REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1. REPORT DATE *(DD-MM-YYYY)*	2. REPORT TYPE	3. DATES COVERED *(From - To)*
(15-05-2014)	FINAL	

4. TITLE AND SUBTITLE

Balancing Act: The U.S. Military's Reliance on Contractors to to Fulfill Operational-Level Logistical Requirements

5a. CONTRACT NUMBER

5b. GRANT NUMBER

5c. PROGRAM ELEMENT NUMBER

6. AUTHOR(S)

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5d. PROJECT NUMBER

5e. TASK NUMBER

5f. WORK UNIT NUMBER

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)

Joint Military
Operations Department
Naval War College
686 Cushing Road
Newport, RI 02841-207

8. PERFORMING ORGANIZATION REPORT NUMBER

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)

10. SPONSOR/MONITOR'S ACRONYM(S)

11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION / AVAILABILITY STATEMENT

Distribution Statement A: Approved for public release; Distribution is unlimited. Reference: DOD Directive 5230.24

13. SUPPLEMENTARY NOTES A paper submitted to the Naval War College faculty in partial satisfaction of the requirements of the Joint Military Operations Department. The contents of this paper reflect my own personal views and are not necessarily endorsed by the NWC or the Department of the Navy.

14. ABSTRACT

This paper examines an overreliance on contractors by the U.S. military. During the past 15 years (1999-2014) the U.S. military has grown accustomed to using contractors to perform a large majority of logistical functions when executing operational-level logistics. Without budget constraints, the U.S. military has turned to contractors and their services to fulfill shortfalls in organic logistical capabilities and capacities. This overreliance on contractors has led to atrophy in the military's logistical forces. With the Iraq war done and the Afghanistan war ending, the U.S. military is downsizing. A smaller military will further restrict what objectives our logistics forces can accomplish. A balance must be reached to ensure logistical forces do not atrophy, while concurrently incorporating contractors when and where it makes the most sense. Future conflicts must continue to use contractors and contracted resources as force multipliers. Contractors, in conjunction with organic logistical forces, will ensure that operational-level commanders have the ability to deploy forces quickly, provide the longevity to sustain the force during protracted operations, and afford the operational reach to prevent culmination due to inadequate logistics.

15. SUBJECT TERMS

Contractors, Host Nation Support, Contracted Resources, Logistics, Sustainment

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			Chairman, JMO Dept
UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED		**22**	19b. TELEPHONE NUMBER *(include area code)* 401-841-3556

Standard Form 298 (Rev. 8-98)

NAVAL WAR COLLEGE
Newport, R.I.

Balancing Act: The U.S. Military's Reliance on Contractors to Fulfill Operational-Level Logistical Requirements

by

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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

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Signature: _____

15 May 2012

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Paper Abstract

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This paper examines an overreliance on contractors by the U.S. military. During the past 15 years (1999-2014) the U.S. military has grown accustomed to using contractors to perform a large majority of logistical functions when executing operational-level logistics. Without budget constraints, the U.S. military has turned to contractors and their services to fulfill shortfalls in organic logistical capabilities and capacities. This overreliance on contractors has led to atrophy in the military's logistical forces. With the Iraq war done and the Afghanistan war ending, the U.S. military is downsizing. A smaller military will further restrict what objectives our logistics forces can accomplish. A balance must be reached to ensure logistical forces do not atrophy, while concurrently incorporating contractors when and where it makes the most sense. Future conflicts must continue to use contractors and contracted resources as force multipliers. Contractors, in conjunction with organic logistical forces, will ensure that operational-level commanders have the ability to deploy forces quickly, provide the longevity to sustain the force during protracted operations, and afford the operational reach to prevent culmination due to inadequate logistics.

