



**Congressional
Research Service**

Informing the legislative debate since 1914

Army Active Component (AC)/Reserve Component (RC) Force Mix: Considerations and Options for Congress

Andrew Feickert

Specialist in Military Ground Forces

Lawrence Kapp

Specialist in Military Manpower Policy

December 5, 2014

Congressional Research Service

7-5700

www.crs.gov

R43808

Summary

The Army is composed of both an Active Component (AC) and a Reserve Component (RC). The AC consists of soldiers who are in the Army as their full-time occupation. The RC is composed primarily of soldiers who serve part-time but who can be ordered to full-time duty. The Army's RC is made up of both the Army National Guard (ARNG) and the United States Army Reserve (USAR). AC/RC force mix refers to the distribution of units between the active and reserve components of the armed forces.

The congressional role in AC/RC force mix is most obvious in its authorization of end strengths for the active and reserve components of each Service. Congressional authority concerning AC/RC mix, however, is much broader than that, as the Constitution provides Congress with broad powers over the armed forces, including the power to “to raise and support Armies,” “to provide and maintain a Navy,” “to make Rules for the Government and Regulation of the land and naval Forces” and “to provide for organizing, arming, and disciplining the Militia, and for governing such Part of them as may be employed in the Service of the United States....”

Debates over AC/RC mix center on whether or not to shift force structure between the AC and the RC and, if so, what types of units to shift. Although specific force mix recommendations can be nuanced, policy advocates generally divide between those who favor a stronger AC emphasis and those who favor a stronger RC emphasis. In the contemporary debate, those who favor a stronger RC emphasis believe that RC units, if properly trained and equipped, are as capable as their AC counterparts while costing less. Thus, they argue that RC units can replace a portion of AC force structure while saving money. Those who favor a stronger AC emphasis believe that certain RC forces—particularly larger direct combat units and higher echelon headquarters—are not as capable as AC forces without substantial additional preparation; cannot respond to a crisis as rapidly as AC forces; and cannot be used with the same frequency and duration as AC forces due to policy limitations. Those who take this perspective believe that replacing too many or certain types of AC units with RC units could reduce the Army's ability to respond rapidly to an overseas crisis and sustain operations over time, or could require too much additional RC funding and training time to make such an approach cost-effective.

Given the nation's current fiscal situation, the contemporary debate has shifted somewhat in favor of a higher ratio of RC forces. For example, in its FY2015 budget request, the Administration proposes that RC forces make up 54.1% of the Army by FY2017, in comparison to 53.6% just before the September 11 attacks and 49.1% when the Army was at its peak size during the Iraq and Afghanistan wars (2010). This proposal would also include a shift of the relative proportion of brigade combat teams (BCTs) towards the ARNG, although the Army's Aviation Restructuring Initiative proposes moving attack helicopters from the USAR and ARNG to the AC.

Determining the appropriate mix of AC and RC forces is complex, with many factors affecting the process. Of these, utilization, readiness, effectiveness, cost, and risk are generally considered the major elements in developing the AC/RC force mix. Each of these factors is described in some detail in this report, along with questions for further investigation. As Congress considers the future AC/RC mix for the Army, it may wish to consider several approaches, including supporting Administration proposals on AC/RC mix; gathering additional information on key factors which contribute to AC/RC mix decisions; directly altering AC/RC mix; and influencing AC/RC mix by adjusting factors that contribute to mix decisions.

Contents

Issue Overview	1
Importance to Congress.....	1
A Brief History of Active Component (AC) and Reserve Component (RC) Force Mix.....	3
Army Active-Reserve Mix	7
Background.....	8
Components of the Army.....	8
The Active Component (AC)	8
The Reserve Component (RC)	9
Basic Organization of Army Forces	11
The Army and the Other Services.....	11
Army AC/RC Force Mix.....	14
How the Army Determines AC/RC Force Mix.....	14
Army Plans to Change its AC/RC Force Mix.....	17
Smallest Acceptable Force Size.....	17
Potential Force Mix Scenarios.....	17
What’s Missing in the Force Mix Discussion?	18
Proposed Aviation Restructuring	18
AC/RC Mix: Considerations for Congress	18
Utilization	18
Missions	19
Access to the Reserve Components.....	19
Deployment to Dwell (AC) and Mobilization to Dwell (RC) Ratios.....	20
Key Questions Related to Utilization.....	21
Readiness.....	21
The Army Readiness System.....	22
Cyclical Readiness: The Army Force Generation (ARFORGEN) Model.....	25
Comparing Readiness Between Units	26
Key Questions Related to Readiness.....	27
Effectiveness.....	28
Key Questions Related to Effectiveness.....	29
Cost.....	29
Which Costs Do You Count?.....	29
How Should These Costs be Apportioned Between the Active and Reserve Components?.....	30
How Often Will Reserve Units Be Activated?	31
What is the Most Appropriate Way to Measure the “Output” of the Cost “Inputs”?	31
Key Questions Related to Cost.....	34
Risk.....	34
Key Questions Related to Risk.....	35
Other Considerations	35
Options for Congress	36
Support Administration Proposals on AC/RC Mix.....	37
Obtain Additional Information	37
Direct New Studies.....	37
Establish Processes to Collect, Analyze, and Share New Types of Data	38
Directly Change the Force Mix	39

Adjust End Strengths.....	39
Reallocate Force Structure Between the AC and RC	39
Influence the Force Mix	39
Reallocate AC and RC Roles and Missions	40
Enhance Training for RC Units	40
Promote Greater Use of the RC.....	42

Figures

Figure 1. The AC/RC Force Mix Process	16
Figure 2. Army Force Generation (ARFORGEN) Model	59

Tables

Table 1. Examples of Army AC/RC Force Mix	8
Table 2. What Readiness Ratings Mean.....	25

Appendixes

Appendix A. Aviation Restructuring Initiative (ARI).....	45
Appendix B. Current Legislation Related to Army AC-RC Mix.....	46
Appendix C. Historical Rationales for Reserve Forces	56
Appendix D. The Army Force Generation (ARFORGEN) Model	58
Appendix E. Laws Governing Access to the Reserve Components	60
Appendix F. Contemporary Studies on AC/RC Force Mix.....	65
Appendix G. Individual Study Examinations.....	69

Contacts

Author Contact Information.....	94
---------------------------------	----

Issue Overview

The Army is composed of both an Active Component (AC) and a Reserve Component (RC). The AC consists of soldiers who are in the Army as their full-time occupation. The RC consists primarily of soldiers who serve part-time but who can be ordered to full-time duty. The Army's RC is made up of both the Army National Guard (ARNG) and the United States Army Reserve (USAR). AC/RC force mix refers to the distribution of units among the active and reserve components of the armed forces.¹ Debates over AC/RC mix center on whether to shift force structure between the AC and the RC and, if so, what types of units to shift. Although specific force mix recommendations can be nuanced, policy advocates generally divide between those who favor a stronger AC emphasis and those who favor a stronger RC emphasis. In the contemporary debate, those who favor a stronger RC emphasis believe that RC units can replace a portion of AC force structure while saving money. Those who favor a stronger AC emphasis believe that replacing too many or certain types of AC units with RC units is not cost-effective and could reduce the Army's ability to respond rapidly to an overseas crisis and sustain operations over time.

Importance to Congress

Typically, the details of AC/RC force mix are determined by the individual services within broad parameters set by Congress, but Congress has sweeping power to set policy in this area. The congressional role in AC/RC force mix is most obvious in its authorization of end strengths² for the active and reserve components of each Service, but congressional authority concerning AC/RC mix is much broader than that.

The Constitution provides Congress with broad powers over the armed forces, including the power to "to raise and support Armies," "to provide and maintain a Navy," "to make Rules for the Government and Regulation of the land and naval Forces" and "to provide for organizing, arming, and disciplining the Militia, and for governing such Part of them as may be employed in the Service of the United States...."³ On the basis of its constitutional authority, Congress authorizes and appropriates funds for the AC and RC on an annual basis and sets end strengths limiting the size of the respective forces. Congress is also responsible for ensuring the AC and RC are properly equipped and supplied, determining pay and benefits, establishing personnel policies, and exercising oversight of Executive Branch management of the Department of Defense (DOD). If it so chooses, it can also allocate roles and missions for the Services and their reserve

¹ Or, as an Army Information Paper states, "Active Component / Reserve Component (AC/RC) Force Mix is the term used by the Army to articulate the distribution of force structure among the three Army components within established End Strengths." See Army Posture Statement, 2012, Addendum A, "Active Component/Reserve Component Mix" available here:

https://secureweb2.hqda.pentagon.mil/VDAS_ArmyPostureStatement/2012/InformationPapers/ViewPaper.aspx?id=229

² The term "end strength" refers to the authorized strength of a specified branch of the military at the end of a given fiscal year, while the term authorized strength means "the largest number of members authorized to be in an armed force, a component, a branch, a grade, or any other category of the armed forces." 10 USC 101(b)(11). As such, end strengths are maximum personnel levels. Congress also sets minimum end strengths for the active components from time to time, which may be identical to or lower than the maximum strength levels.

³ Article I, Section 8.

components, adjust reserve activation authorities, determine training regimens, establish or disestablish units, specify unit composition, and designate the number and types of units within each component.

In recent years, several factors have coincided to stimulate interest in the AC/RC mix, particularly for the Army. The wars in Iraq and Afghanistan included large-scale and continuing mobilizations of RC forces, and defense officials and other observers have generally expressed satisfaction with the operational performance of these units. Additionally, concerns about federal spending, coupled with the constraints of the Budget Control Act (BCA) of 2011 (P.L. 112-25), have led many to look for ways to cut costs within the DOD. As a result, some policymakers have begun considering whether part-time RC forces might provide a more cost-effective alternative to some portion of the AC force structure, particularly for the Army, which has the largest reserve component of all the Services.

In its FY2015 budget request, the Administration envisions shifting the AC/RC mix somewhat more toward the RC. It proposes that RC forces make up 54.1% of the Army by FY2017, in comparison to 53.6% just before the September 11 attacks and 49.1% when the Army was at its peak size during the Iraq and Afghanistan wars (2010). This proposal would also include a shift of the relative proportion of brigade combat teams (BCTs) towards the ARNG, although the Army's Aviation Restructuring Initiative proposes moving attack helicopters (AH-64 Apaches) from the USAR and ARNG to the AC to replace retiring armed reconnaissance helicopters (OH-58D). In return, the USAR and ARNG would receive utility helicopters (UH-60 Blackhawk). Others have advocated a greater shift towards the RC. For example, one proposal put forward by the National Guard Association of the United States recommends the Army be realigned so that RC forces make up 58% of the Army, with 420,000 AC, 385,000 ARNG and 195,000 USAR.⁴ This discussion is not purely academic, as various groups favoring the RC or the AC attempt to persuade the Administration and Congress of the importance and relevance of their respective components in relation to what they believe will be the future strategic environment facing the United States.

The House Armed Services Committee Oversight Plan for the 113th Congress summarized the importance of this issue to Congress, and the difficult choices it poses, noting:

The debate that began during the 112th Congress about the most appropriate force structure mix of active and reserve components, about the proper roles and missions of the reserve components—be they an operational or strategic reserve—and about the affordability of the required force to meet national security requirements will intensify in the 113th Congress. Competition among the active and reserve components for diminishing resources will serve as a catalyst for that debate. As evidenced by the debate about the Air Force's active and reserve component force structure recommendations submitted with the Fiscal Year 2013 President's budget and subsequent Congressional action, reaching a consensus will be most challenging.⁵

⁴ National Guard Association of the United States, briefing entitled "The National Guard: Affordable Solution for a Strong Defense," slide 17 ("Solution 2- The Million Man Army). Two other proposals to increase the Army National Guard by 10,000 and 20,000 personnel are put forward by Major General Wesley Craig in an article "A Better Course of Action for the Army," September 6, 2013, available here: <http://www.ngaus.org/blog/13/09/better-course-action-army>

⁵ U.S. House of Representatives Committee on Armed Services 113th Congress Oversight Plan, undated, pp. 16-17.

A Brief History of Active Component (AC) and Reserve Component (RC) Force Mix

The ratio of AC and RC forces has shifted dramatically over time, and Congress has played a central role in these shifts. From the founding of the nation to the Cold War era, the bulk of force structure was maintained in the reserve component (especially the militia/National Guard), except in times of major conflicts. When major conflicts arose—such as the Civil War, World War I, and World War II—the comparatively small active component was expanded through the activation of militia and federal reserves, recruitment of additional volunteers for the AC, and the use of conscription.⁶ At the end of the conflict, active force levels were dramatically reduced. For example, in 1939, there were fewer than 350,000 active duty personnel in all branches of the U.S. armed forces. During World War II, this number grew enormously, reaching over 12 million servicemembers on duty by 1945. With the end of World War II, the United States radically reduced the size of its active armed forces to about 1.5 million in 1947-1950.

This approach changed with the onset of the Cold War. With the advent of the Korean War in 1950, the United States doubled the size of its active forces by 1951 to approximately 3.2 million. This increase included a major reserve mobilization, with over 850,000 members of the National Guard and Reserves called to active duty. However, with the end of the war in 1953, the size of the active component did not decrease nearly as much as it would have in earlier eras. For the next decade, it remained roughly between 2.5 million and 3 million for all services, while the size of the reserve component hovered around 1 million. In response to the Vietnam War, the size of the active component was increased again to about 3.5 million (1968), but there was no major reserve mobilization.⁷ Thus, since the Korean War and continuing to the present, the United States has maintained most of its force structure in the AC. (Although, it should be pointed out that starting in 1989 and continuing to the present, a slight majority of *Army* force structure has been RC.) In 2003, author Richard A. Lacquement Jr. noted:

Nevertheless, active duty forces dominate the military. This is unlike the peacetime history of the U.S. armed forces before World War II when militia and other reserve forces far outnumbered the much smaller standing elements of the armed forces...Although there has been a shift in relative emphasis to the ready reserves since the end of the Cold War, the current American military posture is still dominated by the standing forces of the four military services.⁸

This shift to an AC-centric force structure model in the aftermath of World War II began to ebb somewhat starting in the 1970s. The downsizing that followed the Vietnam War, the end of the

⁶ Conscription in the United States did not begin until the Civil War, and it did not become a major source of military manpower until World War I. The authority to use conscription lapsed in 1973.

⁷ Despite the United States' substantial military involvement in Vietnam, only two comparatively minor reserve activations occurred, both in 1968. The first reserve activation, announced on January 25, 1968, was not directly related to the war in Vietnam. Rather, it was a response to the capture of the U.S. Navy intelligence ship *Pueblo* by North Korea and the subsequent reinforcement of U.S. forces in South Korea. Most of the units activated remained in the United States or were deployed to Korea, but some were stationed in Vietnam. The second reserve activation was announced on April 11, 1968—just two months after the Tet Offensive in South Vietnam—and was intended “to meet the needs of the Vietnam War and strengthen the depleted Active Strategic Reserve.” (Neil Sheehan, *New York Times*. “U.S. Calls 24,500 Reserves.” April 12, 1968, 1.) A total of 37,643 Guard and Reserve personnel were called up during these activations.

⁸ Richard A. Lacquement Jr., “Shaping American Capabilities After the Cold War” 2003, p. 42.

comparatively inexpensive manpower provided by conscription, budgetary pressures, and dissatisfaction with the negative consequences of not using reserve forces more extensively during Vietnam⁹ led to a renewed focus on using RC forces to supplement the AC. The Total Force Policy, established in 1973 by Secretary of Defense James Schlesinger on the basis of the 1970 Total Force Concept developed by Secretary of Defense Melvin Laird, sought to integrate “the Active, Guard and Reserve forces into a homogenous whole” and emphasized that, instead of draftees, “Guard and Reserve forces will be used as the initial and primary augmentation of active forces.”¹⁰

General Creighton Abrams, the Chief of Staff of the Army from 1972-74, implemented this policy for the Army by instituting changes which deeply integrated reserve forces into the active force structure. This deeper integration helped General Abrams rebuild the Army to 16 divisions while staying within budgetary limits; it also effectively ensured that the Army could not be sent to war again without the Guard and Reserve, as had occurred in Vietnam.¹¹ The most notable manifestation of this increased active-reserve integration was the roundout brigade program, which involved restructuring of certain AC divisions to include an RC brigade. Normally, an AC division would have three AC brigades assigned to it. At Abrams’ direction, some AC divisions were assigned two AC brigades, along with a “roundout” National Guard brigade; other AC divisions kept three AC brigades but had some of their AC battalions replaced with “roundout” RC battalions. Congress passed a new law to allow in 1976 to make it easier for the President to

⁹ The war in Vietnam resulted in a major increase in the size of the Army, which grew from about 1 million soldiers in 1965 to about 1.5 million in 1969. This expansion was accomplished with almost no recourse to the Guard and Reserve, as President Johnson repeatedly denied requests for major reserve mobilizations (the exception being two comparatively minor mobilizations in 1968). One author of several historical works concerning the Vietnam era Army, noted that “Failure to call the reserves at a time when the Army was necessarily expanding, and expanding hugely and rapidly, had a devastating effect on the force. The pool of leaders was depleted over and over again to cadre new units, with officers and non-commissioned officers being spread thinner and thinner. With the trained and experienced leaders in the Reserve and National Guard out of reach, the Army was forced to promote its young officers and sergeants prematurely, and to replace them with newly inducted and hastily trained substitutes.” Lewis Sorley, “Creighton Abrams and Active-Reserve Integration in Wartime,” *Parameters*, Summer 1991, p. 38.

¹⁰ Memorandum from James Schlesinger, Secretary of Defense, “Readiness of the Selected Reserve,” August 23, 1973. Emphasis in original.

¹¹ For more on this, see Lewis Sorley, “Creighton Abrams and Active-Reserve Integration in Wartime,” *Parameters*, Summer 1991, pp. 45-46. General Abrams restructured the Army in such a way as to make it very difficult for the Army to conduct any significant deployment without mobilizing the Guard and Reserve, but there are differing historical interpretations as to his intent in doing this. One perspective is that he did so at least in part to ensure that the President and Congress could not commit the Army to a future conflict without the knowledge and implicit consent of the American people, who would be more deeply impacted by a reserve mobilization than a war fought with only active component personnel or conscripts. Lewis Sorley’s article, cited above, quotes several prominent Army officers who worked with General Abrams and who support this interpretation. A critique of this perspective is summarized by another author as follows: “Facing a significant drawdown, the shift to an all-volunteer armed force, and a desire for ethical reform from the rank and file of an officer corps who believed the Vietnam war had weakened service integrity, Abrams primary goals were to establish an active force structure that maintained 16 division flags while also increasing the readiness of reserve components. His subordinates later claimed that he also had a long-term vision to ensure that no president could ever again fight another Vietnam without mobilization, but that is not clear from available documents. In fact, Secretary of Defense James Schlesinger considered the Army Chief of Staff the epitome of the “good servant” who always deferred to civilian control of the military.” Conrad C. Crane, *Avoiding Vietnam: The U.S. Army’s Response to Defeat in Southeast Asia* (Carlisle, PA: Strategic Studies Institute, 2002), p. 5, <http://www.strategicstudiesinstitute.army.mil/pubs/display.cfm?pubID=58>. Regardless of the motivation, it does not appear that the Army’s reliance on its reserve component has been a significant barrier to the United States’ use of military force, as demonstrated by substantial reserve activations in support of operations over the past 25 years (e.g., Kuwait, Iraq, Bosnia, Kosovo, Haiti and Afghanistan).

activate RC personnel and units.¹² Other initiatives to improve active-reserve integration in the 1970s and 1980s included more modernized equipment for the RC, greater overseas training opportunities, and rotations at the newly established National Training Center.¹³

The first major test of this greater active-reserve integration came during the 1990-91 Persian Gulf War, which saw the activation of over 238,000 RC personnel, including about 60,000 members of the Army National Guard and some 88,000 members of the Army Reserve.¹⁴ In many respects, RC performance in this conflict strengthened support for the Total Force Policy among defense policymakers.¹⁵ However, there were areas of RC readiness identified as needing improvement. This was most apparent with respect to the roundout brigades.¹⁶ Three ARNG roundout brigades were mobilized, somewhat belatedly, and deployed to the National Training Center for post-mobilization training. Amid claims of serious readiness deficiencies, however, they were not certified as combat ready until the war was over. A contemporary report by the Congressional Research Service summarized this experience as follows:

In late 1990, three Army National Guard combat maneuver brigades were mobilized for Operation Desert Shield (later Desert Storm), the U.S. military effort against Iraq. All three brigades were "roundout" units, designated to bring an active Army division to full strength upon mobilization. However, the brigades were not activated until four months after Desert Shield began; the two whose parent divisions fought in the war did not deploy with those divisions; none of the brigades left the U.S.; and the only one to be "validated" as combat ready was so judged on the day of the cease-fire. The brigades' experience generated much controversy about the viability of the roundout concept and the active Army's relationships with the National Guard...The major criticism of the roundout brigades is that they were not ready to deploy with their parent divisions. However, roundout brigades were never intended to deploy without some postmobilization training, and it was never envisioned that they could deploy immediately in response to a no-notice crisis. Unfortunately, a combination of excessive optimism, overreliance on numerical readiness ratings, and high-level inattention to the actual readiness levels of the roundout brigades before Desert Shield/Storm led many to assume that they were as ready as similar active Army brigades. Although the brigades had major readiness problems when first called up, they were able to be validated for

¹² This statute, originally codified at 10 USC 673b, formed the basis for what is today known as Presidential Selected Reserve Call Up authority (10 USC 12304).

¹³ Michael Doubler and Vance Renfroe, "The National Guard and Total Force Policy," in *The Modern National Guard* (Tampa, FL: Faircount LLC, 2003), pp. 42-47.

¹⁴ The total number of reservists mobilized for Operation Desert Shield/Storm was 238,729, broken out by reserve component as follows: Army Reserve (88,282), Army National Guard (60,350), Naval Reserve (19,461), Air Force Reserve (22,860), Air National Guard (10,456), Marine Corps Reserve (35,671), and Coast Guard Reserve (1,649). See CRS Report RL30637, *Involuntary Reserve Activations For U.S. Military Operations Since World War II*, by Lawrence Kapp.

¹⁵ The report which accompanied the House version of the National Defense Authorization Act for FY1993 stated "The committee recommends a package of reforms designed to pave the way for an expanded role for combat units in the future...Operation Desert Storm provided a great deal of information about mobilizing and using the reserve component. Although the experience revealed much that worked very well, it also pointed out the need for some necessary changes in the Army National Guard, as well as the active Army." U.S. Congress, House Committee on Armed Services, *Report of the Committee on Armed Services, House of Representatives, on H.R. 5006*, 102nd Cong., 2nd sess., May 19, 1992, H.Rept. 102-527 (Washington: GPO, 1992), p. 19.

