) who successfully complete a new course of instruction.
- > Increase targeted recruitment of native speakers through the 18-X program or other mechanisms.<sup>105</sup>

<sup>103</sup> William H. McMichael, “Some U.S. Spec Ops Skills Getting Rusty,” *Defense News*, June 23, 2008, p. 20.

<sup>104</sup> Admiral Eric Olson, Commander, SOCOM, Speech at National Security Leaders Forum, Center for a New American Security, March 3, 2008.

<sup>105</sup> It might be possible to recruit legal aliens, non-citizen nationals, and foreign nationals to serve in SOF. Under Section 328 of the Immigration and Nationality Act, members of the US Armed Services who serve honorably for at least one year can have residency and physical presence requirements for naturalization waived. Since 2001, the US Citizenship and Immigration Services has naturalized nearly 37,000 members of the US Armed Forces. The primary obstacle to feeding naturalized recruits into SOF would be their ability to obtain required security clearances. US Citizenship and Immigration Services, “Naturalization through Military Service,” *Fact Sheet*, January 28, 2008. For a discussion of the possible merits of expanding the numbers of foreigners in the US military, see also Stephen M. Kosiak, *Military Manpower* (Washington, DC, CSBA, 2008).

### Create a Second Ranger Regiment

With respect to the war against violent Islamic radicalism, Rangers could provide a rapid-response capability for medium- to large-scale, counter-insurgency contingencies or other situations that cannot be handled by forward-deployed/forward-stationed ODAs, SEAL Teams, or Marine Special Operations Advisor Group/Marine Special Operations Battalion units in conjunction with host-nation forces. With significant direct-action capabilities, Rangers could provide a quick infusion of combat power until conventional ground forces arrive. As in Iraq and Afghanistan today, Rangers will also be frequently called upon to provide security for SMU operations, including global manhunting and counterproliferation missions. To support these operations, it might make sense to forward-station some Ranger elements (all are currently based in the continental United States). Among many other operational benefits, standing up a second Ranger regiment would provide additional high-end, site-seizure capacity, which could be important in “loose nuke” or other counter-WMD scenarios. If it were necessary, for example, to secure WMD-related material by force in a hostile location, JSOC’s SMUs would secure and remove the material itself, while Rangers would be critical for seizing an airfield for infiltration and exfiltration, securing the site, and maintaining perimeter security.

By far the most important reason for expanding Ranger force structure, however, is the fact that it serves as a critical feeder organization for SF ODAs and SMUs. As the Downing Commission explained to Congress:

Rangers become the prime source of candidates after 3 years or 4 years in the Rangers to go in to regular Army special forces and into the Delta force. And so what it does is it gives you a better pool to draw from, or it gives you a larger pool, so that you could build those forces... The Delta force is probably 70 percent Rangers who have come out of either a Ranger special forces track or directly from a Ranger regiment to Delta<sup>106</sup>

To expand Army SF and JSOC, as directed by the 2006 QDR, it will be necessary to have a much larger recruitment base. Accordingly, in the 2009 QDR, DoD should consider standing up an additional Ranger regiment. The 2006 QDR, which directed that a Ranger company be added to each of the three battalions of the 75<sup>th</sup> Ranger Regiment, in effect, created the force structure needed for one of the three battalions in a new regiment. The remaining two battalions and regimental headquarters might be formed by converting elements of an existing airborne brigade. The risk in creating an additional Ranger regiment, however, is that it would siphon off some of the most skilled and capable soldiers from the conventional Army, which is already struggling to maintain performance standards, especially within its non-commissioned officer corps. Increasing active-duty Army infantry, Ranger, and SF force structure *simultaneously* without sacrificing quality will likely prove a daunting challenge.

Standing up a second Ranger regiment would provide additional high-end, site-seizure capacity, which could be important in “loose nuke” or other counter-WMD scenarios.

<sup>106</sup> Downing, Testimony to House Armed Services Subcommittee on Terrorism, Unconventional Threats, and Capabilities, June 29, 2006, p. 22.

### Double SOF Rotary-Wing Capacity

As discussed in Chapter 1, the 160th Special Operations Aviation Regiment (SOAR) operates AH/MH-6 Little Bird light helicopters, MH-60 Black Hawk helicopters, and MH-47E/G Chinook heavy assault helicopters. The Little Birds provide tactical assault capabilities for SMUs and Rangers; the MH-60s provide assault capabilities, as well as infiltration and exfiltration capabilities for SOF ground forces; and the MH-47s provide longer-range infiltration and exfiltration capabilities and high-altitude capabilities. These aircraft not only support JSOC, Army SF and Rangers, but also SEAL Teams and MARSOC units.

The high operations tempo of SOF ground units in Iraq and Afghanistan has already overwhelmed the lift capacity of the 160th SOAR. Conventional Army aviation units currently provide lift support for about two thirds of SOF ground units. Given the ongoing expansion of Army SF and SEAL force structure by one third, as well as the standing up of the Marine Special Operations Advisor Group and two Marine Special Operations Battalions under MARSOC, the demand for rotary-wing aviation is certain to expand. Simply put, more helicopters will be needed to move and support these additional SOF ground forces whether they are engaged in combat operations, building partner capacity, or training at their home stations. Supporting the new Global SOF Posture, which calls for one quarter of the force to be deployed overseas on a steady-state basis, could further stretch already over-taxed 160th SOAR force structure.<sup>107</sup>

Ideally, there would be sufficient SOF-specific rotary wing capacity to support all SOF ground units. However, achieving that objective would appear to require a tripling of current capacity and such an expansion is probably out of reach — due mainly to the time required to recruit and train SOAR flight crews. To reduce reliance on conventional rotary-wing units and accommodate the expanding number of SOF ground units, the 2009 QDR should direct the creation of a second Special Operations Aviation Regiment, gradually standing up an additional two MH-47 Chinook battalions and two MH-60 Blackhawk battalions by 2015. To field a second regiment, it will be necessary to redouble ongoing efforts to recruit, assess, and train high-quality personnel to fly this specialized fleet of helicopters. It will also be imperative to retain experienced SOAR pilots through aggressive use of retention incentives.

Recognizing that the 160<sup>th</sup> SOAR has had trouble meeting annual goals for graduating new MH-47 and MH-60 helicopter pilots, the 2009 QDR should examine options for having the Navy and Marine Corps contribute to the special operations

**More helicopters will be needed to move and support these additional SOF ground forces whether they are engaged in combat operations, building partner capacity, or training at their home stations.**

<sup>107</sup> Under the GSP concept, previously forward-stationed forces will be pulled back to CONUS. Army, Navy, Marine, and Air Force SOF will be formed into regionally tailored JSOGs that will rotate to their respective regional combatant command AORs on a 4:1 rotation. Each JSOG will have four elements: one deployed, one training jointly in pre-deployment, one in unit training, and one in reconstitution, having just returned home from deployment. While deployed, these units will conduct “presence with a purpose” missions such as partner capacity building and combined training exercises.

rotary-wing lift requirement.<sup>108</sup> The Marine Corps, for example, operates a sizable fleet of CH-53 Super Stallions, some of which might be modified to support MARSOC. Similarly, the Navy operates a large fleet of SH-60 Seahawks and MH-53s, both of which could be modified to support SEAL and Special Boat teams. One option would be to reform Helicopter Combat Support Squadron Five (HCS-5) as an active-duty, dedicated special operations helicopter squadron.<sup>109</sup> Alternatively, but less likely for bureaucratic reasons, the Marine Corps and Navy could help fill the 160th SOAR training pipeline with experienced helicopter pilots.

Another alternative would be to increase AFSOC's planned buy of 50 CV-22s, which are intended as replacements for the now-retired MH-53 Pave Low helicopters. While the increased speed and range of the CV-22 is attractive, its high unit cost (more than double the MH-47 and six times that of the MH-60) and reduced payload (versus the MH-53 and MH-47) is not. Furthermore, it is likely that the CV-22 will be far more difficult (and costly) to maintain and service in the field than either the MH-47 or MH-60.

#### Expand Active-Duty Civil Affairs and PSYOPS Force Structure

The senior leadership of al Qaeda is keenly aware of the importance of the “media war” in achieving their strategic goals. In a letter to Mullah Mohammed Omar, for example, Osama bin Laden observed that propaganda is one of the jihadist's most powerful weapons. “It is obvious,” he says, “that the media war in this century is one of the strongest methods; in fact, its ratio may reach 90% of the total preparation for the battles.” In Ayman al-Zawahiri's letter to the late Abu Musab al-Zarqawi in July 2005, he asserted that “we are in a battle, and that more than half of this battle is taking place in the battlefield of the media” and that the Salafi-Takfiri movement is “in a race for the hearts and minds of our Umma.”<sup>110</sup>

SOCOM's Civil Affairs and PSYOPS units are on the front line of this battlefield. By providing social services and conducting other programs that build trust between US government and local populations, Civil Affairs units are critical not only for winning over the “hearts and minds” of Muslim populations, but also for building popular support for partner governments and US policies around the world. These efforts help improve the internal security situation in partner states and shrink under-governed areas that could be exploited by terrorist or insurgent groups. PSYOPS are critical

Civil Affairs units are critical not only for winning over the “hearts and minds” of Muslim populations, but also for building popular support for partner governments and US policies around the world.

<sup>108</sup> In 2005, for example, SOAR graduated only 58 percent of its goal for the former and 47 percent for the latter. GAO, *Special Operations Forces—Several Human Capital Challenges Must Be Addressed to Meet Expanded Role* (Washington, DC: GAO, 2006), p. 23.

<sup>109</sup> The formation of a Navy special operations helicopter unit will require the development and maintenance of proficiency in low-level, over-land flight using night-vision goggles. See Jaden J. Risner, “Fish or Cut Bait,” *Proceedings*, September 2008, pp. 38-42.

<sup>110</sup> Osama bin Laden, Letter to Mullah Mohammed Omar, undated. Harmony database, AFGP-2002-600321, p. 2; and Letter from al-Zawahiri to Zarqawi, July 9, 2005. Available on-line at: [http://www.dni.gov/letter\\_in\\_english.pdf](http://www.dni.gov/letter_in_english.pdf).

for creating and exploiting divisions within and among terrorist groups, discrediting Salafi-Takfiri and Khomeinist ideology and promoting credible, alternative Islamic voices, and isolating extremists from mainline, conservative Muslims.<sup>111</sup> In what is likely to increasingly be an indirect war against Salafi-Takfiri/Khomeinist terrorist groups, Civil Affairs and PSYOPS will be essential for maintaining host-nation support for effective, long-term counterterrorism and counterinsurgency campaigns.

