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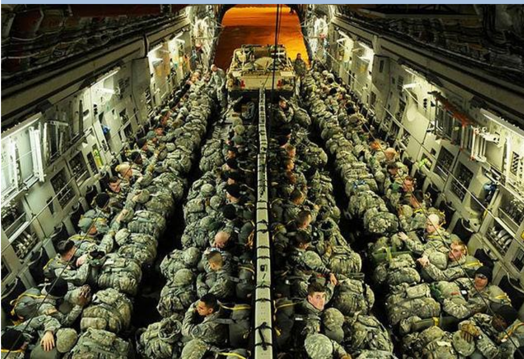

# Getting it right

## Determining the optimal active component end strength of the all-volunteer Army to meet the demands of the 21st century

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# Executive summary

Thirteen years of sustained combat in Iraq and Afghanistan has wearied our citizens and civilian leaders and placed significant strain on our national budget. Sequestration triggered by the Budget Control Act of 2011 has created an environment where substantial reductions must be made across all services. As a "people-centric" force, the United States Army's principle currency for reducing the operating budget is force structure, i.e. people. While other services look to meaningful reductions of high cost weapons systems, the Army must reduce the number of soldiers in its active and reserve components to achieve a fiscally sustainable end strength. Accepting that the Army force structure construct (operating and generating force components) is the best construct to train and ready the force for the future, how large does the U.S. Army active component need to be in order to meet the demands of the 2012 Defense Strategic Guidance in the volatile, uncertain, complex and ambiguous security environment of the 21st century?

The author will suggest that we are in danger of reducing active duty force structure to a level that places at jeopardy the Army's ability to meet its requirements as directed by the secretary of defense. This paper will determine the optimal force size for the active component based on the Army's current force structure construct, that is, an all-volunteer Army that is comprised of an operating force (warfighters and enablers) and a generating force (recruiters, accessions, trainers and educators). It will not challenge the current force construct, nor delve deeply into the reserve component (Army National Guard and Army Reserve) composition. There will also be a brief historical review of U.S. Army reductions following periods of sustained combat and the resultant "re-growth" of the Army in times of need. The paper will also explore alternative viewpoints that address Army mission evolution, the changing security environment, the importance of maintaining a technological comparative advantage at the expense of force strength, and the rapid generation of Army forces after an emergency occurs.

# INTRODUCTION

The Army fills a unique role as the principle component of U.S. military land power. Combat in the land domain is the most complex because it intimately involves humanity—its cultures, ethnicities, religions, and politics. Although modern warfare is waged across all domains, land power is often the arbiter of victory.[1] Throughout my research, I have concluded that in the current environment an active Army end strength that resides somewhere between 480,000 to 490,000 soldiers is required to meet the Army's strategic commitments, support its joint force requirements, and sustain its generating force base. It's the Army's responsibility to prevent, shape, and win in the land domain, and in order to do so it must sustain flexibility, agility, and lethality.[2] Technological overmatch of the United States' adversaries is not just a priority, it is a necessity. Equally important is the requirement to generate, through manning, the combat power necessary to meet U.S. national security objectives.

Nearly 14 years of sustained combat in Afghanistan and Iraq has placed strain on the soldiers that man the U.S. Army and the weapon systems they employ. Political and popular frustration with the longest period of sustained combat in American history has led to a necessary reexamination of employment of ground forces, and a misguided perception that future warfare will somehow be largely devoid of ground combat and long term peacekeeping operations.[3] In addition, sequestration triggered by the Budget Control Act of 2011 has created an environment in which substantial reductions must be made across all military services. In order to safeguard readiness and protect future modernization efforts, the Army faces significant reductions in its current end strength. Chief of Staff of the Army General Raymond Odierno testified to the House Armed Services Committee in 2013:

> Under the funding levels of the President's Budget proposal, which defers the effects of sequestration for several years, the Army will reach what I believe is the absolute minimum size to fully execute the 2012 Defense Strategic Guidance: 450,000 in the Active Army ... at this size, however, we are at high risk for reacting to any strategic surprise that requires a larger force to respond. In addition, the Army will only be able to maintain an adequate level of future readiness by accepting a high degree of risk across every modernization program.[4]

Several recent world events could easily constitute the strategic surprise of which General Odierno spoke. The rise of the Islamic State group in Syria and northern Iraq,

the invasion of Ukraine by pro-Russian separatists and Russian forces, the collapse of the government in Yemen, and the outbreak of Ebola in western Africa demonstrate the volatility of the world in which we live and the velocity of instability to which we are subject.

In October of 2014, and largely in light of these recent strategic surprises, General Odierno amended his statements from 2013, "I now have concern whether even going below 490,000 is the right thing to do or not, because of what I see potentially on the horizon."[5] At the time of this writing, the active Army stands at approximately 500,000 on glide slope to reach 490,000 by the end of fiscal year 2015. Sequestration will rapidly drive force strength even lower for the Army, with some unofficial estimates as low as 380,000 by 2019. And while the size and capacity of our military must be resource-informed, it is incumbent upon military leaders to assess capability against potential adversaries in the context of the 10 missions set forth in our Defense Strategic Guidance.[6] While this potential reduction of over 120,000 active duty soldiers is alarming, equally alarming is the speed with which these reductions must occur.

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**Notes**

[1] *Army Doctrine Publication 1 - The Army*, 1-1, vol. 1 (Washington, DC: Department of the Army, 2012).

[2] Ibid.

[3] *2014 Quadrennial Defense Review* (Washington, DC: Department of Defense, 2014), 19.

[4] Raymond Odierno, "Planning for sequestration in fiscal year 2014 and perspectives of the military services on the Strategic Choices and Management Review," testimony before House Armed Services Committee first session, 113th Congress, Washington, DC, September 1, 2013.

[5] Julian Barnes, "Top General Worries U.S. Army Getting Too Small," *Washington Wire* (blog), *The Wall Street Journal*, October 13, 2014, http://blogs.wsj.com/washwire/2014/10/13/top-general-worries-u-s-army-getting-too-small/, accessed March 23, 2015.

[6] *2012 Defense Strategic Guidance*, 3-6 (Washington, DC: Department of Defense, 2012).