"A sound logistics plan is the foundation upon which a war operation should be based. If the necessary minimum of logistics support cannot be given to the combatant forces involved, the operation may fail, or at best be only partially successful." – ADM Raymond A. Spruance

INTRODUCTION

The past 15 years of operational-level conflicts have exhibited a dramatic spike in the use of contractors to fulfill logistical functions for the U.S. military. Recent U.S. military engagements, largely due to the complex, harsh environmental conditions and the extended lines of communications, have underscored the absolute dependence and intrinsic link that exists between the U.S. military and contractors. The wars in Iraq and Afghanistan have proven to be a test of extremes for the U.S. military's 21st century logistical forces resulting in a growing dependence on contractors in order to remain resilient, adaptive, and responsive on the modern day battlefield. However as the U.S. relies more heavily on contractors and the Department of Defense faces a declining budget environment, future operational-level commanders are going be faced with a new reality of less resources, fewer people, and a steady demand for military presence across continents to maintain U.S. interests as the global hegemony.

This paper examines the overreliance on contractors the U.S. military has grown accustomed to in planning and executing operational-level logistics while acknowledging this as an emerging challenge that necessitates an achievable, appropriate balance in the force structure for future operations. In the modern-day environment of ample Overseas Contingency Operations (OCO) funds, dependency on contractors and services provided has led to atrophy in the military's organic logistical forces. This has been further compounded by sequestration and continued significant budget cuts, with an estimated $200 billion reduction from Fiscal Year (FY) 2012 through 2017[1], which continue to constrain the

capabilities and capacities of what operational-level logistic forces can achieve and what may be outsourced to military contractors. As a result, future complex operational-level conflicts, on a scale and duration comparable to Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF), cannot be adequately supported and sustained with organic logistics assets alone; host nation and contracted resources must continue to be leveraged to augment U.S. military logistical shortfalls providing a balanced approach to achieving the necessary critical capabilities and capacities to meet intended operational-level objectives.

BACKGROUND

The U.S. military in its efforts to support multiple, complex operational-level conflicts has depended on contracted support from U.S. companies, host nations, and third country nationals for logistical support and sustainment efforts. This is largely due to the fact that the military does not possess the organic capacity to perform all logistical functions required to sustain our forces across the globe.[2] Contractors provide augmentation to U.S. military forces performing logistical functions and allowing for more combat forces to be deployed into operational areas.[3] In addition, U.S. military logistics organizations lack some of the capacity and capabilities to conduct support and sustainment operations during multiple protracted conflicts which increases potential logistics shortfalls and risks early culmination at the operational-level. In order to rapidly make up for these shortfalls, the U.S. military has turned to contractors to fill logistical support and sustainment requirements.[4] U.S. military logistical functions have been augmented by contractors since the beginning of American Military history.

Throughout the American Revolutionary War, George Washington used contractors to provide rations, clothing, fuel, supplies, labor, and transportation in order to supply and sustain the Continental Army.[5] During the Korean War, the Army benefited from utilizing Japanese (third country national) as stevedores and Koreans (local nationals) as stevedores, road and rail maintenance, and supply-carrying parties.[6] Without the extensive use of Japanese and Korean contractors during the Korean War, it is estimated that more than a quarter of a million more U.S. military personnel would have been required to support and sustain the war.[7]

While contracting assets are an integral part of U.S. military operations, the balance in our most recent conflicts has tipped too far. Contracting assets have surpassed our forward deployed military forces. "In Operation Desert Storm there was 1 contractor for every 100 military personnel, while in Bosnia, the ratio at times was nearly 1 to 1."[8] During a significant portion of OIF and OEF, contractors maintained close to a 1 to 1 ratio and, at times, the numbers of contractors surpassed the U.S. military's total number of personnel on the ground.[9] As of the first quarter in FY 2013, Afghanistan had 1.46 contractors for every one U.S. military personnel deployed to the area.[10]

Logistics support services ranked first in money spent on contingency service contracts from 2002 to 2011 in OIF and OEF with over $46.5 billion out of $85.6 billion (44%) being spent on support and sustainment operations.[11] Major corporations like Kellogg Brown and Root (KBR), DynCorp, Fluor Intercontinental, Inc., and ITT Federal Services International along with miscellaneous foreign contractors received the bulk of money in support of contracted activities.[12] This increased spending further highlights the U.S. military’s dependence on contractors in recent conflicts.