¹⁶ The General Accounting Office published several reports which were fairly critical of the brigades' readiness, including: U.S. General Accounting Office, *Peacetime Training Did Not Adequately Prepare Combat Brigades for Gulf War*, NSIAD-91-263, September 24, 1991, <http://www.gao.gov/products/NSIAD-91-263> and U.S. General Accounting Office, *Army Guard Combat Brigade War Lessons Reflect Long-Standing Problems*, T-NSIAD-92-36, May 5, 1992, <http://www.gao.gov/assets/110/104510.pdf>.

deployment to the theater of war three months after activation. This was an unprecedented achievement compared with past call ups of similar reserve component units.¹⁷

The Persian Gulf War experience led Congress to address identified readiness shortcomings through passage of the Army National Guard Combat Readiness Reform Act of 1992 (also known as “Title XI,” in reference to its location within the 1993 National Defense Authorization Act¹⁸). The reforms focused primarily, though not exclusively, on ARNG combat units. Title XI contained 19 provisions which sought to improve the readiness of Army Guard units and their compatibility with AC units by: increasing experience and leadership levels in the ARNG by recruiting more prior-service personnel, Service Academy graduates, and ROTC graduates; revising the training focus for combat units; providing for a more robust medical and dental evaluation process; ensuring the compatibility of personnel, supply, maintenance and finance systems across the AC, ARNG, and USAR; reforming the Army’s readiness system for USAR and ARNG units; directing the Secretary of the Army to conduct inspections to ensure that ARNG units meet deployability standards; and mandating that the Army provide greater funding to early deploying ARNG and USAR units.¹⁹

Although the Department of Defense effectively ended the roundout brigade program in 1993,²⁰ the disintegration of the Soviet Union gave further impetus to the ongoing integration of the AC and RC. With the demise of the United States’ main military competitor, the requirement for large numbers of ground forces at a high state of readiness was considered less critical for national security. Subsequently, AC force structure was substantially reduced in the 1990s. During this time, the Army also adjusted the roles of its reserve components. The Army’s 1993 “Offsite Agreement”²¹ guided the realignment of force structure between the ARNG and USAR, and stipulated that:

- The ARNG would retain a balanced mix of combat and support units;²²
- The USAR would be divested of nearly all its combat structure and would focus on providing support units; it would also provide the bulk of the RC’s Echelon Above Division (EAD) and Echelon Above Corps (EAC) units; and
- The USAR and ARNG would swap approximately 12,000 spaces to facilitate this agreement.

¹⁷ Robert L. Goldich, CRS Report to Congress, “The Army’s Roundout Concept After the Persian Gulf War,” October 22, 1991, summary page. See also Anne W. Chapman, *The National Training Center Matures, 1985-1993*, U.S. Army Training and Doctrine Command Military History Office, Fort Monroe, VA, 1997, pp. 237-248, <http://www.tradoc.army.mil/HISTORIAN/publications.htm> and Michael D. Doubler, *Civilian in Peace, Soldier in War: The Army National Guard, 1636-2000* (Lawrence, KS: University Press of Kansas, 2003), pp. 312-317, 330-332.

¹⁸ P.L. 102-484.

¹⁹ P.L. 102-484, Title XI (sections 1101-1137).

²⁰ Michael D. Doubler, *Civilian in Peace, Soldier in War: The Army National Guard, 1636-2000* (Lawrence, KS: University Press of Kansas, 2003), pp. 349-50.

²¹ Some information about the Offsite Agreement provided to CRS during a meeting with the Army G-8 office on May 19, 2014.

²² In the terminology common at that time, the ARNG would continue to maintain a balanced mix of combat, combat support (CS), and combat service support (CSS) units, while the USAR would be made up almost exclusively CS and CSS units. Combat units include infantry, armor, artillery, special forces and certain aviation and engineer units. Combat support (CS) includes intelligence, communication, chemical, military police and certain aviation and engineer units. Combat service support (CSS) includes supply, ordnance, transportation, medical, legal, and finance units.

The post-Cold War drawdown was followed by the increased employment of RC forces in Iraq (low-intensity conflict with Iraq, 1998-2003), Bosnia (1995-2004), Kosovo (1999-present), and Haiti (1994-1996). As the use of RC units increased and they gained experience through repetitive deployments, the distinction between components faded somewhat, and RC units began to be more seriously considered as suitable substitutes for AC units—provided they received necessary personnel, equipment, training and preparation time prior to being deployed. This perspective was further reinforced by the large-scale and continuing mobilizations of RC forces for the wars in Iraq and Afghanistan, which led many public officials and policy analysts to conclude that the performance of the RC in these conflicts largely validated the Total Force Policy. Some Army officials have argued, however, that AC and RC units are not interchangeable, with one senior Army officer indicating that this was the reason RC BCTs were used for less complex missions in Iraq and Afghanistan than their AC counterparts.²³ RC advocates counter that they had no control over the missions they were assigned in Iraq and Afghanistan, that they were effective in all the missions they were given, and that they could have successfully completed combined arms maneuver missions if they had been given the opportunity.²⁴

In addition to the large scale mobilization of RC units during the wars in Iraq and Afghanistan, Congress authorized significant expansions of the active Army and Marine Corps. This led to an increase in the ratio of AC to RC forces in those Services. However, with the end of the war in Iraq and the ongoing reduction of forces in Afghanistan, a multi-year drawdown of AC forces is underway in these Services. This drawdown has rolled back the war-time increases in AC strength and will likely end at a level lower than existed prior to the war. As such, the proportion of AC to RC forces will also likely decline in those Services.

Army Active-Reserve Mix

The Army determines the distribution of units between the AC, ARNG, and USAR within the end strengths²⁵ mandated annually by Congress by a process it calls Total Army Analysis (TAA). The TAA uses a deliberative campaign analysis process to determine the demand for forces from all three components based on multiple possible future scenarios and current operational demands, as well as lessons learned from past operations and conflicts and resource constraints. AC/RC force mix is dynamic and changes over time in response to changing national security strategies and the resources made available to the Army. **Table 1** illustrates the changing nature of AC/RC force

²³ See comments of Major General John Rossi, Army Quadrennial Defense Review Director, in Sydney J. Freedberg, Jr., *Breaking Defense*, “National Guard Commanders Rise in Revolt Against Active Army; MG Rossi Questions Guard Combat Role,” available here: <http://breakingdefense.com/2014/03/national-guard-commanders-rise-in-revolt-against-active-army-mg-ross-questions-guard-combat-role/>. Chief of Staff of the Army Raymond Odierno made similar if less specific comments at the National Press Club on January 7, 2014: “...the Army for many years now is structured to become complementary. And what I mean by that is you have an active component that has a certain capability. You have a National Guard that has a certain capability. And you have a U.S. Army reserve that has a certain capability. The capabilities are not interchangeable. There's a reason why the active component is more expensive. It brings you a higher level of readiness because they're full-time. They are trained and ready to do things at a higher level because they spend every day focused on that. Our National Guard, who's done an incredible job in the last 10 years, trains 39 days a year. And that covers personnel training and—so when you're talking about integrating organizationally, it takes a bit longer. So it's not—they're not interchangeable.”

²⁴ See also National Guard Association of the United States, “NGAUS: Guard and Active Units are ‘Interchangeable,’” January 13, 2014, available here: <http://www.ngaus.org/newsroom/news/ngaus-guard-and-active-units-are-interchangeable#>

²⁵ See footnote 2 for the definition of end strength.

mix. Of all the Services, the Army has the largest reserve component, and the highest ratio of reserve component personnel to active component personnel.

Table I. Examples of Army AC/RC Force Mix

K = thousands; M = millions

Year	AC Levels	RC Levels	AC % of force mix	RC % of force mix	Total Size of Army
1989 (end of the Cold War)	770 K	776 K	49.1%	50.1%	1.546 M
Sept 11, 2001	480 K	555 K	46.4%	53.6%	1.035 M
2010 (peak Army strength related to wars in Iraq and Afghanistan)	570 K	564 K	50.3%	49.7%	1.134 M
FY2015 Budget Request	490 K	552 K	47.0%	53.0%	1.042 M
Army proposal for FY2017 ("smallest acceptable force")	450K	530K	45.9%	54.1%	980K
Army proposal for FY2019 ("worst case scenario")	420K	500K	45.6%	54.4%	920K

Source: Historical data, Army budget documents, and information given to CRS during a meeting with the Army G-8 office on May 19, 2014.

Note: The Army has the highest proportion of its force structure in the RC (52% at the end of FY2014). For comparative purposes, the RC proportions for the other Services at the end of FY2014 are as follows: Navy (15%), Air Force (35%), Marine Corps (17%).

Background

Components of the Army

The Army has an Active Component and two Reserve Components: the Army National Guard and the Army Reserve. These three components are sometimes identified as Compo 1 (Active Army), Compo 2 (Army National Guard), and Compo 3 (Army Reserve). Each component is discussed in more detail below.

The Active Component (AC)

The Army’s active component consists of soldiers who are in the Army as their full-time occupation. Soldiers in the AC can be deployed world-wide with little to no advanced notification to participate in a wide variety of military operations. The AC has both direct combat and support-type units. Examples of the former include infantry, armor, artillery, combat aviation, and special forces units; while the latter include medical, transportation, communications, supply, ordnance, intelligence, military police, and engineer units.

The Reserve Component (RC)

The term “Reserve Component” normally refers to all seven of the individual reserve components of the Armed Forces,²⁶ but for the purpose of this report it refers only to the Army’s reserve components: the Army National Guard of the United States and the United States Army Reserve. The purpose of the reserve components, as codified in law, is to “provide trained units and qualified persons available for active duty in the armed forces, in time of war or national emergency, and at such other times as the national security may require, to fill the needs of the armed forces whenever more units and persons are needed than are in the regular components.”²⁷ A DOD directive further states: “It is DOD policy that... The RCs provide operational capabilities and strategic depth to meet U.S. defense requirements across the full spectrum of conflict...”²⁸ The Army National Guard also has a state role, described below.

Army National Guard (ARNG)

Descended from colonial-era militias²⁹ which existed prior to the adoption of the Constitution, the Army National Guard has a long historical pedigree. The Constitution contains provisions that recognize the existence of the militia and that granted the federal government a certain amount of control over it.³⁰ Additionally, since 1933, the ARNG has been not only a part of the organized

²⁶ The seven reserve components are the Army National Guard of the United States, the Army Reserve, the Navy Reserve, the Marine Corps Reserve, the Air National Guard of the United States, the Air Force Reserve, and the Coast Guard Reserve. Although the term “reserves” is often used as a generic term to refer to all members of the seven individual reserve components, there is an important distinction between the five reserve components that are purely federal entities (the Army Reserve, Navy Reserve, Marine Corps Reserve, Air Force Reserve, and Coast Guard Reserve) and the two reserve components that are both federal and state entities (the Army National Guard and the Air National Guard). Hence, in some contexts, the five purely federal reserve components are referred to collectively as the Reserves, while the dual federal/state reserve components are referred to as the National Guard.

²⁷ 10 U.S.C. 10102. The language was changed by P.L. 108-375, the Ronald W. Reagan National Defense Authorization Act for FY2005. Prior to this change, the language was as follows: “The purpose of each reserve component is to provide trained units and qualified persons available for active duty in the armed forces, in time of war or national emergency, and at such other times as the national security may require, to fill the needs of the armed forces whenever, during and after the period needed to procure and train additional units and qualified persons to achieve the planned mobilization, more units and persons are needed than are in the regular components.” The change in statutory language, as explained in a House Armed Services Committee report, would “clarify that the purpose of the reserve components is to provide trained units and qualified personnel not just as the result of involuntary mobilizations but whenever more units and persons are needed than are in the active component. The revision recommended by this section more accurately reflects recent and future employments of the reserve components.” H.Rept. 108-491, p. 316.

²⁸ Department of Defense Directive 1200.17, “Managing the Reserve Components as an Operational Force,” October 29, 2008, paragraph 4a, available here: <http://www.dtic.mil/whs/directives/corres/pdf/120017p.pdf>.

²⁹ The colonial militia, which was derived from a longstanding English tradition and which required every able bodied free male (though Native Americans and free blacks were frequently excluded) to participate in the common defense of his town or locality, was the principal institution of colonial military power. Gradually, as the colonial population grew and military threats waned, a distinction arose between the unorganized militia (those members of the militia who were potentially liable for military service but who did not actively participate in military training) and the organized militia (those members of the militia who regularly trained for war and who responded first to military threats). Today, the U.S. Code still recognizes the militia as consisting of “all able-bodied males at least 17 years of age and ... under 45 years of age who are, or who have made a declaration of intention to become, citizens of the United States and of female citizens of the United States who are members of the National Guard.” (10 U.S.C. 311) This provision of the law further divides the militia into the organized and the unorganized militia, and declares the National Guard and the Naval Militia to be the organized militia. At present New York, Ohio, and South Carolina have active Naval Militias.

³⁰ See U.S. Constitution, Article I, Section 8, clauses 15 and 16, and Article II, Section 2, clause 1.

militia of the various states, but simultaneously a reserve component of the Army. In this latter status, it falls under Congress' broader constitutional authority "to raise and support Armies."³¹

This unique history means that the ARNG is both a federal and a state organization. It is made up of 54 separate National Guard organizations: one for each state, and one each for Puerto Rico, Guam, the U.S. Virgin Islands, and the District of Columbia. While the District of Columbia National Guard is an exclusively federal organization and operates under federal control at all times, the other 53 National Guards operate as state or territorial organizations most of the time. In this capacity, each of these 53 organizations is identified by its state or territorial name (e.g., the California National Guard or the Puerto Rico National Guard), and is controlled by its respective governor. Due to their dual federal and state role, National Guardsmen can be called to duty in several different ways.

The ARNG is made up primarily of part-time personnel who are usually required to train at least one weekend a month and two weeks per year. Training time can be increased if needed; for example, if an individual needs to attend a military school, or if the unit is preparing for deployment. The ARNG also has a cadre of full-time support personnel, who are "assigned to organize; administer; instruct; recruit and train; maintain supplies, equipment and aircraft; and perform other functions required on a daily basis in the execution of operational missions and readiness preparations as authorized in Title 5 [Government Organizations and Employees], Title 10 [Armed Forces], and Title 32 [National Guard]...."³² The full-time cadre makes up about 17% of the total strength of the ARNG. During times of war and in support of other military missions, the ARNG can be federalized and deployed. It also participates in a wide variety of other activities such as assisting during natural disasters or supporting homeland security operations, although it typically does these missions while under the control of the state governor. Like the AC, the ARNG has both direct combat and support type units.

United States Army Reserve (USAR)

In comparison to the ARNG, the USAR is of comparatively recent origin, having been established in 1908 under Congress's constitutional authority "to raise and support Armies."³³ It is a purely federal entity and today is composed almost exclusively of support units rather than direct combat units. Like the ARNG, the USAR consists primarily of part-time soldiers who are usually required to train at least one weekend a month and two weeks per year, although training time can be increased if needed. The part-time personnel are augmented by a cadre of full-time support personnel, who constitute about 14% of total USAR strength. Unlike the ARNG, which normally operates under state control, the USAR is always under the control of the federal government.

³¹ U.S. Constitution, Article 1, Section 8, clause 12.

³² Department of Defense Instruction (DODI) 1205.18, "Full Time Support (FTS) to the Reserve Components," May 4, 2007, enclosure 2, paragraph E2.4, at <http://www.dtic.mil/whs/directives/corres/pdf/120518p.pdf>

³³ U.S. Constitution, Article 1, Section 8, clause 12.

Basic Organization of Army Forces

The Army—whether AC or RC component—is organized along the following basic lines:

From an operational perspective, the Army focuses on the brigade level. Brigades have the capacity to be employed independently on operations as they possess organic headquarters, combat, combat support, and combat service support units. Brigades can be combined along with other units to form divisions. Divisions, along with a variety of higher echelon support units, can be combined into corps and armies, which are well suited for large scale, long-duration operations.

How the Army Organizes its Forces

Squad – 4 to 12 soldiers
Platoon – 16 to 50 soldiers
Company – 60 to 200 soldiers
Battalion – 400 to 1,000 soldiers
Brigade – 3,000 to 5,000 soldiers
Division – 10,000 to 18,000 soldiers
Corps – 40,000 to 100,000 soldiers
Army – 100,000 to 300,000 soldiers

The Focus on Army Brigades

From a 2012 RAND Report:

“In 2003, the U.S. Army began implementing a set of ambitious changes to its force structure to address the challenges of waging war and conducting extended stabilization operations. A key change involved transitioning the Army from a traditional, division-based force into a brigade-based force, a concept that has come to be known as “modularity.” Some important capabilities that were formerly part of the host division were made organic to the brigade combat team organization. The Army also reduced the range of combat brigade types from 17 to three: infantry, Stryker, and Heavy [now referred to as Armored] ... The move to modularity provided the Army with a greater number of smaller, very capable force packages, making it easier to sustain the protracted operations in Iraq and Afghanistan. Combat support and combat service support units and force structure were also redesigned to make the entire force more modular.”³⁴

Types of Army Brigades

Brigade Combat Teams: Armored Brigade Combat Teams (ABCTs); Stryker Brigade Combat Teams (SBCTs); and Infantry Brigade Combat Teams (IBCTs), including airborne, air assault, and light infantry variations; and.

Functional and Multi-Functional Support Brigades: Aviation, Fires (artillery, etc.), Air Defense, Intelligence, Battlefield Surveillance, Cyber, Engineer, Maneuver Enhancement, Chemical, Biological, Radiological, Nuclear and Explosive (CBRNE), Military Police, Civil Affairs, Medical, Transportation, Field Support, Sustainment, and Contracting.

The Army and the Other Services

The Army is not a stand-alone service but instead part of a joint team. This relationship is described in the following passage.

Although individual Services may plan and conduct operations to accomplish tasks and missions in support of Department of Defense (DOD) objectives, the primary way DOD employs two or more Services (from two Military Departments) in a single operation,

³⁴ Stuart E. Johnson, John E. Peters, Karin E. Kitchens, Aaron Martin, Jordan R. Fischbach, “A Review of the Army’s Modular Force Structure,” RAND National Defense Research Institute, 2012, p. iii.

particularly in combat, is through joint operations. Joint operations is the general term to describe military actions conducted by joint forces and those Service forces in specified command relationships with each other.³⁵

The Army's most significant role as part of the joint force is the provision of landpower, further defined as:

The Army's contribution to joint operations is landpower. Landpower is the ability—by threat, force, or occupation—to promptly gain, sustain, and exploit control over land, resources, and people. Landpower includes the ability to—

- Impose the Nation's will on adversaries—by force if necessary—in diverse and complex terrain.
- Establish and maintain a stable environment that sets the conditions for a lasting peace.
- Address the consequences of catastrophic events—both natural and manmade—to restore infrastructure and reestablish basic civil services.
- Support and provide a base from which forces can influence and dominate the air and sea dimensions of the joint operational area.

While the Army is an integral part of the joint force, the value of its contribution depends on its ability to exercise landpower. Ultimately, Army forces' ability to control land, resources, and people through a sustained presence makes permanent the advantages gained by joint forces.³⁶

It should also be noted the Army provides critical enabling capabilities to joint operations including joint command and control (Joint Force Headquarters), communications, air and missile defense, and logistics.

Functions of the Department of the Army

a. The Department of the Army includes land combat, and service forces, and such aviation, water transport, and space and cyberspace forces as may be organic therein, and shall be organized, trained, and equipped primarily for prompt and sustained combat incident to operations on land, and to support the other Military Services and joint forces. The Army is responsible for the preparation of land forces necessary for the effective prosecution of war and military operations short of war, except as otherwise assigned. The Army is the Nation's principal land force and promotes national values and interests by conducting military engagement and security cooperation; deterring aggression and violence; and should deterrence fail, compelling enemy behavioral change or compliance. The Army shall contribute forces through a rotational, cyclical readiness model that provides a predictable and sustainable supply of modular forces to the Combatant Commands, and a surge capacity for unexpected contingencies.

b. The Functions of the Army. In addition to the common military service functions listed in paragraphs 2.a. through 2.n. of this enclosure, the Army, within the Department of the Army, shall develop concepts, doctrine, tactics, techniques, and procedures, and organize, train, equip, and provide forces with expeditionary and campaign qualities to perform the following specific functions:

- (1) Conduct prompt and sustained combined arms combat operations on land in all environments and types of terrain, including complex urban environments, in order to defeat enemy ground forces, and seize, occupy, and defend land areas.

³⁵ Joint Publication 1, Doctrine for the Armed Forces of the United States, March 23, 2013, p. xi.

³⁶ Field Manual 1, The Army, June 2005, p. 1-1.

- (2) Conduct air and missile defense to support joint campaigns and assist in achieving air superiority.
- (3) Conduct airborne and air assault, and amphibious operations. The Army has primary responsibility for the development of airborne doctrine, tactics, techniques, and equipment.
- (4) Conduct CAO [civil affairs operations].
- (5) Conduct riverine operations.
- (6) Occupy territories abroad and provide for the initial establishment of a military government pending transfer of this responsibility to other authority.
- (7) Interdict enemy sea, space, air power, and communications through operations on or from the land.
- (8) Provide logistics to joint operations and campaigns, including joint over-the-shore and intra-theater transport of time-sensitive, mission-critical personnel and materiel.
- (9) Provide support for space operations to enhance joint campaigns, in coordination with the other Military Services, Combatant Commands, and USG departments and agencies.
- (10) Conduct authorized civil works programs, to include projects for improvement of navigation, flood control, beach erosion control, and other water resource developments in the United States, its territories, and its possessions, and conduct other civil activities prescribed by law.
- (11) Provide intra-theater aeromedical evacuation.
- (12) Conduct reconnaissance, surveillance, and target acquisition.
- (13) Operate land lines of communication.³⁷

Types of Army Operations

The Army conducts what is described as “full spectrum operations.”

During joint campaigns overseas, Army forces execute a simultaneous and continuous combination of offensive, defensive, and stability and reconstruction operations as part of integrated joint, interagency, and multinational teams. Concurrently with overseas campaigns, Army forces within the United States and its territories combine offensive, defensive, and **civil support operations** to support homeland security. Strategically, the ability to conduct **offensive, defensive, and stability and reconstruction** operations in overseas campaigns while supporting **homeland security** domestically is central to full spectrum operations.³⁸

Specific operations types described in the preceding paragraph are defined as:

- **Offensive operations** carry the fight to the enemy by closing with and destroying enemy forces, seizing territory and vital resources, and imposing the commander’s will on the enemy. They focus on seizing, retaining, and exploiting the initiative.³⁹
- **Defensive operations** counter enemy offensive operations. They defeat attacks, destroying as many attackers as necessary. Defensive operations preserve control over land, resources, and populations. They retain terrain, guard populations, and protect key resources. Defensive operations also buy time and economize forces to allow the conduct of offensive operations elsewhere. Defensive operations not only defeat attacks but also create the conditions necessary to regain the initiative and go on the offensive or execute stability and reconstruction operations.⁴⁰

³⁷ Department of Defense Directive 5100.01, Functions of the Department of Defense and Its Major Components, December 21, 2010.

³⁸ Ibid.

³⁹ Ibid.

⁴⁰ Ibid.

- **Stability and reconstruction** operations sustain and exploit security and control over areas, populations, and resources. They employ military capabilities to reconstruct or establish services and support civilian agencies. Stability and reconstruction operations involve both coercive and cooperative actions. They may occur before, during, and after offensive and defensive operations; however, they also occur separately, usually at the lower end of the range of military operations. Stability and reconstruction operations lead to an environment in which, in cooperation with a legitimate government, the other instruments of national power can predominate.⁴¹
- Within the United States and its territories, Army forces support **homeland security operations**. Homeland security operations provide the Nation strategic flexibility by protecting its citizens and infrastructure from conventional and unconventional threats. **Homeland security has two components**. The first component is **homeland defense**. If the United States comes under direct attack or is threatened by hostile armed forces, Army forces under joint command conduct offensive and defensive missions as part of homeland defense. The other component is **civil support**, which is the fourth type of Army operation.⁴²
- **Civil support operations** address the consequences of man-made or natural accidents and incidents beyond the capabilities of civilian authorities. Army forces do not conduct stability and reconstruction operations within the United States; under U.S law, the federal and state governments are responsible for those tasks. Instead, Army forces conduct civil support operations when requested, providing Army expertise and capabilities to lead agency authorities.⁴³

A central tenet of full spectrum operations is that all Army units—AC and RC alike—are required to be ready to successfully conduct all of the aforementioned operations.