Civil Affairs and PSYOPS units should routinely accompany SOF ground units involved in partner-capacity-building missions and, to a lesser extent, sustained man-hunting operations in countries around the world. While they could augment SF cultural expertise, they would be especially useful for providing Rangers, SEALs, and selected MARSOC units with the cultural and linguistic expertise they lack. Finally, Civil Affairs and PSYOPS units could also lead independent operations focused on winning over the hearts and minds of populations in more permissible areas.

Although the 2006 QDR directed a major expansion in active-duty Civil Affairs and PSYOPS capacity, additional growth is necessary. The 95th Civil Affairs Brigade is slated to reach 900 personnel by 2011, but that figure includes a significant amount of administrative overhead, support staff, and planners. Only about 320 personnel will be assigned to on-the-ground Civil Affairs teams (80 personnel per battalion). That number could easily be absorbed just in Iraq or Afghanistan. The capacity shortfall with respect to PSYOPS is similar in scale.

To conduct global Civil Affairs operations in support of the war against violent Islamic radicalism, as well as counter-insurgency efforts more broadly, the 2009 QDR should direct a major expansion in active-duty Civil Affairs and PSYOPS capacity. A reasonable goal would be to field an additional Civil Affairs Brigade and PSYOPS

<sup>111</sup> For an expanded discussion of this topic, see: Martinage, *The Global War on Terrorism—An Assessment*, pp. 259–275.

TABLE 7. REGIONAL ALLOCATION OF ACTIVE CIVIL AFFAIRS AND PSYOPS CAPACITY

Region	Active CA Battalions	Active PSYOPS Groups
Latin America	1	–
Europe	1	–
Sub-Saharan Africa & Horn of Africa	3	1
Arab World	4	1
Iran & Central/South Asia	3	1
China & Northeast Asia	1	–
Southeast Asia	3	1
<b>TOTAL</b>	<b>16</b>	<b>4</b>

Group for the CENTCOM, AFRICOM, and PACOM AORs—for a total of four Civil Affairs Brigades and four PSYOPS Groups. Using the new regional orientation suggested earlier (Table 6), the steady-state deployment of expanded civil affairs and PSYOPS Group force structure proposed below would focus effort where it is most needed: the Muslim world (see Table 7). Regions with light or no assigned active-duty units would be covered by reserve units in the conventional force.

## NAVSPECWARCOM

In what is likely to be a protracted fight against Salafi-Takfiri and Khomeinist terrorist groups, SEAL Teams will be increasingly relied upon for widely-distributed manhunting and other counterterrorism operations, as foreshadowed by current operations in Iraq and Afghanistan. WARCOM, which has had difficulty recruiting enough qualified enlisted personnel to fill available slots in the SEAL training program for the past several years, will need to redouble its efforts to meet the 2006 QDR's direction to field two additional SEAL team equivalents by 2013.<sup>112</sup> Beyond that, WARCOM's highest priority should be expanding undersea infiltration/exfiltration capacity.

### Enhance the Foreign Internal Defense Capabilities of SEAL Teams and Special Boat Teams

WARCOM should take step to enhance the foreign internal defense capability of SEAL Teams, as well as Special Boat Teams, by more vigorously cultivating relevant language proficiency and cultural expertise. By training and advising their foreign counterparts, SEAL Team and Special Boat Team operators could make a more significant contribution to the broader capacity-building mission. As mentioned in Chapter 1, NSWG-1 is currently oriented on PACOM and CENTCOM, while NSWG-2 is oriented on EUCOM and SOUTHCOM. Given the much greater anticipated demand in the CENTCOM and PACOM AORs for counterterrorism and foreign internal defense missions, as well as other special-operations-intensive contingencies, realignment of SEAL Team orientation should be examined in the 2009 QDR.

### Expand Special Boat Team and SEAL Delivery Vehicle Capacity

The 2009 QDR should seriously consider significantly expanding Special Boat Team capacity to help provide persistent reconnaissance and interdiction coverage over littoral and riverine areas that are already or could potentially be exploited by terrorists. Special Boat Teams could provide a very low-signature option for conducting coastal/

SEAL Teams will be increasingly relied upon for widely-distributed manhunting and other counterterrorism operations, as foreshadowed by current operations in Iraq and Afghanistan.

<sup>112</sup> Between 2000 and 2005, for example, WARCOM graduated only 150 SEALs each year, but it requires at least 250 new enlisted personnel to meet planned growth. GAO, *Special Operations Forces—Several Human Capital Challenges Must Be Addressed to Meet Expanded Role* (Washington, DC: GAO, 2006), p. 24.

**Serious consideration should be given to developing and fielding a new version of the Advanced SEAL Delivery System.**

riverine patrols in high-threat areas and interdicting suspicious ships. This counterterrorism presence could be leveraged for counternarcotics and counter-piracy operations, as well as to interdict the movement of nuclear or other sensitive WMD-related materials by sea if given the requisite intelligence cueing. Special Boat Teams could also train and advise foreign maritime security forces. They might, for example, concentrate their effort on “training the trainers,” cultivating a cadre of well-trained partner-nation personnel with the skills needed to run their own maritime security training courses.

With respect to the potential military threat posed by China, WARCOM’s SEAL Teams and SEAL Delivery Vehicle Teams could conduct myriad special reconnaissance, information operations, and direct-action missions in littoral areas. Clandestinely inserted by SEAL Delivery Vehicles or Advanced SEAL Delivery System mini-submarines, SEALs could:

- > Tap into or disrupt fiber-optic lines and sensors on the seafloor;
- > Plant beacons or limpet mines on high-value warships prior to the onset of hostilities;
- > Conduct underwater demolition operations against critical ports (including submarine pens that have been carved into the sides of mountains to reduce their vulnerability to air and missile attack) and supporting infrastructure; and
- > Conduct on and off-shore intelligence collection, including locating time-sensitive, high-value targets such as anti-ship cruise missile launchers, air defense radars, and surface-to-air missile launchers hidden in China’s cluttered littoral landscape.

Given China’s maturing anti-access capabilities and the potential scale of the mission described above, WARCOM’s inventory of ten MK VIII SEAL Delivery Vehicles and one semi-operational Advanced SEAL Delivery System is almost certainly inadequate.<sup>113</sup> The 2009 QDR should examine options for expanding WARCOM’s clandestine undersea mobility capacity. In addition to procuring additional MK VIII SEAL Delivery Vehicles (or a follow-on pressurized system) serious consideration should be given to developing and fielding a new version of the Advanced SEAL Delivery System — or what is now referred to as the Joint Multi-Mission Submersible (JMMS).<sup>114</sup> While development of the current Advanced SEAL Delivery System was beset with difficulties that resulted in significant performance shortfalls, major delays and cost overruns, the operational requirement for the vehicle remains.<sup>115</sup> Unlike

<sup>113</sup> The ASDS is a 65-foot long, battery-powered mini-submersible that can transport a SEAL squad in a dry environment from a host platform, typically a submarine, to an objective area. It has a two-person crew and includes a lock out/lock in diving chamber.

<sup>114</sup> The long-term goal of the Navy should be to transition from the “wet” MK VIII SDV to a “dry” follow-on system that would fit vertically inside a seven-meter diameter SSGN or SSN payload tube.

<sup>115</sup> GAO, *Defense Acquisitions — Success of Advanced SEAL Delivery Systems Hinges on Establishing a Sound Contracting Strategic and Performance Criteria*, GAO-07-745, May 2007.

flooded SEAL Delivery Vehicles in which combat swimmers are exposed to water during transit (often making the process physically and mentally fatiguing), a pressurized JMMS mini-submarine would allow them to remain warm and dry, enhancing their tactical readiness. This factor, along with the increased submerged endurance of the JMMS relative to the flooded MK VIII SEAL Delivery Vehicles, would make it possible to insert SEALs from a host submarine from a much greater stand-off distance. While the design of key Advanced SEAL Delivery System subsystems will need to be revisited, and different builder arrangements worked out, it is highly likely that additional hulls will be needed to meet requirements for clandestine maritime infiltration and exfiltration. While more analysis is needed, it certainly would be reasonable to equip WARCOC's two SDV Teams with three vehicles each. This recommendation is consistent with Admiral Olson's assertion that "we have a standing requirement for a small fleet. It's somewhere between four and six."<sup>116</sup> These mini-submarines could not only provide SEALs with clandestine infiltration and exfiltration capability in denied areas, but could also be used to conduct clandestine "close-in" surveillance missions; emplace coastal sensors and fiber-optic networks; exploit, manipulate, or disrupt enemy undersea networks; or even conduct submarine ambush operations near an enemy submarine base.

## JSOC

DoD capacity for high-end counterterrorism, counterproliferation, and direct action operations in politically sensitive or denied areas is currently limited to JSOC's SMUs. While there are limits to how quickly and how extensively JSOC capacity can be increased, the 2009 QDR should explicitly consider options for doing so.

During the course of the war against violent Salafi-Takfiri and Khomeinist terrorists, while the Army and Navy SMUs are likely to find themselves involved in continual intelligence-intensive, distributed, proactive counterterrorism operations (primarily global manhunting), they will still have to maintain operational readiness for *reactive* counterterrorism operations (e.g., responding to hostage-rescue situations). Currently, JSOC reportedly lacks sufficient capacity to maintain a robust manhunting presence in both Iraq and Afghanistan.<sup>117</sup> JSOC's readiness for reactive counterterrorism missions globally has likely suffered owing to the extremely high operations tempo in Iraq and Afghanistan.

Looking ahead, one could designate the Army (Delta) and Navy (SEAL Team 6) SMUs to be fungible substitutes for reactive counterterrorism operations, but this

JSOC's readiness for reactive counterterrorism missions globally has likely suffered owing to the extremely high operations tempo in Iraq and Afghanistan.

<sup>116</sup> "ASDS Mini-Sub Program Taking on Water," *Defense Industry Daily*, April 29, 2008.

<sup>117</sup> According to some sources, JSOC maintains 120 Delta soldiers and a similar number of SEALs in Iraq, augmented by some 800 Rangers. These forces routinely conduct from six to a dozen manhunting raids daily. This commitment, however, has reportedly led to a more than two-thirds reduction in the number of JSOC personnel allocated to operations in Afghanistan. Andrew Feickert, "U.S. Special Operations Forces (SOF): Background and Issues for Congress, CRS Report RS21048, June 28, 2007, p. 6; and Thom Shanker, "Special Operations: High Profile, But in Shadow," *New York Times*, May 29, 2007.

The potential global diffusion of nuclear weapons and other weapons of mass destruction over the coming decades could dramatically increase demand for JSOC's highly specialized "render safe" capability.

ignores the reality that they are not completely fungible; while both maintain sophisticated hostage-rescue capabilities, SEAL Team 6 specializes in maritime operations such as ship takedowns, and Delta specializes in rescue operations against hijacked aircraft. Alternating responsibility for reactive counterterrorism operations between the two SMUs would thus result in additional operational risk. The capacity of both SMUs to conduct distributed counterterrorism operations, therefore, will likely need to be increased over the coming decade, though not necessarily to the same extent. At a minimum, this will likely mean increasing human intelligence capacity (i.e., creating a human intelligence squadron within each SMU) and either creating additional operational squadrons or increasing the number of "shooters" within existing squadrons.