While historically logistical contractor support is a necessary aspect for U.S. military engagement, over the previous 15 years the balance and money spent has gone too far presenting challenges for future commanders. In this modern era, military commanders are faced with maintaining critical logistical functions, as defined in Joint Publication (JP) 4-0, of deployment and distribution; supply; maintenance; logistic services; operational contract support (OCS); engineering; and health services (HS).[13] In order to simplify this complex subject, the logistical functions analyzed will be – deployment and distribution, maintenance, and logistic services. These three logistical functions have been heavily outsourced to contractors over the past 15 years and, in some cases, are no longer performed by U.S. military forces at the operational-level placing the U.S. military in an ill-prepared state for future operations.

OPERATIONAL DEPLOYMENT AND DISTRIBUTION

Deployment and distribution, as outlined in JP 4-0, focuses on the necessity to rapidly deploy, execute, and sustain operations globally in order to fully support the Joint Forces Commander (JFC).[14] The goal is to reduce the logistics footprint while providing the JFC with flexible options to employ forces in time and space. The two principle ways to accomplished this is through a highly effective deployment process to *"Move the Force"* and an extremely efficient distribution process to *"Sustain the Force"*.[15] Both processes rely heavily on contractor resources to move and sustain personnel, equipment, and supplies to and throughout the operational area.

In order to *Move the Force* and deploy in support of the JFC and operational-level requirements, contracted resources are used to transport personnel and equipment by air, sea, and land from main bases to intermediate bases and directly into the operational area.

Depending on the threat level in an operational area, contracted resources may be further used to deploy personnel and equipment forward from the intermediate base directly into the objective area.[16]

Contracted commercial airlift is the primary deployment method for personnel and, in more recent years, has been relied on for equipment deployment. This method of intertheater airlift to deploy troops and their equipment is undertaken by the Air Mobility Command (AMC).[17] AMC possesses the capability but not the capacity to meet the current demands of airlift requirements in a timely manner. AMC utilizes the Civil Reserve Air Fleet (CRAF) comprised of commercial airliners and pilots to compensate for this shortfall. These contracted assets are necessary to augment AMC in order to move troops and equipment in a timely manner in support of the needs of the operational-level commander.[18] From 2004 to 2012 CRAF aircraft transported on average between 65% to 75% of personnel.[19] The use of contracted aircraft for intertheater airlift alleviates Air Force resources for shorter more dangerous intratheater airlift support to move troops and equipment forward from the intermediate staging bases into the operational area. In addition, contracted cargo aircraft are also used to fly deployment equipment directly to bases within the operational area. Airlifting equipment directly to locations, like Bagram and Khandahar, completely eliminates the need for transloading deployment equipment at an intermediate base. The necessity to move by air is also shared by forces conducting combat operations creating substantial gaps in rotary wing lift availability. Contracted helicopters are employed to offset the inherent capacity gaps by moving troops and their equipment within the operational area. The use of contracted helicopters for movement of deploying personnel and equipment has enabled the U.S. military to focus its limited rotary wing assets on combat operations in the operational area.[20]

Whereas military and contracted airlift support largely moves forces, sealift provides the JFC with the primary mode for deploying the bulk of equipment into the operational area. More than 90% of the equipment and supplies necessary for the JFC to conduct operations is shipped by contracted commercial carriers.[21] The Military Sealift Command (MSC) is responsible for the sealift of deployment equipment necessary for the JFC to build and sustain combat potential in theater. The MSC possesses the capability, via the sealift program (PM5), to move deployment equipment but relies on contracted carriers to expand its capacity in order to meet the transportation demands of the JFC to deploy into an operational area.[22] The MSC's sealift program utilizes a mix of government-owned, long-term-chartered, and voyage-chartered ships to fulfill its sealift requirements. U.S. Flagged commercial contracted ships are primarily utilized for sealift while government-owned ships are utilized only when suitable U.S. Flagged commercial ships are unavailable.[23] Without the use of contracted sealift resources, the JFC would be forced to modify timelines in order to build up forces. Prolonging the concentration of combat potential could have adverse consequences in achieving operational objectives.