Army AC/RC Force Mix

How the Army Determines AC/RC Force Mix⁴⁴

The starting point for determining AC/RC force mix is a series of national security strategic guidance documents including:

- The Administration’s National Security Strategy (NSS);
- DOD’s National Defense Strategy (NDS);
- The congressionally-mandated Quadrennial Defense Review (QDR); and
- The Chairman of the Joint Chiefs of Staff’s (CJCS) National Military Strategy (NMS).⁴⁵

These high-level strategic documents broadly articulate the Army’s role in the national security architecture. They also delineate specific missions and responsibilities as well as parameters that the Army uses to help determine what kind of force the Army needs to “build.” Based on these documents the Army could build a heavier (more armor) or lighter (more infantry) force, a force oriented on fighting a major regional adversary, or one that is more focused on counterinsurgency,

⁴¹ Ibid.

⁴² Ibid.

⁴³ Ibid.

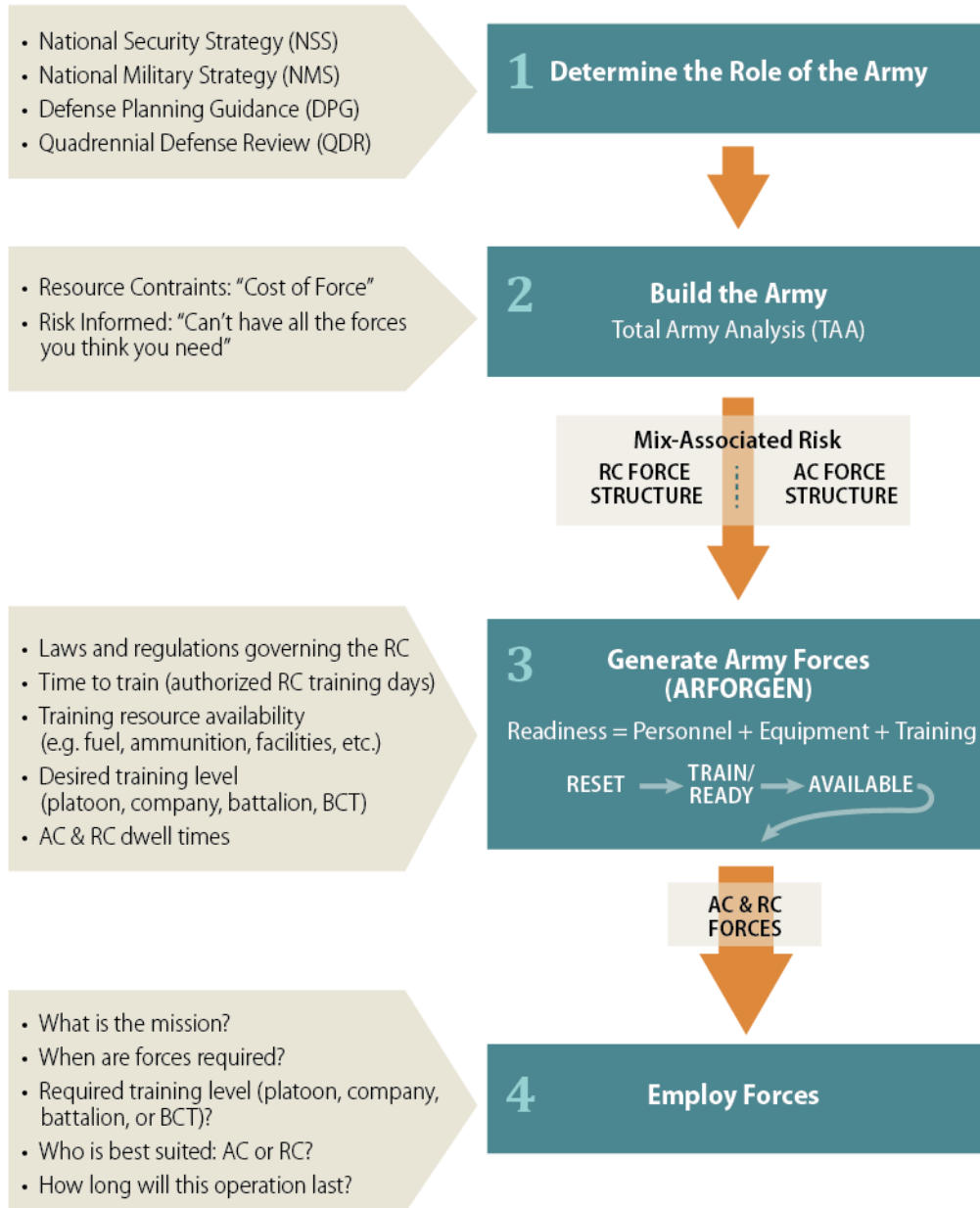
⁴⁴ Information in this table is taken from information given to CRS during a meeting with the Army G-8 office on May 19, 2014.

⁴⁵ For detailed information on the aforementioned national security documents see CRS Report R43174, *National Security Strategy: Mandates, Execution to Date, and Issues for Congress*, by Catherine Dale.

etc. However, because there is risk associated with putting too much emphasis on one type of force (heavy vs. light, for example), the Army tends to build a mix of forces that can address a wide variety of operations—or what the Army refers to as a “full spectrum” force.

In addition to strategic guidance, budgetary considerations play a major role in determining the size of the Army as well as, to an extent, the AC/RC force mix. Historically, during times of conflict or national emergency, resources are made available to expand the Army as well as provide necessary equipment and training. After conflicts or during periods of protracted peace, traditionally fewer resources have been provided to the Army, often resulting in a drawdown of forces as well as the rebalancing of the AC/RC mix based on the premise that RC forces are less costly to maintain during peacetime. These decreases in resources can also adversely affect the readiness of available forces as well as impact Army modernization efforts.

Figure 1. The AC/RC Force Mix Process
From Conception to Employment



Source: CRS graphic developed by authors.

As previously noted, the Army determines much of the AC/RC force mix by the Total Army Analysis (TAA) process. TAA generates the combat support (CS) and combat service support (CSS) forces needed to support divisional and non-divisional combat forces that are set forth in the Defense Planning Guidance (DPG). The TAA uses a deliberative campaign analysis process to determine the demand for forces from all three components based on multiple possible future scenarios, current operational demands, as well as lessons learned from past operations and conflicts, and resource constraints. This force is then presented to Army leadership who use the

approved force to build the Army's annual budget request. **Figure 1** graphically depicts the process used to determine the Army's AC/RC force mix.

Army Plans to Change its AC/RC Force Mix

In addition to overall force size, the Army also expresses AC/RC force mix in terms of units, with the brigade combat team (BCT)⁴⁶ being the most commonly used unit. Brigade combat teams (BCTs) are the Army's basic operational warfighting unit and it should be noted there are only AC and ARNG BCTs—the USAR has no BCTs. As the Army reduces overall force size, the force mix between AC and RC is altered to reflect these reductions. In FY2014, the Army has:

- 38 Active Component BCTs.
- 28 Army National Guard BCTs.
- **66 Total BCTs.**

In 2013, the Army decided to add an additional “maneuver battalion”⁴⁷ to its Infantry BCTs and Armored BCTs which, prior to 2013, had only two maneuver battalions (unlike Stryker BCTs which have always had 3 maneuver battalions). This additional maneuver battalion will come from BCTs in the process of deactivating. Thus, even though BCTs are being eliminated from AC and RC force structure, Infantry and Armored BCTs are gaining additional combat capability which should be taken into consideration when discussing force reductions and force mix.

Smallest Acceptable Force Size⁴⁸

The Army has stated a 450,000 AC, a 335,000 ARNG, and a 195,000 USAR—28 active BCTs and 24 ARNG BCTs (52 BCTs total)—is the “smallest acceptable force to implement the defense strategy.” Any force smaller than this “lacks the capacity to conduct simultaneous major combat operations while defending the nation at home, sustaining minimal presence in critical regions, and retaining a Global Response Force (consisting of one BCT) at the direction of the Commander-in-Chief.”⁴⁹

Potential Force Mix Scenarios⁵⁰

The Army has stated that force structure reductions are required to meet sequestration-imposed funding levels. The Budget Control Act (BCA) of 2011 (P.L. 112-25), as amended by the American Taxpayer Relief Act of 2012 (P.L. 112-240), requires across-the-board spending

⁴⁶ For additional information on brigade combat teams see CRS Report R42493, *Army Drawdown and Restructuring: Background and Issues for Congress*, by Andrew Feickert.

⁴⁷ Maneuver battalion is an Army term for either an infantry or armored (tank) battalions which are capable of “maneuvering” to destroy enemy forces.

⁴⁸ Information in this section is taken from an Army Briefing, “Army Force Mix: Least Risk: Best Value,” January 6, 2014.

⁴⁹ Ibid. p. 3.

⁵⁰ Information in this section is taken from an Army Briefing, “Army Force Mix: Least Risk: Best Value,” January 6, 2014. For more detailed information on the Army's drawdown see CRS Report R42493, *Army Drawdown and Restructuring: Background and Issues for Congress*, by Andrew Feickert.

reductions (sequestration) in most federal defense and nondefense discretionary programs. The American Taxpayer Relief Act of 2012 raised defense and nondefense budget spending limits under the Budget Control Act (BCA) for FY2014 and FY2015 but BCA spending limits will return in FY2016 if no further legislative action is taken.

Because of budget uncertainty, the Army's "worst case" planning scenario is that sequestration-level funding levels return in FY2016. In addition, DOD has provided the Army with both strategic and fiscal guidance which influences the force level the Army can "afford" as well as the AC/RC force mix. Under this worst case scenario, the Army would reduce in size to a 420,000 AC; a 315,000 ARNG; and an 185,000 USAR which would translate to 24 AC BCTs and 22 ARNG BCTs. Army leadership has repeatedly stated that this force level would result in insufficient capacity and the Army would be unable to implement the U.S. defense strategy.

What's Missing in the Force Mix Discussion?

As previously noted, BCTs are the mostly commonly portrayed unit type when examining AC/RC force mix but there are scores of other types of units ranging from combat aviation brigades, engineer units, logistics units, to military police brigades as well as smaller units that are part of the greater force mix equation. These non-BCT formations play a significant role in a wide range of military operations and depending on the operation, they could be the focus of the operation instead of BCTs. It is important to note that when determining AC/RC force mix, these non-BCT units are also included as part of the process even though they are frequently not included in related discussions. In this regard, when questioning Army AC/RC force mix proposals, it could prove beneficial to also examine the mix of non-BCT units as well.

Proposed Aviation Restructuring

In March 2014, the Army proposed a plan (referred to as the Aviation Restructuring Initiative or ARI) to restructure aviation units. Under the ARI, the AC and National Guard would be allocated aircraft that supposedly better align with each component's respective missions which would also supposedly generate savings. This proposal, which has generated a great deal of discussion, is further discussed in **Appendix A**.

AC/RC Mix: Considerations for Congress

Determining the appropriate mix of AC and RC forces is complex, with many factors affecting the process. Of these, utilization, readiness, effectiveness, cost, and risk are generally considered the major elements in developing the AC/RC force mix. These factors are all linked to the ability of the specified military forces to meet national security requirements in a budget constrained environment. However, there are other factors often considered with respect to AC/RC mix, particularly with respect to the National Guard. These factors are discussed briefly as well, under the heading "Other Considerations."

Utilization

A key driver of Army force structure, both AC and RC, is the anticipated future demand for Army units. What will they be used for? How quickly will they need to respond? For how long will they

be needed? Answering these questions involves assumptions about likely threats to national interests, how frequently the United States will deploy Army units in response to those threats, and what type of mission they will need to conduct when responding to those threats. Given those broad parameters, several factors should be considered in determining how much of the “demand” can be met with AC forces and with RC forces.

Missions

The missions anticipated for Army units play a key role in determining the number and types of units the Army maintains in its force structure. If AC and RC units of the same type are identical in capability and availability, they can be used in precisely the same manner and, consequently, this factor would have limited applicability to AC/RC mix considerations. However, some observers argue AC and RC units are not identical in terms of availability and, at least in some circumstances, are not identical in terms of capability; hence, they are not always interchangeable for mission planning purposes. For example, AC Army units are usually considered better positioned to respond to crises requiring immediate action because they are more readily available; that is, they typically require less notification, preparation and train up time prior to deployment than similar RC units.⁵¹ RC Army units tend to be preferred for missions that permit a substantial train up period; for example, as reinforcements for an initial response force or as part of a periodic rotation for a long term mission. Additionally, given policy constraints on the length of RC activations (discussed more below), AC units are often preferred for “forward presence” missions overseas, such as the main Army forces in Europe and South Korea. More controversial is the contention that AC and RC units of the same type are not identical in terms of their capability. (See footnote 23) Some argue that AC units are superior to their RC counterparts in certain respects, and are therefore better suited for certain missions—most notably high intensity combat or “combined arms maneuver.”⁵² The reverse of this argument—that some RC units are better suited to certain missions (such as homeland defense, disaster response, and missions with a close civilian analogue)—is also advanced.

Access to the Reserve Components

Historically, one of the barriers to use of the RC was the limited circumstances under which they could legally be ordered to active duty. The principal activation authorities in effect after World War II—today known as Full Mobilization and Partial Mobilization Issues—limited reserve activations to times of war or situations where a national emergency had been declared by Congress or the President. In 1976, a new authority, now known as Presidential Reserve Callup Authority, allowed the President to activate reservists for missions without a declaration of

⁵¹ Several factors relate to this: more rapid assembly of an active personnel (versus the time it takes to invoke activation authorities for reservists and assemble the personnel); the full-time nature of active duty allows AC soldiers to maintain a higher state of training readiness (whereas reserve soldiers typically need at least some post-mobilization training); the location of AC units on bases which have support activities to enable deployment (whereas RC units frequently have to travel some distance to arrive at such a base); and, more AC units are forward deployed and may thus be located closer to the crisis location.

⁵² The Army’s doctrinal definition of combined arms maneuver is “the application of the elements of combat power in unified action to defeat enemy ground forces; to seize, occupy, and defend land areas; and to achieve physical, temporal, and psychological advantages over the enemy to seize and exploit the initiative. It exposes enemies to friendly combat power from unexpected directions and prevents an effective enemy response.” Department of the Army, Army Doctrinal Publication 3-0, *Unified Land Operations*, October 10, 2011, p. 6, available here: http://armypubs.army.mil/doctrine/DR_pubs/dr_a/pdf/adp3_0.pdf .

emergency, though the duration of this type of activation was limited, as was the number of reservists who could be activated at any given time. Subsequent amendments expanded the scope of this authority significantly. The FY2012 National Defense Authorization Act added two new activation authorities: one to permit activation of reservists for up to 120 days to respond to disasters, and another to permit activation of reservists for up to one year for “preplanned mission in support of a combatant command.” This latter authority opens the door for activations in support of more routine military missions, rather than the crisis or “contingency” focus of the other authorities. These activation authorities are summarized in **Appendix E**.

The lowering of legal barriers to reserve activations has contributed to the increased use of reservists in recent decades and eased the concerns of senior defense officials that reservists will be available when needed. Still, when considering whether to use reserve forces in a given role or for a particular mission, the reserve activation authorities place constraints on defense officials that do not exist for active forces. In particular, there are statutory limits on the number of reservists that may be activated, and the length of time that they may be ordered to active duty. Since 2007, there have also been DOD policy limitations on the frequency and duration of reserve activations that are stricter in certain respects than the statutory limits (discussed in the next section). Finally, in considering the use of reserve units for specific roles and missions, defense planners must take into account the time it takes to invoke activation authorities for reservists, notify affected units, assemble their personnel, and conduct post-mobilization training.

Deployment to Dwell (AC) and Mobilization to Dwell (RC) Ratios⁵³

During World War II, Army units typically deployed for the duration of the conflicts; thus, units and their personnel could spend three to four years deployed in combat zones. A different approach was used starting with the Korean War, when individuals were rotated in and out of theater on a periodic basis. During the Vietnam conflict, soldiers were rotated in and out of the deployed unit for a one year “tour of duty” and then returned home. While this policy addressed the issue of spending an extended period in combat, it also created a great deal of turbulence which some cited as having had an adverse impact on unit cohesion and discipline.

With the advent of the All-Volunteer Force and the growth of military families, separating soldiers from their families for extended periods raised concerns about impacts on retention. When it became apparent to military leadership that operations in Iraq and Afghanistan would span many years, DOD established a deployment policy for the Active and Reserve components. In 2007, the Secretary of Defense established a “deployment-to-dwell” policy for AC forces—which remains in effect today—indicating that the planning objective would be one year of deployment followed by two years at home station. He also limited RC activations to a maximum of one year (excluding individual skill training and post-mobilization leave), and set the “mobilization to dwell” planning objective for RC units at one year mobilized followed by five years demobilized.⁵⁴ These dwell time policies are typically expressed by the ratios of 1:2 and 1:5.

⁵³ Information from this section is taken from Secretary of Defense Memorandum, “Utilization of the Total Force, January 19, 2007.

⁵⁴ Memo from Secretary of Defense Robert Gates, “Utilization of the Total Force,” January 19, 2007, available here: <http://www.armyg1.army.mil/MilitaryPersonnel/Hyperlinks/Adobe%20Files/OSD%20Memo%20dtd%2020070119%20-%20Utilization%20of%20the%20Force.pdf>

In addition to the differences in ratios, another key distinction between the two policies is that the deployment-to-dwell ratio for AC units is tied only to time deployed, while the mobilization to dwell ratio for RC units is tied to time mobilized, which can include both pre-deployment training and deployment time. For example, a one-year mobilization for an RC unit might include three months of train up followed by a nine-month deployment. These differences in policy for AC and RC units play a critical role in comparative cost estimates which use a deployed unit cost approach (discussed later in the report).

Key Questions Related to Utilization

- What are the major threats to which Army units will be expected to respond? How fast will the Army be expected to respond and with what types of units? How long will operations last? How long will units be expected to remain in a deployed status. Will units need to conduct multiple deployments in order to meet sustained demands?
- Are there any roles or missions for which either AC or RC forces are clearly more capable than their counterpart, and therefore might be the preferred force of choice? How does this determination align with current AC and RC force structure?
- Should statutory limits in reserve activation authorities be modified? Should they allow more reservists to be activated, and for a longer period of time, than currently allowed?
- Should the DOD policy on “deployment-to-dwell” ratios be modified for active and/or reserve personnel? If so, what should those ratios look like? Are they sufficiently robust to meet projected national security obligations? Do they allow sufficient rest time between deployments so that recruiting and retention remain at acceptable levels?

Readiness

Readiness is a term policymakers, analysts, and military leaders often cite when describing the state of the U.S. military. The Department of Defense defines readiness as “the ability of military forces to fight and meet the demands of assigned missions.”⁵⁵ There are two processes currently in place for reporting the readiness of military units: the Department of Defense Readiness Reporting System (DRSS) and the Chairman’s Readiness System (CRS). This report will focus on the way in which Army commanders determine the readiness of their units to perform their “core functions/designed capabilities”⁵⁶ for submission to DRSS. The data for DRSS comes from a report known as the Commanders Unit Status Reports (CUSR) or Unit Status Reports (USR), which unit commanders submit to the Army component of DRSS (known as DRSS-Army or DRSS-A).

⁵⁵ Department of Defense, Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms, as amended through July 16, 2014, p. 214, available at http://www.dtic.mil/doctrine/new_pubs/jp1_02.pdf.

⁵⁶ There is a separate, though similar process, for reporting readiness for a unit’s “assigned mission,” as an assigned mission may vary somewhat from what the unit was designed to do.

The Army Readiness System

Readiness can be evaluated in different ways, but Army readiness evaluations revolve around four main components: **personnel**, **equipment availability**, **equipment readiness**, and **training**, each of which is described below. This readiness evaluation process is led by unit commanders, who assess readiness levels within the parameters specified by Army regulations. Sometimes the regulations require the commander to apply professional military judgment to a significant degree (most notably in the case of training assessments); while in other areas the commander's discretion is much more limited.

Personnel (P-level)

There are three principal measures of personnel readiness ("P-level metrics") for Army units:

1. The ratio of unit personnel available for deployment in comparison to the total number of personnel the unit is authorized to have.
2. The ratio of unit personnel who are both available for deployment and qualified in their assigned duty position in comparison to the total number of personnel the unit is authorized to have.
3. The ratio of available "senior personnel" in comparison to the total number of senior personnel the unit is authorized to have.

Ratios in each of these metrics generate a rating between 1 (highest) and 4 (lowest) according to a published scale, and the lowest of these three ratings is used to determine the overall "P-rating" of the unit.⁵⁷ In essence, units with a full or nearly full complement of soldiers by specialty and grade are assessed as P-1, while those with substantial shortages in one or more of the measured areas are assessed as P-2, P-3, or P-4, depending on how significant the shortfalls are. This aspect of readiness is relatively objective and therefore requires limited application of a commander's professional judgment.

Equipment Availability (S-level)

Another readiness factor for Army units is the availability or supply of key equipment. This is called the "S-level," and it is based on two metrics:

1. The ratio of designated critical equipment items (known as pacing items) currently in the unit's possession, under its control, or available within 72 hours in comparison to the number of such items the unit is authorized to have. For example, a pacing item for an armor unit would be M-1 Abrams tanks.
2. The ratio of other mission essential equipment items⁵⁸ currently in the unit's possession, under its control, or available within 72 hours in comparison to the number of such items the unit is authorized to have. Examples of this type of equipment might include radios, machine guns, and night vision devices.

⁵⁷ That is, if the three personnel metrics are rated as 1, 1, and 2, respectively, the P-level will be P-2.

⁵⁸ These items are designated as "Equipment Readiness Code A" or ERC A.

Like the P-level, ratios in each of these metrics generate a rating of between 1 and 4 according to a published scale, and the lowest of these two ratings is used to determine the overall “S-rating” of the unit.⁵⁹ Units with all or nearly all of their most important equipment are assessed as S-1, while those with substantial shortages in pacing items or other mission essential equipment are assessed as S-2, S-3, or S-4, depending on how significant the shortfalls are. This aspect of readiness is readily measurable.

Equipment availability is heavily influenced by whether there is sufficient funding to procure the required equipment for a given unit, and by how senior policymakers chose to allocate equipment among units. In the Cold-War era, RC units had comparatively low S-level ratings, as senior defense officials considered equipping these units to be a lower priority than equipping AC units. This changed significantly with the wars in Iraq and Afghanistan and the large-scale and ongoing mobilization of RC units. In 2013, according to the Department of Defense, AC units had approximately 91% of their authorized equipment on hand, the ARNG had approximately 91%, and the Army Reserve had approximately 86%.⁶⁰

Equipment Readiness (R-level)

The third measured area for Army units is equipment readiness or serviceability. That is, is the unit’s equipment fully functional or not? A unit could have all of its authorized equipment by type and numbers, but still suffer from poor equipment readiness if a large portion of authorized equipment or weapon systems does not work. The “R-level” is determined by calculating the percentage of each pacing item that is fully mission capable, and the aggregate percentage of certain designated equipment (“maintenance reportable equipment”) in the unit’s possession that is fully mission capable. Each of these categories is rated between 1 and 4 according to a published scale, and the lowest of these ratings becomes the overall R-level.

The R-level is heavily influenced by funding. If there is not enough money for spare parts or to send a vehicle into depot level maintenance, equipment readiness can suffer. Unit manning can affect equipment readiness too. If there are not enough trained mechanics and supply personnel, repairs can be delayed. RC units have full-time support personnel dedicated to equipment maintenance, and the number of these personnel have increased since the wars in Iraq and Afghanistan began. However, some argue that RC full-time manning levels are still less than optimal.