The potential global diffusion of nuclear weapons and other weapons of mass destruction over the coming decades could dramatically increase demand for JSOC's highly specialized "render safe" capability. Given the time it takes to train operators to locate, characterize, and disarm nuclear weapons or, more likely, improved nuclear devices, it might be prudent to anticipate this potential demand and begin investing in additional capacity in this area now. To improve JSOC's speed of response for reactive CP missions, consideration should be given to forward basing a small number of personnel in Europe, Central Asia, and/or East Asia. While serving in this capacity, JSOC units, possibly augmented by Department of Energy personnel, could train selected foreign partners in "render safe" tactics, techniques, and procedures.

### AFSOC

One of the critical shortfalls of the 2006 QDR is that it did not include an expansion in AFSOC's fleet to accommodate the roughly one-third expansion in SOF ground forces. The small aging fleet cannot meet anticipated future demand without significant expansion. Most urgently, it must recapitalize its aging fleet of C-130 derivative aircraft, all of which are well beyond their planned service life. Unscheduled maintenance rates have ballooned and a significant portion of the fleet will be grounded in the next few years for safety reasons, owing in part to structural fatigue in the center wing box. As will be detailed below, however, this does not mean that AFSOC should necessarily replace its fleet with newer models of the C-130. Rather, as AFSOC has already started to investigate, it should also modify a range of smaller, more versatile aircraft such as the C-27 Spartan and even single- or dual-engine "civilian" aircraft to satisfy immediate to mid-term needs. DoD must also invest in a stealthy SOF transport for AFSOC both to conduct clandestine operations as part of the war against violent Islamic extremism and to prepare for possible special operations (primarily unconventional warfare, information operations, special reconnaissance, and direct action) against a future, more openly confrontational China armed with modern integrated air defenses. Currently, the vast majority of UCAS operated by AFSOC (and the Air Force more broadly) are concentrated in Iraq and Afghanistan. There is a clear

need for additional UCAS capacity to provide persistent airborne surveillance-strike coverage over key terrorist operating areas. The need to train and advise foreign security forces in the use of air power against Salafi-Takfiri and Khomeinist terrorist groups, as well as other threats to the internal security of partner nations, warrants a major expansion of the 6th Special Operations Squadron. Finally, additional Special Tactics capacity is required to support proactive, sustained “manhunting” and disruption operations (both unilaterally and with US partners); conduct overt unconventional warfare against state sponsors of terrorism and transnational terrorist groups globally; and prepare for potential high-end direct action missions against authoritarian capitalist states such as China or Russia, and nascent nuclear-armed states such as Iran.

All five of these investment areas should be high priorities. Realizing them, however, will pose different challenges. Recapitalizing and expanding the fixed-wing fleet, developing a stealthy transport, and expanding the UCAS fleet will require a sustained financial commitment by the Air Force and SOCOM. The primary obstacle to expanding the 6th Special Operations Squadron and Special Tactics Group capacity is recruiting, training, and retaining highly skilled personnel.

### Recapitalize and Expand AFSOC’s Legacy Fixed-Wing Fleet

AFSOC’s motley fleet of C-130 variants started showing its age at least a decade ago. The MC-130P Combat Shadow and MC-130E Combat Talon I aircraft, for example, have an average age of over forty years and the AC-130H gunship fleet is not far behind with an average age of thirty-seven years.<sup>118</sup> According to AFSOC commander Lieutenant General Donald Wurster, the surge in flight hours since 2001 has caused the amount of unscheduled maintenance time for this aging fleet to skyrocket by nearly 60 percent.<sup>119</sup> The center wing box of in-service aircraft needs to be replaced sooner than anticipated, owing in large part to unexpectedly high utilization rates. In fact, at current flying levels, portions of the AC-130 fleet and MC-130H fleet will likely be grounded for safety reasons *before* their center wing box can be replaced.<sup>120</sup> According to some expert estimates, as much as one third of the AFSOC fleet will need to be grounded for repairs over the next two years.<sup>121</sup> As one AC-130 maintenance officer recently remarked, “we’re flying the wings off them literally . . . These airframes are

**Recapitalizing and expanding the fixed-wing fleet, developing a stealthy transport, and expanding the UCAS fleet will require a sustained financial commitment by the Air Force and SOCOM.**

<sup>118</sup> The MC-130E Combat Talon I transport, AC-130H Spectre gunship, and MC-130P refueler were first deployed in 1966, 1972, and 1986, respectively.

<sup>119</sup> Lieutenant General Donald Wurster, “AFSOC Update,” speech/briefing at National Defense Industrial Association, 19th Annual SOLIC Symposium, February 13, 2008; and Magnuson, “Slow Delivery,” p. 25.

<sup>120</sup> At current utilization rates, AC-130U aircraft will start grounding in the spring of March 2009, roughly one year prior to the first scheduled CWB delivery date.

<sup>121</sup> Comer, “Strategic Directions for Special Operations’ Fixed-Wing Capabilities,” p. 28

The fact that the fleet comprises a small number of many different kinds of aircraft exacerbates this already daunting support challenge, made even more difficult by the “vanishing vender” problem.

getting so old that we’ve got stuff breaking on them that has never broken before.”<sup>122</sup> The fact that the fleet comprises a small number of many different kinds of aircraft, all with unique parts, exacerbates this already daunting support challenge, which is made even more difficult (and costly) by the “vanishing vender” problem—several subcomponents are simply no longer available and cannot be easily replaced with newer models.<sup>123</sup> As an emergency stopgap measure, AFSOC is acquiring twelve MC-130W Combat Spear transport/refuelers, which are modified, refurbished variants of the conventional C-130H.<sup>124</sup>

To support the projected 2006 QDR growth in SOF ground combat units—five SF battalions, two SEAL Team equivalents, a Marine Special Operations Advisor Group, and two Marine Special Operations Battalions—AFSOC will need to increase its transport and gunship capacity significantly. This is especially true if a significant portion of the force is going to remain dedicated to steady-state global manhunting/disruption operations and partner-capacity-building missions. The persistent forward presence needed to win the war against violent Islamic extremism will require not only routine ferrying of operators to and from their far-flung deployment areas and their home bases, but also intra-theater transport and resupply in geographically expansive areas of operations, as well as fire support for unilateral and combined combat operations in widely distributed locations. All of these tasks will put significant strain on the already-taxed AFSOC fixed-wing fleet.

SOCOM currently plans to modify thirty-seven variants of the Air Force Combat Command’s replacement for the HC-130 combat search and rescue aircraft, which will be sufficient to replace AFSOC’s Combat Talon Is and Combat Shadows on a one-for-one basis.<sup>125</sup> While this is a good step forward in terms of recapitalization, it will not significantly increase current capacity. According to General Wurster, AFSOC actually requires at least sixty-one of these new aircraft.<sup>126</sup> That number is likely to grow higher. As AFSOC’s director of plans and programs Colonel Billy Montgomery

<sup>122</sup> Comment by Captain James May as quoted in “Gunships Under Stress,” *Air Force Magazine Daily Report eNewsletter*, March 14, 2008.

<sup>123</sup> AFSOC’s C-130 variant fleet of roughly one hundred aircraft includes eight different types; the most common of which accounts for only twenty-three aircraft.

<sup>124</sup> A total of eight should be delivered by the end of 2008. The remaining four are slated for delivery in 2009. AFSOC has already expressed an interest in procuring an additional five MC-130Ws—for a total buy of seventeen. Olson, Speech at National Security Leaders Forum, Center for a New American Security, March 3, 2008, p. 20.

<sup>125</sup> As with most AFSOC procurement, the Air Force will pay for the basic airframe and all common equipment, while SOCOM pays for all the unique SOF modifications. Major General Richard Comer, “Strategic Directions for Special Operations’ Fixed-Wing Capabilities,” in Clark Murdock et al, *Special Operations Forces Aviation at the Crossroads* (Washington, DC: CSIS, 2007), p. 28.

<sup>126</sup> Major General Donald Wurster, then AFSOC Vice Commander, AFSOC—Challenges for the Long War,” Speech at National Defense Industry Association SO/LIC Symposium and Exhibition, February 27, 2007; and Andrew Feickert, “U.S. Special Operations Forces (SOF): Background and Issues for Congress,” CRS Report RS21048, January 28, 2008, p. 3.

explained in 2007, “the 61 number . . . that was our requirement we believed a year ago. Since that time we’ve had another theater stand up with its mobility requirement.”<sup>127</sup>

While drawing down the number of older aircraft and replacing them with 61 or more newer C-130 variants is attractive from a maintenance perspective, serious consideration should be given to procuring a smaller number of modified C-130s and investing instead in significantly more variants of the more affordable C-27J Spartan transport (or similar aircraft), as well as single and dual-engine “civilian” aircraft. While the C-27 has less payload capacity than the C-130, it has nearly the same range and can go places that the C-130 cannot, such as narrow, unimproved airstrips. More importantly, with a payload of 12,000 lbs or about twenty-four fully-loaded operators, modified C-27s could provide a more efficient means of shuttling individual ODAs, SEAL Teams, and other units back and forth to distant lands and routinely flying in required supplies. When it comes to small-unit transportation and logistics, bigger is not necessarily better. Equipped with a sensor suite, C-27s could serve as airborne surveillance platforms; armed with a small cannon, they could serve as small gunships, taking operational pressure off the AC-130 fleet.<sup>128</sup> Other SOF-unique modifications to the C-27 airframe would likely include a terrain following/terrain avoidance radar for low-flight operations, an aerial refueling package, and a top-of-the line defensive system such as the Directional Infrared Countermeasure system (DIRCM).<sup>129</sup> Conveniently, the C-27 has already been chosen by the Army and Air Force to address the requirement for a Joint Cargo Aircraft.

Taking the small-aircraft logic another step further, it would also make sense for AFSOC to expand its current fleet of small “civilian” aircraft. The 319th Special Operations Squadron is already flying nine modified, single-engine Pilatus Porter PC-12s in Iraq and Afghanistan, reportedly with fantastic results.<sup>130</sup> With a payload capacity of nearly 3,000 lbs and the ability to land on short dirt/grass strips, it has proven to be an excellent means of intra-theater lift and support for SOF. In addition, these aircraft have an inherently low profile; as common civilian aircraft, they are much less conspicuous than hulking C-130s. While not covert, they can hide in plain sight. Accordingly, many countries might be more amenable to granting SOF access, especially those for which a blatantly overt US military presence might be problematic politically. Moreover, at a unit cost of about \$4 million per aircraft, it would be possible to procure roughly ten of them for the same price as a single C-130H/J vari-

**Taking the small-aircraft logic another step further, it would also make sense for AFSOC to expand its current fleet of small “civilian” aircraft.**

<sup>127</sup> Amy Butler, “Growing Pains,” *Aviation Week & Space Technology*, July 23, 2007, pp. 52–52.