A third transportation mode for military and contract logistics transportation is ground transportation. Deployment equipment arriving into the operational theater at either an Airport of Debarkation (APOD) or a Seaport of Debarkation (SPOD) is moved forward into and around the operational area by trucks. Movement with trucks is known as line hauling which is conducted by U.S. military and contracted assets. Although the U.S. military has significant line haul capabilities, it relies on contracted resources to expand its capacity in lieu of activating reserve transportation units. Contracted line haul resources are normally sourced from within the host nation if they are available and when not available the

U.S. military utilizes third country national companies to compensate for shortfalls.[24] Contracted line haul trucks provide the bulk of the assets for moving deployment equipment to its final destination in the operational area. This frees up organic military transportation assets to provide more tactical level support to locations that are not as permissive as the main lines of communication. Requirements to deploy equipment from all the services and maintain a steady flow of supplies to multiple bases far exceeds the capacity of organic transportation units and must be heavily contracted in order to meet the operational needs of the JFC. The utilization of military and contracted resource in not only ground transportation, but air and sea as well, provide evidence of the necessary use of both contractor and military resources to *Move the Force* and meet the incredible demands of supporting modern day operational-level conflicts.

To *Sustain the Force* and meet JFC operational-level requirements in order to extend operational reach and prevent early culmination, contracted distribution assets must be leveraged. The continuous transportation of equipment and supplies through air, sea, and land is the lifeline to forward deployed forces in the operational area. The U.S. military relies on the same contracted transportation resources discussed in *Move the Force* to provide distribution transportation to *Sustain the Force*. Sustaining the force requires a constant flow of replacement personnel, equipment, and supplies through the operational area. The steady flow of human and material resources provides operational reach to the JFC and prevents culmination before objectives can be reached.

Without the robust use of contracted transportation resources to provide operational-level deployment and distribution support, the U.S. military would be unable to *Move the Force* and *Sustain the Force* during protracted conflicts in support of the JFC. The U.S.

military's finite transportation capacities require contracted resources to fly, ship, and haul personnel, supplies, and equipment from main bases through intermediate bases and into the operational area. The effective and efficient use of contractors provides the U.S. military with the most flexible, responsive, and sustainable method to deploy forces and distribute supplies and equipment in the operational area.

OPERATIONAL MAINTENANCE

Maintenance operations, as summarized from JP 4-0, provide system readiness to the JFC. The maintenance strategy utilized by the Joint Forces relies on a mix of depot and field level maintenance to improve freedom of action and sustain the readiness of the JFCs combat potential.[25] Depot maintenance is predominately conducted outside of the operational area at large fixed facilities and exists to perform tasks unable to be conducted at the field maintenance level.[26] Field maintenance utilizes a strong contracted workforce located at the operational-level and directly supports the JFC. These operations are imperative to combat operations, for example in support of OEF and OIF $2.4 billion was obligated from FY02 to FY11 in support of contracted field maintenance in the operational areas.[27] The main purpose of field maintenance is to repair equipment and systems necessary for day-to-day operations as quickly as possible.[28] Field maintenance is directly responsible for building combat potential in the operational area by ensuring equipment and systems are in the highest state of readiness to meet JFC requirements. The complexities of current operational-level conflicts, dispersal of Joint Forces in the operational area, and influx of new technologically advanced equipment and systems has produced a need for contracted maintenance personnel to support

organic field maintenance activities. In addition, contractors provide the lead in supporting new highly technical systems and Commercial Off The Shelf (COTS) equipment.