# A BRIEF HISTORY OF ARMY END STRENGTH

*Through World War II*

Historically, United States defense policy has relied upon a small Army that could rapidly expand in times of war. Following conflict the Army would contract and await the next call to arms. State militias augmented the regular army during the American Revolution and the War of 1812, but with the advent of the Mexican War in 1846 and the American Civil War in 1861, volunteer soldiers filled the roll of militias.[1] After rapid demobilizations following these conflicts, America's entry into the Spanish American War in 1898 found the Army wanting in preparedness and poorly suited for deployment and sustained mobility.

As World War I erupted, the United States found itself again incapable of providing a sizable rapidly-deployable force to support U.S. national objectives as part of a broader coalition. The pre-World War I regular Army comprised merely 75,000 of its authorized 100,000 soldiers when America declared war on Germany in April 1917. By late 1918, however, federalization of the National Guard and the use of the draft surged the total active force to over 3 million men.[2] After reaching its zenith of nearly 3.7 million men in 1918, 2 million of whom were deployed to Europe with the American Expeditionary Force, the United States Army completed its wartime task and saw a reduction in excess troop strength.

Despite a world that was still balanced precariously between peace and war, the reductions were rapid and drastic. As with other times throughout history, emerging technologies called into question the efficacy of large ground forces. The painful lessons of trench warfare and the many hundreds of thousands of combatants lost for negligible gains raised questions about whether future warfare would include large ground components. Weapon systems such as the machine gun, the tank, and chemical agents presented significant threats to large formations of infantry. By the 1920s many pundits speculated that the advent of airpower and the airplane specifically would change the face of warfare and negate the need for ground units altogether.[3]

By 1922 Army end strength dipped below 150,000 and remained there until 1935 even though the National Security Act of 1920 authorized Army end strength of 280,000 men. During his tenure as chief of staff of the Army from 1930 to 1935, General Douglas McArthur felt the Army was ill-prepared and poorly trained to respond to even small emergencies and made several attempts to increase strength to the authorized level. At each attempt he was rebuffed by Congress and the president.[4] By 1939 the Army had grown, but still consisted of fewer than 200,000 soldiers despite Germany's clear intention to seek regional hegemony in Europe. German aspirations in Europe finally prompted the United States to begin a slow mobilization in 1940 that was rapidly accelerated after the attack on Pearl Harbor in 1941. The resultant buildup created what would become an Army of over 8 million soldiers by August of 1945. The investment in infrastructure and war production to sustain this 4,000 percent increase in manpower was unprecedented. The War Department envisioned even greater growth and planned to eventually produce over 200 divisions. Political realities reduced this growth aspiration, and Army end strength was capped at 90 divisions by 1943.[5]

*The new great power and the Cold War Army*

After the victory over Germany and Japan in World War II, the United States Army once again found itself with significantly more end strength than it required or could sustain. Millions of men drafted into service were thrust back into society and absorbed into the workforce by a nation that was brimming with the benefits of wartime industrial production. Among the great powers, only the United States had prospered economically as a nation because of the war, while Europe and Asian states faced monumental infrastructure losses and the daunting task of rebuilding.[6] Prior to World War II, the expansion and rapid contraction of the Army had arguably negligible effects on the nation's well-being and strategic posture. Technology was not available to rapidly close the tactical distances required to threaten the homeland. Intelligence was slow to develop and almost exclusively human-oriented. Deployment of combat assets took many days and weeks, and transoceanic crossings were only possible via ship. Strategic risk could be assumed because technology afforded a reaction gap in time and space. At the conclusion of the war, however, Paul Kennedy writes that the United States found itself in a new role.

> With the traditional Great Powers fading away, [the United States] steadily moved into the vacuum which their going created; having become number one, it could no longer contain itself within its own shores, or even its own hemisphere. To be sure, the war itself had been the primary cause of this projection outward of American power and influence;

because of it, for example, in 1945 it had 69 divisions in Europe, 26 in Asia and the Pacific, and none in the continental United States.[7]

Following the victory over Japan in August 1945, the U.S. Army reduced its forces by over 93 percent from the high water mark of 8 million to less than 600,000 by 1950. Having spent years fulfilling occupation duties in Germany and Japan, routine combat training suffered. When North Korea invaded South Korea in 1950, the Army found itself poorly trained and ill-prepared for massive mobilization to a battlefield where it had no experience and where the U.S. had previously placed little to no strategic value. Exacerbating this situation was the ever-present need to maintain forces in Western Europe to bolster NATO commitments and provide defense assurance to Western allies against the Soviet threat.[8]

The Army subsequently expanded to facilitate the new conflict and eclipsed 820,000 soldiers by 1953. But this force of rapidly conscripted men sustained high casualty rates, losses that were attributable not just to the rapid expansion but to an overall lack of readiness to address the threat in northeast Asia. As in the World Wars that preceded the Korean War, the activation of reserve component forces was essential to building combat power. But while the call-up was rapid, mobilization took time, and mobilized reserve forces lacked the training to be placed quickly into combat without great risk. In fact, reserve forces could not be generated quickly enough to fill the requirements being set by the Far East Command. As a result, the Army recalled nearly 20,000 officers and over 100,000 enlisted men, a politically unpopular action.[9]

In southeast Asia the insidious onset of the Vietnam conflict presented President Lyndon Johnson with a choice between expanding the active Army or mobilizing reserve forces. He remained reluctant to mobilize reserve forces because the active Army stood at a healthy 965,000 in 1965. But as America was pulled deeper into the conflict, the active component expanded, and by 1968 had reached over 1.5 million. A liberal deferment policy applied with the draft and the individual replacement policy used to man the combat force in Vietnam created an experiential gap that led to high casualty rates and less overall effectiveness of the fighting force. The draft deferment policy also aggravated training issues and led to a conscript pool that was of lower overall quality than those in previous conflicts. Force efficacy suffered as the individual replacement policy turned stateside units into feeder units for duty in Vietnam. These units were stripped of talented mid-grade leadership and could not sustain cogent training for new recruits to feed the war effort or build future soldiers/leaders for the Army's other Cold War commitments in Western Europe.[10]