<sup>128</sup> In August 2008, it was announced that AFSOC plans to acquire nine multirole AC-27J Stinger gunships, procuring the first one in FY 2011 and two additional aircraft annually between 2012 and 2015. “Stinger Will Fill Critical Need,” *Air Force Magazine Daily Report Enewsletter*, August 13, 2008.

<sup>129</sup> Comer, p. 28.

<sup>130</sup> The U-28As are equipped with a weather radar and a suite of advanced communications and navigation gear.

ant.<sup>131</sup> Given the anticipated scale of the transnational terrorist challenge, building to a fleet of ninety U-28A-class aircraft (e.g., Spanish CASA C-212, Cessna 17 or Piper Arrow) over the next several years would seem reasonable.

Aside from the opportunity cost of not investing in additional C-27J and U28A-like aircraft as proposed above, the other drawback to a large buy of specialized C-130-like aircraft is that it could easily crowd out investment in a follow-on family of stealthy SOF aircraft, which is urgently needed. Additional study is required to determine the most appropriate balance between recapitalization/expansion of current SOF support aircraft and development of future platforms, but a reasonable force-planning target would be:

- > Twelve to seventeen MC-130W Combat Spear transport/refuelers, as planned;
- > Forty-two variants of the HC-130 replacement (increase of five aircraft over baseline capacity);
- > Twenty to thirty modified versions of the C-27J Spartan, to include at least ten gunships;<sup>132</sup> and
- > Ninety single- and dual-engine aircraft in the U-28A class.

As these aircraft are being fielded over the next decade, the mix could be adjusted to reflect actual operational requirements and employment experience.

### Invest in a Stealthy SOF Transport

As modern integrated air defense systems diffuse over the next two decades, it will become increasingly difficult to conduct clandestine operations or penetrate into denied areas with an acceptable level of risk using today's fleet of Combat Talon/Spear transports. The Air Force should begin immediate development of special operations aircraft that exploit stealth. Consistent with this recommendation, the 2006 QDR directed the Department to "enhance capabilities to support SOF insertion and extraction into *denied areas* from strategic distances."<sup>133</sup> Unsurprisingly, various "mission needs" documents for this type of aircraft have been circulating within AFSOC and SOCOM for fifteen years.<sup>134</sup>

To conduct clandestine operations or penetrate into defended air space, highly trained AFSOC pilots typically exploit some combination of the following tactics, techniques, and procedures:

<sup>131</sup> AFSOC, U28A Fact Sheet, accessed on-line at: <http://www2.afsoc.af.mil/library/factsheets/factsheet.asp?id=226>.

<sup>132</sup> AFSOC currently plans to procure at least nine and as many as sixteen C-27 variants.

<sup>133</sup> Emphasis added. *2006 QDR Report*, p. 45.

<sup>134</sup> Major General Richard Comer, "Strategic Directions for Special Operations' Fixed-Wing Capabilities," in Clark Murdock et al, *Special Operations Forces Aviation at the Crossroads* (Washington, DC: CSIS, 2007), p. 18.

- > Carefully mapping out routes so as to avoid known air defenses (e.g., fixed and mobile ground-based radars and surface-to-air missile (SAM) firing units), as well as to exploit terrain masking opportunities.<sup>135</sup>
- > Flying very low altitude, “nap-of-the earth” flight profiles using terrain-following and terrain-avoidance radar systems to get beneath the coverage envelope “floor” of air defense radars and other sensor systems.<sup>136</sup>
- > Conducting missions at night and during inclement weather to minimize the chances of visual, radar, and IR detection.
- > Taking advantage a wide array of electronic countermeasures systems (e.g., radar and infrared jammers) and passive defenses (e.g., towed decoys, chaff ejectors and flares).

Although these measures are demonstrably useful for evading detection and enhancing aircraft survivability under some circumstances, their effectiveness and applicability are limited today and certain to decline over time. Prospective adversaries are already using commercially available networking and data-processing technologies to link disparate air defense sensors into more effective multi-static networks. Exploiting the exponentially increasing computational power of microprocessors and more advanced signal-processing algorithms, air defense systems are becoming more resistant to jamming and better able to handle “clutter,” meaning that sensor “floors” will fall ever lower.<sup>137</sup> Prospective adversaries, including China, are also investing in more powerful radars with expanded coverage volumes and passive sensor systems (e.g., infrared search and track, night-vision, and electro-optical sensors) that are difficult to localize and counter.

Given these and related trends, the effectiveness of all of the tactics, techniques, and procedures that MC-130 aircraft rely upon today to avoid detection will wane significantly over the coming decades. Pre-mission flight planning to exploit terrain-masking opportunities and “thread the needle” through ever smaller coverage gaps in multi-static air defense networks will become increasingly difficult, especially against networks comprising mobile air-defense radars and passive sensors; low-level, nighttime flight will afford progressively less protection as sensor “floors” drop

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<sup>135</sup> The energy emitted by radars and other sensor systems is reflected by mountains and other elevated terrain features. As a result, platforms operating on the opposite side of an obstruction relative to a radar transceiver are blocked or “masked” from view.

<sup>136</sup> Radar transceivers are typically set with a minimum elevation angle to minimize excessive returns from ground clutter. Consequently, there is an altitude “floor” beneath which aircraft can operate without being detected.

<sup>137</sup> Next-generation Russian systems such as the S-400 will reportedly have an altitude ceiling just over one meter above ground level at a range of 400-plus kilometers. William Saier, “The Advanced Special Operations Air Mobility Platform (M-X)—The Time is Now,” *Air and Space Power Journal*, Spring 2005, p. 26.

and long-range IR sensors are fielded in greater numbers; and the effectiveness of electronic countermeasures and “last ditch” self-protection systems (e.g., chaff, flares, and DIRCM-like systems) will erode substantially with the spread of more capable “end-game” sensors and onboard signal-processing systems for interceptor missiles. Aside from these limitations, it is also worth noting that traditional penetration tactics, techniques, and procedures are not universally applicable: there are many areas of the world where there are no terrain features or clutter in which to mask or hide an aircraft with signatures as large as the MC-130’s.

In short, the air defense threats that are expected to emerge over the next two decades will effectively preclude the current fleet of Combat Talons/Spears, even with all of the planned upgrades in ECM and self-protection systems, from clandestinely infiltrating, resupplying, and exfiltrating SOF in many areas of the world. As AFSOC warned a few years ago in its *Way Ahead* planning document:

The next 25 years will see the proliferation of infrared (IR), radar-guided, and directed-energy (DE) threats that will render many existing aircraft obsolete by the end of this period. Between DE and radar-guided threats current AFSOF aircraft will have survivability challenges in the years 2016 and beyond. This evolving threat has the potential to significantly challenge the capability for Special Operations Forces (SOF) to achieve tactical surprise through clandestine air mobility due to the increasing technological capability of passive aircraft detection at further distances.<sup>138</sup>

Major General John Dorris, the former mobilization assistant to the commander of AFSOC, candidly summarized this impending capability gap this way: “After 2015, the ability of the C-130 as it’s currently configured, even with enhancements, is not going to be able to go into a lot of the airspace that it needs to go into.”<sup>139</sup> An Air Force colonel who participated in AFSOC’s fifteen month M-X Analysis of Alternatives study similarly observed:

While AFSOC continues to modify its Combat Talon aircraft with enhancements to increase mission effectiveness and survivability, it just won’t be able to make the radar detectability of such a huge aircraft with a large RCS any better. Couple that with the fact that aircraft and crew can’t fly any lower or any faster; night can’t become any darker; adverse weather isn’t something one can conjure up when needed; there are areas in the world where AFSOC may need to go where there is no terrain to hide in; and one quickly comes to the conclusion that AFSOC needs a new LO aircraft to remain relevant in the future.<sup>140</sup>

<sup>138</sup> US Air Force, AFSOC’s *Way Ahead* (Hurlburt Field, FL: AFSOC Plans and Programs Office, n.d.), pp. 8–9.

<sup>139</sup> He also remarked, “The prediction is that the C-130 will no longer be survivable past about 2015.” See Marc Selinger, “USAF Plans Serious Look at Replacing Special Ops Aircraft,” *Aerospace Daily*, February 6, 2004; and Joshua Kucera, “US Boosts Special Forces to Meet Iraqi Challenge,” *Jane’s Defence Weekly*, February 18, 2004, p. 10.

<sup>140</sup> Col William E. Saier, “The Advanced Special Operations Air Mobility Platform (M-X) — The Time is Now,” *Air and Space Power Journal*, Spring 2005, p. 29.

To address this widening capability gap, the Air Force should begin immediate development of a stealthy SOF transport and strive to reach an IOC by 2020, at the latest. While more analysis is needed to discern the optimal blend of performance characteristics for the M-X, the following would be reasonable goals: an operational range of over 4,500 nm,<sup>141</sup> a payload of between 15,000 and 20,000 pounds, a speed in the high sub-sonic range, and service ceiling of at least 40,000 feet, preferably higher.<sup>142</sup> Using low-observable design techniques and materials (e.g., radar-absorbing materials) that are already on hand or under development as part of the Next Generation Bomber (NGB) program, it would be possible to reduce the RCS — as well as infrared, acoustic, and visual signatures — of the M-X well below that of the B-2. With that level of stealth, the M-X would, of course, be far more difficult to detect than the MC-130. What may be less obvious, however, is the synergistic relationship between stealth and the traditional evasion tactics described earlier. The volume of air space in which sensors can detect and track a stealthy aircraft is much smaller than that for non-stealthy aircraft. As a result, it would be easier to plan and fly routes, often referred to as “blue lines,” that avoid known enemy air defenses. A stealthy M-X would also be better able to hide in clutter and exploit terrain-masking opportunities. The synergy between stealth and sensor evasion would not only enhance tactical surprise, but also enable clandestine operations under conditions that would be impossible today.

From a programmatic standpoint, the most daunting challenge in developing and fielding a stealthy SOF transport is the way SOCOM’s MFP-11 process typically works. MFP-11 funding is used for research, development, testing, evaluation and acquisition costs associated with SOF-unique equipment and upgrades. In the case of fixed-wing aircraft, this almost always means that the Air Force pays for the development and procurement of the basic airframe and SOCOM pays for the SOF-unique modifications. As a practical matter, however, this means that AFSOC is locked into modifying whatever aircraft are already in service with the Air Force, such as the C-130. While in theory MFP-11 funds could be used to develop and acquire a stealthy transport from the ground up, because it is arguably “SOF unique,” such an undertaking would not only overwhelm SOCOM’s total budget, it would also be beyond the professional

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<sup>141</sup> With 4,500 nm range, the M-X could refuel 300-plus miles away from Chinese borders, penetrate some 1,800 nm into the Chinese interior, loiter for a short period, and then return to a refueling orbit outside of Chinese airspace prior to returning to base; alternatively, it could fly one-way missions across China, which spans about 2,500 nm at its widest point, with enhanced persistence in designated target areas.