Training (T-level)

The final measured area for Army readiness is the most subjective, and relates to training. Training readiness does not lend itself to quantifiable evaluation to the same extent as personnel and equipment readiness, and so relies more heavily on the commander’s professional military judgment. In assessing training readiness, unit commanders evaluate how well trained the unit is on certain key tasks, known as “mission essential tasks” or METs. Commanders evaluate their unit’s training proficiency in each MET as either trained (T), needs practice (P), or untrained (U).

⁵⁹ That is, if the two equipment metrics are rated as 1 and 3, respectively, the S-level will be S-3.

⁶⁰ Office of the Assistant Secretary of Defense for Reserve Affairs, Deputy Assistant Secretary of Defense (Material and Facilities), *National Guard and Reserve Equipment Report for FY2015*, March 2014, page 2-3, available here: <http://ra.defense.gov/Portals/56/Documents/NGRER%20FY2015.pdf>. The figures refer to MTOE (Modified Table of Organization and Equipment) units, which are units designed for deployment.

Based on these ratings, a specified calculation methodology, and a published scale, the unit receives a T-level rating of between 1 and 4.⁶¹

An important tenet of training readiness is that all units—AC and RC—train to the same standards. However, AC and RC units do not necessarily achieve proficiency at the same organizational level (i.e., platoon, company, battalion, or brigade). During the ARFORGEN cycle, RC units are typically funded to achieve platoon or company level proficiency prior to deployment, while AC units are often funded to achieve battalion or brigade level proficiency prior to deployment (see “Differences in ARFORGEN Training Levels” later in the report). Additionally, the data on which the commander’s judgments are made can vary substantially. For example, there may be variations between units in the frequency of training, the ranges and resources available for the training, and the number and type of units represented in a training exercise. Operational deployments may also be used when evaluating a unit’s training proficiency, so the commander of a recently deployed unit may be able to more accurately assess his or her unit’s training status.

Overall Readiness (C-level)

The C-level rating, or overall readiness assessment, is derived from the four areas discussed above (P, S, R & T). The C-level is equivalent to the lowest of these four levels,⁶² although commanders have some ability to upgrade or downgrade the rating based on their professional military judgment. The C-rating is meant to reflect the unit’s ability to accomplish its core functions, provide its designed capabilities, and carry out its mission essential tasks.⁶³ The meaning of each C-level is described in **Table 2**.

Subjective Upgrades and Downgrades

Army commanders may not upgrade or downgrade the ratings of the four main resource categories (i.e., they cannot upgrade or downgrade the P, S, R, or T ratings). However, under certain circumstances, commanders may upgrade or downgrade the “C-level” rating of their unit. They do this by comparing the C-level rating initially determined with the descriptions outlined in Army Regulation 220-1, which are summarized in **Table 2**. If the two are mismatched in the commander’s professional judgment, he or she may upgrade or downgrade the unit’s C-level rating so it more closely aligns with the appropriate C-level description. Commanders of brigades and smaller organizations may upgrade or downgrade the C-level by one rating level on their own authority; changes of two rating levels require approval of a higher ranking commander of a specified rank. Commanders of divisions and corps headquarters may upgrade or downgrade by

⁶¹ The methodology assigns a weight of 3 to each “T,” 2 to each “P,” and “1” to each U. These figures are summed and then divided by the product of 3 multiplied by the number of METs. The resulting quotient is multiplied by 100 to produce a percentage, which is interpreted according to a published scale. As an example, if a unit had 5 METs, which the commander evaluated as T, P, T, U, and P this would be converted to 3, 2, 3, 1, and 2. The sum of these numbers (3+2+3+1+2=11) would then be divided by the 3 times the number of METs (3x5=15). The resulting percentage would be 73.3% (11/15*100). If the unit had no untrained tasks (U), this percentage would result in a T-2 rating. However, since the unit has an untrained task, the result is a T-3 rating.

⁶² That is, if the unit was evaluated as P-1, S-1, R-1, and T-3, it would receive a C-3 rating, subject to the possible upgrade or downgrade by the commander.

⁶³ AR 220-1, para4-4(a).

up to two levels on their own authority. The commander must explain the rationale for any such subjective change.

Table 2. What Readiness Ratings Mean
For Army “C-Level” Ratings

C-1	C-2	C-3	C-4
The unit possesses the required resources and is trained to accomplish or provide the core functions and fundamental capabilities for which it was designed.	The unit possesses the required resources and is trained to accomplish or provide most of the core functions and fundamental capabilities for which it was designed.	The unit possesses the required resources and is trained to accomplish or provide many, but not all, of the core functions and fundamental capabilities for which was designed.	
The status of resources and training in the unit do not limit flexibility in methods to accomplish core functions.	The status of resources and training in the unit may cause isolated decreases in the flexibility of choices to accomplish core functions.	The status of resources and training in the unit will result in significant decreases in flexibility to accomplish core functions.	The unit requires additional resources or training to accomplish or provide the core functions and fundamental capabilities for which was designed.
The status of resources and training in the unit will not increase vulnerability of unit personnel and equipment.	The status of resources and training in the unit will not increase the vulnerability of the unit under most envisioned operational scenarios	The status of resources and training in the unit will increase the vulnerability of the unit under many, but not all, envisioned operational scenarios.	
The unit does not require any compensation for deficiencies.	The unit will require little, if any, compensation for deficiencies.	The unit will require significant compensation for deficiencies.	

Source: Adapted from AR 220-1, paragraph 4-6. Emphasis added to highlight the differences between ratings.

Other Measures of Readiness

The metrics discussed above are considered the most important measures of readiness by the Army, but they do not encompass all the ways of measuring readiness. Certain other measures of readiness are also available to commanders to inform any decision to upgrade or downgrade their readiness ratings. For example, Army databases provide information on personnel turnover rates, additional skill qualifications, language qualifications, and professional military education completion. Other measures of readiness—for example, discipline, morale, and certain aspects of leadership and experience—while typically considered important aspects of unit readiness, are not formally integrated into the readiness assessment process. However, commanders may take these factors into account in their C-level upgrade/downgrade decisions.

Cyclical Readiness: The Army Force Generation (ARFORGEN) Model

Because the Army has limited resources, its units cannot all be maintained at the highest state of readiness (C-1) at the same time. One way of doing this is called “tiered readiness,” with

designated units continually maintained in the highest state of readiness, with the remainder maintained at lower readiness levels. This technique was used during the Cold War era, with many AC units and nearly all RC units normally maintained in lower readiness states; this approach assumed that there would be sufficient time and resources to improve their readiness in the event of a major conflict. The reduction in AC force structure at the end of the Cold War, coupled with the pressures of the wars in Iraq and Afghanistan, generated a need to share the burden of deployment among more Army units. Additionally, the Army also began to use its reserve units with greater frequency and so invested more resources in improving and maintaining the readiness of RC units.

Because the Army cannot maintain all of its forces at the highest state of readiness, a process is needed to bring units in a lesser state of readiness to a high state of readiness so they can be deployed to conduct full spectrum operations. The current process the Army employs is known as Army Force Generation (ARFORGEN), a cyclical readiness system that applies to both the AC and RC. **Appendix E** provides additional details on the ARFORGEN process.

Differences in ARFORGEN Training Levels

Discussions with the Army staff⁶⁴ indicate that AC BCTs enter the Available Pool trained up to the brigade level, meaning the unit is ready to be deployed and conduct full spectrum operations as a brigade. In contrast, ARNG BCTs are only trained up to the platoon and company level prior to mobilization, meaning that only that BCT's platoons and companies are ready for full-spectrum operations. Additional resources and authorized training days could enable ARNG BCTs to train to a higher level prior to mobilization, or they can conduct additional train up during post-mobilization training. Nonetheless, the disparity in training readiness has significant implications for the employment of ARNG BCTs in certain operations, particularly those that are complex or short-to-no-notice. Other types of RC units, such as separate battalions and companies, may achieve the same training levels as their AC counterparts prior to mobilization.

Comparing Readiness Between Units

The Defense Readiness Reporting System is intended to broadly assess the ability of military forces to fight and meet the demands of assigned missions, as illustrated in **Table 2**. Thus, two units with a C-1 rating—whether AC or RC—should both have the required resources and training proficiency to accomplish all of their core functions, without significant limitations on their flexibility of methods or increases in unit vulnerability. However, in some circumstances this is not necessarily the case. Some possible examples include:

- The training area relies on a subjective application of professional military judgment. Might there be cases in which some commanders overestimate the training status of their unit while others underestimate it? This could be due to a variety of factors, including having served more or less time as a commander, having observed more or fewer unit training events, having undergone more or less challenging training scenarios, or having a more or less critical attitude towards judging training outcomes.

⁶⁴ Information in this section is taken from information given to CRS during a meeting with the Army G-8 office on May 19, 2014.

- The P, S, and R-level ratings are meant to be fairly objective, but they do not claim to represent all possible readiness factors. Other factors that could significantly affect the ability of a unit to accomplish its core functions might include unit discipline and morale, amount of time key personnel have served in their positions, and the leadership abilities of commissioned and noncommissioned officers in the unit. Might disparities in these unmeasured factors affect the comparability of unit readiness ratings? Commanders have the authority to incorporate such factors with their upgrade/downgrade authority for C-level ratings, but the use of this authority is subjective and may admit to substantial variation between commanders.
- Variations in experience may not be fully captured in the P-level ratings. The P-level rating attempts to capture experience by determining if a person with the right grade and occupational specialty is filling each authorized position in the unit. It also attempts to capture experience by determining if there are an adequate number of people of senior grade, in comparison to the number of authorized senior positions. However, both of these metrics use grade (rank) as a proxy for experience, rather than experience itself. This is not unreasonable given that grade is closely tied to years of military service; but years of active military service normally produce more military experience than do years of reserve military service. Additionally, civilian experience is not captured at all by these metrics. As such, P-level ratings may not fully capture experience, and the ratings might overlook key differences in the experience of AC and RC personnel.

Key Questions Related to Readiness

- Do the readiness levels of AC and RC units differ in general, or in certain types of units? If so, what factors are associated with this difference? How might any such differences be ameliorated?
- Are readiness ratings directly comparable between AC and RC units?
- With respect to the subjective areas of readiness assessment, particularly training assessments and upgrades/downgrade, are there differences in the way AC and RC commanders make their determinations?

Effectiveness

As discussed above, the Defense Readiness Reporting System (DRRS) is designed to assess the ability of units to “execute their missions, plans, and individual tasks based on their capabilities reflecting demonstrated performance in training and operations.”⁶⁵ Logically then, readiness levels should correlate strongly with actual unit performance during exercises and operational missions. However, CRS was unable to find any studies which attempted to determine the extent of this correlation. There does not appear to be any systematic assessment of unit performance during the wars in Iraq and Afghanistan that would be suitable for comparing unit effectiveness between AC and RC units.

The National Defense Authorization Act for FY2012 included a provision requiring the Department of Defense to submit a report “setting forth an analysis of the costs of a sample of deployable units of the active components of the Armed Forces and the costs of a sample of similar deployable units of the reserve components of the Armed Forces.” DOD submitted this report to Congress on December 20, 2013, and it was subsequently evaluated by the Government Accountability Office (GAO). The GAO assessment of the DOD report included the following statement:

Second, the report does not consider or comment on the effectiveness of either active- or reserve-component units when compared to each other. DOD officials told us that there are differences across the services in the way that reserve-component units are employed, so it would be difficult to generalize about their relative effectiveness. The officials told us that it is a generally accepted principle that in most cases, similar active and reserve units should have comparable levels of effectiveness after completing sufficient training; however, they added that data for measuring active- and reserve-unit effectiveness are limited and inconsistently collected. Because the report does not include a discussion of active- and reserve-unit effectiveness, the extent to which the unit-cost comparisons presented in the report can be used to inform force-mix decisions is limited.⁶⁶

The “generally accepted principle” discussed above that “similar active and reserve units should have comparable levels of effectiveness after completing sufficient training” makes intuitive sense, but it does raise some pertinent questions. For example:

- What is meant by “sufficient training”—the amount of training that AC and RC units currently receive during the ARFORGEN process or something different?

Differences in AC and RC Experience

Two of the P-level metrics—qualified in duty position and senior level personnel—consider whether the grade (rank) of a given individual corresponds to the doctrinally required grade of the position they occupy in a unit. The required grade for the position is essentially a proxy for required experience level. This is reasonable given that military grade is closely tied to years of military service (experience); but years of active military service normally produce more military experience than do years of reserve military service, given that active service is full-time and reserve duty is often part-time. Additionally, civilian experience is not captured at all by these metrics.

Hence, a lieutenant colonel or master sergeant with 18 years of active military service will have substantially greater military experience than a lieutenant colonel or master sergeant with 18 years of reserve service. This differential is not captured by the relevant P-level metrics. On the other hand, the lieutenant colonel or master sergeant with 18 years of reserve service may also have 18 years (or more) of civilian experience that is equivalent to or superior to that of his active duty counterpart. This differential is not captured either.

⁶⁵ AR 220-1, para 2-5(c).

⁶⁶ <http://www.gao.gov/assets/670/665181.pdf>

- Do RC units currently receive “sufficient training” prior to deployment to make them comparable in effectiveness to AC units? If not, how much additional training, and what types of training, would be required to make RC units comparable to AC units in effectiveness?
- Do variations in AC and RC training practices disadvantage RC units? If so, are there ways to align RC training practices more closely with AC practices so as to provide more comparable levels of training?
- What impact, if any, do differences in the military and civilian experience of AC and RC personnel play in the comparative effectiveness of AC and RC units?

Key Questions Related to Effectiveness

- Are AC and RC units with the same readiness levels equally effective in exercises and operational missions?
- Are there certain missions or types of units where AC units are more effective than RC units due to training or experience differentials, and vice-versa?
- Does AC and RC unit effectiveness vary by echelon (i.e., company, battalion, and brigade)? If so, are there ways to mitigate these differences?

Cost

A key consideration for policymakers when considering AC/RC mix is their comparative cost. Which are less expensive: AC units or RC units? From one perspective, the answer appears obvious: an RC unit *that is not activated* is inherently less expensive than a similar AC unit, because the large majority of RC personnel only perform military duty part-time, whereas AC personnel perform military duty full-time. This difference also affects comparative training and equipment maintenance costs. Additionally, even when an RC unit *is activated*, its cost should be roughly equivalent to a similar AC unit, as comparable AC and RC units have nearly identical equipment and personnel authorizations. Various studies have approached the issue of AC/RC costs from this perspective, and come up with different determinations of the size of the cost differential. The differences hinge on three principal factors: (1) the range of costs being considered, (2) the apportionment of those costs between the AC and RC, and (3) assumptions about how often RC units will be in an inactive status versus an active status. Each of these points is discussed below. Additionally, some studies have approached AC/RC costs from a different perspective, one that focuses on the different “outputs” associated with those costs. From this perspective, RC units are not always less expensive than AC units, and in some cases they can be more expensive, because multiple RC units are needed to match the output of one AC unit. This perspective is summarized below as well.

Which Costs Do You Count?

An important factor in evaluating AC and RC costs relates to which costs to count. When comparing Army, Army Reserve, and Army National Guard costs, some analyses look only at personnel costs, or only at personnel costs plus operations and maintenance costs. This disregards other costs, such as military procurement, research and development, and construction costs. A more expansive approach looks at the “top-line” budget figure for the Army, the Army Reserve, and the Army National Guard. However, even this approach is not comprehensive as it omits

certain costs covered by DOD, such as those associated with health care and commissaries. It also excludes military-related costs covered by other agencies, such as the costs of Veterans' Affairs educational, disability, and survivor benefits, or the Treasury Department's contributions towards military retirement, concurrent receipt, and the Medicare-Eligible Retiree Health Care fund. Including more costs obviously increases the total cost of both AC and RC forces, and the way in which these costs are apportioned to the active component and the reserve component can significantly affect their comparative cost.⁶⁷

How Should These Costs be Apportioned Between the Active and Reserve Components?

Another challenge associated with determining comparative AC and RC costs revolve around how to apportion certain costs. Certain costs can be apportioned to their respective component more easily because they are provided through separate budgetary accounts. For example, the active Army, Army Reserve, and Army National Guard each have their own appropriations for personnel costs and for operations and maintenance costs. (Although even within these accounts, there are some shared costs that are difficult to allocate.)⁶⁸ Other costs are more difficult to apportion. For example, procurement of major weapons systems and equipment for the reserve components is done primarily via the active component account.⁶⁹ A research and development (R&D) account exists only for the active component, although the reserve component benefits from it. Apportioning the costs from these accounts to the respective components poses substantial challenges; but attributing all of the costs to the active component—particularly those spent to purchase reserve component equipment—distorts the comparative cost of active and reserve component forces.⁷⁰ Additionally, the reserve component benefits from certain activities conducted and funded largely by the active component—for example, developing doctrine, building and operating bases, and running most military schools. Attributing these costs exclusively to the active component likewise alters the comparative cost calculation. Finally, some costs are difficult to apportion between the active and reserve components due to the lack of research on the most appropriate way to do so. For example, if one wished to consider veterans' benefits in the calculation of comparative active and reserve costs, one obstacle would be the limited understanding of the extent to which active and reserve personnel use these benefits, a

⁶⁷ For more information on how different counting methodologies affect total cost, see *Eliminating Gaps in DOD Data on the Fully-Burdened and Life-Cycle Cost of Military Personnel: Cost Elements Should be Mandated by Policy*, Washington, DC, January 7, 2013, http://ra.defense.gov/rfpb/_documents/RFPB_Cost_Methodology_Final_Report_7Jan13.pdf. See pages 12-22, and Appendix B, Slides 16-17.

⁶⁸ See comment later in the paragraph about activities funded by active accounts which are utilized by the RC. The reverse is also true in some cases.

⁶⁹ There is a reserve component procurement account known as the National Guard and Reserve Equipment Account (NGREA), which is used for upgrading existing equipment and procuring new equipment; however, this account is fairly small in comparison to the main active component procurement accounts.

⁷⁰ Reserve component procurement funding can be identified through the NGREA account and the "Procurement Programs (P1-R) Reserve Components" budget appendix document. However, this does not account for the costs of equipment transferred ("cascaded") from the active to the reserve components. Procurement costs are often ignored in AC and RC cost comparisons, but this can be a critical variable, especially when using the Deployed Unit Cost Approach. Under the Deployed Unit Cost Approach, multiple RC units may be needed to sustain the same output as one AC unit. If this is the case, then the procurement costs associated with equipping multiple RC units can have a very significant impact on comparative cost calculations.

problem compounded when one considers that many military personnel serve in both an active and a reserve capacity during their careers.

How Often Will Reserve Units Be Activated?

Another key factor in determining comparative AC/RC costs relates to the frequency with which the RC unit is used. If RC units cost less than AC units when not activated, and about the same as AC units when activated, then the comparative costs will vary based on how frequently the RC unit is activated. Or, to put it another way, RC units will cost the least if they are never activated, cost the same as AC units if they are continually activated, and fall somewhere in between based on their ratio of active to inactive time. Thus, an RC unit that is activated for one year out of every two years will be more expensive than one activated for one year out of every three years. Likewise, an RC unit that is activated for one year out of every two years will be more expensive than one activated for nine months out of every two years. These ratios, often referred to as “deployment-to-dwell ratios,” became an increasingly important part of understanding RC costs due to the large scale rotational deployment of RC units to Iraq and Afghanistan, and due to the desire of many policymakers to continue using RC units for operational missions in the future.⁷¹ They also play an important role in determining the “boots on the ground” output metric discussed below.

What is the Most Appropriate Way to Measure the “Output” of the Cost “Inputs”?

A major change in how AC and RC costs are discussed today comes in the area of correlating the “input” of cost (dollars) with various “outputs.” Perhaps the most common “output” used historically in AC/RC cost comparisons has been personnel, as when Lieutenant General Jeffrey Talley, Chief of the Army Reserve, noted that the Army Reserve provides “nearly 20% of the Army’s trained Soldiers and units, for just six percent of the Army budget.”⁷² A somewhat different formulation compares budget share and the number of personnel in each component, resulting in a “cost per person” metric. For example, for FY2015 the Army has requested about \$120 billion in budget authority. Of this, about \$98 billion is for active component accounts, and \$22 billion for reserve component accounts.⁷³ The proposed end strength of active component

⁷¹ See the new activation authority granted by the 2012 National Defense Authorization Act, codified at 10 USC 12304b, discussed in **Appendix E**.

⁷² Statement by Lieutenant General Jeffrey Talley before the U.S. Senate Armed Services Committee, April 8, 2014, p. 5, available here: http://www.armed-services.senate.gov/download/talley_04-08-14pdf. Another example of this approach was provided in a 2012 National Guard Bureau posture statement: “The National Guard currently provides 35-40% of the Army and Air Force operational force for less than 7% of the base defense budget....” National Guard Bureau, *2012 National Guard Bureau Posture Statement*, page 7, <http://www.nationalguard.mil/portals/31/Documents/PostureStatements/2012%20National%20Guard%20Bureau%20Posture%20Statement.pdf>.

⁷³ The total requested budget authority for the Army in FY2015 is \$120.2 billion. Of this, appropriations accounts dedicated to the USAR are approximately \$7.4 billion (Reserve Personnel, Army; Medicare Eligible Retiree Health Care Fund, Reserve, Army; Operations and Maintenance, Army Reserve; and Military Construction, Army Reserve), while accounts dedicated to the ARNG are approximately \$14.8 billion (National Guard Personnel, Army; Medicare Eligible Retiree Health Care Fund, Army National Guard; Operations and Maintenance, Army National Guard; and Military Construction, Army National Guard). See Office of the Under Secretary of Defense (Comptroller), National Defense Budget Estimates for FY2014, April 2014, Table 6-7, “Inyears, DOD TOA, Budget Authority, and Outlays by Appropriation Account,” available here: http://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2015/FY15_Green_Book.pdf

soldiers is 490,000, while the proposed end strength for reserve component soldiers is 552,200 (350,200 ARNG and 202,000 USAR).⁷⁴ Using this approach, the cost per active soldier could be calculated at \$200,000 per year and the cost per reserve soldier could be calculated at \$40,000 per year, leading to a statement indicating that reserve soldiers costs one-fifth as much as an active-duty soldier.

This approach has been criticized for how costs are allocated between the AC and RC. (See previous section, “How Should These Costs be Apportioned Between the Active and Reserve Components?”) It has also been criticized for lacking a strong relationship to work performed. That is, even if AC soldiers cost five times more than RC soldiers (using the above example), they also are on duty more often, train more often, and deploy for operational missions more often, potentially resulting in more “bang for the buck.” Alternative approaches, therefore, attempted to look at cost in relation to a metric of usage.

Individual Member Cost Approach

One such approach sought to “develop a means to compare the use of active versus guard and reserve forces per dollar spent.”⁷⁵ The authors developed two alternative methods: the first was based on projected AC and RC personnel costs over an individual’s full career, including deployments, and into retirement (a “life-cycle” cost approach). This method used the number of deployments as its output metric. The second method calculated AC and RC personnel costs over the course of the year, and used days of duty performed as its output metric.