The Air Force uses Contract Logistics Support (CLS) to augment internal military capabilities and provide maintenance on high-tech weapons systems and equipment. High operational tempo (OPTEMPO) during OIF and OEF had more than doubled the amount that the Air Force has spent on CLS from 2000 to 2006.[29] The Army and Marines also rely on contracted field maintenance support to augment their organic maintenance capabilities. Ground units that operated in OIF and OEF conducted high OPTEMPO operations with equipment that is not inherent to their organizations. Not only is some equipment new to the Joint Forces, it is being distributed in greater quantities than can be managed by internal capabilities in adverse combat conditions. The surge in the need for Mine Resistant Ambush Protected (MRAP) family of vehicles created an influx of 27,740 heavy wheeled vehicles in a five year period that military field maintenance personnel were not prepared to handle on their own.[30] Contractors were used to fill this gap while U.S. military personnel received maintenance training. Even after maintenance personnel received training, the high density per unit, overall numbers of the new MRAPs, and high OPTEMPO of forces required continued contracted field maintenance support forward in the operational area.

Contracted field maintenance provides not only common maintenance actions like vehicle services, but they also provide a needed surge capability when there are periods of increased damage to vehicles and equipment due to enemy engagements. This surge capability increases field maintenance capacity allowing military and contracted field maintenance personnel to ensure combat systems and equipment are quickly repaired to enable the JFC to have the highest combat potential at all times. Additionally, the use of

contracted resources provides the ability for military maintenance personnel to be forward deployed at remote locations where their skills and support can make an immediate impact on the battlefield.[31] Present and future complex asymmetric conflicts require the procurement of new systems and equipment to support emerging Joint Force capabilities. In order to quickly provide the right systems and equipment to meet these new threats, the Joint Forces purchase COTS items directly from vendors. The vast majority of COTS items purchased are not within the scope of what our U.S. military maintenance personnel can repair and require complete maintenance support from contractors. Without contractors providing maintenance support for COTS items, the Joint Forces would be less adaptable to changing threats in current and future conflicts.

Current and future operational-level conflicts are at risk without contracted field maintenance support to maintain required systems and equipment. The surge capacity contractors can provide coupled with system specific expertise they bring to the battlefield enables the military to maintain its high OPTEMPO. Forward deployed contracted field maintenance enables service specific systems to remain forward in the operational area, reducing risk by ensuring the operational-level commander has the maximum amount of combat potential at all times. U.S. military maintenance personnel leveraging contracted personnel effectively compensate for capability and capacity gaps. Additionally, the continued use of highly technical systems and quickly procured COTS items will entail a persistent reliance on contractor support for field maintenance. Contractors provide the JFC with responsive and flexible field maintenance, enabling constant and reliable projection of combat potential into the operational area.[32]

OPERATIONAL LOGISTICS SERVICES

Logistics services, another primary function necessary in supporting operational-level conflicts, is described in JP 4-0 as the critical life support capabilities that allow the Joint Forces to sustain themselves while forward deployed in the operational area. These services include food, comprised also by water and ice, and base and installation, which also includes hygiene services.[33] Logistics services provided to the Joint Force during major combat operations are historically provided by U.S. military personnel. As Joint Forces transition to stability operations and disperse within the operational area into fixed bases, the need for contractors to provide logistic services becomes prevalent. However, with the widely dispersed operational engagements of the military over the past 15 years, this reliance has scaled too far. An example of an overreliance on contracted logistical services is outlined in the Joint Chiefs of Staff (JCS) assessment on military to contractor personnel ratios in Iraq in 2008. Out of over 80,000 personnel performing logistical installation services only 14% were U.S. military and the remaining 86% were all contracted personnel.[34] The Army's Logistics Civil Augmentation Program (LOGCAP) plays the leading role in augmenting the current ground based logistics forces in the operational area. LOGCAP provides ground forces in the operational area footprint with contracted support to dining and laundry facilities, housing, sanitation, waste management, postal services, engineering and construction, and facilities maintenance and repair.[35]