<sup>142</sup> The altitude ceiling for the MC-130 is 33,000 feet above mean sea level. While this is adequate for avoiding engagement by the vast majority of SAMs in most areas of the world, it is too low for operating in areas of high elevation (e.g., Afghanistan, Pakistan, and Iran). The Hindu Kush mountain range that runs over 800 km from northern Pakistan into northeast Afghanistan, for example, soars as high as 25,236 feet and includes many peaks with elevations above 10,000 feet (e.g., Takur Ghar of Operation Anaconda). As a result, the MC-130’s service ceiling in that area of the world would often be less than 20,000 feet above ground level — or in the heart of the engagement envelope of widely available SAMs. For that reason, as well as to hedge against the diffusion of SAMs capable of high-altitude intercepts, the M-X should have a service ceiling of at least 40,000 feet, and preferably closer to 50,000 feet.

While the top priority is for a stealthy SOF transport, a more survivable SOF refueler and gunship would also be desirable.

competence of SOCOM to manage such a complex, large-scale acquisition program.<sup>143</sup> In short, if AFSOC is ever going to acquire a stealthy transport, it will require overcoming two high hurdles: first, convincing the Air Force to fund the acquisition cost of the basic airframe (assuming a suitable one exists); and persuading SOCOM to allocate a major portion of its MFP-11 funding to the modification of that airframe.

The only hope at present for vaulting over those hurdles is the Air Force's Next Generation Bomber (NGB), which is slated to have an IOC in 2018. It is projected to have a range of 4,500 nm (or radius of 2,000 nm plus loiter), a payload of at least 28,000 lbs, and a speed in the high subsonic range.<sup>144</sup> Moreover, it will incorporate very advanced signature reduction features.<sup>145</sup> In other words, it would meet all the core performance parameters for a stealthy SOF transport. While there would undoubtedly be challenges involved—such as physically modifying the bomb bay (including pressurization and heating), reconfiguring the engines to support an altitude-flight speed envelop that is consistent with special operations freefall, and possibly changing the planform slightly to accommodate special operators and their equipment—it is technically feasible and within the realm of MFP-11 resourcing. The key to unlocking this future capability for AFSOC is for DoD to allocate additional funds to the Air Force for the procurement of more NGB airframes, which are likely to cost roughly \$500 million per copy, and for SOCOM to fund what would be SOF-unique modifications of considerable magnitude. For the Air Force, this would be a win-win because the additional aircraft for AFSOC—perhaps as few as twenty-four or as many as ninety-six—would lower the unit procurement cost for the entire program.<sup>146</sup>

While the top priority is for a stealthy SOF transport, a more survivable SOF refueler and gunship would also be desirable. The latter, for instance, could be armed with retractable 120-mm mortar with laser-homing rounds (or other terminally guided rounds), very small (3-7 lbs-class) PGMs such as Northrop Grumman's Viper Strike weapon, or eventually a solid-state, high-energy laser. It is sometimes argued that investing in stealth for a gunship is ill-advised because it has to operate at relatively low altitude to provide close-air support, making it vulnerable to visual and infrared detection. While the gunship would indeed be vulnerable for those reasons, it still has to penetrate into denied airspace and survive against modern IADS during the ingress and egress from the target area. Put another way, while some of the benefits of

<sup>143</sup> Managing large-scale development programs has not been one of SOCOM's strengths. See GAO, *Defense Acquisitions—An Analysis of Special Operations Command's Management of Weapon System Programs* (Washington, DC: GAO, 2007).

<sup>144</sup> Anthony Murch, *CRS Report for Congress—The Next Generation Bomber: Background, Oversight Issues, and Options for Congress*, Doc. No. RL34406, March 7, 2008, pp. 14–15.

<sup>145</sup> Bill Sweetman, "Ultra Stealth: Northrop Grumman has a Secret: USAF's Next Generation Bomber," *Defense Technology International*, June 2008, p. 16.

<sup>146</sup> The 24 figure would be for two 12-aircraft special operations transport squadrons. The 96 figure would be for four 12-aircraft special operations transport squadrons (48 aircraft); two 12-aircraft special operations aerial refueling squadrons (24 aircraft); and two 12-aircraft special operations gunship squadrons (24 aircraft).

advanced stealth would certainly be diminished for the relatively short period of time while the gunship was actually engaged in fire support, stealth could be essential for getting to and from the area of operations.<sup>147</sup>

While the development and fielding of a stealthy M-X would be expensive, the strategic benefits would be immense. A stealthy M-X would be invaluable for conducting time-sensitive counterterrorism, counterproliferation, unconventional warfare, and other clandestine operations against Salafi-Takfiri/Khomeinist terrorist groups in denied or politically sensitive areas of the world. Moreover, it would be very useful for conducting offensive operations (e.g., unconventional warfare, information operations, special reconnaissance, and direct action) against future adversaries armed with advanced “anti-access” capabilities and possessing significant strategic depth (e.g., a more openly hostile China or Iran). A stealthy MX would, for example, provide the *only* practical option for inserting SOF to conduct special reconnaissance and direct action missions in the interior of China where known offensive space control sites, ballistic missile garrisons and hide sites, and other high-value targets are located.

While the development and fielding of a stealthy M-X would be expensive, the strategic benefits would be immense.

### Create Additional UCAS Squadrons

As mentioned in Chapter 2, AFSOC clearly needs additional UCAS capacity to provide persistent airborne reconnaissance and strike coverage to support what is likely to be a global, protracted war against transnational terrorist groups. These aircraft could be used to monitor under-governed land areas, as well as littoral zones; to locate, track, and strike time-sensitive, high-value targets; and to enable US and partner operations. Demand for full-motion video, which has grown by an eye-popping 300 percent over the past several years, is now four times that supplied by available aircraft.<sup>148</sup> Currently, SOCOM and CENTCOM each claim to require approximately thirty UCAS combat air patrols for operations in Iraq and Afghanistan — for a total of sixty combat air patrols just in the CENTCOM area of responsibility.<sup>149</sup>

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<sup>147</sup> Given the low-altitude vulnerability of the stealthy gunship, it might make sense to invest in a slightly lower tier of stealth technology to bring down its unit cost. As AFSOC’s Colonel Billy Montgomery explained in this regard, “The level of stealthiness and LO technology is not the same degree that you’d want a take-down-the-door next-generation bomber or F-22 to have.” Amy Butler, “Future Bomber a Foundation for Next-Gen Gunship,” *Aviation Week & Space Technology*, July 23, 2007.

<sup>148</sup> Tom Vanden Brook, “Spy Drone Shortage Allows Attacks ‘With Relative Impunity,’ Report Says,” *USA Today*, March 25, 2008, p. 1.

<sup>149</sup> Michael Hoffman, “Task Force to Get More UAVs into War Zones,” *Air Force Times*, April 26, 2008.

AFSOC's current UCAS fleet is clearly inadequate. But how many UCAS orbits are enough?

AFSOC's 3rd Special Operations "Dragons" Squadron currently operates a fleet of twenty-eight MQ-1 Predators.<sup>150</sup> With that size fleet, it can sustain six combat air patrols, which obviously falls far short of SOCOM's thirty combat air patrol requirement.<sup>151</sup> AFSOC's current UCAS fleet is clearly inadequate. But how many UCAS orbits are enough? That is a difficult question, especially because there has been no clearly delineated division of labor, or allocation of roles and missions, between AFSOC and the Air Force with respect to UCAS operations.<sup>152</sup>

While this is an area that certainly merits additional study in the next QDR, a reasonable, long-term force-planning goal would be for AFSOC to stand up at least ten 16-aircraft squadrons, which could each be sub-divided into four 4-aircraft flights. Ten squadrons would be adequate to provide each active SFG and two NSWGs with a dedicated squadron, as well as provide two squadrons for JSOC/Rangers and one for MARSOC. With each squadron comprising four flights, it would be possible to provide dedicated support at the battalion level, if desired. Each active SF battalion, for example, could be supported with a four-aircraft flight, which would be sufficient for one UCAS combat air patrol. In addition, if at some point a stealthy UCAS becomes available, it would be very desirable for SOCOM to procure at least one additional squadron, primarily to support JSOC operations. This proposed growth in AFSOC's UCAS capacity would require the procurement of at least 132 additional aircraft — or thirty-three MQ-1 Predator systems (each with four aircraft, ground control station, satellite link, and other support equipment). The total procurement cost would be around \$1.4 billion, which could be spread over several years. Even that manageable cost, however, might be significantly reduced by refurbishing and modifying the approximately one hundred Air Force-operated MQ-1 Predators that are scheduled to be retired between 2011 and 2015 as the MQ-9 Reaper fleet builds up.<sup>153</sup>

This discussion, however, raises another important question: should AFSOC shift to the MQ-9 Reaper as well, or at least field a mixed fleet of MQ-1 Predators and

<sup>150</sup> The Predator MQ-1 can carry a 465-lb. sensor payload (e.g., gimble-stabilized EO/IR and SAR) for up to twenty-four hours at a mission radius of 500 nm. It typically flies at around 15,000-20,000 feet when conducting ISR missions, but has an altitude ceiling of 26,000 feet. During the war in Afghanistan, a handful of Predator UAVs were armed with two laser-guided, ground-attack Hellfire missiles for directly attacking enemy targets. After demonstrating the ability to employ Hellfire missiles, the designation of the Predator was changed from RQ-1 to MQ-1. Kenneth Munson, ed., *Jane's Unmanned Aerial Vehicles and Targets* (London, UK: Jane's Information Group, 2002), p. 240.

<sup>151</sup> It was announced in June 2007 that Air Combat Command (ACC) had transferred 21 MQ-1 Predators to AFSOC, which were followed by an additional seven aircraft shortly thereafter. ACC also gave operational control over two CAPS to CENTCOM and three CAPS to other government agencies. Braybrook, "Special Air Delivery," p.p. 11-12; and Michael Moseley, USAF Chief of Staff, Memorandum on "Executive Agency for Medium- and High-Altitude Unmanned Aerial Vehicles (UAVs)," March 5, 2007 (see attachment, "USAF UAV Force Structure").

<sup>152</sup> For an excellent overview of the historical and future role of UAVs and UCAS in special operations, see: Tom Ehrhard, "Future of SOF Aviation Unmanned Aerial Vehicles," Briefing, January 17, 2007.