Following the Vietnam conflict Army reductions were more modest. The Cold War was at its peak: the need for a strategic force in Western Europe and a general reserve for rapid action elsewhere in the world justified a force size between 750,000 and 790,000. As a function of widespread objection to the U.S. involvement in Vietnam, President Richard Nixon moved to abolish the draft, which had been in place since 1940. In 1973 draft notices were no longer issued—a move initially opposed by the Department of Defense and Congress which believed that manning goals could not be attained through voluntary service alone.[11]

Nearly concurrent with the decision to move to an all-volunteer force, the Army began a holistic review of its investment strategy for future combat systems in light of the continued Soviet threat. Significant investments in principal combat systems in the late 1970s and early 1980s set the stage for what would become known as the "the Big Five": the AH-64 Apache attack helicopter, the UH-60 Black Hawk utility helicopter, the M1 Abrams tank, the M2 Bradley fighting vehicle and the MIM-104 Patriot missile system.[12] These systems represented not just a commitment to increasing the Army technological advantage over its adversaries but also secured the mandate for a professionalized force required to employ these complex systems. This investment in technology underscored the importance of the decision to move to the all-volunteer force. The training, education, and sustained focus required to attain proficiency on these more advanced weapon systems necessitated the longer enlistment terms of volunteer soldiers as compared to draftees who suffered higher turnover rates and lower aggregate levels of education.

*The era of the all-volunteer force*

The post-Vietnam all-volunteer force composed the largest "peace time" Army in our nation's history. Episodic employment of tailored quick reaction forces during interventions in Grenada in 1983 and Panama in 1989 hardly challenged an active duty force composed of 18 divisions. It was not until the invasion of Kuwait by the forces of Iraqi dictator Saddam Hussein in 1990 that the all-volunteer Army was pressed into major mobilization and conflict. By the end of the Cold War, the Army had begun to reduce its force to more modest levels, shrinking from 770,000 in 1989 to 735,000 in 1991. Amidst the throes of force reduction, the Army faced the prospect of desert warfare with one of the world's largest armies. The active Army briefly arrested this reduction to support the war effort during Desert Shield/Desert Storm but began to aggressively shrink forces again in 1992. By 1999 the active Army had realized a 38 percent reduction over its Desert Storm manning levels and resided at approximately

479,000. While the ease of victory over Iraqi forces fed the desire by many to further reduce force levels, Army leaders were concerned that many areas identified during the war, such as undermanned higher headquarters staffs, would suffer with a force sized at only 480,000.[13]

In the aftermath of the attacks of September 11, 2001, the Army found itself struggling to address the unique task of mobilizing, deploying, and employing to Afghanistan, a landlocked country with limited transportation infrastructure and unimaginably harsh terrain. President George W. Bush's actions to immediately mobilize reserve forces had no immediate impact on the size of the active force. Unlike other periods of conflict, the active Army grew slowly, increasing only modestly to 482,000 by the end of 2003. It was not until 2005 that significant increases in active duty strength were realized. The combination of Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) and the modernization of Army force structure to a more agile and deployable force construct—the Brigade Combat Team construct—resulted in an 11 percent increase in active Army end strength by 2010. To fill the force requirements created by the surges, first in Iraq and later in Afghanistan, the Army grew to over 547,000 in 2012.[14] Exacerbating end strength challenges were the many wounded warriors who remained on active duty throughout OEF/OIF and the post-war period. Unlike in previous wars, in the aftermath of Iraq and Afghanistan, an effort was made to conduct more meaningful rehabilitative efforts to return badly injured soldiers to active duty and to transition those who could not return to duty into the Veterans Administration (VA) system at a pace that ensured the best care and optimized treatment.

Most recently the Army realized the need to reduce force structure to a level that assures mission success, sustains a generating force that will continue to address training and manning requirements, and provides agility, depth, and versatility to the combatant commanders. The 2012 Defense Strategic Guidance, based on the objectives set forth in the 2010 National Security Strategy, directed all services to recalibrate activities and make the investments necessary to meet the following 10 mission sets.

- Counter Terrorism and Irregular Warfare.
- Deter and Defeat Aggression.
- Project Power Despite Anti-Access/Area Denial Challenges.
- Counter Weapons of Mass Destruction.
- Operate Effectively in Cyberspace and Space.
- Maintain a Safe, Secure, and Effective Nuclear Deterrent.

- Defend the Homeland and Provide Support to Civil Authorities.
- Provide a Stabilizing Presence.
- Conduct Stability and Counterinsurgency Operations.
- Conduct Humanitarian, Disaster Relief and Other Operations.[15]

With responsibilities across virtually all of these missions, the Army conducted analysis on what size force (active and reserve) would be required to meet these requirements. In 2012, in light of the 2011 Budget Control Act, the Army published Strategic Planning Guidance that distilled its responsibilities down to four critical requirements to support the Joint Force: 1) retaining sufficient capacity with the right balance of capabilities to deter or defeat aggression in one or more locations simultaneously; 2) protecting the homeland through homeland defense and defense support of civil authorities operations; 3) projecting power despite anti-access/area denial challenges; and 4) preserving the ability to rapidly expand the size of the Army if required.[16] Additionally, Army planners were keenly aware that the Army, more so than any other service, provided substantial support to non-Army specific Department of Defense activities. In fact, of the 71 DOD executive agency responsibilities that are shared across the four major services, the Army is responsible for 42 of them, which in turn requires more manpower and funding to sustain.[17] Considering all of these factors, the Army assessed a requirement to maintain an active duty end strength of approximately 490,000 soldiers to ensure mission accomplishment. As a result of the Quadrennial Defense Review of 2014, the Army was directed to further reduce active end strength to 440,000 to 450,000 to meet the fiscal realities of sequestration.[18]

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**Notes**

[1] *The Myths of Army Expansibility—A Study from World War I to the Present* (Carlisle, PA: United States Army War College, Historical Services Division, 2014), 5.
[2] Ibid, 6.
[3] Michael O'Hanlon, "America's Big Military Mistake: Cutting Land Forces Too Quickly," *The National Interest*, October 1, 2014, http://nationalinterest.org/feature/americas-big-military-mistake-cutting-land-forces-too-11381, accessed March 25, 2015.
[4] *The Myths of Army Expansibility*, 16.
[5] Ibid, 17.
[6] Paul Kennedy, *The Rise and Fall of the Great Powers—Economic Change and Military Conflict from 1500 to 2000* (New York, NY: Random House, 1987).
[7] Ibid, 369.
[8] *The Myths of Army Expansibility*, 6.
[9] Ibid, 28.
[10] Ibid, 7.