Food services for Joint Forces operating on the ground during combat operations rely on organic capabilities to conduct field feeding. U.S. military personnel provide food service for set numbers of forces with mobile feeding equipment. Food quality is limited to rations that can be easily moved and stored during operations. Once the Joint Force transitions to

stability operations, military personnel cease to be able to provide effective food service operations similar to what is provided on fixed installation in a non-forward deployed environment.[36] Consolidation of Joint Forces at large Forward Operating Bases (FOB), SPODs, and APODs requires augmentation or complete replacement of food service personnel by contractors in order to provide adequate food service operations. Food service in forward locations must be capable of supporting excessive headcounts of joint and multinational forces, governmental organizations, contractors, and many others. Without the reliance on contractors to provide food service, water, and ice operations in forward locations the Joint Forces would be unable to maintain large numbers of consolidated forces at fixed facilities for prolonged periods of time.

Contracted food service operations is the only method of managing multiple dining facilities and preparing and serving food for large headcounts at forward locations. As of 2010, contractors were supporting over 100 dining facilities in support of OIF and OEF and had served over one billion meals, produced over 24 billion gallons of water, and produced over 268 million tons of ice.[37] These high thresholds would not have been met without the contracted support in place.

Along with food services, contracting support is heavily leveraged for base and installation support. Base and installation resources are needed to support the infrastructure of large scale FOB's and installations in the operational area and are not easily found amongst the Joint Forces sustainment capabilities. Base support capabilities necessary to support Joint Forces at a fixed locations include; laundry facilities, housing, sanitation, waste management, postal services, engineering and construction, and facilities maintenance and repair. The capabilities to perform these functions amongst the Joint Forces is limited and

quickly drained during protracted major operational-level conflicts as was the case with OEF and OIF. Organizations like the Navy's Seabees, Army's Engineer Corps, and the Air Force's Civil Engineers possess the capabilities necessary to perform engineering, construction, and maintenance facility and repair. Although robust, the Joint Forces inherent capabilities must be heavily augmented and, in most cases, completely replaced by contractors because of the vast number and sizes of forward bases in the operational area. Forward bases that are larger than a small city require logistical services, like sanitation, waste management, laundry, and housing, be provided to the large populations stationed there. The Army alone has committed an estimated $15 billion dollars a year to their LOGCAP contract for logistical services in support of bases in forward operational areas.[38]

The Navy's Combat Logistics Force (CLF) provides the Navy's fleet with the necessary logistical support and material to remain at sea while forward deployed in an operational area. As of September 2013, CLF vessels have been completely crewed by Navy civilians under the supervision of the MSC.[39] While not technically contractors, Navy civilians perform CLF sustainment duties once run predominantly by Navy military personnel. In addition to CLF vessels no longer being crewed by Navy military personnel, the MSC also utilizes contracted commercial helicopters to conduct aerial replenishment during CLF sustainment operations.[40] The alternative to receiving logistics services from CLF assets is to conduct port calls at foreign locations in the operational area. The Navy relies on contractors to provide husbandry services when conducting port calls outside of U.S. Naval bases within an operational area.[41] Husbandry services provide the following; trash removal, sewage removal, potable water, pilot, tug and line handlers, water ferry/taxi service, oil waste removal, and provisions.[42] Logistical services provided by the CLF and

port calls are essential to allow the Navy's fleet to remain at sea and operate forward in the operational area.

Current Joint Force distributions into forward operational areas has necessitated a reliance on contractors to provide critical food and base logistical services. Without contracted support for logistics support and services, the JFC's flexibility and sustainability to conduct protracted, widely dispersed operations would be limited. Large FOBs, APODs, and SPODs would be unable to be maintained without the critical capabilities and capacities that contracted resources provide to logistics services. Degraded logistics services would limit operational reach and create the potential for early culmination if the Joint Force cannot be supported and sustained during complex operational-level conflicts on a global scale.