<sup>153</sup> Between 2011 and 2016, the Air Force plans to increase the number of MQ-9 Reaper combat air patrols from just under twenty to fifty, while dropping the number MQ-1 combat air patrols from over thirty to zero. USAF, "MQ-1 to MQ-9 Transition Plan," briefing slide, 2008.

MQ-9 Reapers? The MQ-9, which is not dramatically more expensive and entered full-rate production in 2008, provides a number of capability improvements over the MQ-1, especially with respect to its potential for conducting precision strikes. It can fly more than 20,000 feet higher (its altitude ceiling is 50,000 feet), carry an internal sensor payload that is several hundred pounds heavier, cruise nearly three times as fast, and carry a much heavier external weapons payload (3,000 pounds).<sup>154</sup> It is fitted with six pylons for mounting weapons, external fuel tanks, or additional sensor systems.<sup>155</sup> With an endurance of at least twenty-four hours *without external* payload, the MQ-9 Reaper could remain on station for more than eighteen hours at a radius of 500 nm and around fourteen hours at a radius of 1,000 nm.<sup>156</sup> The MQ-9 Reaper can be equipped with internally mounted electro-optical, infrared, and synthetic aperture radar sensors, as well as a laser range-finder and target-designator. It may also carry a laser-radar (LIDAR) sensor that will reportedly be capable of penetrating moderate cloud cover, smoke, dust, foliage, and camouflage.<sup>157</sup> In the reconnaissance-strike role, while both the MQ-1 and MQ-9 have similar mission endurance (assuming the Reaper carries a standard weapons load and no external fuel tanks), the MQ-9 has significantly longer loiter time at radius because it cruises so much faster (200 knots versus 70 knots). Its endurance, moreover, can be increased significantly by mounting a pair of 1,000-lb external fuel tanks to its “wet” inner pylons.<sup>158</sup> In the ground-attack role, the standard load-out for the MQ-9 is four 500-lb class weapons such as the GPS-guided JDAM or Paveway II laser-guided bomb; or alternatively, up to ten 250-lb class weapons such as the Small Diameter Bomb (GBU-39).<sup>159</sup> Since the MQ-9 Reaper system provides considerably more operational flexibility than the MQ-1 Predator (i.e., higher altitude, greater payload, faster cruising speed, and longer operational reach), the 2009 QDR should give serious consideration to investing in a mixed fleet of at least ten squadrons of MQ-1 Predators and MQ-9 Reapers for

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<sup>154</sup> Department of Defense, *Unmanned Systems Roadmap, 2007-2032* (Washington, DC: DoD, 2007), pp. 65, 73; General Atomic Aeronautical Systems, “Predator B,” *Fact Sheet*, accessed online on February 8, 2007; US Air Force, “MQ-9 Reaper,” *Fact Sheet*, May 2008; and US Air Force, “MQ-9 Reaper,” *Fact Sheet*, May 2008.

<sup>155</sup> Twin inner pylons can carry a maximum of 1,500 lbs each, twin mid-wing pylons can carry a maximum of 600 lbs each, and twin outer-wing pylons can carry a maximum of 200 lbs each.

<sup>156</sup> These loiter times are based upon a cruising speed of 200 knots and a total endurance without external payload, typically referred to as a “slick” configuration, of twenty-four hours at 40,000 feet. Some sources, including the manufacturer, claim that the MQ-9 has a maximum endurance of thirty hours; in which case, loiter time at radius would be significantly longer. The thirty-hour figure, however, probably represents the endurance without *any* payload — external or internal. DoD’s *Unmanned Systems Roadmap, 2007-2032*, specifies an operational radius of 1,655 nm and the most recent Air Force *Fact Sheet* indicates a maximum range of 3,200 nm.

<sup>157</sup> Sweetman, “In the Tracks of the Predator,” p. 50.

<sup>158</sup> The Reaper normally carries 4,000 lb of fuel. If drag was not a factor, the additional 2,000 lb of fuel would increase range by about 50 percent. The increase drag caused by the external tanks, however, would cause the actual range increase to be significantly less.

<sup>159</sup> *Unmanned Systems Roadmap, 2007-2032*, p. 73.

As air defense systems proliferate and become more capable over the course of the coming decade, the need for stealthy UCAS will grow more pressing.

AFSOC. To take advantage of these air vehicles, it will also be necessary to expand well above current levels the number of trained pilots, sensor operators, and mission coordinators in AFSOC.<sup>160</sup>

Given the limited range of Predator and Reaper UCAS, it will be necessary to establish forward-based regional hubs to maintain adequate air surveillance and strike coverage over major terrorist operating areas (e.g., the Maghreb and pan-Sahel, Horn of Africa, the Levant and Middle East, Central Asia, South Asia, and Southeast Asia). In addition, the AFSOC fleet will need to be complemented by Air Force-operated high-altitude, long-endurance (HALE) UAVs such as the Global Hawk, tethered aerostats, high-altitude airships, and MQ-9 Reaper UCAS—all of which will play an important role in generating persistent global airborne surveillance and strike coverage.

A major capability shortfall of the proposed hunter-killer fleet is that neither the Predator nor the Reaper is stealthy. For conducting surveillance and, in some cases, strike missions in denied areas (e.g., Iran) and sensitive areas (e.g., countries with which the United States is not at war, and which possess modern air surveillance systems), it would be highly desirable to have a stealthy, long-endurance UCAS. While this is admittedly a niche capability in the war against transnational terrorist groups, it could be a critical one in many plausible contingencies. As air defense systems proliferate and become more capable over the course of the coming decade, the need for stealthy UCAS will grow more pressing. This requirement, moreover, overlaps with the need to develop and field a stealthy, persistent surveillance-strike capability to hedge against the rise of China as a military competitor.

### Expand 6<sup>th</sup> Special Operations Squadrons into a Full Irregular Warfare Wing

Airpower is a major source of American advantage in foreign internal defense. Lieutenant General Michael Wooley, then commanding general of AFSOC, asserted in 2007 that to make the greatest possible contribution to US irregular warfare efforts, the Air Force must focus on “conducting support to counterinsurgency operations and training and enabling partner nations through aviation foreign internal defense activities.”<sup>161</sup> Currently, however, American capacity for aviation foreign internal defense, which resides almost exclusively within the 6th Special Operations Squadron,

<sup>160</sup> The Air Force currently does not have enough trained air vehicle crews to support fully operations in Iraq and Afghanistan. As Lt Col Matthew Bannon, chief of unmanned aerial systems at Langley Air Force base put it, “If you asked me if we had enough people—pilots, sensor operators, mission coordinators, etc—I would tell you no.” Tom Vanden Brook, “Drones’ Supply, Support Lacking,” *USA Today*, March 20, 2007, p. 1.

<sup>161</sup> Michael Wooley, forward in Colonel Billy Montgomery, “Air Force Special Operations Command White Paper – USAF Irregular Warfare Concept, May 2007, p. 2.

falls far short of demand.<sup>162</sup> While the 6th Special Operations Squadron is in the process of doubling its capacity from 110 to 230 authorized advisors, as directed by the 2006 QDR, that expansion is likely to be insufficient. Although the 6th Special Operations Squadron has been extremely effective in supporting a limited number of theater requests for aviation foreign internal defense and combat aviation advisory missions, the number of Air Force advisor teams is simply inadequate to conduct sustained operations.<sup>163</sup> A 2006 RAND study concluded that aviation foreign internal defense capacity may need to be expanded four-fold and possibly more to meet growing demand.<sup>164</sup>

To close this capacity gap, SOCOM should create an irregular warfare (IW) wing that is “properly organized, trained, and equipped to operate by, with, and through PNs [partner nations] where US Airpower cannot be directly employed and to build partner nation capacity.”<sup>165</sup> As an AFSOC white paper argued:

To complement existing capabilities, the USAF needs a dedicated wing capable of conducting IW operations with the ability to train and enable partner nations to combat their own internal security threats. This force should consist of medium and light mobility, light strike, and rotary wing aircraft multi-rolled with ISR capability. This wing should consist of a professionally trained force and permanently assigned, low tech, relatively inexpensive, easy to maintain aircraft, with the potential to transfer or sell similar assets to partner nations through appropriate security assistance channels.<sup>166</sup>

The IW wing would have two core missions: providing specialized airpower necessary to support IW operations globally; and training and enabling “partner nations to develop, sustain, employ, and fully understand the role airpower plays in combating

Aviation foreign internal defense capacity may need to be expanded four-fold and possibly more to meet growing demand.

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<sup>162</sup> The 6th Special Operations Squadron forms the core of USAF aviation-FID capability and is the only Air Force unit organized, trained, and equipped to function as Combat Aviation Advisory flights. It is organized into regionally oriented flights that focus on supporting host-nation counterinsurgency, counterterrorism, and counternarcotics efforts through building indigenous tactical airpower capabilities. Each Combat Aviation Advisory flight is organized, trained, and equipped to function as an integrated, interdependent team to train both operators and support personnel. See Montgomery, “Air Force Special Operations Command White Paper—USAF Irregular Warfare Concept,” p. 7; and Stephen Tribble, “US Air Force Planners Want Irregular Warfare Wing,” *Flight International*, July 2, 2007.

<sup>163</sup> Montgomery, “Air Force Special Operations Command White Paper—USAF Irregular Warfare Concept,” p. 10.

<sup>164</sup> The current capacity of the 6<sup>th</sup> Special Operations Squadron is approximately eleven training missions annually. As much as five times this amount may ultimately be required. According to 6th Special Operations Squadron personnel, at least 58 percent of the formal requests for forces received by the squadron were unsupported, primarily owing to a lack of manpower, and hundreds of additional informal requests were not met. The RAND study concluded that creating a “wing-level organization for aviation advising” was “the single most important initiative USAF can take to enhance its own counterinsurgency capabilities.” See Alan J. Vick, Adam Grissom, William Rosenau, Beth Grill, and Karl Muel-ler, *Air Power in the New Counterinsurgency Era-The Strategic Importance of USAF Advisory and Assistance Missions* (Santa Monica, CA: RAND, 2006), pp. xviii, 125, 136–143.

<sup>165</sup> Montgomery, “Air Force Special Operations Command White Paper—USAF Irregular Warfare Concept,” p. 3.

<sup>166</sup> *Ibid.*, p. 20.