[11] Janice Laurence, "The All-Volunteer Force: A Historical Perspective," RAND Corporation, http://www.rand.org/content/dam/rand/pubs/monographs/MG265/images/webS0840.pdf, accessed April 1, 2015, 9.

[12] Greg Grant, "RMA, Cold War End for Army," *DoD Buzz*, January 7, 2010, http://www.dodbuzz.com/2010/01/07/rma-cold-war-end-for-army/, accessed April 1, 2015.

[13] *The Myths of Army Expansibility*, 37.

[14] Ibid, 39.

[15] *2012 Defense Strategic Guidance*, 3-6 (Washington, DC: Department of Defense, 2012).

[16] "2012 Army Strategic Planning Guidance," United States Army, January 1, 2012, http://usarmy.vo.llnwd.net/e2/c/downloads/243816.pdf, accessed April 2, 2015, 6.

[17] "Research Paper: National Security Depends on Army Size," unpublished draft, U.S. Army Training and Doctrine Command, G-9, 2015.

[18] *2014 Quadrennial Defense Review* (Washington, D.C.: Department of Defense, 2014), IX.

# WHAT THE RIGHT SIZE LOOKS LIKE IN THE OPERATING FORCE

*Understanding the models and variables*

There is no easy formula or model that quickly generates an answer to the question: what is the right size for the Army? Routinely, force strength to mission is determined by a combination of methods, the most common of which is “troop to task.” This method examines the task to be performed and assigns a specific number of “troops” or soldiers against that task to ensure safe mission accomplishment. It is easy to imagine the enormity of such a method if the entire U.S. Army is to be considered. Even if one were able to distill all of the possible tasks required to accomplish the specified and implied missions of the Army, many such tasks or missions would not occur simultaneously and could therefore draw upon the same soldiers for completion. In the context of combat operations for instance, contingency plans (CONPLANs) to address armed conflict in country X might require the mobilization and deployment of active duty Army divisions A, B, and C. CONPLANs for armed conflict in country Y might require mobilization and deployment of active duty Army divisions A, B, and D. The unlikely event of both CONPLANs occurring simultaneously drives planners to task divisions A and B against both CONPLANs.

Other military services use the same calculus with an understanding that DOD has a limited number of planes, ships, unmanned platforms, etc. with which to conduct war. How then might we assess what right looks like and how much force is enough to effectively ensure our national objectives are met? The Army employs a process known as Total Army Analysis (TAA). Established as a comprehensive and transparent process, the TAA is supported by strategic planning guidance and employs analytical products developed and approved by the Office of the Secretary of Defense and by Headquarters, Department of the Army (HQDA). The TAA additionally considers the Army force from both a qualitative and quantitative viewpoint. These assessments are made during a two part process that includes a capability demand analysis (CDA) phase and a resourcing phase.[1] The importance of the CDA will become apparent when we later discuss optimum force size, particularly for the operating force.

Army forces that are provided to the geographic combatant commanders (GCCs) to conduct operations are referred to as the operating force. "Operating forces consist of units organized, trained, and equipped to deploy and fight. They include about two-thirds of the Regular Army, and three-fourths of the Army's total force. The Secretary of Defense assigns these units to the various combatant commanders. Operating forces are modular."[2] They are the action arm of U.S. military ground power—fire, maneuver, logistics, enabling elements, etc.—and their job is to fight the fight. As we assess how many are required to field the optimal Army, the best place to start is the critical requirements identified by the Army through the Strategic Planning Guidance referenced above. An examination of these requirements provides insight into where the floor should be set for active Army end strength.

The Army must retain sufficient capacity with the right balance of capabilities to deter or defeat aggression in one or more locations simultaneously.[3] In order to do this a realistic examination of likely aggressors is required. Each GCC maintains CONPLANs designed to address the known threats in their area of responsibility (AOR). These threats run the gamut from nation-state armed conflict against the United States or its interests, to non-state actors sowing regional strife, to natural disasters that might overly-tax the resources of U.S. allies and international partners. Given the scope of the task and the ever-changing nature of the international security environment, these CONPLANs are under constant and cyclical revision—so, too, is the process of allocating active Army forces against them.

Since the end of the Cold War, the Army has prepared itself to fight and win two major regional conflicts simultaneously. The 1997 Quadrennial Defense Review provided the reasoning behind this approach.

> As a global power with worldwide interests, it is imperative that the United States now and for the foreseeable future be able to deter and defeat large-scale, cross-border aggression in two distant theaters in overlapping time frames, preferably in concert with regional allies. Maintaining this core capability is central to credibly deterring opportunism—that is, to avoiding a situation in which an aggressor in one region might be tempted to take advantage when U.S. forces are heavily committed elsewhere—and to ensuring that the United States has sufficient military capabilities to deter or defeat aggression by an adversary that is larger, or under circumstances that are more difficult, than expected. This is particularly important in a highly dynamic and uncertain security environment.[4]

However, in accordance with the 2014 Quadrennial Defense Review, the U.S. Army, as part of the Joint team, must be prepared to defeat an adversary in one major combat

operation while simultaneously denying the objectives of or imposing unacceptable costs on an adversary in a second theater.[5] Principally, the Army's mission is to fight and win our nation's wars, but secondarily the Army has a responsibility to prevent conflict with its presence and shape a favorable security environment for U.S. interests, for our allies, and for the collective safety of the region.[6] When considering the allocation of Army forces to multiple CONPLANs across six GCCs, the requirement to provide force presence to prevent aggression and shape the security environment, and the implied requirement to have a force capable of sustaining presence in perpetuity, the math becomes exceptionally complex. Moreover, allocating forces against such plans, even when double- and triple-slating operational units, would drive the required size of the Army to unacceptable and fiscally unsustainable levels. Therefore, assessment of the operational force size relies on the strategic planning framework, the assessments of the GGCs, and the experiential base of the Army's senior military and civilian leaders.