According to the authors, the life-cycle cost method estimated the lifetime cost of an AC servicemember at nearly \$2.4 million, and the RC servicemember at about \$790,000. “In terms of ‘usage,’ this works out to \$336,000 per deployment ‘opportunity’ for the active member and \$198,000 for a member of the reserves.” In this analysis, reserve personnel cost about 60% of what active personnel cost per deployment. The authors’ concluded that “In essence, this analysis shows that reserves are a good deal because the military services only have to pay for them when they are needed. Because their retirement is deferred—not paid out until age 60—it is much less expensive than for active members...However, there are limitations to this assessment too. Utilization of the force is more encompassing than simply being deployed.”⁷⁶

The second method, which focused on cost per day of duty performed, estimated that AC personnel would perform 275 days of duty per year, that “statutory” reservists would perform 39 days of duty per year, and that “busy” reservists would perform 120 days of duty per year. It then estimated the compensation that each of these three servicemember types would receive over the course of the year, and divided that by days of duty performing. The result was an estimated “cost per duty day” in FY2005 of \$261.52 for AC personnel, \$284.35 for statutory reservists and \$237.30 for busy reservists. Using this method then, reserve personnel cost between 91% (busy

⁷⁴ See Army FY2015 Budget Overview, March 2014, slide 7, available here: <http://asafm.army.mil/Documents/OfficeDocuments/Budget/budgetmaterials/fy15//overview.pdf>

⁷⁵ John D. Winkler and Barbara Bicksler, "Chapter 10: The Cost of the Reserves," by Jennifer C. Buck in *The New Guard and Reserves* (San Ramon, CA: Falcon Books, 2008), p. 178, http://www.sainc.com/reports/pdf/New_Guard_Reserve.pdf.

⁷⁶ *Ibid.*, 179-80. Note that the National Defense Authorization Act for FY2008 contained a provision which permits certain reservists to draw retired pay as early as age 50, while maintaining the age for access to the military health care system at 60.

reservists) and 109% (statutory reservists) of what active personnel cost per day of duty performed. The authors state, “The bottom line of this analysis is that the more days reservists serve, the less costly they are to use...in other words, a busy reservist is cheaper than a statutory one. However, this analysis reveals an unanticipated result. The more full-time benefits added to the cost of a reservist, such as TRICARE for Life health care accrual, the more expensive a part-time reservist is relative to his or her availability.”⁷⁷

Deployed Unit Cost Approach

Still, at a time when U.S. forces were deploying to Iraq and Afghanistan at a fairly high rate, these individual member cost methods were also critiqued. From this perspective, the key issue was not the relative cost of an AC or RC soldier per duty day, but the relative cost of maintaining a *continuous unit presence in an overseas theater*. The costing models developed for this “deployed unit cost approach” included two variables that profoundly affected comparative cost calculations: the deployment-to-dwell ratio for AC and RC forces and, for RC forces, the amount of time devoted to pre-deployment training.

This approach appears to have been developed first by Jacob Klerman and published in *Rethinking the Reserves*.⁷⁸ In chapter 5 of this monograph, the author reviews several previously published works and identifies the comparative cost of the RC when not activated at 20-30% of AC forces, and 100% of AC forces when activated.⁷⁹ The author then estimates the number of RC units and AC units required, according to various deployment-dwell ratios, to maintain one unit “boots on the ground (BOG)” continuously in a given deployment location. The estimate is three for AC units and eight for RC units, assuming that AC units deploy 12 months out of 36 and that RC units train for three months and deploy for nine months out of 72. “Thus, according to policy guidance, we need 3.0 (=36/12) AC units in the force to keep one unit BOG...and 8.0 (=72/9) units in the [reserve] force to keep one unit BOG. Thus, the ratio of RC to AC units is slightly less than 3 (~2.7 = 8.0/3.0).”⁸⁰ These rotation estimates are based on DOD guidelines established in 2007 and still in effect today.⁸¹

Combining the average costs of AC and RC units when deployed and non-deployed, with the number of units required to sustain one unit “boots on the ground,” the author generates a “cost per unit of BOG” metric. Under the DOD rotation policy guidelines (12:36 for AC; (9+3)/72 for RC), he concludes that in peacetime, the relative cost of RC units is 67% of AC units. In wartime, the relative cost of RC units is 101%. Subsequently, the author manipulates some of the key variables—deployment-to-dwell ratios, the proportion of the reserve component involved in deployments, and the relative cost of RC units when not deployed—to generate a table illustrating a range of potential relative costs. These range from a low of 58% to a high of 141%.

The more favorable cost comparisons for reserve units under this approach generally involve:

⁷⁷ *Ibid*, 180-81.

⁷⁸ Jacob Alex Klerman, *Rethinking the Reserves*, RAND, Arlington, VA, 2008, <http://www.rand.org/pubs/monographs/MG757.html>. RAND, *Rethinking the Reserves*, 2008.

⁷⁹ *Ibid*, pp. 57, 59.

⁸⁰ *Ibid*, 58.

⁸¹ Secretary of Defense Memorandum, “Utilization of the Total Force, January 19, 2007.

- Activating reserves less frequently;
- When activated, lengthening their deployments (one year BOG instead of nine months BOG) while holding AC rotation policy stable;
- Reducing the amount of RC train up time from three months to two (hence, generating 10 months BOG for the RC unit); and
- Using the lower estimates of RC relative costs in peacetime.

The less favorable cost comparisons for reserve units under this cost approach generally involve:

- Activating reserves more frequently;
- Intensifying the rotation of AC units (for example, one year deployed out of every two) while holding RC rotation policy stable; and
- Using the higher estimates of RC relative costs in peacetime.

Key Questions Related to Cost

- Which costs are being considered? Which costs are being omitted?
- How are these costs being allocated to AC and RC forces?
- How do policymakers expect AC and RC forces to be used in the future?
- What are the most appropriate ways to measure the “output” of AC and RC forces in relation to their cost?
- What types of units generate a cost advantage if maintained in the RC? What types of units generate a cost advantage if maintained in the AC? How does that align with current force structure allocations?
- Should AC and RC “deployment-to-dwell” ratios be modified?
- Can RC pre-deployment training be shortened without adverse effects on performance?

Risk

The Army, as is the case with the other Services, cannot “afford” all of the resources it believes it needs—including force structure—to accomplish its assigned missions due to budgetary constraints. In order to convey the impact of perceived inadequate resources to decision makers, DOD uses the concept of risk. DOD describes risk as follows:

1. **Military and Political Risk:** Military risk encompasses the ability of U.S. forces to adequately resource, execute, and sustain military operations in the near- to midterm, and the mid- to longer term. In the international context, political risk derives from the perceived legitimacy of our actions and the resulting impact on the ability and will of allies and partners to support shared goals. In the domestic context, political risk relates to public support of national strategic priorities and the associated resource requirements in the near term, midterm, and long term.

2. **Operational Risk:** Operational risk is the ability of the current force to execute strategy successfully within acceptable human, materiel, financial, and strategic costs. Consideration

of operational risk requires assessing the Department's ability to execute current, planned, and contingency operations in the near term.

3. Force Management Risk: Force management risk is our ability to recruit, retain, train, educate, and equip the All-Volunteer Force, and to sustain its readiness and morale. This requires the Department to examine its ability to provide trained and ready personnel in the near term, midterm, and long term.

4. Institutional Risk: Institutional risk is the capacity of management and business practices to plan for, enable, and support the execution of DOD missions. It encompasses the ability to develop effective and efficient organizations and processes over the near term, midterm, and long term.

5. Future Challenges Risk: Future challenges risk is the Department's capacity to execute future missions successfully, and to hedge against shocks. Here most consideration is given to the Department's ability to field superior capabilities and sufficient capacity to deter/defeat emerging threats in the midterm and long term.⁸²

While some of these risks might be less relevant to AC/RC force mix than others, military risk, operational risk, and future challenges risk are likely directly impacted by decisions related to AC/RC force mix. It should be noted that many of the current AC/RC force mix proposals and related policy debates do not fully explore the risks associated with force mix but instead focus on costs associated with AC and RC units. Perhaps a more fully developed risk assessment, in conjunction with associated cost assessments, might prove to be of greater utility to decision makers.

Key Questions Related to Risk

- Why are the risks associated with AC/RC force mix proposals not given the same level of examination or discussion as are costs associated with AC and RC units?
- Are there specific elements of risk that Congress would like examined in greater detail as part of the AC/RC force mix process?
- As it pertains to force mix decisions, are there guidelines for decision makers when comparing cost savings and associated risks or are decisions made based on subjective criteria alone?

Other Considerations

The above factors are all tied directly to the ability of the specified military forces to meet national security requirements. However, there are other factors often considered with respect to AC/RC mix, particularly with respect to the National Guard. Perhaps most notably, the United States' long tradition of a keeping a substantial military force structure in the reserve components can be traced to the ideological underpinnings of the nation's founding, which included a powerful aversion to professional military forces. In the colonial and founding eras, "standing armies" and a naval establishment were considered by many to be the principal threat to democratic sovereignty and individual liberty. In the event of military crisis, the preferred

⁸² The definitions of risk are taken from pages 90-95 of the February 2010 DOD Quadrennial Defense Review (QDR). The 2010 QDR notes DOD has used these definitions since 2001.

solution was to call on “citizen-soldiers”—members of the militia—to augment a relatively small professional force. This distrust of professional forces declined substantially in the aftermath of World War II, and some may find it anachronistic today, but such sentiments continue to undergird support for a robust reserve component vis-a-vis the active component. Additionally, since the advent of the All-Volunteer Force in 1973, policymakers have periodically raised concerns that the military was not adequately reflective of the U.S. population at large and was at risk of becoming isolated from it. The reserve components, while suffering from some of the same representational issues, are more geographically dispersed throughout the country, and its members normally live and work in the civilian world, thus providing a bridge of connection between the two worlds. Using the reserve components to solidify the link between the armed forces and the civilian population it serves may therefore be a consideration that policymakers wish to consider in AC/RC mix decisions.

Options for Congress

The current debate about Army AC/RC mix revolves around whether or not to shift force structure between the AC and the RC and, if so, how much to shift and of what types of units. Some argue RC performance in recent conflicts demonstrates abilities equivalent to their AC counterparts, and that properly trained and equipped reserve forces can replace a portion of AC force structure and generate cost savings. Others believe that certain RC forces—particularly larger direct combat units and higher echelon headquarters—are not as capable as AC forces without substantial additional preparation; cannot respond to a crisis as rapidly as AC forces; and cannot be used with the same frequency and duration as AC forces due to policy limitations. Those who take this perspective believe that replacing too many or certain types of AC units with RC units could reduce the Army’s ability to respond rapidly to an overseas crisis and sustain operations over time; or could require too much additional RC funding and training time to make it cost-effective. There are also those who believe the current mix is about right, and still others who advocate shifting certain types of units between the AC and RC—for example, moving more combat units to the AC and more support units to the RC, or reallocating some units between the AC and the RC based on their comparative costs—which may or may not result in changes to the relative size of the components.

As Congress considers the future AC/RC mix for the Army, there are several approaches it may wish to consider. These are outlined below, with additional detail provided later in the report. They are not necessarily mutually exclusive; Congress could elect to pursue some combination of the following options:

- Support Administration proposals on what the proper mix of Army AC and RC units should be;
- Gather additional information on key factors that contribute to AC/RC mix decisions;
- Directly adjust AC/RC mix; and/or
- Influence AC/RC mix by adjusting factors that contribute to mix decisions.

Support Administration Proposals on AC/RC Mix

One option for Congress would be to support the Administration’s proposals on the mix of AC and RC units (see previous section entitled “Army AC/RC Force Mix”). These proposals, formulated by the Army with input from the Department of Defense, were included in the President’s FY2015 budget request. Congress routinely considers the professional judgment of senior military officers and executive branch officials—and accepts them when it seems appropriate—as such judgments are typically backed by significant research and a wealth of experience. Reserve advocates may criticize this approach, arguing the Army has institutional biases that make it resistant to options which lessen the role of the AC in the future, and that the professional judgment of reserve leaders should be considered more fully. Others counter that the RC—the ARNG in particular—has a significant degree of political influence not enjoyed by the AC and that this influence has been used to obtain outcomes more favorable to the RC. Some believe these biases and varying levels of influence result in a less than optimal AC/RC force mix.

Obtain Additional Information

If Congress wants to evaluate specific AC/RC mix options and develop a deeper understanding of the likely consequences of those options it could seek out additional information. Congress could obtain this information either by directing new studies of existing data or by establishing processes to collect, analyze, and share new types of data.

Direct New Studies

Despite a variety of recent studies—both governmental and private sector—on AC/RC force mix and related issues, a number of issues remain unresolved which, if further examined, might lead to better informed decisions on AC/RC force mix. With regards to cost, recent studies have given decision-makers a better sense of the comparative costs and their relationship with various outputs, but there continues to be disagreement on various methodological aspects, including how best to apportion certain “enterprise” costs between the AC and RC. Other areas have received less research attention, including the comparability of readiness levels between AC and RC units as well as their relative effectiveness on operations. Some analysts also believe the role risk plays in determining the appropriate AC/RC mix needs additional emphasis in the overall process. Thus, if Congress so desired, it could direct studies to determine whether readiness assessments vary between AC and RC, ascertain whether performance differentials existed between similar AC and RC units at the end of the ARFORGEN training cycle, and establish a firmer understanding of the link between readiness metrics and performance during operations.

As detailed in **Appendix B**, the Senate version of the FY2015 National Defense Authorization Act (NDAA) calls for the creation of a National Commission on the Future of the Army. If enacted, such a commission could examine some of the aforementioned issues, potentially improving the overall AC/RC force mix determination process. Army and Army National Guard leaders have conflicting opinions on the need for the National Commission on the Future of the Army. Regarding a commission to study the Army, Chief of Staff of the Army, General Raymond Odierno noted in testimony:

For the last year, 12 to 18 months, we’ve done detailed analysis internal to the Army and we’ve done external to the Army. The Rand Corporation has studied this.

In addition to this, OSD CAPE [Cost Assessment and Program Evaluation] has validated our total force levels as well as the Aviation Restructure Initiative. So we've had outside validate this.

So in my mind, I'm not sure what additional expertise would be brought to this by a commission. In addition to that, it would cost us \$1 billion additionally a year if we delay this two years, and I worry about that because we already have significant unfunded requirements.⁸³

Also at the hearing, Chief of the National Guard Bureau, General Frank Grass noted:

I think your question to me is there a value in an external look at the Reserve component versus the Active component balance. I will tell you, throughout my career every time we've had challenges, fiscal challenges, this comes up. My personal opinion is that it never hurts to have another look at that balance, because we all learn from it over time.⁸⁴

Lieutenant General Jeffery Talley, Chief of the Army Reserve, supported General Odierno's position, stating at the hearing:

Senator, it's not clear to me why we need an Army commission. I think the Army, working together and leading through some of the challenges we're having, which are really, to be frank, an impact of the serious budget issues that have been placed upon this service, I think we can resolve them.

If the Congress makes the decision to go forward with the commission, the only thing I would ask is it's critical to make sure that all three components are well represented and integrated.⁸⁵

Taking into account the Army's mixed feelings about the need for a national commission on the Army, Congress could gain valuable insights through either a national commission on the Army or some other academic endeavor that examines unresolved cost, readiness, effectiveness, and risk issues in greater detail.

Establish Processes to Collect, Analyze, and Share New Types of Data

Existing data may be insufficient to adequately evaluate the competing arguments related to AC/RC mix. For example, as noted earlier in the report, Army readiness data may not fully capture important aspects of the AC and RC readiness, and there is little objective data on the comparative effectiveness of similar AC and RC units. Congress could direct the Army to develop processes to collect, analyze and share data of particular value to congressional deliberations. Alternatively, given the contentious debate which often erupts over the validity of such data, Congress could establish an independent agency or office to do so instead. For example, if Congress wanted more insight into the comparative effectiveness of AC and RC units at the end of the ARFORGEN cycle, it could establish an independent agency to regularly assess the performance of AC and RC units during pre-deployment rotations at the Combat Training

⁸³ Hearing Transcript, Senate Armed Services Committee, "Army Active and Reserve Force Mix," April 8, 2014, p. 56.

⁸⁴ Ibid.

⁸⁵ Ibid.

Centers. Such assessments could both inform congressional decision making on AC/RC mix, but also identify barriers to AC/RC integration.

Directly Change the Force Mix

Congress may elect to change the AC/RC mix directly, by way of adjusting AC and RC strength levels or reallocating major units between components. This might be the most appropriate approach if broad consensus exists in Congress on the desirability of such changes, coupled with a sufficient confidence in the likely costs and benefits of such changes. Concerns about negative and unintended consequences could be mitigated in a variety of ways; for example, by the use of pilot programs, the gradual phase-in of policy changes, or periodic policy assessments.

Adjust End Strengths

Congress establishes the end strengths for the active and reserve components of each Service on an annual basis in the National Defense Authorization Act. Congress also sets minimum strength levels for the active component, which may be identical to or lower than the end strength. If Congress so desired, it could directly influence AC/RC force mix by adjusting AC and RC end strengths. If Congress believes, for example, the RC should play a more prominent role in national security, it could increase RC end strength or decrease AC end strength or a combination of both. Conversely, if Congress believes the nation needs a more robust AC, it could increase the size of the AC and reduce the RC. Such adjustments, however, are fairly blunt policy tools and could have negative impacts, particularly if the magnitude of such changes were large and phased in rapidly. For example, it could result in a misalignment between combat and support forces or it might result in more frequent activations of reserve units than is considered desirable. It might also engender institutional resistance by the Active Army or its Reserve Components if the adjustments were seen as unrealistic or unduly favoring one side over the other.

Reallocate Force Structure Between the AC and RC

Congress could also direct that certain types of units be transferred from one component and added to the other component. For example, Congress could specify the number of BCTs and CABs in the AC and in the ARNG. Such an action would likely be taken if Congress was not satisfied with the Army's proposed AC/RC force structure. Congress would likely base such an action on a variety of academic and analytical studies, although reaching a consensus on an appropriate force mix could prove to be contentious. As in the case of adjusting end strength, such a decision could strain the relationship between Congress and the Army and require Congress to assume a greater degree of ownership if their force structure decision proves to be detrimental to the conduct of military operations.

Influence the Force Mix

Rather than directing a specific force mix, a different approach would be to influence the AC/RC mix by altering certain underlying factors that contribute to mix decisions. Several such options are examined below.

Reallocate AC and RC Roles and Missions

Congress could influence AC/RC force mix by assigning or prioritizing roles and missions by component thereby addressing issues concerning the utilization of the components. In this regard, Congress could look at the spectrum of missions and allocate them between components to capitalize on the strengths of the components. Changing the way in which AC and RC units are used would likely change the calculus of the number and types of units in the AC and RC. For example, one study examined in **Appendix G** offers the following observation:

RC is best suited for missions and tasks that are predictable, relatively consistent, and benefit from long-term personnel and geographic relationships. Force generation processes should consider providing predictability to RC units for those missions requiring regional expertise, as well as Homeland Defense or Defense Support to Civil Authorities missions.⁸⁶

This observation—“using the RC for missions it is best suited for”—is also offered in other reports CRS examined (see Appendix G) and suggests, for example, that a mission like engagement⁸⁷ might be better allocated to RC as opposed to AC units. Another study suggests “If a mission requires a rapid response or a high state of readiness, it is often seen as a mission best suited to the AC.”⁸⁸ If Congress were to reallocate or prioritize missions between the AC and RC, there could be a fairly significant reorganization of AC and RC force structure which could substantially change the AC/RC mix.

Enhance Training for RC Units

One of the reasons why senior Army officials often appear reluctant to use RC units for certain types of missions is a belief that RC units are not as well trained as AC units, thus limiting their utility for the most complex operations. Such concerns appear to stem from an intrinsic difference between full-time and part-time forces—the greater number of days available for training for AC units in comparison to RC units—and differences in AC and RC training processes. However, these differences could potentially be mitigated with changes to statute, policies, or resource allocations. Several areas where AC advocates believe differences exist are detailed below, along with potential options for addressing them.

Brigade Combat Teams

Some Army leaders have argued that ARNG BCTs cannot perform the most complex operations with the same level of proficiency as AC BCTs. This belief leads to a heavy reliance on AC BCTs to meet requirements in operational plans and thus is a key driver of AC/RC mix. Differences in AC and RC training processes appear to lie at the root of this perception. As previously discussed,

⁸⁶ See “Comprehensive Review of the Future Role of the Reserve Component,” Volume I: Executive Summary and Main Report.”

⁸⁷ Engagement is a term used by DOD to describe military-to-military activities designed to help improve a foreign military’s capabilities and also develop interpersonal relationships between participants. The belief is that improved relationships could prove beneficial in the event a coalition is formed to deal with a military crisis or if there is civil unrest in a country where the United States has developed military-to-military ties.

⁸⁸ Office of the Vice Chairman of the Joint Chiefs of Staff and the Office of Assistant Secretary of Defense for Reserve Affairs, *Comprehensive Review of the Future Role of the Reserve Components, Volume I: Executive Summary and Main Report*, April 5, 2011, pp. 6-7. <https://www.hsdl.org/?view&did=685426>.

AC BCTs are trained up to the brigade level during the ARFORGEN process while ARNG BCTs are only trained up to the platoon and company level. The implication of this current policy is that, upon completion of the ARFORGEN process, only the platoons and companies of an ARNG BCT are fully ready to deploy and conduct their assigned missions. General Raymond Odierno, the Army Chief of Staff, highlighted this issue in testimony before the Senate Armed Services Committee:

What the Guard is able to do is do individual proficiency and small unit proficiency. So they get good at their individual MOS [Military Occupational Specialty]. They can do some small unit, platoon level capability, maybe at home station. But without having CTC [Combat Training Centers]⁸⁹ rotations, it's much more difficult to get to company, battalion, and brigade. And the more complex the organization, the more difficult it is. The complex organizations are brigade combat teams, aviation brigades. Less complex organizations, such as transportation units and maintenance units, they can do a lot of it at home station. But the impact is really on the more complex, integrated, collective training that has to be done, that they're simply not able to do, where in an active unit you can do it at your home station because you have the ground and air space and facilities to do it and you're collocated together, where the Guard is spread out and they don't have that. So they need the training center in order to build that readiness.⁹⁰

This testimony suggests that the Army believes there are significant differences between AC and ARNG BCTs, and that the cause of this distinction is differences in training, including inherent differences in the time available between AC and RC forces. Specifically, General Odierno notes the comparative lack of CTC rotations for ARNG BCTs and the training limits caused by geographic dispersion of their subordinate elements. To address the first factor, Congress could elect to provide for additional CTC rotations for ARNG BCTs. General Mark Milley, the commander of U.S. Army Forces Command, has recently advocated this approach.⁹¹ This option would likely require additional funding for the rotations and may require statutory changes to mandate additional training days for the BCT members; it would also require increased ARNG access to CTCs, either by displacing AC units, expanding the capacity of the existing CTCs, or establishing one or more new CTCs.⁹² Addressing the second factor might be more difficult,

⁸⁹ From the Army's 2009 Posture Statement: "The mission of the Army CTC Program is to provide realistic Joint and combined arms collective training for Soldiers, leaders, staffs, and units according to Army and Joint doctrine. The CTC Program includes several organizations. The Battle Command Training Program (BCTP), based at Fort Leavenworth, Kansas, provides training and leader development for corps, division, and brigade commanders and their staffs. The Joint Readiness Training Center, located at Fort Polk, Louisiana, trains primarily Infantry Brigade Combat Teams (IBCTs). The National Training Center, located at Fort Irwin, California, trains primarily mechanized BCTs. The Joint Multi-National Readiness Center at Hohenfels, Germany trains primarily BCTs assigned to Europe. Regardless of training location, all units face a highly skilled opposing force that uses our enemy's current tactics, techniques, and procedures," http://www.army.mil/aps/09/information_papers/combat_training_center_program.html, accessed August 15, 2014.

⁹⁰ Hearing Transcript, Senate Armed Services Committee, "Army Active and Reserve Force Mix," April 8, 2014, p. 44.