**Combat Controller Teams can significantly increase overall combat effectiveness, leveraging US precision air power to its full effect.**

internal threats.<sup>167</sup> The focus would be on airborne ISR, tactical and operational mobility for ground forces, combat search and rescue, medical evacuation, and light strike (e.g., air interdiction, close-air support, and battlefield air operations) in support of counterinsurgency, counterterrorism, counternarcotics, and other host-nation internal security operations. AFSOC proposed that the wing be equipped with eighty-four aircraft: twenty light-medium mobility aircraft (e.g., Cessna Cargomaster, Cessna Caravan, Twin Otter, CASA 212, G-222, C-27, or C-235); twenty light-strike aircraft (e.g., Raytheon AT-6B, Tucano, Super Tucano, or modified Cessna Caravan); twenty rotary-wing aircraft (e.g., UH-1, Bell 412, Bell 212, or other commercial medium-lift helicopters); twenty manned, fixed wing ISR aircraft; and four heavy mobility aircraft (e.g., C-130s).<sup>168</sup> It would also have an “organic capability to integrate support requirements such as aircraft maintenance, airbase defenders, communications, intelligence, survival, and other critical combat support functions.”<sup>169</sup> This IW wing could be organized into three or more regionally focused squadrons with specialized cultural and language training. The highest demand areas for aviation foreign internal defense are likely to be the Maghreb, Trans-Sahara, and Horn of Africa; the Middle East; Central Asia; South Asia; and Southeast Asia.

Aviation foreign internal defense is an area that should be shared between the “big Air Force” and AFSOC. Specially trained aviation advisor squadrons within each numbered Air Force could conduct joint training and partner-capacity building exercises on a routine basis with foreign air forces. Those squadrons could provide an ideal pool for recruiting individuals for AFSOC’s combat advisor training program — much like how the Ranger regiment serves as a feeder for SF and JSOC. AFSOC would focus on training their foreign counterparts in special operations aviation, as well as on conducting missions in politically sensitive countries. To make this a reality, however, the Air Force needs to take on the training and advising mission as a core competence.

### Increase Special Tactics Squadron Capacity

Combat Controller Teams, one of the core elements of AFSOC Special Tactics Squadrons, are in short supply. By conducting local air traffic control and coordinating precision fire support while embedded with SOF ground units, Combat Controller Teams can significantly increase overall combat effectiveness, leveraging US precision air power to its full effect. As part of the war against Salafi-Takfiri/Khomeinist terrorist groups, globally distributed teams of SOF conducting unilateral counterterrorism operations, combined operations with partner nations, and unconventional warfare operations with irregular forces will all require Combat Controller Team support.

<sup>167</sup> Ibid., p. 12.

<sup>168</sup> Ibid., pp. 13–16.

<sup>169</sup> Ibid., p. 12.

Currently, AFSOC has six Special Tactics Squadrons, one of which is permanently assigned to JSOC. Given the growing importance of Combat Controller Teams in linking small teams of ground operators with air power, sufficient capacity is required to provide steady-state support to the Special Forces Groups, Naval Special Warfare Groups One and Two, the Rangers and MARSOC. Accordingly, the 2009 QDR should seriously consider standing up at least an additional three Special Tactics Squadrons. Achieving that goal, however, will likely prove challenging. Over the past several years, AFSOC has had recruitment and training-throughput shortfalls, especially with regard to combat controllers.<sup>170</sup>

## MARSOC

MARSOC, which is still struggling to reach its end-strength goal of 2,600 marines, appears to be on the right trajectory for making a valuable contribution to the war against violent Islamic extremism. The command's emphasis on foreign internal defense is especially appropriate. Marine Special Operations Advisor Group training teams have already deployed to several states in need of assistance. While many of these deployments have been brief (six to eight weeks), others have been as long as six months. In several cases, they have conducted training activities in the same country multiple times. As Colonel Michael Peznola, commander of the Marine Special Operations Advisor Group explained, "Our goal is persistent engagement" and reflecting that, "we've hit some of the countries three times already. Same unit, same force, same country."<sup>171</sup>

As mentioned in Chapter 2, DoD needs the capacity to conduct training and advisory activities on a steady-state basis in at least a score of high-priority countries and to carry out more episodic training activities on a rotational basis in another twenty to forty countries. Marine Special Operations Advisor Group teams will play an important role in meeting that requirement. The command should be encouraged to shift even further toward extended deployments, in some cases over a year, in high priority countries — and away from routine rotational activities that general purpose forces could readily handle.

Given that the demand for partner capacity-building is expected to grow, it is not clear that MARSOC should divert scarce resources to the development of an unconventional warfare capability. Rather than attempt to duplicate a capability that has been nurtured over decades at considerable cost within SF, it might make sense for MARSOC to focus on the foreign internal defense mission and, to a lesser extent, upon direct action and special reconnaissance.

**It might make sense for MARSOC to focus on the foreign internal defense mission and, to a lesser extent, upon direct action and special reconnaissance.**

<sup>170</sup> GAO, *Special Operations Forces—Several Human Capital Challenges Must Be Addressed to Meet Expanded Role* (Washington, DC: GAO, 2006), pp. 23–24.

<sup>171</sup> Matt Hilburn, "A Work in Progress," *Seapower*, February 2008, p. 21.

## SOF-RELATED FORCE PLANNING IMPLICATIONS FOR THE SERVICES

Although this chapter has focused exclusively on the force planning implications for SOF of the operational requirements discussed in Chapter 2, there are many cross-linkages with the conventional Services that will be discussed briefly below. In summary, the Army and Marine Corps need to take on irregular warfare, and the partner-capacity building mission more narrowly, as a core competence; the Navy needs to help generate persistent maritime surveillance and interdiction coverage of critical littoral areas, provide insertion and support platforms for SOF, and take on the maritime foreign internal defense mission; and the Air Force needs to help generate persistent airborne surveillance and strike coverage, support the development of a stealthy SOF transport, and take on part of the aviation foreign internal defense mission.

**The Army and Marine Corps must develop the capabilities and capacities needed to train and advise foreign security forces in multiple, widely dispersed countries simultaneously.**

### Reorient Ground General Purpose Forces Toward Irregular Warfare

As part of a broader reorientation toward irregular warfare and away from conventional, combined-arms mechanized warfare, the Army and Marine Corps must develop the capabilities and capacities needed to train and advise foreign security forces in multiple, widely dispersed countries simultaneously. As Secretary Gates observed, “Looking forward, tasks such as standing up and mentoring indigenous armies and police — once the province of the Special Forces — are now a key mission for the military as a whole.”<sup>172</sup> In addition, DoD needs to create a “preventive surge” capability, meaning the ability to deploy a relatively large number of specialized security, stability, transition, and reconstruction (SSTR) units to stabilize weak or failing states *before* they collapse by providing capacity in areas in which indigenous resources are inadequate, while simultaneously building host-nation capacity.<sup>173</sup> Training and advisory experience developed in Iraq and Afghanistan must be institutionalized or it will be lost.

Improving skill sets for irregular warfare—and partner capacity-building and SSTR operations more narrowly—will require the US Army and Marine Corps to dedicate significant resources to introducing or, in some cases, expanding the following specialized capabilities: intelligence collection and analysis, military police, explosive ordnance handling, psychological operations, civil affairs, language/cultural expertise, medics, and engineers. The professional military education system and current training programs need to be restructured to focus on building an

<sup>172</sup> Secretary of Defense Robert Gates, Speech at Marine Corps Association Annual Dinner, Crystal Gateway Marriott Hotel, Arlington, VA, July 18, 2007.

<sup>173</sup> DoD may not only be called upon to provide and build capacity for internal security and law enforcement, but for other “non-military” areas critical to the stability of the state (e.g., electrical power generation and distribution, water treatment and distribution, provision and distribution of food, sanitation, and medical care).

institutional competence in counterinsurgency strategy and operations, as well as on developing and refining IW focused tactics, techniques, and procedures. To accomplish this across the force in a reasonable timeframe, it will likely be necessary to create new training infrastructure. Increased investment in simulation tools to facilitate mission planning, rehearsal and execution at the small-unit level is warranted. It may also make sense to create specialized, standing IW units, especially for training and advising missions in relatively benign threat environments.

By taking on a portion of the capacity-building mission, even if it is a small one because of host-nation political reluctance to invite in relatively large conventional US military units, the general purpose forces could free up SOF for other tasks that more fully leverage their unique capabilities.<sup>174</sup> SOF would, however, remain responsible for training, equipping, and advising missions in politically sensitive areas where a low-visibility presence is essential, as well as for instructing foreign special operations units.

### **Refocus the LCS Fleet, Expand the Coastal Patrol Fleet, and Stand up Additional Riverine Squadrons**

It is well established that Al Qaeda Associated Movement (AQAM) is exploiting commercial shipping to move personnel, materiel, finances (i.e., currency, gold, and jewels), and contraband (e.g., opium and heroin). According to one source, al Qaeda possesses a “phantom fleet” of twenty-three dozen cargo ships around the world.<sup>175</sup> These vessels, owned by an ever-changing array of shell companies, are constantly renamed and re-registered. AQAM probably also takes advantage of legitimate commercial shipping firms to move containers globally. While recognizing that it is impractical to completely deny AQAM the ability to operate at sea, the US Navy should be postured and equipped to:

- > Maintain persistent surveillance over littoral zones adjacent to countries where AQAM is believed to be operating.
- > Monitor and, if necessary, secure critical chokepoints globally.
- > Board and inspect suspicious vessels routinely in cooperation with partner states.
- > Seize vessels by force, when necessary.
- > Conduct small quick-reaction raids against ground targets in coastal regions.

**SOF would remain responsible for training, equipping, and advising missions in politically sensitive areas where a low-visibility presence is essential, as well as for instructing foreign special operations units.**

<sup>174</sup> While both the Army and Marine Corps are taking steps to enable the deployment of smaller units for partner-capacity building missions, they are unlikely to do so below the company level, which is still much larger than a twelve-man SF ODA.

<sup>175</sup> Akiva J. Lorenz, “Al Qaeda’s Maritime Threat,” p. 17. Available on-line at: [http://www.cicte.oas.org/Database\\_/50637-Al%20Qaeda's%20MaritimeThreat.pdf](http://www.cicte.oas.org/Database_/50637-Al%20Qaeda's%20MaritimeThreat.pdf). See also: “International Authorities Track Terrorist Shipping Assets, Activities,” at <http://www.amo.union.org/newspaper/morgue///1-2002/Sections/News/terrorist.htm>.

- > Secure critical offshore infrastructure — both on the surface and undersea (e.g., oil rigs and fiber-optic cables).

The Navy's recent decision to stand up three riverine squadrons, which can be used to deny terrorists inland maritime sanctuaries, is a promising first step toward meeting these requirements. To create a maritime surveillance and interdiction fleet, however, the Navy should also shift the mission focus of its littoral combat ship (LCS) program to the missions listed above, significantly increase its coastal patrol boat fleet, and stand up at least four additional riverine squadrons.<sup>176</sup> As part of the Global Fleet Station concept, the Navy could forward-base a Global Fleet Station Command Ship (T-LSD), a US Coast Guard operated Berthoff-class National Security Cutter, a Joint High Speed Support Vessel, a patrol boat squadron, and a riverine squadron at each of seven fleet stations strategically located around the globe. These ships could be reinforced with LCS squadrons or other surface combatants, as necessary. In addition to conducting the tasks enumerated above and contributing to the GCTN more broadly, SOF could leverage these forward-based platforms and associated support infrastructure for a wide range of missions. SEAL Teams and MARSOC units, in particular, could stage operations from Global Fleet Station ships and rely upon them for various forms of support.