Optimistic worldviews hold that since the Cold War ended the most pressing existential threat to the United States has vanished. For a brief period during the early 1990s, theoreticians believed that a new world order of global security assurance and mutual economic dependency would force greater cooperation across most nations. In the United States, leaders and academics alike believed that we could reap this peace dividend and focus on economic prosperity. But recent history demonstrates the folly of this belief. The unprecedented scale of Al Qaeda's attacks on New York and Washington in September of 2001 required rapid military response. The invasion of Iraq in 2003 exacerbated the need to accelerate defense spending and expand U.S. military forces. Even after the U.S. exit from Iraq in 2011 and a significant reduction in U.S. troop presence in Afghanistan in 2014, the nation finds itself in a world that many believe is less predictable, less secure, and less stable.

An information paper drafted by the Army to inform the joint staff on force posture in late 2014 stated that, based on projected demands from combatant commanders, requests for operational forces would likely increase from 2014 to 2016, not diminish. Among the most important elements highlighted by combatant commanders to prevent conflict and shape the security environment are theater enablers (to include ISR and logistics), special operations forces, and ballistic missile defense assets. Additionally, Northern Command, Central Command, and Africa Command requested additional support from Army division-level headquarters to assist with command and control of deployed forces in 2016. European Command, Pacific Command, and Central Command requested

additional security forces (military police, infantry) and enablers (aviation, intelligence, logistics, etc.).[7]

The Army is also the service that contributes the most forces to theater security cooperation plans. Most of the world's nation-states hold their army as the dominant service. This requires U.S. Army forces to remain constantly engaged through presence and human relationships essential to deterring conflict and, as required, building and sustaining multinational coalitions during periods of conflict. In fiscal year 2013 alone, the Army conducted nearly 6,000 security cooperation events across the globe. These bilateral and multinational events were essential to strengthening regional partnerships, advancing U.S. ambassadors' country plans, and enhancing regional and global security.[8] Demand for U.S. Army forces is growing, not diminishing.

Projections by the Department of the Army suggest that demand for manpower and units (from the GCCs) will meet or exceed the Army supply or dwell goals of such manpower or units in all major categories through fiscal year 2018. The Army currently stands at 11 active duty divisions with a demand signal from the combined GCCs for 10 divisions in 2015, but 11 divisions from 2016 to 2018, committing every active duty division. The Army will have 32 brigade combat teams (BCT) by the end of 2015 and further reduce to 28 BCTs by 2018, but GCC demand for 2015 is 18 BCTs. This number reduces to 13 BCTs from 2016 to 2018, but this still exceeds the Army's rotational capability, and the reduction of demand from 18 to 13 BCTs directly reflects the downsizing of the Resolute Support Mission in Afghanistan. The Army will have 10 combat aviation brigades (CAB) by the end of 2015 while GCC demand for 2015 is seven. GCC estimated demand for CABs from 2016 to 2018 is not less than five, exceeding the targeted dwell goal. The challenge is more vexing for air defense artillery units with six of seven theater high altitude area defense (THAAD) batteries and 12 of 15 Patriot battalions under GCC demand through 2018.

A strategic examination of how the Army sizes itself operationally focuses on several joint interdependence fundamentals. The Army relies heavily on the force generation model to assess how large the force should be. Throughout the contingency operations that characterized the post-9/11 era, the Army struggled to meet a goal of one to one dwell to deployment—that is, ensuring that for every day that a soldier is deployed, he or she spends one day "dwelling" in a non-deployed status. During the "dwell time" the soldier would be expected to accomplish those tasks necessary to ensure personal development, career professional development, recuperation with family (leave), and most importantly, training at the individual and collective level to prepare for the next

mission or deployment. As a matter of force sustainment, the Army believes that a two to one dwell to deployment ratio is necessary to maintain a healthy and ready force. This model is critical to the personnel life-cycle management of the force.[9] This model also provides the mathematical formula necessary to determine operational force size.

In order to sustain optimal dwell of two to one, the operating force of the Army needs to be not less than three times the size of the deployment requirement. The math becomes fuzzy when deployments are unpredictable and evolving. The ability to program deployments to the Afghanistan and Iraq theaters from 2002 to the present has provided predictability to many soldiers and units. Recent deployments in support of unexpected contingencies such as the deployment of Army personnel to Western Africa to support Ebola efforts, deployments to the Baltic states to provide defense assurance in response to the Russian invasion of Ukraine, and deployment of trainers to Northern Iraq to train Iraqi forces in the fight against the Islamic State group are far less predictable. And while smaller in scope, they demonstrate just how important trained and ready forces are across the operational Army.

Efforts to manage the force generation model have led to new strategic approaches for the Army. The regionally aligned forces (RAF) model is designed specifically to focus training resources and provide predictability to GCCs and Army service component commands (ASCC) within the GCCs. Seeking greater efficiency from the limited pool of personnel across the Army, RAF seeks to capitalize on cultural awareness training, language skills, and a habitual training relationship between partner nation forces and the selected Army unit’s soldiers. The goal is better trained and regionally focused soldiers who can reduce overhead, over-training, and excess in the operational personnel pool.

Some critics argue that the roughly 10 percent difference between an active duty Army of 440,000 to 450,000 and 490,000 is negligible, but the demands from the GCCs demonstrate just how important that difference is. As we will see below, the malleability of Army force structure occurs mainly in the operating force. Reductions in the generating force create gaps and seams in capability development, training, recruiting, and education. The difference between an active Army of 450,000 and 490,000 could therefore equate to a reduction of eight additional BCTs, a combat aviation brigade, and a division headquarters. While this would constitute an overall force structure reduction of approximately 8 percent, it would represent a 28 percent reduction in BCTs.

*The criticality of the generating force*

If the operating force in the Army is viewed as the muscle mass that accomplishes combat missions and prevents, shapes, and wins in the security environment, then the generating force represents the skeleton around which the operating force is formed. Its components are many and varied, and each serves a critical function in ensuring the Army is trained and ready for the mission. In accordance with Army doctrine, “the generating force mans, trains, equips, deploys, and ensures the readiness of all Army forces. The generating force consists of Army organizations whose primary mission is to generate and sustain the operating forces of the Army.”[10] The generating force assesses potential Army recruits, conducts initial entry-level (basic) training, and provides professional military education throughout the soldier life-cycle. Additionally, the generating force is charged with servicing, supplying, contracting, acquiring, and equipping the operating force. It also serves as the Army interface with the commercial sector. As the largest of the services, the Army uses its generating force to provide training and professional military education to each of the services across the training spectrum as well as to our allies and international military partners. Assessing the size of the generating force requires an understanding of the elements that are essential to sustain within the Army training base and a recognition that some efficiencies in size result in loss of effectiveness across the enterprise.