⁹¹ "The Army also is integrating Guard and reserve soldiers and units into its combat training center rotations. This means future rotations at the National Training Center at Fort Irwin, California, or the Joint Readiness Training Center at Fort Polk, Louisiana, will heavily feature Guard and reserve soldiers training alongside active-duty soldiers. 'Two years ago we had about 18% or so of a [combat training center] rotation was National Guard and reserve,' [General Mark] Milley said. 'We are trying to ratchet that up. My objective is to come in about 50%. FORSCOM is already making progress, with the most recent rotation coming in at about 42% Guard and reserve, he said. 'What we don't want to do is go back to 10% Guard and reserve, 90% active,' he said. 'That is not Total Force.'" Michelle Tan, "Milley: Readiness Helps US Army Face Uncertain Future," *Defense News*, October 13, 2013, <http://www.defensenews.com/article/20141013/SHOWSCOUT04/310130014>.

⁹² In the Army's 2009 Posture Statement, the Army was examining the feasibility of establishing another stateside- (continued...)

given that the geographic dispersion of RC units is considered a positive factor in other ways,⁹³ but it could include statutory or funding changes to facilitate or mandate greater battalion and brigade level training opportunities. In both of these cases, however, any additional training requirements has the potential to conflict with the civilian employment of reserve personnel and will almost certainly increase costs, thereby reducing any cost savings that might be associated with transferring capabilities to the RC.

Greater Military Education Opportunities

For initial entry training, AC and RC personnel typically attend the same schools in a “resident” status. As their careers progress, the option for resident training decreases for RC personnel in comparison to their AC counterparts, and they instead attend distance learning or distance/resident hybrid courses. At the highest level of professional military education, RC personnel have very limited opportunities for full-time attendance at some of the most valued military educational opportunities, such as the Senior Service Colleges and the Sergeants Major Academy. In part, this reflects the challenge of fitting these long-duration courses into reservists’ civilian career, but it also reflects the very limited number of reserve “slots” at these schools. If Congress determines that this divergence in professional military education disadvantages RC personnel in comparison to their AC peers, it may wish to provide for greater opportunities for individuals to attend these schools.

New Criteria for Selecting Key Leaders

Another way to mitigate concerns about training differentials would be to set new criteria for the promotion and assignment of senior RC officers and enlisted personnel. For example, Congress could require that in order to fill certain key leadership positions, the individual must have met certain educational requirements, such as resident attendance at a senior service college, or completed certain developmental assignments, such as tours on active duty in appropriate developmental positions. It might also require that those selected for certain positions serve a higher—perhaps much higher—number of days per year even when not activated. For example, a reserve battalion commander might be required to serve at least 120 days of active and inactive duty per year while holding that position; a brigade commander and certain key staff members might be required to serve full time for the duration of that command.

Promote Greater Use of the RC

From the perspective of some reserve advocates, the biggest barrier to a greater role for RC units is the institutional biases of senior AC officers. These senior leaders, they believe, are reluctant to use RC units because any RC success weakens the justification for AC force structure. There is a certain logic to this argument, for if part-time RC units are truly identical in capability to similar full-time AC units, then a core justification for AC force structure disappears. RC advocates therefore tend to favor approaches that remove or limit the ability of the AC to keep them “on the

(...continued)

based CTC. 2009 U.S. Army Posture Statement, “Combat Training Center (CTC) Program,” http://www.army.mil/aps/09/information_papers/combat_training_center_program.html, accessed August 15, 2014.

⁹³ For example, the geographic dispersion of RC units is often considered to be a positive factor for recruiting purposes and for maintaining a strong connection between the armed forces and the citizenry at large.

sidelines.” Additionally, they believe that increased integration of AC and RC personnel help to reduce negative stereotypes on the part of the AC and thereby gradually reduce this institutional bias. Several options for promoting greater use of the RC are listed below.

Require RC Leadership of Certain Missions

One way to promote greater use of the RC would be to require that RC units be the “force of first choice” for certain missions. While this topic was discussed more generally earlier (see “Reallocate AC and RC Roles and Missions”), some examples of missions dedicated primarily to the RC might include peacekeeping, training of foreign militaries, and humanitarian relief. Such an approach need not rule out the use of AC forces as part of a given operation, but might simply require that RC officers would normally lead those types of missions and RC units would provide the bulk of the forces.

Enhance AC/RC Partnerships

One potential means of promoting greater use of the RC—which can also enhance RC training levels—is partnerships between AC and RC units. This is not a new concept. The roundout brigade program, discussed earlier in this report, assigned ARNG brigades to active divisions. Although the roundout brigade program was criticized after Desert Storm and eventually discontinued, a variant of the concept is being used today. At present, the Army has reportedly begun to formally pair AC BCTs with ARNG BCTs to “create partnerships and to increase training opportunities at home, and boost leader development.”⁹⁴ Called the “Total Force Partnership Program” this pairing of formations is intended to promote informal leader development, encourages units to find shared training opportunities, and share lessons learned. In addition to BCTs, the Army also is partnering active duty corps with ARNG divisions and aviation brigades, fire brigades, and multifunctional brigades from the two components are also partnering. Reportedly as of June 2014, 20 AC BCTs have been paired with 28 ARNG BCTs and sixteen aviation brigades and several fire brigades have also been partnered.⁹⁵ These partnerships are not formal command relationships and were based on geographic considerations, unit types, and preexisting relationships.

While the Total Force Partnership Program is relatively new, Congress might wish to further explore the potential benefits of this program. While this “peer to peer” program is intended to enhance the effectiveness of both the AC and RC, it could prove particularly beneficial to the RC. It is possible over time this AC/RC partnership could significantly enhance RC readiness, perhaps even having implications for AC/RC force mix.

Direct Blended AC/RC Units

As mentioned above, the roundout brigade program assigned ARNG brigades to active divisions. These divisions were a type of “blended unit.” Although the roundout brigade program was criticized and eventually discontinued, Congress may wish to consider other blended unit approaches. For example, the roundout concept could be applied at a lower level, with RC

⁹⁴ Information in this section, unless otherwise noted, is taken from Michelle Tan, “BCT Partners: Active, Guard Pair Up to Get Brigades’ Readiness Back,” *Army Times*, June 16, 2014, pp. 18-19.

⁹⁵ Ibid.

battalions integrated into AC brigades, or RC companies integrated into AC battalions. Alternatively, Congress could require that some portion of AC positions be reserved for RC personnel on active duty tours. For the AC, this could include required tours serving in RC units as part of their full-time manning.

Appendix A. Aviation Restructuring Initiative (ARI)

As part of the Army's downsizing and reorganizational efforts, the Army plans a major force structure change for its aviation units, as described in the following section:

The Aviation Restructure Initiative allows us to eliminate obsolete air frames, sustain a modernized fleet, reduce sustainment costs, and efficiently organize ourselves to meet our operational commitments and imperatives. Disproportionate reductions come from the Active component aviation. We will inactivate and eliminate three complete combat aviation brigades from the Active component. We will move all LUH-72s from the Active component to Fort Rucker in order to train pilots across all three components. In the National Guard we'll maintain 10 aviation brigades. We will move Apaches to the Active component while increasing the fleet of UH-60s by sending 111 of the most modern Black Hawk helicopters to the National Guard. The National Guard will also retain all of its LUH-72s and CH-47s.

In the end, the Active component will be reduced by 686 aircraft, which is 86% of the total reduction. The National Guard will be reduced by 111 aircraft, which is 14% of the total reduction. ARI will result in better and more capable formations which are able to respond to contingencies at home and abroad.⁹⁶

In addition, the Army Reserve is swapping out its two AH-64 Apache Battalions for two assault battalions (either UH-60 or CH-47 helicopters).⁹⁷ Army Reserve leadership notes that this swap is better suited for the Army Reserves as they are predominately combat support and service support.⁹⁸

ARI Cost Savings

Army leadership has stated that the ARI will save the Army \$12 billion dollars.⁹⁹

National Guard Association Objections to the Army's Aviation Restructuring Proposal

In its advocacy role for the Army National Guard, the National Guard Association noted its objections to the Army's proposal:

- By taking all AH-64s from the National Guard, they will lose attack and aerial reconnaissance capabilities;
- Elimination of AH-64s also means the loss of some of the Total Army's most experienced Apache pilots and maintainers; and
- Eliminating AH-64s also eliminates a place for Active Component pilots and maintainers to serve should they leave active service.

⁹⁶ Hearing Transcript, Senate Armed Services Committee, "Army Active and Reserve Force Mix," April 8, 2014, p. 5.

⁹⁷ Ibid., p. 20.

⁹⁸ Ibid.

⁹⁹ Ibid., p. 3.

Appendix B. Current Legislation Related to Army AC-RC Mix

H.R. 4435, National Defense Authorization Act for FY2015

From H.Rept. 113-446 (pp. 199-200)

Army Force Structure

The committee believes the Army's current requirement to further reduce planned end strength and force structure by fiscal year 2019 is a direct consequence of the Budget Control Act of 2011 (Public Law 112-25). The committee notes the Army's current plan would reduce the Active Component end strength from a wartime high of 570,000 soldiers to 450,000 soldiers with a potential further reduction to 420,000 soldiers absent repeal of sequestration-level budget caps in fiscal year 2016.

As a result, the committee understands the Army is also reducing active brigade combat teams from 45 to 32 and divesting almost 700 aircraft, as well as eliminating 3 combat aviation brigades. The Army's plan would also reduce Army National Guard end strength from 358,000 soldiers to 335,000 soldiers with a potential further reduction to 315,000 soldiers absent repeal of sequestration-level budget caps. The committee understands the Army National Guard would be required to divest its AH-64 Apache attack helicopters, effectively transferring these assets to the Active Component, as well as divest its OH-58 Kiowa Warriors Scout Reconnaissance helicopters. However, the committee understands the Army National Guard would receive 111 UH-60 Black Hawk L and M model utility helicopters from the Active Component to improve the Guard's capabilities to perform title 32 crisis response and defense support to civil authority missions. Therefore, the committee expects that those units that transfer AH-64 Apache attack helicopters to the active Army will receive priority for modernized Black Hawks which should be at a minimum in the UH-60 Black Hawk L model utility helicopter configuration.

In testimony before the committee, the Secretary of the Army and Chief of Staff of the Army officially stated their concerns regarding the potential inability of the U.S. Army to meet the requirements of the current National Military Strategy and execute operational plans absent a repeal of sequestration-level budget caps in fiscal year 2016. The committee remains concerned by this testimony and believes that in order to mitigate the increased strategic risk generated by the Budget Control Act of 2011, the Army is being forced to reduce end strength to preserve near-term readiness through the Future Years Defense Program. The committee is concerned with the planned reductions and realignments the Army has proposed, specifically the greater reductions in Active Component end strength and brigade combat teams, as well as the proposed aviation realignment of combat aviation aircraft. Therefore, elsewhere in this Act, the committee includes a provision that would require a Comptroller General of the United States review of the methods the Army and the Department of Defense Office of Cost Assessment and Program Evaluation used to determine the future force structure of the Army, to include the appropriate mix between Active, Guard, and Reserve Component forces. The committee also recommends increases in funding for procurement and operation and maintenance accounts to accelerate the conversions of UH-60A to UH-60L Black Hawk helicopters, and also recommends additional funding to procure six additional UH-60M Black Hawk helicopters to address Army National Guard modernization shortfalls. Finally, the committee recommends additional funding for operation

and maintenance readiness accounts to increase overall training opportunities and increase depot-level maintenance in the Army National Guard.

Section 1050—Conditions on Army National Guard and Active Army Force Structure Changes Pending Comptroller General Report (p. 223)

This section would prohibit the Secretary of Defense and Secretary of the Army, during fiscal year 2015, from reducing the end strength for active duty personnel of the Army below 490,000; reducing the end strength for Selected Reserve personnel of the Army National Guard below 350,000; or transferring AH-64 attack helicopters from the Army National Guard to the regular Army.

This section would also require the Comptroller General of the United States to assess and validate the methods the Army and the Department of Defense Office of Cost Assessment and Program Evaluation used to determine the future force structure of the Reserve Component forces and submit a report to the congressional defense committees not later than March 1, 2015. Elsewhere in this Act, the committee describes its larger concerns regarding the Army’s end strength and force structure reductions. As a result of these concerns, the committee also recommends increases in funding for procurement and operation and maintenance accounts to accelerate the conversions of UH-60A to UH-60L Black Hawk helicopters, and additional funding to procure six additional UH-60M Black Hawk helicopters to address Army National Guard modernization shortfalls. Finally, the committee recommends additional funding for operation and maintenance readiness accounts to increase overall training opportunities and increase depot-level maintenance in the Army National Guard.

S. 2410, Carl Levin National Defense Authorization Act for FY2015¹⁰⁰

TITLE XVII—NATIONAL COMMISSION ON THE FUTURE OF THE ARMY

SEC. 1701. SHORT TITLE.

This title may be cited as the “National Commission on the Future of the Army Act of 2014”.

SEC. 1702. PROHIBITION ON USE OF FISCAL YEAR 2015 FUNDS TO REDUCE STRENGTHS OF ARMY PERSONNEL.

Subject to an authorized reduction under section 691(e) of title 10, United States Code (as applied to the end strengths below), none of the funds authorized to be appropriated or otherwise made available for fiscal year 2015 for the Army may be used to reduce the Army below the authorized fiscal year end strengths for personnel of the Army as follows:

- (1) 490,000 for active duty personnel of the Army.
- (2) 350,200 for the Army National Guard.

¹⁰⁰ S. 2410, Carl Levin National Defense Authorization Act for Fiscal Year 2015, June 2, 2014.

(3) 202,000 for the Army Reserve.

SEC. 1703. LIMITATION ON USE OF FISCAL YEAR 2015 FUNDS FOR TRANSFER OR DIVESTMENT OF CERTAIN AIRCRAFT ASSIGNED TO THE ARMY NATIONAL GUARD.

(a) LIMITATION.—

(1) AIRCRAFT.—None of the funds authorized to be appropriated or otherwise made available for fiscal year 2015 for the Army may be used to divest, retire, or transfer, or prepare to divest, retire, or transfer, any AH–64 Apache aircraft of the Army assigned to units of the Army National Guard as of January 15, 2014.

(2) PERSONNEL.—None of the funds authorized to be appropriated or otherwise made available for fiscal year 2015 for the Army may be used to reduce personnel related to any AH–64 Apache aircraft of the Army National Guard below the levels of such personnel as of September 30, 2014.

(3) READINESS OF AIRCRAFT AND CREWS.—

The Secretary of the Army shall ensure the continuing readiness of the AH–64 Apache aircraft referred to in paragraph (1) and the crews of such aircraft during fiscal year 2015, including through the allocation of funds for operation and maintenance and support of such aircraft and for personnel connected with such aircraft as described in paragraph (2).

(b) SCOPE OF LIMITATION.—Nothing in subsection (a) shall be construed to limit the use of funds described in that subsection for the training of members of the Army National Guard or Army Reserve who are pilots, crew, or mechanics of AH–64 Apache aircraft on any other aircraft.

(c) EXCEPTION.—Notwithstanding subsection (a), funds described in that subsection may be used for the transfer of not more than 48 AH–64 Apache aircraft from the Army National Guard to the regular Army if the Secretary of Defense certifies in writing to the congressional defense committees that such a transfer would not—

- (1) degrade the strategic depth or regeneration capacities of the Army;
- (2) degrade the Army National Guard in its role as the combat reserve of the Army; and
- (3) occur before October 1, 2014.

SEC. 1704. NATIONAL COMMISSION ON THE FUTURE OF THE ARMY.

(a) ESTABLISHMENT.—There is established the National Commission on the Future of the Army (in this title referred to as the “Commission”).

(b) MEMBERSHIP.—

(1) COMPOSITION.—The Commission shall be composed of eight members, of whom—

- (A) four shall be appointed by the President;
- (B) one shall be appointed by the Chairman of the Committee on Armed Services of the Senate;

(C) one shall be appointed by the Ranking Member of the Committee on Armed Services of the Senate;

(D) one shall be appointed by the Chairman of the Committee on Armed Services of the House of Representatives; and

(E) one shall be appointed by the Ranking Member of the Committee on Armed Services of the House of Representatives.

(2) APPOINTMENT DATE.—The appointments of the members of the Commission shall be made not later than 90 days after the date of the enactment of this Act.

(3) EFFECT OF LACK OF APPOINTMENT BY APPOINTMENT DATE.—If 1 or more appointments under subparagraph (A) of paragraph (1) is not made by the appointment date specified in paragraph (2), the authority to make such appointment or appointments shall expire, and the number of members of the Commission shall be reduced by the number equal to the number of appointments so not made. If an appointment under subparagraph (B), (C), (D), or (E) of paragraph (1) is not made by the appointment date specified in paragraph (2), the authority to make an appointment under such subparagraph shall expire, and the number of members of the Commission shall be reduced by the number equal to the number otherwise appointable under such subparagraph.

(4) EXPERTISE.—In making appointments under this subsection, consideration should be given to individuals with expertise in national and international security policy and strategy, military forces capability, force structure design, organization, and employment, and reserve forces policy.

(c) PERIOD OF APPOINTMENT; VACANCIES.—Members shall be appointed for the life of the Commission. Any vacancy in the Commission shall not affect its powers, but shall be filled in the same manner as the original appointment.

(d) CHAIR AND VICE CHAIR.—The Commission shall select a Chair and Vice Chair from among its members.

(e) INITIAL MEETING.—Not later than 30 days after the date on which all members of the Commission have been appointed, the Commission shall hold its initial meeting.

(f) MEETINGS.—The Commission shall meet at the call of the Chair.

(g) QUORUM.—A majority of the members of the Commission shall constitute a quorum, but a lesser number of members may hold hearings.

SEC. 1705. DUTIES OF THE COMMISSION.

(a) STUDY ON STRUCTURE OF THE ARMY.—

(1) IN GENERAL.—The Commission shall undertake a comprehensive study of the structure of the Army, and policy assumptions related to the size and force mixture of the Army, in order—

(A) to make an assessment of the size and force mixture of the active component of the Army and the reserve components of the Army; and

(B) to make recommendations on the modifications, if any, of the structure of the Army that are necessary to fulfill current and anticipated mission requirements for the Army at acceptable levels of national risk and in a manner consistent with available resources and anticipated future resources.

(2) CONSIDERATIONS.—In undertaking the study required by subsection (a), the Commission shall give particular consideration to the following:

(A) An evaluation and identification of a structure for the Army that—

(i) has the depth and scalability to meet current and anticipated requirements of the combatant commands;

(ii) achieves cost-efficiency between the regular and reserve components of the

Army, manages military risk, takes advantage of the strengths and capabilities of each, and considers fully burdened lifecycle costs;

(iii) ensures that the regular and reserve components of the Army have the capacity needed to support current and anticipated homeland defense and disaster assistance missions in the United States;

(iv) provides for sufficient numbers of regular members of the Army to provide a base of trained personnel from which the personnel of the reserve components of the Army could be recruited;

(v) maintains a peacetime rotation force to avoid exceeding operational tempo goals of 1:2 for active members of the Army and 1:5 for members of the reserve components of the Army; and

(vi) maximizes and appropriately balances affordability, efficiency, effectiveness, capability, and readiness.

(B) An evaluation and identification of force generation policies for the Army with respect to size and force mixture in order to best fulfill current and anticipated mission requirements for the Army in a manner consistent with available resources and anticipated future resources, including policies in connection with—

(i) readiness;

(ii) training;

(iii) equipment;

(iv) personnel; and

(v) maintenance of the reserve components as an operational reserve in order to maintain as much as possible the level of expertise and experience developed since September 11, 2001.

(C) An identification and evaluation of the distribution of responsibility and authority for the allocation of Army National Guard personnel and force structure to the States and territories.

(D) An identification and evaluation of the strategic basis or rationale, analytical methods, and decision-making processes for the allocation of Army National Guard personnel and force structure to the States and territories.

(b) **STUDY ON TRANSFER OF CERTAIN AIRCRAFT.**—

(1) **IN GENERAL.**—The Commission shall also conduct a study of a transfer of Army National Guard AH–64 Apache aircraft from the Army National Guard to the regular Army.

(2) **CONSIDERATIONS.**—In conducting the study required by paragraph (1), the Commission shall consider the factors specified in subsection (a)(2).

(c) **REPORT.**—Not later than February 1, 2016, the Commission shall submit to the President and the congressional defense committees a report setting forth a detailed statement of the findings and conclusions of the Commission as a result of the studies required by sub-sections (a) and (b), together with its recommendations for such legislative and administrative actions as the Commission considers appropriate in light of the results of the studies.

SEC. 1706. POWERS OF THE COMMISSION.

(a) **HEARINGS.**—The Commission may hold such hearings, sit and act at such times and places, take such testimony, and receive such evidence as the Commission considers advisable to carry out its duties under this title.

(b) **INFORMATION FROM FEDERAL AGENCIES.**—The Commission may secure directly from any Federal department or agency such information as the Commission considers necessary to carry out its duties under this title. Upon request of the Chair of the Commission, the head of such department or agency shall furnish such information to the Commission.

(c) **POSTAL SERVICES.**—The Commission may use the United States mails in the same manner and under the same conditions as other departments and agencies of the Federal Government.

SEC. 1707. COMMISSION PERSONNEL MATTERS.

(a) **COMPENSATION OF MEMBERS.**—Each member of the Commission who is not an officer or employee of the Federal Government may be compensated at a rate not to exceed the daily equivalent of the annual rate of \$155,400 for each day (including travel time) during which such member is engaged in the performance of the duties of the Commission. All members of the Commission who are officers or employees of the United States shall serve without compensation in addition to that received for their services as officers or employees of the United States.

(b) **TRAVEL EXPENSES.**—The members of the Commission shall be allowed travel expenses, including per diem in lieu of subsistence, at rates authorized for employees of agencies under subchapter I of chapter 57 of title 5, United States Code, while away from their homes or regular places of business in the performance of services for the Commission.

(c) **STAFF.**—

(1) **IN GENERAL.**—The Chair of the Commission may, without regard to the civil service laws and regulations, appoint and terminate an executive director and such other additional personnel

as may be necessary to enable the Commission to perform its duties. The employment of an executive director shall be subject to confirmation by the Commission.

(2) COMPENSATION.—The Chair of the Commission may fix the compensation of the executive director and other personnel without regard to chapter 51 and subchapter III of chapter 53 of title 5, United States Code, relating to classification of positions and General Schedule pay rates, except that the rate of pay for the executive director and other personnel may not exceed the rate payable for level V of the Executive Schedule under section 5316 of such title.

(d) DETAIL OF GOVERNMENT EMPLOYEES.—Any Federal Government employee may be detailed to the Commission without reimbursement, and such detail shall be without interruption or loss of civil service status or privilege.

(e) PROCUREMENT OF TEMPORARY AND INTERMITTENT SERVICES.—The Chair of the Commission may procure temporary and intermittent services under section 3109(b) of title 5, United States Code, at rates for individuals which do not exceed the daily equivalent of the annual rate of basic pay prescribed for level V of the Executive Schedule under section 5316 of such title.

SEC. 1708. TERMINATION OF THE COMMISSION.

The Commission shall terminate 90 days after the date on which the Commission submits its report under section 1705(c).

SEC. 1709. FUNDING.

Amounts authorized to be appropriated for fiscal year 2015 by section 301 and available for operation and maintenance for the Army as specified in the funding table in section 4301 may be available for the activities of the Commission under this title.