Given the likely demand for training, advising, and equipping foreign maritime security personnel, the capacity of Expeditionary Training Command is at least an order of magnitude too low.

### Take on the Steady-State Maritime Foreign Internal Defense Mission

Aside from small elements of the NSWGs, the only unit organized, trained, and equipped to train foreign maritime security personnel is the Naval Expeditionary Combat Command's Expeditionary Training Command, which comprises seventy-five personnel, about fifty of whom are on active duty.<sup>177</sup> Given the likely demand for training, advising, and equipping foreign maritime security personnel — especially from countries in the littoral of Africa, the Middle East, and Southeast Asia — the capacity of Expeditionary Training Command is at least an order of magnitude too low. The potential demand from just Nigeria or Indonesia, for example, would easily overwhelm its current capacity. To take on the steady-state maritime foreign internal defense mission as a core mission, the Navy needs to get serious about staffing and resourcing the Expeditionary Training Command and Naval Expeditionary Combat

<sup>176</sup> Mission packages for the LCS are currently focused on three different “asymmetric” littoral challenges: swarming boat attacks, mines, and submarines. Many of the modules and offboard systems being developed for the first two missions have direct relevance to operations against transnational terrorist groups, including various types of UAVs, USVs, and precision-guided missiles. Myriad sensor and weapons systems tailored to the counterterrorism mission, moreover, could be developed to fit into the LCS's payload stations such as specialized SIGINT and communications intelligence (COMINT) sensors; equipment for detecting chemical, biological, or nuclear weapons aboard cargo vessels; UAVs equipped with biometric identification systems; various types of tagging and tracking systems; and SF/SEAL mission planning tools and equipment.

<sup>177</sup> NECC Command Brief, October 2007.

Command more broadly, which also includes units responsible for explosive ordnance disposal, maritime civil affairs, maritime expeditionary security, naval coastal warfare, naval construction, and expeditionary logistics. While elements of many of these missions could be performed by SEAL Teams or other NSWG units, it would be extremely useful to lessen demand for very limited SEAL capacity by having conventional Navy units shoulder more of the burden in these areas.

### Expand the SSGN Fleet

In addition to providing a potent counter to China's ongoing development and fielding of increasingly sophisticated capabilities for finding, tracking, and attacking surface combatants, expanding the nuclear-powered conventional guided-missile submarine (SSGN) fleet would also provide additional platforms from which to conduct clandestine maritime infiltration and exfiltration. The Navy has already converted four Ohio-class fleet ballistic missile submarines (SSBNs) to SSGN configuration, which includes conversion of the two forward-most missile tubes into lock-in/lock-out trunks that allow SEALs to enter and exit the submarine while submerged; interior modifications that provide working, berthing, and command and control space for sixty-six or more SEALs for about ninety days; and the addition of hull fittings to accommodate up to two ASDS/JMMS mini-submarines or Dry Deck Shelters (DDSs).<sup>178</sup> The 2009 QDR should give serious consideration to the conversion of two additional SSBNs that are no longer required for the strategic nuclear deterrence mission to SSGN configuration.

### Expand Air Force UCAS Capacity and Develop Stealthy UCAS

Today, the Air Force provides nearly 25 UCAS combat air patrols, nearly all of which are MQ-1 Predator orbits in Iraq and Afghanistan. This has required an all-out effort with crews flying the ever-expanding UCAS fleet on a 24-hour rotation. So many personnel are flying combat operations that keeping the training program on the rails has been problematic: trainers, for example, have been pushed into "flying" combat sorties. As General Blair Hansen, director of Air Force ISR commented recently, "we are going whole hog" with about 88 percent of Air Force UAVs deployed and operators flying them around the clock.<sup>179</sup> The problem, however, is two-fold: first, CENTCOM and SOCOM both claim that they need at least thirty combat air patrols in Iraq alone; and second, the opportunity cost of current UCAS allocations to Iraq and Afghanistan is a concomitant scarcity throughout the rest of the world.<sup>180</sup>

The 2009 QDR should give serious consideration to the conversion of two additional SSBNs that are no longer required for the strategic nuclear deterrence mission to SSGN configuration.

<sup>178</sup> For relatively short periods of time, an SSGN could accommodate over one hundred SOF personnel. A DDS enables a submarine to launch and recover special operations personnel, vehicles and equipment (e.g., Combat Rubber Raiding Crafts) while remaining submerged.

<sup>179</sup> Gordon Lubold, "In Push for Drones, Gates Labors to Change Pentagon," *Christian Science Monitor*, April 28, 2008.

<sup>180</sup> Michael Hoffman, "Task Force to Get More UAVs into War Zones," *Air Force Times*, April 26, 2008.

**In order to be able to generate persistent ISR and strike coverage in denied areas, it is imperative for the Air Force to develop and field a stealthy UCAS.**

The Air Force is pinning its hopes on expanding its inventory of the more capable MQ-9 Reaper as rapidly as possible, with the goal of fielding by 2016 an MQ-9-only UCAS force that can sustain fifty combat air patrols.<sup>181</sup> Even with the significant operational advantages of the MQ-9 Reaper over the MQ-1 Predator with respect to cruising speed, altitude, and payload, as well as planned surveillance system upgrades,<sup>182</sup> it is very likely that additional UCAS capacity will be required to provide adequate coverage of suspected or known terrorist areas of operation globally, as well as provide on-call tactical support to widely distributed ground units.

In addition, as mentioned above, both the Predator and Reaper are non-stealthy aircraft. As modern air-defense systems continue to diffuse and mature, these UCASs are going to become progressively more vulnerable to detection and attack. In order to be able to generate persistent ISR and strike coverage in denied areas (e.g., China's eastern coast), it is imperative for the Air Force to develop and field a stealthy UCAS. This same aircraft could be modified by SOCOM to support clandestine special operations in denied, semi-permissive, and politically sensitive areas around the world in support of the war against Salafi-Takfiri/Khomeinist terrorist groups and counter-WMD operations.

### **Support the Development of a Stealthy SOF Transport**

It is imperative for AFSOC to field a stealthy SOF transport to provide clandestine mobility and support to SOF ground units in denied, semi-permissive, and politically sensitive areas. It appears that the only feasible path ahead is to develop a SOF transport variant of the NGB. Without the active support of the Air Force, both in terms of integrating fundamental performance parameters for SOF applications into the initial NGB design and willingness to procure additional airframes for SOCOM-funded modification, a stealthy SOF transport is unlikely to be realized.

### **Take on the Aviation Advisor Mission as a Core Competence**

The expansion of the 6<sup>th</sup> Special Operation Squadron should be accompanied by the creation of aviation advisor squadrons in the regular Air Force. Not only would this mean selecting high-quality personnel to serve in these squadrons, but also investing in the construction and professional staffing of an air advisor training school to

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<sup>181</sup> USAF, "MQ-1 to MQ-9 Transition Plan," Briefing Slide, no date.

<sup>182</sup> The USAF is developing a Wide-Area Airborne Surveillance (WAAS) payload for the Reaper with a projected initial operational capability in FY 2009 that will provide a single full-motion video feed and respond to up to thirty lower data-rate (two frames per second) imagery requests over a 64-square-kilometer footprint. With the anticipated fielding of the Autonomous Real-Time Ground Ubiquitous Surveillance-Imaging System (ARGUS-IS) beyond 2013, the Air Force plans to expand the coverage footprint to 100-square-kilometers and support an additional 65 "simultaneous targets through the tactical operations center."

teach air advisor skill sets, including culturally appropriate instruction techniques. Advisor teams would also need training and experience operating and maintaining nonstandard and foreign aircraft.



ماتوا باسمه الإلهام  
أي مقاومة هذا؟  
لماذا السكوت عليهم؟

## CONCLUSION

Special Operations Forces have figured prominently in US military operations since 2001 and have become central to the implementation of US national defense strategy with respect to the war against violent Islamic radicalism. They are building partner capacity, collecting intelligence, hunting high-value targets, and conducting other counterterrorism operations in multiple countries across several continents. To ratchet up ongoing operations against Salafi-Takfiri and Khomeinist terrorist groups, SOF will need to overcome several major challenges, including the very high concentration of available SOF manpower in Iraq and Afghanistan; poor alignment between current cultural/linguistic expertise and anticipated operational demand; capacity and capability shortfalls in several critical areas; and an organizational structure and institutional ethos that tend to favor direct over indirect action.

In the event of a future conflict with China, SOF may be called upon to conduct unconventional warfare operations in border areas; penetrate into internal areas and littoral zones to gain access to closed communication and computer networks; and conduct a wide array of special reconnaissance and direct-action missions, including in denied, deep-inland areas. To prepare for these prospective missions, it will be necessary to field a stealthy transport and expand clandestine undersea infiltration and exfiltration capacity. In addition, SF ODAs and SEAL Teams will need to develop new information operation capabilities (e.g., clandestine network penetration and exploitation), as well as expand the number of operators with proficiency in relevant languages.

To address future counterproliferation requirements, SOF may not only need to develop new means of penetrating into heavily defended airspace and locating sensitive WMD-related materiel, but also to increase JSOC's limited capacity to render safe improvised nuclear devices or nuclear weapons that are no longer under effective state control. To improve JSOC's speed of response to reactive counterproliferation contingencies, it may be worthwhile to base a small number of personnel in Europe, Central Asia, and/or East Asia.

Although the 2006 QDR launched several important initiatives to better prepare SOF for the future security environment, it fell short in a number of areas. Looking across SOCOM's subordinate commands, the most critical shortfalls are within USASOC and AFSOC. For the former, it is imperative to expand special operations rotary-wing capacity, as well as increase Civil Affairs and PSYOPS force structure. For the latter, high-priority investment areas include recapitalizing, modernizing, and expanding the aging MC-130 fleet; developing and fielding a stealthy airlifter; expanding UCAS force structure; increasing the number of Special Tactics Squadrons; and increasing the number of Combat Aviation Advisory flights available to train foreign security forces in the use of modern air power.

When the next presidential administration takes over the reins of the executive branch in January 2009, serious consideration should be given to the organizational and policy changes, investments, and reorientation of SOF detailed in Chapter 3. This paper is not meant to provide the definitive answer for how SOF should be shaped, sized, organized, and postured to better prepare for the challenges posed and opportunities afforded by the future security environment, but rather to identify the critical issues that must be debated and expeditiously addressed. To be sure, many of the detailed recommendations made in this report will need to be modified based on operational experience, as well as to adapt to unanticipated changes in the future security environment.

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