Currently the Army’s generating force strength fluctuates, but the force resides somewhere between 90,000 and 100,000 active duty soldiers.[11] Some critics argue that the Army has excess capacity in the generating force and that the force is inefficient. A review of the “Defense Manpower Requirements Report” for fiscal year 2014 demonstrates that the Army generating force constitutes only 31 percent of the total active Army, compared with 53 percent, 36 percent, and 45 percent for the Navy, Marine Corps, and Air Force generating forces respectively.[12] Advances in technology, particularly in the collation and delivery of trainable materials, suggests that manpower requirements could be driven down at the Army installations that conduct training and training management. Calls for consolidation of some higher level professional military education, like the individual war colleges in each service, could make modest manpower reductions possible. Since these schools are designed to teach strategic warfare concepts that are inherently joint in nature, this seems to make sense.[13] However, the focus on individual service component contributions to the overall strategic architecture would be diluted or lost. A combined school or combination of schools might breed more uniformly “joint” officers, but one of the most valued attributes of a joint team comprised of multiple service component officers would be lost—the

perspective of his or her respective service and the unique capabilities that service can bring to the fight in an operational or strategic context.

A 2013 study by the RAND Corporation emphasized the importance of the Army maintaining a diverse, specialized generating force, stating that "maintaining a sufficient and capable generating force is required to train and educate the Army; conceive and develop the doctrine, organization, and material solutions; and implement policy changes to adapt to a changing world."[14] The study also assigned a strength value to the generating force, assessing that "reducing the institutional Army below 88,000 would fracture core institutional capabilities."[15]

*What's left: Transients, trainees, holdees, and students*

Aside from the operating force, which conducts the Army's principle mission, and the generating force, which recruits, trains, and sustains the operating force, there is another pool of manpower that must be accounted for. Known in the Army as TTHS, the transients, trainees, holdees, and students population covers those soldiers who are not currently assigned to either the operating force or the generating force. It accounts for the significant portion of the population that is moving from one assignment to the other (transients), those soldiers who are not yet at their first permanent duty station and are undergoing initial entry training (trainees), those soldiers who are in prison or hospitals (holdees), and those soldiers attending training other than initial entry training (students). Also included in this number are the approximately 4,000 cadets at the United States Military Academy (USMA).

While the term TTHS is often maligned in the Army, this population represents a critical element of the force and makes up nearly 13 percent of total active duty personnel, or approximately 65,000 soldiers.[16] Certainly, strength reductions in the TTHS "account" would reduce overall end strength numbers, but such reductions would be difficult to manage and only produce marginal effects. As of 2004, of the approximate 65,000 soldiers that make up the TTHS population, a mere 2 percent are holdees (the area where biggest gains could arguably be made). This number rose during the late 2000s as the wounded warrior population grew across the Army. The USMA cadet population makes up only 6 percent and represents an area where reductions would be difficult if the Army is to continue to meet officer accession goals. The remaining 90-plus percent represents an investment in critical training and continuing education—two cornerstones of leader development.[17]

## Notes

[1] "Report to Congress on Army Force Structure—August 2013," testimony before the U.S. Congress, Washington, DC, August 1, 2013.

[2] *Army Doctrine Publication 1 - The Army*, 1-1, vol. 1 (Washington, DC: Department of the Army, 2012), A-4.

[3] "2012 Army Strategic Planning Guidance," United States Army, January 1, 2012, http://usarmy.vo.llnwd.net/e2/c/downloads/243816.pdf, accessed April 2, 2015, 6.

[4] William S. Cohen, "Report of the 1997 Quadrennial Defense Review," Department of Defense, May 1, 1997, http://www.dod.gov/pubs/qdr/sec3.html, accessed April 8, 2015.

[5] *2014 Quadrennial Defense Review* (Washington, DC: Department of Defense, 2014), VI.

[6] *Army Doctrine Publication 1 - The Army*, 1-1.

[7] Information Paper on Army End Strength (pre-decisional draft), Office of the Chief of Staff, United States Army, Washington, DC, September, 2014, 3.

[8] "Research Paper: National Security Depends on Army Size," unpublished draft, U.S. Army Training and Doctrine Command, G-9, 2015.

[9] "2012 Army Strategic Planning Guidance," 8.

[10] *Army Doctrine Publication 1 - The Army*, A-4.

[11] Raymond Odierno, "Rethinking the Army of the Future," *Defense One* Summit, November 19, 2014.

[12] *Defense Manpower Readiness Report for Fiscal Year 2014*, Office of the Assistant Secretary of Defense for Readiness & Force Management (Washington, DC: Department of Defense, 2013).

[13] Michael O'Hanlon, *Healing the Wounded Giant: Maintaining Military Preeminence While Cutting the Defense Budget* (Washington, DC: Brookings Institution, 2013), 67-68.

[14] "Generating Force Requirements and Resourcing Study," RAND Corporation (Washington, DC: RAND Arroyo Center, 2013).

[15] Ibid.

[16] Scott Nestler, "TTHS Is Not a Four Letter Word," Association of the United States Army, November 1, 2004, http://www.ausa.org/publications/ilw/Documents/lpe04_7wnestler.pdf, accessed April 15, 2015.

[17] Ibid.

# ASSESSING RISK

*How much is too much?*

The biggest variable in assessing the necessary Army end strength to meet national objectives is risk. As stated earlier, General Raymond Odierno placed the risk at “high” when considering reductions that would take the active Army below 490,000 by 2017. Risk is an amorphous and often misunderstood or misused term that is open to interpretation and no small degree of subjectivity by the assessor. The military defines risk as “the probability and severity of loss linked to hazards.”[1] That definition fits easily into the context of assessing risk for individual personnel, equipment, or missions. Webster’s online dictionary defines risk as, “the possibility that something bad or unpleasant will happen.”[2] This again is a simple and broad definition that encompasses a spectrum of possibilities. Assessing risk from a national security perspective takes elements from both: high risk for the military (or in this case the Army) equates to a high probability that with conditions unchanged something bad will happen resulting in severe loss as the result of hazards either not identified or not addressed. Assessing the magnitude of risk is more difficult still.