S.Rept. 113-176, Carl Levin National Defense Authorization Act for Fiscal Year 2015¹⁰¹

Comptroller General of the United States report on the Department of the Army actions to determine the appropriate structure of the Army (page 83)

The committee directs the Comptroller General of the United States to submit a report to the congressional defense committees on a comprehensive review of the Department of the Army's data, analysis, decisionmaking processes, and plans for structuring, readying, and managing the forces of the Army, including the regular Army, the Army National Guard, and the Army Reserve. The required report will include a description and assessment of the manner in which the Department of the Army determines the size and force mixtures of the components of the Army in order to fulfill the national security missions of the Army, including any data on cost, readiness, effectiveness, and other factors available and used by the Department in making that determination. The Comptroller General shall provide an interim briefing not later than March 1, 2015, and a final report on March 1, 2016.

¹⁰¹ S.Rept. 113-176, Carl Levin National Defense Authorization Act for Fiscal Year 2015, June 2, 2014.

TITLE XVII—NATIONAL COMMISSION ON THE FUTURE OF THE ARMY

National commission on the future of the Army (Sections 1701– 1709) (pages 245-246)

The committee recommends a provision that would create a commission to study the size and force structure of the Army, including active-duty forces, the U.S. Army Reserve (USAR), and the Army National Guard (ARNG). The committee is aware that the Army and the Department of Defense continue their analysis, course of action development, and decisionmaking process with respect to the distribution of reductions of both end strength and force structure necessary to achieve the savings required by the Budget Control Act of 2011.

The committee believes that under these circumstances an independent and objective review of Army size and force structure by a national commission is worthwhile. The commission would be required to submit a report to the congressional defense committees not later than February 1, 2016. The provision would prohibit the use of funds in fiscal year 2015 to reduce the end strength of the regular Army, ARNG, or USAR below the levels provided in the budget request. The provision would also prohibit the use of funds in fiscal year 2015 to divest, retire, or transfer any AH-64 Apache aircraft assigned to the ARNG. An exception to this aircraft prohibition, however, would allow the transfer of up to 48 Apache aircraft from the ARNG to the regular Army.

The commission would be made up of four members appointed by the chairman and ranking members of the Committees on Armed Services of the Senate and the House of Representatives and four members appointed by the President. The commission would undertake a comprehensive study of the structure of the Army and policy assumptions related to the size and force mixture of the Army. In addition to the review of the Army's structure, the commission would conduct a study of plans to transfer Apache aircraft from the ARNG to the regular Army. The commission would also evaluate the distribution of responsibility and authority, as well as the strategic basis or rationale, analytical methodology, and decisionmaking process, related to the allocation of ARNG end strength and force structure to the states and territories.

In its assessment of the Army's size and structure, the commission should also consider the need for any changes to existing legislation— such as the Militia Act of 1903, the National Defense Act of 1920, the National Security Act of 1947, and the Goldwater-Nichols Act of 1986—that establishes the roles and missions of the active and reserve components.

The committee notes the difficulties expressed by the National Commission on the Structure of the Air Force associated with the Department of Defense's (DOD) interpretation and application of the Federal Advisory Committee Act (FACA) as amended (Public Law 92-463). The commissioners stated in their report that, "As the Commission proceeded with its work, it became increasingly clear that the DOD's interpretation of FACA's purpose would have a significant, and frequently negative, impact on the Commission's work." It is apparent from the views of the commissioners that the Department's interpretation of the oversight safeguards intended by the FACA may have unnecessarily complicated the conduct of their study. The committee expects the Secretary of Defense to support the National Commission on the Future of the Army in a balanced manner and in a spirit consistent with congressional intent and appropriate FACA oversight while avoiding the negative impacts that were experienced by the Air Force Commission.

The committee is also aware that certain aspects of the Army's "1993 Offsite Agreement" pertaining to reserve component core competencies has, in part, for the last 20 years, guided its

analysis and decisionmaking with respect to reserve component force structure. This agreement, between senior leadership of the regular Army, ARNG, USAR, and the associations representing their members, guided the realignment of combat arms, combat support, and combat service support force structure between the ARNG and USAR. The agreement provides that the ARNG should retain a mix of combat arms and support structure while the USAR would divest its combat arms and retain combat support and combat service support capabilities. In this manner the core competencies of the Army's reserve components are established: for the ARNG a balance of combat and supporting arms, and for the USAR combat support and service support. By and since this agreement, therefore, the ARNG has been and remains the reserve component within which the Army places those combat arms capabilities to reinforce, supplement, or compliment the combat capabilities of the active Army. The committee notes that, as appropriate and necessary to address the national security and support for civil authorities requirements of the United States, there are several examples of units and capabilities in the regular Army that are not in the reserves, as well as units and capabilities in the reserves that are not in the regular Army.

This system for the alignment of core capabilities among the Army's reserve components has served the Nation, the Army, and the domestic support and public safety needs of the states very well ever since. The committee recognizes the success of this agreement, as evident by the successful partnerships in combat, security, and support missions by active and reserve servicemembers in the conflicts in Afghanistan and Iraq. The committee encourages the Army to continue to maintain the reserve components as an operational reserve and manage the distribution of combat arms, combat support, and combat service support capabilities and forces consistent with and respectful of the intent of its "1993 Offsite Agreement" regarding reserve component core competencies.

H.R. 4870, Department of Defense Appropriations Act, 2015¹⁰²

SEC. 8136. None of the funds made available by this Act may be used to transfer AH-64 Attack helicopters from the Army National Guard to the active Army: Provided, That this section shall continue in effect through the date of enactment of the National Defense Authorization Act for Fiscal Year 2015.

H.Rept. 113-473, To Accompany H.R. 4870, Department of Defense Appropriations Bill, 2015¹⁰³

ARMY AVIATION RESTRUCTURE INITIATIVE

The Army's fiscal year 2015 budget request proposes a significant restructuring of Army aviation assets. Part of this proposal is to transfer all Apache helicopters from Army National Guard units to the active Army and to shift Blackhawk helicopters from the active Army to the Army National Guard. Another component of the proposal is to retire the Kiowa Warrior helicopter, including the TH-67 helicopter, currently being used as the training platform for Army aviation. The Committee understands that the Army made this proposal primarily for affordability reasons. The Committee approves the proposal, with the exception of the transfer of Apache aircraft from the

¹⁰² House passed version of H.R. 4870, Department of Defense Appropriations Act, 2015.

¹⁰³ H.Rept. 113-473, to accompany H.R. 4870, Department of Defense Appropriations Bill, 2015, p. 126.

Army National Guard, as discussed in title VIII of this Act. With respect to the retirement of TH-67 aircraft, the Committee is extremely concerned about the impact on the rotary wing industrial base of placing such a large amount of excess airframes on the market. Therefore, the Committee directs the Secretary of Defense to submit a report to the congressional defense committees not later than 120 days after the enactment of this Act on the aircraft being retired as part of the Army proposal. This report should include the number of airframes being divested; the number of airframes being transferred to other government agencies, the number of airframes being offered for sale to other nations, the cost of divesting these aircraft, and the impact the divestiture of these airframes will have on the domestic rotary wing industrial base. Further, the Secretary of the Army is prohibited from divesting any aircraft until the report is submitted by the Secretary of Defense.

Appendix C. Historical Rationales for Reserve Forces

At the end of FY2013, there were slightly more than 1.4 million members of the active components of the U.S. armed forces and roughly 842,000 members of the Selected Reserve. If one looks only at the Army, the active component is slightly smaller than its combined reserve components (530,000 active component personnel versus 555,000 reserve component). While this may seem remarkable, it is not particularly unusual from an historical perspective. In fact, for most of the nation's history, active component forces have been quite small and the reserve components have been comparatively large. This situation was reversed after World War II, with active forces predominating, but the balance shifted back somewhat in the aftermath of the Cold War. Still, regardless of historical era, the United States has always maintained a substantial proportion of its military force structure in the reserve components. There have been four principal reasons for this, each of which is described below.

Ideological

The long U.S. tradition of a keeping a substantial military force structure in the reserve components can be traced to the ideological underpinnings of the nation's founding, which included a powerful aversion to professional military forces. In the colonial and founding eras, "standing armies" and a naval establishment were considered by many to be the principal threat to democratic sovereignty and individual liberty. In the event of military crisis, the preferred solution was to call on "citizen-soldiers"—members of the militia—to augment a relatively small professional force. The Constitution gives Congress the authority "to raise and support Armies" and "to provide and maintain a Navy," while simultaneously recognizing the existence of the militia and granting the federal government a certain amount of control over it.¹⁰⁴ The intent of this arrangement, as articulated by Alexander Hamilton in in *The Federalist Papers*, was for the militia to augment the professional forces in time of need and to serve as a check upon their power:

...it is a matter of utmost importance that a well digested plan should, as soon as possible, be adopted for the proper establishment of the militia. The attention of the government ought particularly to be directed to the formation of a select corps of moderate size, upon such principles as will fit it for service in case of need. By thus circumscribing the plan, it will be possible to have an excellent body of well-trained militia ready to take the field whenever the defense of the State shall require it. This will not only lessen the call for military establishments, but if circumstances should oblige the government to form an army of any magnitude that army can never be formidable to the liberties of the people while there is a large body of citizens, little if at all inferior to them in discipline and the use of arms, who stand ready to defend their own rights and those of their fellow citizens. This appears to me to be the only substitute that can be devised for a standing army, and the best possible security against it, if it should exist.¹⁰⁵

¹⁰⁴ United States Constitution, Article I, Section 8.

¹⁰⁵ Alexander Hamilton, James Madison, and John Jay, "No. 29," in *The Federalist Papers* (New York, NY: Penguin Group, 1961), p. 185.

This distrust of professional forces declined substantially in the 20th century, particularly in the aftermath of World War II, and some may find it anachronistic today. However, such sentiments continue to undergird support for a robust reserve component vis-a-vis the active component, for legal restrictions on domestic military activities such as the Posse Comitatus Act, and for military policies such as the prohibition on military personnel engaging in political activity while in uniform.

Military

Maintaining a substantial reserve component has also long been justified on military grounds as a mechanism for providing strategic depth. From this perspective, a major reason to maintain reserve forces is to provide a supply of trained individuals and units to augment active forces in the event of a crisis. Examples of this abound in U.S. history: reserve forces have been called into service for every major U.S. conflict, and several less significant ones. The strategic depth provided by reserve forces allows the armed forces to rapidly expand in size. For example, during major wars such as World War II, Korea, and Desert Storm, large numbers of reserve units were activated to expand the overall capacity of the armed forces to perform combat and supporting missions. Additionally, the availability of a wide array of reserve unit types enhances the Services' capacity to conduct specific types of missions, providing flexibility across a wide range of situations. For example, during the intervention in Haiti, reserve activations were more narrowly targeted to provide increased capacity in specialized skills such as military police, transportation, and civil affairs.

Economic

Another long standing justification for reserve component forces has been cost. When not activated, reserve forces cost much less than active component forces. Based on the traditional model for non-activated reservists—training one weekend per month and two weeks per year—most reserve personnel receive about 1/6 of the pay that their active component peers receive. Historically, reserve personnel costs have also been kept down by intentionally manning many units at less than 100%. Operations and maintenance costs in this paradigm are also much lower, as vehicles and equipment are used less, and less work-related travel occurs. However, new research and cost models have shed a different light on this topic. See the section entitled “Cost” in the main body of this report.

Sociopolitical

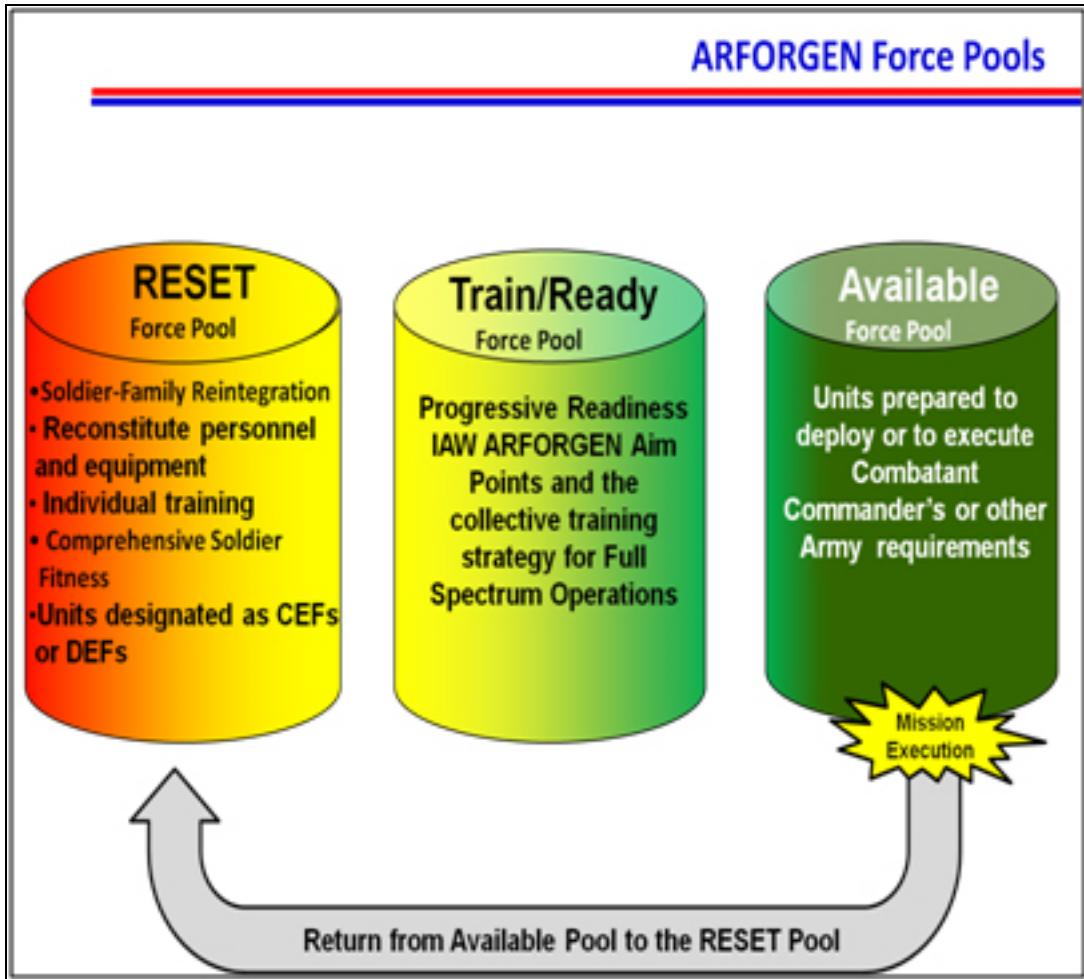
Unlike the World War II era, and for several decades thereafter, the active component military today is comparatively small, composed entirely of volunteers, and has fairly low turnover. This has raised periodic concerns that the military is not adequately reflective of the American population at large and is at risk of becoming isolated from it. The reserve component, while suffering from some of the same representational issues, is more geographically dispersed throughout the country, and its members normally live and work in the civilian world. From this perspective, the reserve component provides a critical link between the armed forces and the civilian population and help ensure that the American public views the armed forces as a part of the community, not as a separate class.

Appendix D. The Army Force Generation (ARFORGEN) Model

Army Force Generation (ARFORGEN) “The structured progression of increased unit readiness over time resulting in recurring periods of availability of trained, ready, and cohesive units. These units are prepared for operational deployment in support of Combatant Commanders’ or civil authorities’ requirements. Units are task organized in modular expeditionary forces, tailored for mission requirements. Operational requirements drive the ARFORGEN training and readiness process. These same requirements support the prioritization and synchronization of resourcing, recruiting, organizing, manning, equipping, training, sustaining, sourcing, mobilizing, and deploying cohesive units more effectively and efficiently. This rotational model, which maximizes total force utilization, replaces the Army’s linear, tiered readiness strategic construct for force generation. The Army builds the readiness of units as they move through three force pools as described below.

1. **Reset Pool.** The unit’s focus is on reintegrating soldiers and families and completing individual education, development, and institutional training. During this time the institutional Army focuses on manning and equipping the unit so it can conduct collective training.
2. **Train/Ready Pool.** The unit’s focus is on restoring proficiency through unit training, with the unit leaving this force pool upon completing a culminating collective training event (CTE). This CTE ensures the unit achieves the required operational capability.
3. **Available Pool.** A unit may be a Deployed Expeditionary Force (DEF) with a “deployed mission” or a Contingency.”

Figure 2. Army Force Generation (ARFORGEN) Model



Source: Figure provided to CRS by the Army Legislative Affairs Office, November 21, 2014.

Notes: Contingency Expeditionary Forces (CEFs) are units that are designated to respond to contingency (unexpected) situations. Deployable Expeditionary Forces (DEFs) are units that are designated to deploy to participate in pre-planned operations such as training exercise or previously established operations.

Appendix E. Laws Governing Access to the Reserve Components

There are a number of statutory provisions by which members of the Reserve Components can be ordered to active duty by the federal government. These provisions differ from each other in terms of the statutory requirements for utilization, the number and category of reservists called up, and the duration of the call up. Members of the National Guard can be called up in a nonfederal status, and there is also a special provision for the recall of retired reservists. Each of these authorities is detailed below.

Full Mobilization

In time of war or national emergency declared by Congress, or when otherwise authorized by law, Section 12301(a) of Title 10 U.S.C. permits the Service Secretaries¹⁰⁶ to authorize the involuntary activation of any member of the reserve components under his or her jurisdiction. There is no limit on the number of reservists which may be ordered to active duty under this provision and mobilized reservists may be kept on active duty for the duration of the war or emergency plus six months.

Partial Mobilization

In time of a national emergency declared by the President, or when otherwise authorized by law, Section 12302 of Title 10 U.S.C. permits the Service Secretaries¹⁰⁷ to authorize the involuntary activation of members of the Ready Reserve under his or her jurisdiction for a period not to exceed 24 consecutive months. Up to 1 million members of the Ready Reserve may serve on active duty at any one time under this provision of law. Reservists may be mobilized under this provision of law without approval from Congress. This authority was used to mobilize reservists during the later part of the Persian Gulf War (1991) when the Presidential Reserve Call-up (PRC) authority was no longer sufficient to activate the number of reservists needed. President George W. Bush invoked this authority in the aftermath of the September 11 terrorist attacks. It was used

¹⁰⁶ Section 12301(a) of Title 10 U.S.C. states “In time of war or of national emergency declared by the Congress, or when otherwise authorized by law, an authority designated by the Secretary concerned may, without the consent of the persons affected, order any unit, and any member not assigned to a unit organized to serve as a unit, of a reserve component under the jurisdiction of that Secretary to active duty for the duration of the war or emergency and for six months thereafter. However a member on an inactive status list or in a retired status may not be ordered to active duty under this subsection unless the Secretary concerned, with the approval of the Secretary of Defense in the case of a Secretary of a military department, determines that there are not enough qualified Reserves in an active status or in the inactive National Guard in the required category who are readily available.” The “Secretary concerned,” as defined in 10 U.S.C. 101(a)(9), is the Secretary of the Army with respect to the Army, the Secretary of the Air Force with respect to the Air Force, the Secretary of the Navy with respect to the Navy, Marine Corps, and Coast Guard (when it is operating as part of the Department of the Navy), and the Secretary of Homeland Security with respect to the Coast Guard (when it is not operating as part of the Department of the Navy).

¹⁰⁷ Section 12302 of Title 10 U.S.C. states “In time of national emergency declared by the President after January 1, 1953, or when otherwise authorized by law, an authority designated by the Secretary concerned may, without the consent of the persons concerned, order any unit, and any member not assigned to a unit organized to serve as a unit, in the Ready Reserve under the jurisdiction of that Secretary to active duty for not more than 24 consecutive months.” See footnote 106 for the definition of “Secretary concerned.”

to mobilize reservists for Operations Noble Eagle and Enduring Freedom, and later used for Operation Iraqi Freedom/New Dawn as well.¹⁰⁸ Activations under this authority have continued to the present.

Presidential Reserve Call-up (PRC)

Section 12304 of Title 10 U.S.C. permits the President to authorize the involuntarily activation of members of the Selected Reserve and the Individual Ready Reserve for a period up to 365 consecutive days.¹⁰⁹ Under this authority, up to 200,000 members of the Selected Reserve and the Individual Ready Reserve “mobilization category”—a sub-component of the Individual Ready Reserve which is currently not being used¹¹⁰—may serve on active duty at one time. The President may activate reservists under this provision of law without approval from Congress; however, he is required to notify Congress within 24 hours of such an action. This authority was used to mobilize reservists during the earlier part of the Persian Gulf War (1990-1991), during the intervention in Haiti (1994-1996), during the Bosnian peacekeeping mission (1995-2004), during the low-intensity conflict with Iraq¹¹¹ (1998-2003), and during the earlier years of the Kosovo

¹⁰⁸ Until 2007, DOD’s general policy had been to mobilize reservists for no more than one year, while allowing the Service Secretaries to keep reservists on active duty for up to 24 *cumulative* months if they were needed to meet operational or other requirements. No reservist was allowed to serve beyond 24 cumulative months under the Partial Mobilization authority. Army Reserve and National Guard units deploying to Iraq and Afghanistan were typically mobilized for 18 months to provide for pre-deployment training, a one-year tour in theater, demobilization, and the utilization of accrued leave prior to release from active duty. On January 19, 2007, Secretary of Defense Robert Gates established a new policy with respect to the exercise of Partial Mobilization in support of these operations. The new policy specified that “from this point forward, involuntary mobilization for members of the Reserve Forces shall be for a maximum of one year at a time. At service discretion, this period may exclude individual skill training required for deployment and post-mobilization leave ... the planning objective for involuntary mobilization of Guard/Reserve units will remain a one year mobilized to five year demobilized ratio. However, today’s global demands will require a number of selected Guard/Reserve units to be remobilized sooner than this standard.” In practice, this new policy limits reserve mobilizations to about 13 or 14 months at a time for the vast majority of reservists (the exception would be those reservist who need lengthy individual skill training to become qualified in their occupational specialty prior to deployment). Note, however, there is no longer a prohibition on serving more than 24 *cumulative* months under the Partial Mobilization authority. This is consistent with the statutory language of 10 U.S.C. 12302, which only specifies a 24 *consecutive* month cap.

¹⁰⁹ Section 522, P.L. 109-364, the John Warner National Defense Authorization Act for FY2007, expanded this call-up period from 270 to 365 days.

¹¹⁰ The law specifies that the only members of the Individual Ready Reserve who may be activated under a PRC are those individuals who belong to “the Individual Ready Reserve mobilization category and designated as essential under regulations prescribed by the Secretary concerned.” Further, 10 U.S.C. 10144(b) specifies that individuals may not be placed in this mobilization category unless “(A) the member volunteers for that category; and (B) the member is selected for that category by the Secretary concerned, based upon the needs of the service and the grade and military skills of that member.” DOD has not made it a priority to fill this “mobilization category” and currently there are no members assigned to it. Thus, the PRC authority is effectively limited to members of the Selected Reserve at present. If this mobilization category were to be manned and used, the law limits the total number of IRR “mobilization category” members on active duty at one time to 30,000.