COUNTER-ARGUMENT

Some might argue that complex operational-level conflicts can be adequately supported and sustained by U.S. military logistical forces provided there is sufficient preparation time to build up forces. Across the military services there are sufficient capabilities and capacities to fulfill the JFC's logistical requirements if, and only if, the military mobilizes its Reserve and National Guard forces. Complete mobilization of all elements of the military and national power, as was done during World War I and World War II, provide the military with an abundance of manpower to support and sustain its forces. The abundance of military personnel through mobilization during both World Wars resulted in a relatively low contractor to U.S. military force ratio. Specifically in World War I, there was an estimated one contractor for every 20 service personnel and in World War II that ratio was about one contractor for every seven uniformed service personnel.[43] Both of these wars are

case and point that with mobilization of all elements of the military's power from across the services, the U.S. military could quickly make up shortfalls in its logistical capabilities and capacities.

The success of mobilization of forces, in lieu of contractors, is also evident in modern-day conflicts. A recent example of the successful use of the mobilization of U.S. military logistical capabilities and capacities was during the Persian Gulf War. During Operation Desert Shield and Operation Desert Storm, the military was able to successfully support and sustain itself while only utilizing an estimated one contractor for every 100 service personnel deployed.[44] The effective mobilization of the Army Reserves made up 24 percent of the total Army ground forces.[45] The substantial logistical augmentation that Reserves units provide can significantly decrease or potentially even eliminate the need for contractors in the operational area.

While the capabilities and capacities to provide sufficient logistical functions could be completely found within the Joint Forces, the possibility of complete mobilization of the military and Nation is highly unlikely in the modern era. Political and popular support for total mobilization of the armed forces in support of future complex operational-level conflicts resembling OIF or OEF has not existed within recent years in the U.S. Without an imminent threat to the Homeland or another world war, the military will continue to rely on contractors to fill logistical functions in lieu of mobilizing Reserve and National Guard units from across the services. Additionally the robust use of contractors to provide logistical functions enables the U.S. military to deploy less forces forward into the operational area. Lower troop deployment numbers provides the President and military with increased popular support from the general public in the U.S. Therefore a balance must be achieved as future military

commanders will need the support of contractors. Future, complex operational-level conflicts, on a scale and duration comparable to OIF and OEF, cannot be adequately supported and sustained with organic logistics assets alone; host nation and contracted resources must continue to be leveraged to augment U.S. military logistical shortfalls providing a balanced approach to achieving the necessary critical capabilities and capacities to meet intended operational-level objectives.

CONCLUSION

For the foreseeable future, the military operating environments will continue to present complex operational and logistical challenges. These challenges are further compounded by troop downsizing and budget cuts that are resulting in diminished capabilities and capacities throughout the Joint Forces. Tough decisions will have to be made as troop and budget reductions are forcing military commanders to operate non-traditionally and without the flexibility the U.S. military has grown accustomed to during the last 15 years of conflicts. Given this environment, JFC's must determine the appropriate balance between U.S. military personnel and the use of contractors as contracting resources will still be necessary to supplant the already existing shortfalls in organic capabilities and capacities during operational-level conflicts. A balance must be reached to ensure logistical forces do not atrophy, while concurrently incorporating contractors when and where it makes the most sense. The right mix of active and reserve U.S. military, government, civilian, host nation, and third country national contractors must be achieved in order to provide the JFC with operational reach and mitigate early culmination due to inadequate logistics.

Future operational-level commanders will have to strive for flexibility, sustainability, and survivability of their logistics. Fully integrating logistical functions through a balanced mix of military forces and contractors enables the JFC to remain offensive minded while economizing forces. Evidence of the importance of contractors to the JFC is shown in JP 5-0 where the staff is tasked to create an Operational Contract Support staff estimate in support of the planning process.[46] During operations with force constraints, the judicious employment of contractors to perform logistical functions can allow the operational commander to deploy more combat forces. In addition, the use of contractors in performing garrison type logistical functions on bases in a deployed environment enables the U.S. military to widely forward distribute its logistical forces more effectively at the tactical level.