The missions defined in the 2012 Defense Strategic Guidance are broad and aspirational but are necessarily so in a world that expects the U.S. to lead in many areas. As each military service calibrates its role in this joint strategy, they look for gaps and seams that aggravate risk and threaten the mission. The Army, in particular, as the principal land component, has responsibilities across the spectrum of missions in either leading or supporting roles. The necessity to adequately man the force to meet these missions is a critical feature of how risk is mitigated based on global realities that have aggravated the problem. For instance, the Defense Strategic Guidance of 2012 suggests that most countries in Europe are now providers of security instead of consumers of it, but Russian aggression in Crimea and Ukraine have demonstrated the problems with that assumption.[3] Additionally, most countries in NATO are not meeting the agreed-to minimum defense spending goal of 2 percent of their respective gross domestic product (GDP). Many of these countries are landlocked and require significant land forces as a primary element of defense. The unacknowledged assumption from these countries is that U.S. military power will fill the gaps created by reduced defense spending. Additionally, despite assertions from some critics that U.S. technological

overmatch negates the need for a large Army, overall national defense risk has increased as the U.S. Navy and U.S. Air Force face reductions in ships, aircraft, and primary weapons systems. While the Army cannot offset all of these risks, sustaining active duty end strength at current levels keeps the risk from becoming overwhelming.

*The smaller Army model*

Some believe that a broad transformation of the Army is required to maximize its manpower potential and reduce risk across the board. Although a thorough examination of these theories exceeds the scope of this research, there are some points that should be addressed. Tom Ricks, a noted military theorist, opined in 2013 that our military (and particularly our ground forces) should be "small and nimble." I agree with his point that the "[Army's] officers should be educated as well as trained because one trains for the known but educates for the unknown—that is, prepares officers to think critically as they go into chaotic, difficult and new situations."[4] This assertion supports a robust generating force that can sustain the educational foundation that provides our soldiers with their comparative advantage. The Army continues to place a high premium on leader development, which underpins all activities across the mission spectrum. Ricks' assertion that, "land forces, in particular, need to think less about relying on big bases and more about being able to survive in an era of persistent global surveillance,"[5] also rings true, but one should not mistake the experience of the Afghanistan and Iraq conflicts for the framework for future warfare. The Army is focused on modularity across the force construct. Additionally, large bases usually house large command elements. While base size may not be a clean corollary to higher command headquarters, the GCCs have demonstrated with their request to the Army that more division-level (two-star) and joint task force-level (three-star) headquarters are required to synchronize the fight across all the warfare domains. While it is plausible that the Army can break up BCTs into battalion or company task forces and disperse them across the battlefield, assuming that they can sustain and supply themselves, coordinate their actions with higher and adjacent headquarters, and conduct critical partnering operations in the geostrategic space of the security environment without the assistance of a command element specifically designed to perform these tasks is not.

Retired Army Colonel Douglas MacGregor has also advocated for a smaller Army, suggesting changes to the BCT construct that would eliminate overhead, reduce (what he sees as) unnecessary headquarters, and integrate greater joint interoperability and employment. His concept of constructing combat groups, nominally commanded by one-star generals, has merit, particularly at the tactical level. It promotes flattening the

mission command architecture and removes the colonel-level command completely in favor of brigadier general-led combat groups with greater firepower, flexibility, agility, and lethality.[6] Where it errs is dismissing the significant sustainment tasks that would emanate from such a design. It also makes no provision for the significant task of "setting the theater"—the receiving, staging, integration, and onward movement of combat assets. The MacGregor model also calls for the dissolution of three four-star Army commands (Forces Command, Training and Doctrine Command, and Army Materiel Command) without any substantive analysis on how two two-star commands could fill the significant void left in the generating force by this divestiture.[7] Still, perhaps no approach to Army force structure reduction is as popular as the argument to reduce the Army after periods of war, as we have historically done, and then expand it rapidly during times of need.

*Rapidly expanding the Army in times of need: A flawed approach*

Based largely on the historical elasticity of the Army, many believe that a relatively small force can be maintained and then rapidly expanded during times of national need. While the draft allowed for this type of expansion during the 19th and most of the 20th century, the advent of the all-volunteer force presents challenges to this technique. The speed of innovation and information technology has increased the pace of operations and the ability of malign actors to spread effects, influence, and actions across the battlefield. The ability to rapidly deliver trained and ready combat units is essential to the 21st century Army. Most soldiers in the Army today spend at least five years in the service. This amount of time is essential for them to develop reasonable expertise in increasingly difficult military skill sets. By contrast, draftees of the past spent only two years in the service, far less time than required to develop even a modicum of expertise on the complex battlefield systems and network modalities of the 21st century. Additionally, disparities of race and ethnicity would be skewed by a draftee force, amplifying the challenge to maintain diversity in the Army and keeping it a force that provides a representative sampling of the broader American population.[8]

An examination of the brigade combat team as a model reveals that far from being rapidly regenerated, it takes as long as 30 months to recruit, assemble, and train a brigade combat team equivalent for deployment. And as General Raymond Odierno noted during testimony to the Senate Defense Appropriations Subcommittee in March of 2015, "senior command and control headquarters, such as divisions and corps, take even longer to generate and train to be effective given the skill sets and training required of soldiers manning these formations. Overall, we must acknowledge that

today's highly-technological, all-volunteer force is much different than the industrial age armies of the past."[9]

A review of the 2014 Quadrennial Defense Review suggests there will be significant changes in the nature of warfare and U.S. forces' contributions to wars in the future. The QDR makes the leap that future wars will be short despite recent conflicts in Iraq and Afghanistan that lasted for over seven years and 13 years respectively. There is also a suggestion that post-conflict stability operations will be elective, permitting the rapid withdrawal of ground forces following military victory.[10] Our own military history, punctuated by the recent lessons of Iraq and Afghanistan, demonstrate that this is not realistic. Despite a desire to sacrifice troop strength in favor of technology, rapid mobilization, and modularity, the Army was eventually forced to surge manpower in both conflicts. A bipartisan review panel made the following observation after examining the 2014 Quadrennial Defense Review, "we are convinced the 2014 QDR's contemplated reduction in Army end strength goes too far. We believe the Army … should not be reduced below their pre-9/11 end strength—490,000 active-duty Soldiers … —bearing in mind that capability cannot always substitute for capacity."[11]

One need only look to the Gulf War of 1991 to realize that a large ground force—over 310,000—was required to achieve the overwhelming victory that assured low casualties for U.S. and coalition forces. The Army currently has over 120,000 soldiers deployed across approximately 150 countries.[12] Where they are not engaged in direct support to combat operations (as in Afghanistan), they are conducting shaping operations, assisting allies and partners with security assurance missions, and preventing conflict from erupting in areas of instability.

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## Notes

[1] *Safety—Risk Management*, 6, vol. DA Pam 385-30 (Washington, DC: Department of the Army, 2014).

[2] "Risk," Merriam-Webster, January 1, 2015, http://www.merriam-webster.com/dictionary/risk, accessed April 15, 2015.

[3] *2012 Defense Strategic Guidance*, 3-6 (Washington, DC: Department of Defense, 2012), 3.

[4] Thomas Ricks, "Why Our Military Should Be Small and Nimble," *The Cap Times*, December 8, 2013, http://host.madison.com/ct/news/opinion/column/thomas-e-ricks-why-our-military-should-be-small-and/article_d9e0833d-a33d-5fd3-a5e1-1741e0525673.html, accessed March 18, 2015.

[5] Ibid.

[6] Douglas MacGregor, "Shaping the Army for Joint Warfighting," briefing to Congressman Mac Thornberry, Washington, DC, April 3, 2014.

[7] Rickey Smith, *Information Paper—Alternative Force Structure Methodology* (Washington, DC: United States Army, 2015), 2.

[8] Fred Kaplan, "The False Promises of a Draft," *Slate*, June 23, 2004, http://www.slate.com/articles/news_and_politics/war_stories/2004/06/the_false_promises_of_a_draft.single.html, accessed April 13, 2015.

[9] Raymond Odierno and John McHugh, "Statement on the Posture of the United States Army to the Senate Committee on Appropriations, Subcommittee on Defense, First Session, 114th Congress," March 11, 2015, http://www.appropriations.senate.gov/hearings-and-testimony/defense-subcommittee-hearing-fy16-us-army-budget, accessed April 12, 2015.

[10] *2014 Quadrennial Defense Review* (Washington, DC: Department of Defense, 2014), 29.

[11] William Perry and John Abizaid, *Ensuring a Strong U.S. Defense for the Future—The National Defense Panel Review of the 2014 Quadrennial Defense Review* (Washington, DC: United States Institute of Peace, 2014).

[12] "2015 Index of U.S. Military Strength," The Heritage Foundation, February 1, 2015, http://index.heritage.org/militarystrength/chapter/us-power/us-army/, accessed April 13, 2015

# Conclusion

The active Army force must maintain an end strength akin to what it was prior to September 11, 2001—480,000 to 490,000. While the National Guard and Reserve components of the total Army are essential to any strategy we undertake, they cannot close the gap in capability that will be posed in the future by an active Army that moves towards 450,000 and below. The Guard and Reserve components are themselves facing reductions in end strength due to sequestration. Examination of current Army force structure with an eye towards increasing efficiency demonstrates that some institutions, particularly those echelons above brigade, are already functioning with suboptimal manning and require additional Army force infusion during times of conflict. Today, nearly 370,000 soldiers are committed in the operating and generating force around the world where missions preclude immediate employment elsewhere.[1]

In addition to its operational commitment, the Army has a vast responsibility across the joint force to set the theater of operations in times of conflict and project significant enabling capability to support communications, cyber warfare defense, and sustainment functions. The Army also serves as the executive agent for 42 of the Department of Defense's 71 joint activities. The Army provides over 50 percent of the DOD's special operations manning and over 80 percent of the deployed special operations support for the geographic combatant commanders.[2]

Proponents of a smaller Army look to the promise of national leaders to stay ahead of security challenges and resist the temptation to commit land forces to combat that might become enduring and expensive. Other advocates for revolutionary change in the Army recommend modifications to force structure that leave gaps in capability or too easily dismiss the sustainment costs of deploying ground combat forces. Perhaps no argument is as persuasive as that which advocates rapid regeneration of Army forces to meet a large regional conflict or conflicts. But history has shown that the all-volunteer force, an essential pillar in the professionalization of the Army, cannot be so easily regenerated. Even after the strike on Pearl Harbor it took 11 months for the United States, employing the manpower advantages of a draft, to commit ground forces to combat. In the current security environment we are unlikely to have the luxury of such time for preparation.

The active Army requires manning at the 480,000 to 490,000 soldier level to meet all of its operational and force generation requirements. An expectation that trained, ready, and well-equipped forces can be created after an emergency occurs is misguided. Arresting the reduction of active Army end strength at the end of FY 2015 is the best strategy to ensure that our nation maintains its competitive advantage, can prevent conflict before it arises, shape the security environment for successful employment of our elements of national power, and win decisively in a complex world. As our Defense Strategic Guidance points out, "unless we are prepared to send confident, well-trained, and properly equipped men and women into battle, the nation will risk its most important military advantage."[3]

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**Notes**

[1] "Army's Commitment to Defense Strategy," briefing to the chairman, Joint Chiefs of Staff, United States Army, Training & Doctrine Command, Washington, DC, January 27, 2014.

[2] "Research Paper: National Security Depends on Army Size," unpublished draft, U.S. Army Training and Doctrine Command, G-9, 2015, 3.

[3] *2012 Defense Strategic Guidance*, 3-6 (Washington, DC: Department of Defense, 2012), 7.

# ABOUT THE AUTHOR

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Colonel Evans is a graduate of Appalachian State University. He holds a master's in adult education from Kansas State University and in national security and strategic studies from the U.S. Naval War College.