Although the conflict in Iraq has ended and Afghanistan is drawing down, the requirements to support and sustain the operational-level commander during future conflicts will not diminish. The future operating environment will continue to pose a myriad of challenges to our forces, from protracted conflicts and operations in harsh environments to widely dispersed operational areas and hybrid warfare. A shrinking U.S. military will not waiver in its intrinsic mission of defending the nation and projecting power forward. The need for operational-level commanders to project power on a global scale comes with immense logistical requirements that must be adequately supported and sustained. Future conflicts must continue to use contractors and contracted resources as force multipliers in conjunction with organic logistical forces to ensure that operational-level commanders have the ability to deploy forces quickly, the longevity to sustain the force during protracted operations, and the operational reach to prevent culmination due to inadequate logistics.

NOTES

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[13] U.S. Office of the Chairman of the Joint Chiefs of Staff. *Doctrine for Logistics Support of Joint Operations*, Joint Publication (JP) 4-0. (Washington, D.C.: CJCS, 2013), II-1.
[14] Ibid.
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[20] The author has personal experience deploying a Brigade Combat Team from its main bases in Germany through intermediate bases in Central Command (CENTCOM) and on to final destinations at Forward Operating Bases (FOB) and Combat Outposts (COP) in Afghanistan.
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[23] Military Sealift Command. United States Navy. "Combat Logistics Force" Accessed 30 March 2014, 1. http://www.msc.navy.mil/PM1/
[24] The author has personal experience utilizing third country national Kuwaiti truck companies to move equipment from the SPOD and APODs in Kuwait into Iraq as well as Pakistani and Afghani truck companies to move equipment from SPODs in Pakistan and APODs in Afghanistan to FOBs and COPs in Afghanistan.
[25] Chairman of the Joint Chiefs of Staff. *Doctrine for Logistics Support of Joint Operations*, JP 4-0, II-7
[26] Ibid.
[27] Commission on wartime contracting in Iraq and Afghanistan. *Transforming Wartime Contracting,* 26.
[28] Chairman of the Joint Chiefs of Staff. *Doctrine for Logistics Support of Joint Operations*, JP 4-0, II-7
[29] Michael Boito, Cynthia R. Cook, and John C. Grasser. *Contract Logistics Support in the U.S. Air Force.* (Santa Monica: Rand Corporation, 2009), 3.
[30] Richard Sisk. "Pentagon shuts down MRAP production line." *DoD Buzz Online Defense and Acquisition Journal,* (2012), 1. http://www.dodbuzz.com/2012/10/01/pentagon-shuts-mrap-production-line/

[31] The author has personal experience with sourcing additional mechanics forward into the operational area due to the use of contracted mechanics on large forward operating bases.
[32] The author has extensive personal experience coordinating contracted field maintenance personnel during operations in Kosovo, Iraq, and Afghanistan.
[33] Chairman of the Joint Chiefs of Staff. *Doctrine for Logistics Support of Joint Operations*, JP 4-0, II-8.
[34] Commission on wartime contracting in Iraq and Afghanistan. *Transforming Wartime Contracting,* 201.
[35] Defense Industry Daily Staff. "LOGCAP 4: Billions of Dollars Awarded for Army Logistics Support." *Defense Industry Daily* (2011), 1. http://www.defenseindustrydaily.com/Billions-of-Dollars-Awarded-Under-LOGCAP-4-to-Supply-US-Troops-in-Afghanistan-05595/
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[40] Ibid.
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[42] Ibid., 24-28.
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[44] Ibid.
[45] Ronald P. Dale, Colonel, USA. *Mobilization for Operation Desert Shield/Storm Lessons Learned.* (Carlisle Barracks, U.S. Army War College, 1992), 14.
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