¹¹¹ In the aftermath of the 1991 Persian Gulf War, the United States maintained a substantial military presence in the region in order to enforce the terms of the cease-fire agreements. The United States used this military force to compel Iraqi compliance with the terms of the cease fire agreements on a number of occasions. One of the most significant U.S. confrontations with Iraq began in late 1997, in response to Iraqi interference in the conduct of U.N. weapons inspections. As tensions with Iraq mounted, the United States began to build up its forces in the Gulf region. Subsequently, a nearly constant low-intensity air war took place in and over Iraq: Iraqi anti-aircraft weapons fired on U.S. and allied aircraft; the allies responded by bombarding these and other military targets. On February 24, 1998, President Clinton ordered a Presidential Reserve Call-up. The first reservists called under this authority entered active duty on March 1, 1998. This low-intensity conflict with Iraq changed to a high-intensity conflict on March 20, 2003, (continued...)

conflict and peacekeeping mission (1999-present).¹¹² Those activated under this authority may not be used to enforce federal authority or to suppress insurrection; nor may they be used to provide assistance to the federal government or the states for disaster response, unless responding to an emergency involving the use or threatened use of weapons of mass destruction or an actual or threatened terrorist attack of significant proportions.¹¹³

Combatant Command Support Activation

The National Defense Authorization Act for Fiscal Year 2012 contained a provision to allow involuntarily activations of Selected Reserve units for up to 365 consecutive days of active duty.¹¹⁴ No more than 60,000 members of the National Guard and Reserves may be serving on active duty under this authority at any given time. The authority to activate reservists under this provision rests with the Service Secretary, but it may only be invoked for a “preplanned mission in support of a combatant command” where the costs of the activations and a description of the mission are included in the service’s budget materials. According to the committee report which accompanied the Senate version of the bill, this new authority “is not designed for use for emergent operational or humanitarian missions, but rather to enhance the use of reserve component units that organize, train, and plan to support operational mission requirements to the same standards as active component units under service force generation plans in a cyclic, periodic, and predictable manner.”¹¹⁵ This provision is now codified at 10 U.S.C. 12304b. In its FY2014 and FY2015 budget requests, the Army specified its plans to use this authority for an array of smaller on-going operations, such as air defense in the United States, counterterrorism partnership efforts in Africa, peacekeeping support in Europe, and an array of theater security cooperation efforts.¹¹⁶

Disaster Response Activation

A separate provision in the National Defense Authorization Act for Fiscal Year 2012, now codified at 10 U.S.C. 12304a, allows the Secretary of Defense to involuntarily order units and

(...continued)

with the commencement of Operation Iraqi Freedom. On May 1, 2003, all operations associated with the low-intensity conflict—such as Operation Northern Watch and Operation Southern Watch—became part of Operation Iraqi Freedom. At that point, reservists who were involuntarily activated for operations related to Iraq were ordered to active duty under the post-September 11, 2001, Partial Mobilization.

¹¹² In 2003, DOD stopped using the Presidential Reserve Callup authority that had been used since 1999 to activate reservists for Kosovo, and instead began using the broader Partial Mobilization authority used for ONE/OEF/OIF. Starting in 2014, the Army began activating reservists for Kosovo under the Combatant Command Support Authority (10 USC 12301b).

¹¹³ 10 U.S.C. 12304(b) and (c). The authority to use those activated under a PRC for domestic response missions was expanded by Section 1076(c) of the John Warner National Defense Authorization Act for FY2007 (P.L. 109-364); however, this provision was repealed by Section 1068(c) of the National Defense Authorization Act for FY2008 (P.L. 110-181).

¹¹⁴ P.L. 112-81, Section 516.

¹¹⁵ S.Rept. 112-26, p. 110.

¹¹⁶ For FY2014, see pages 9-10 of the Army’s Military Personnel budget justification book, available here: <http://asafm.army.mil/Documents/OfficeDocuments/Budget/budgetmaterials/fy14/milpers//mpa.pdf>. For FY2015, see pages 11-12 of this the Army’s Military Personnel budget justification book, available here: <http://asafm.army.mil/Documents/OfficeDocuments/Budget/budgetmaterials/fy15/milpers//mpa.pdf>

individuals of the Army Reserve, Navy Reserve, Marine Corps Reserve, and Air Force Reserve to active duty for up to 120 days “when a governor requests federal assistance in responding to a major disaster or emergency.”¹¹⁷ National Guard forces are not included in this authority, but state governors already have the ability to activate their state National Guard forces and to request support from other state National Guards under the Emergency Management Assistance Compact. The Coast Guard Reserve has long had a short-term, disaster response activation authority (14 U.S.C. 712) which is very similar to 12304a authority.

This provision also contained language specifying that when the Armed Forces and the National Guard are employed simultaneously in support of civil authorities within the United States, a dual status commander should be appointed. A dual status commander is a military officer who simultaneously serves as a state National Guard officer under the control of his or her governor, and as a federal military officer under the control of the President.¹¹⁸ A dual status commander is thus able to command non-federalized National Guard forces and federal forces via these separate chains of command. The language of this provision also specifies that “when a major disaster or emergency occurs in any area subject to the laws of any State, Territory, or the District of Columbia, the Governor of the State affected normally should be the principal authority supported by the primary Federal agency and its supporting Federal entities, and the Adjutant General of the State or his or her subordinate designee normally should be the principal military authority supported by the dual-status commander when acting in his or her State capacity.”¹¹⁹

Recall of Retired Reservists

Members of the Retired Reserve can be involuntarily ordered to active duty in the case of a Full Mobilization (see “Full Mobilization,” above). Under this authority, there is no limit on the number of retired reservists who can be called to active duty, and they may be kept on active duty for the duration of the war or emergency plus six months. Additionally, the Secretary of each military department has the authority to involuntarily order certain members of the Retired Reserve to active duty at any time, but this authority only applies to members of the Retired Reserve who have a regular retirement (at least 20 years of active duty).¹²⁰ There is a limit on the amount of time recalled retirees can serve, and a limit on the number of officers recalled, but these limits do not apply in times of war or national emergency declared by the Congress or the President.¹²¹

Title 32, Section 502(f)

An unique authority to activate National Guard personnel involves duty under Title 32 of the U.S. Code, Section 502(f). This provision of law provides that “a member of the National Guard may ... without his consent, but with the pay and allowances provided by law ... be ordered to perform training or other duty in addition to that prescribed under subsection (a) [subsection (a) covers

¹¹⁷ P.L. 112-81, Section 515. The language does not limit the activations only to the Selected Reserve, so it appears that members of the Individual Ready Reserve can be activated under this authority.

¹¹⁸ See 32 U.S.C. 315 and 325.

¹¹⁹ P.L. 112-81, Section 515(c).

¹²⁰ 10 U.S.C. 688(b)(2).

¹²¹ 10 U.S.C. 688 & 690.

annual training and inactive duty training, also known as “weekend drill”].¹²² While activated under this authority, National Guard personnel remain under the control of their governor, but receive federal pay and benefits, as though they were in federal services, along with certain legal protections.¹²³ National Guard personnel were activated under this provision to provide security at many of the nation’s airports in the aftermath of the terrorist attacks of September 11, 2001, to assist with the response to Hurricanes Katrina and Rita in 2005, and for the southwest border security mission in 2006-2008 and 2010-2014.

State Active Duty

As members of the militia of their state or territory, National Guard personnel can also be called up by their governor for full-time duty. When employed in this capacity, referred to as state active duty, National Guardsmen are considered state or territorial employees, not federal employees, and their pay and benefits are determined by state or territorial law. Typical missions performed under state active duty include responding to disasters and civil disorders. Additionally, shortly after September 11, 2001, some governors called up members of the National Guard to protect critical infrastructure in their states, such as nuclear power plants, water treatment facilities, and bridges, from potential terrorist attacks.

¹²² 32 U.S.C. §502(f)(1). The training or duty ordered to be performed under this provision of law may include the following: “(A) Support of operations or missions undertaken by the member’s unit at the request of the President or Secretary of Defense. (B) Support of training operations and training missions assigned in whole or in part to the National Guard by the Secretary concerned, but only to the extent that such training missions and training operations— (i) are performed in the United States or the Commonwealth of Puerto Rico or possessions of the United States; and (ii) are only to instruct active duty military, foreign military (under the same authorities and restrictions applicable to active duty troops), Department of Defense contractor personnel, or Department of Defense civilian employees.” 32 U.S.C. §502(f)(2).

¹²³ Specifically, they are entitled to protection under the Uniformed Services Employment and Reemployment Rights Act (USERRA), but are only covered under the Servicemembers’ Civil Relief Act (SCRA) if performing “service under a call to active service authorized by the President or the Secretary of Defense for a period of more than 30 consecutive days under Section 502(f) of Title 32, United States Code, for purposes of responding to a national emergency declared by the President and supported by Federal funds” (P.L. 108-189, Section 101(2)(A)(ii), codified at 50 U.S.C. App. 511). Those not covered by the SCRA may, however, receive civil liability protection from state or territorial laws.

Appendix F. Contemporary Studies on AC/RC Force Mix

The studies surveyed in this appendix are listed below. It should be noted that while some studies directly address the topic of AC/RC cost and/or force mix, many studies only include this topic as a component of an examination of national defense, military reform, DOD budget choices and other defense-related topics. The reports are listed in chronological order.

A. John D. Winkler and Barbara Bicksler, *The New Guard and Reserves*, “Chapter 10: The Cost of the Reserves” by Jennifer Buck, 2008.

B. Jacob Alex Klerman, *Rethinking the Reserves*, RAND, 2008.

C. Dennis J. Reimer, Roger C. Shultz, and James R. Helmly, *The Independent Panel Review of Reserve Component Employment in an Era of Persistent Conflict*, November 2, 2010

D. Office of the Vice Chairman of the Joint Chiefs of Staff and the Office of Assistant Secretary of Defense for Reserve Affairs, *Comprehensive Review of the Future Role of the Reserve Component, Volume I: Executive Summary and Main Report*, April 5, 2011.

E. Michael L. Hansen, Celeste Ward Gventer, and John D. Winkler, et al., *Reshaping the Army’s Active and Reserve Components*, RAND, 2011.

F. *AC/RC ARFORGEN Costing Model*, United States Army G-8 PA&E, January 5, 2012.

G. David Barno, Nora Bensahel, and Matthew Irvine, et al., *Sustainable Preeminence—Reforming the U.S. Military at a Time of Strategic Change*, Center for a New American Security, May 2012.

H. *Eliminating Gaps in DOD Data on the Fully-Burdened and Life-Cycle Cost of Military Personnel: Cost Elements Should be Mandated by Policy*, Reserve Forces Policy Board, January 7, 2013.

I. Gary Roughead and Kori Schake, *National Defense in a Time of Change*, Brookings (The Hamilton Project), February 2013.

Key Points and Recurring Themes of Surveyed Reports

An examination and comparison of the aforementioned reports revealed a number of key points, often recurring in multiple reports, related to cost and other force mix considerations. These are summarized below. The order in which they are presented does not suggest any sort of prioritization by CRS.

Cost

- When considering AC/RC force mix, some studies noted that while cost is a very important planning factor, it is not the only or the most important factor.

- The cost elements used in comparisons varied widely, and wide variations existed on whether and how to allocate certain costs that do not lend themselves easily to division between the AC and the RC. Reports note that cost estimating tools for different types of missions, operating profiles, and accounting systems vary greatly between services, although there is a limited degree of commonality in personnel costing methodologies.
- Non-activated RC personnel are less expensive than AC personnel because they spend much less time training per year and thus receive much less in pay and benefits; this lower training level also results in lower associated operations and maintenance costs. Even when activated, lower RC costs for retired pay and retiree health care benefits make RC forces less costly as far as compensation costs “per day of duty” are concerned. However, compensation costs are not the only costs to consider, nor is “per duty day” the only way to measure output.
- Using RC forces reduces, and may even eliminate, their cost advantage. In part, this is due to the increase in compensation costs when activated (that is, the government begins to pay the activated RC personnel in the same manner as it does AC personnel). Additionally, if one considers costs in relationship to an output such as “days deployed” (also called “boots on the ground”), RC costs increase significantly in comparison to the AC for two reasons. First, DOD rotation policy puts stricter limits on how frequently a reserve unit can be mobilized in comparison to an active unit.¹²⁴ This results in the need for more RC units to sustain the equivalent “boots on the ground” output of a single AC unit. Second, when RC forces are activated, they typically undergo post-activation training, which may be several weeks or several months, depending on the type of unit. This reduces the amount of “boots on the ground” time in each deployment cycle. Taken together, these factors increase the cost per “day deployed” of RC units in comparison to AC units.
- While dependent on rotational variables, units with high-cost equipment or extensive training needs appeared to have a cost advantage in the AC, while units with less expensive equipment and lower training needs appeared to have a cost advantage in the RC.
- The cost savings estimates provided in these reports were limited in scope, and therefore may be of limited utility for policymakers as they examine affordability and force-mix issues. This could possibly be attributed to the previously-cited lack of a common cost methodology.
- The RC provides additional value not captured in cost data. For example, the RC provides the opportunity to serve for those who do not wish to serve full time, RC members have civilian expertise and perspective that AC personnel might not have, and using the RC provides a link between operational use of the Army and

¹²⁴ DOD’s “deployment-to-dwell” planning goal is 1:2 or greater for active forces (that is, one year deployed to two years of “dwell time” on active duty at their normal duty station) and 1:5 or greater for reserve forces (that is, one year mobilized to five years of “dwell time” in a non-activated status). Specific units may be activated and deployed more or less frequently than the goals, depending on circumstances. Under Secretary of Defense (Personnel and Readiness), *Under Secretary of Defense (Personnel and Readiness) Deployment-to-Dwell, Mobilization-to-Dwell Policy Revision*, Washington, DC, November 1, 2013.

the public at large, thereby potentially strengthening public support for the operation.

Roles and Utilization:

- Some studies suggested that the RC perform roles along the lines of “missions and tasks that are predictable, relatively consistent, and benefit from long-term personnel and geographic relationships.”¹²⁵ While this might be a valid finding or recommendation based on analysis, it also raises issues for potential consideration by policymakers. If the RC is truly part of the Total Force, then why the RC should be relegated only to “tasks that are predictable, relatively consistent?” While this recommendation was likely based on an observation that unpredictable and frequent deployments tend to be aligned with the AC,¹²⁶ in theory, a RC unit in the Army Force Generation (ARFORGEN) model “Ready Pool” should be as capable in this arena as an AC unit.
- With respect to the perceived benefits provided by the RC when long-term personnel and geographical relationships are an essential part of a mission, this is attributed to the comparative long-term stability in many RC units. AC units tend to turn over most of their personnel every two to three years while reservists and National Guardsmen may spend their entire career in just a few units. More specifically, there is a belief held by some that Combatant Commander Theater Security Cooperation and Building Partner Capacity activities benefit from long-term personal relationships that would be more likely if RC units were involved.
- Several reports also suggest RC forces are particularly well-suited to Homeland Defense or Defense Support to Civil Authorities missions.
- The RC as a provider of “strategic depth” was a common theme in many reports. For example, the Army noted “it would take five to seven years to build a new Combat Aviation Brigade in the AC”¹²⁷ when a similar unit in the RC could be ready for deployment within a few months, depending on its personnel, equipment, and training status. The strategic depth argument is one counter to the criticism that RC brigade combat teams (BCTs) and combat aviation brigades (CABs) are more expensive and less effective than their AC counterparts. To put it another way, some would argue that it worth keeping a number of these equipment and training-intensive combat formations in the RC—even if they cost more than their AC counterparts when used for operational purposes—as a means of quickly reconstituting or “surging” force structure in the event of a crisis.

Force Mix

- A common theme relating to force mix is that of mission requirements. If a mission requires a rapid response or a high state of readiness, it is often seen as a

¹²⁵ Office of the Vice Chairman of the Joint Chiefs of Staff and the Office of Assistant Secretary of Defense for Reserve Affairs, *Comprehensive Review of the Future Role of the Reserve Component, Volume I: Executive Summary and Main Report*, April 5, 2011, pp. 6-7, <https://www.hsdl.org/?view&did=685426>.

¹²⁶ Taken from briefing materials given to CRS by the Army on May 3, 2013.

¹²⁷ Taken from CRS discussions with Army officials on May 3, 2013.

mission best suited to the AC. If the mission is of a more enduring nature, allowing for predictable deployments, it is thought to be a more appropriate mission for the RC.

- Another theme repeated in a number of reports is that of requiring multiple RC units to match the rotational output of a single AC unit. It should be noted, however, this requirement is more pertinent to an “operationalized” RC—i.e., an RC that is to be included in the Army’s routine deployment of units on operations—rather than an RC serving as a “strategic reserve.” In the case of an “operationalized RC,” the current one year deployed every six years (the 1:5 deploy-to-dwell ratio) rule makes it necessary to have multiple RC units to match the one AC unit that deploys for one out of every three years (the 1:2 deploy-to-dwell ratio). Changing the deployment-to-dwell ratios, whether for the AC or RC, changes the requirements for the number of units needed.
- Some reports suggested that there are advantages in placing some types of support units in the RC. Lower echelon and support/sustainment units without extensive or complicated equipment (such as a Medium Truck Company), which typically require less post-activation training before deployment, are often cited as examples. Comparatively shorter post-mobilization training periods increase the number of days deployed, and therefore decreases the cost per day deployed ratio.

Effectiveness

One theme noticeably absent from reports focusing on cost and force mix is that of comparative military effectiveness between AC and RC units.

- While there were anecdotal examples—such as RC Military Police and Civil Affairs units being more effective than their AC counterparts because many RC soldiers in these units perform their military specialties daily in their civilian lives—there was not a comprehensive examination of military effectiveness as it relates to force mix. Perhaps a quote from a RAND report explains why military effectiveness was not examined in detail:

A unit-for-unit cost comparison implicitly assumes that, once trained-up, RC units are as effective as AC units. In many military forums, it is considered impolite to raise this issue, so such discussion appears to go on only in private and with little direct evidence.¹²⁸

¹²⁸ Jacob Alex Klerman, *Rethinking the Reserves*, RAND National Defense Research Institute, 2008, pp. 20-21. Another possible reason why military effectiveness was not examined in detail was the subjective nature of assessing military effectiveness for both the AC and RC in terms of both peacetime training evaluations and, when applicable, under actual combat conditions.

Appendix G. Individual Study Examinations

A. The New Guard and Reserves (Chapter 10: Cost of the Reserves).¹²⁹

Executive Summary:

This chapter, written by a Jennifer Buck, a former Deputy Assistant Secretary of Defense for Reserve Affairs, “explores several different ways to look at active and reserve costs.” It outlines three methods:

- “The first is a traditional, simple method that compares the total guard and reserve budget with the portion of the total force it supports. This was the method used by the Commission on the Guard and Reserves in reaching its conclusion that ‘the cost of the reserve components is approximately 23% of the amount needed to man, train, equip and sustain the active component.’”¹³⁰
- “The second approach is based on estimating the cost of individual members of the reserve components...[which determines] the cost of reserves vis-a-vis their ‘use’. Use is defined in a number of ways. One is availability for deployment over the course of a career. Another is the number of duty days served within a given year.”¹³¹
- “The final method examines the cost of guard and reserve units based on an analysis of brigade combat teams. This assessment evaluates the cost of units under different deployment scenarios.”¹³²

Findings:

- “Differences in active and reserve component costs relate primarily to three factors. First, the guard and reserve have lower operating and training tempo. Second, they received part-time pay and benefits [when not activated]. Third, the guard and reserve incur smaller infrastructure costs—such as, for example, in family housing.”¹³³
- “It is obvious that the more the guard and reserve are used, the more they ‘cost’.”¹³⁴
- Traditional method
 - Using this method and FY2005 figures, “the guard and reserve require 8.6% of the budget to support 38.4% of the force, which, on the surface, appears to be a great bargain. But this admittedly simplistic approach does not

¹²⁹ John D. Winkler and Barbara Bicksler, "Chapter 10: The Cost of the Reserves," by Jennifer C. Buck in *The New Guard and Reserves* (San Ramon, CA: Falcon Books, 2008), pp. 175-185, http://www.sainc.com/reports/pdf/New_Guard_Reserve.pdf.

¹³⁰ *Ibid*, 176.

¹³¹ *Ibid*, 176.

¹³² *Ibid*, 176.

¹³³ *Ibid*, 175.

¹³⁴ *Ibid*, 176.

incorporate costs such as research and development, paid by the military services, with benefit to both the active and reserve components. Further, it does not factor in the value of equipment that is transferred to the guard and reserve from the active forces, or the guard and reserve ‘share’ of institutional support provided by the services, such as schools or training ranges.”¹³⁵ If supplemental war funding is factored in, the guard and reserve share of the budget rises to 9.4%.

- The traditional method “is perhaps more relevant for a reserve component used primarily as a force in reserve—as a strategic reserve that serves as an ‘insurance policy’ for national defense—rather than a reserve that is called on to support operational missions...this very simple approach is no longer sufficient to answer the question of the relative cost of the guard and reserve.”¹³⁶
- Individual members method
 - The focus of this method “was to develop a means to compare the use of active versus guard and reserve forces per dollar spent.”¹³⁷ Two alternative approaches were developed: the first was based on projected AC and RC personnel costs over a full career, including deployments, and into retirement (a “life-cycle” cost approach); the second calculated cost per day of duty in FY2004 and FY2005.
 - Life Cycle Variant
 - The “life-cycle” variant estimates the lifetime cost of an AC servicemember at nearly \$2.4 million, and the RC servicemember at about \$790,000. “In terms of ‘usage,’ this works out to \$336,000 per deployment ‘opportunity’ for the active member and \$198,000 for a member of the reserves.”¹³⁸
 - “In essence, this analysis shows that reserves are a good deal because the military services only have to pay for them when they are needed. Because their retirement is deferred—not paid out until age 60—it is much less expensive than for active members...However, there are limitations to this assessment too. Utilization of the force is more encompassing than simply being deployed.”¹³⁹
 - “Duty Days” Variant
 - The “duty day” variant estimates AC personnel will perform 275 days of duty per year, that “statutory” reservists will perform 39 per year, and that “busy” reservists will perform about 120 per year. It estimates “cost

¹³⁵ *Ibid*, 176.

¹³⁶ *Ibid*, 178.

¹³⁷ *Ibid*, 178.

¹³⁸ *Ibid*, 179.

¹³⁹ *Ibid*, 179-180. Note that the National Defense Authorization Act for FY2008 contained a provision which permits certain reservists to draw retired pay as early as age 50, while maintaining the age for access to the military health care system at 60.

per duty day” in FY2005 as \$261.52 for AC personnel, \$284.35 for statutory reservists and \$237.30 for busy reservists.¹⁴⁰

- “The bottom line of this analysis is that the more days reservists serve, the less costly they are to use...in other words, a busy reservist is cheaper than a statutory one. However, this analysis reveals an unanticipated result. The more full-time benefits added to the cost of a reservist, such as TRICARE for Life health care accrual, the more expensive a part-time reservist is relative to his or her availability.”¹⁴¹
- Unit method
 - This approach is based on a 2007 unpublished briefing by Jacob Alex Klerman (whose 2008 report *Rethinking the Reserves* is covered later in this appendix). It compares costs of an active duty unit to its reserve component counterpart based on models that consider costs of both deployed and non-deployed units, and which also factor in the expected deployment-to-dwell ratios.
 - “Taking into account pay and benefits, as well as training and support costs, reserve brigade combat units are much cheaper than active duty units—on the order of 28% of costs during peacetime...When activated, reserve units costs about the same as active duty units. Thus, if both an active and reserve unit could accomplish the same task, assigning it to a reserve unit would realize considerable cost savings. It was assumed, in the past, that activations would be rare.”¹⁴²
 - “But this comparison is fundamentally different when reserve units are used as part of a rotational force. Thus, the second question posed in the analysis becomes critically important—the relative cost of a reserve brigade combat team for one-year of ‘boots-on-the-ground’For a six year rotation cycle, nine reserve combat teams were needed to sustain continuous operations, versus three active duty teams. Using the reserve in this fashion increases their relative costs to 84% when not activated, and as high as 120% when they are.”¹⁴³ [Note: It is unclear how the report derives these figures; see comment in “Potentially Contentious Issues”].
 - “The results show that for use as part of a rotational force, cost does not clearly favor reserve units, as it does under simpler cost calculations...the less we expect to use the reserves, the lower their relative cost. Further, the more quickly reserve units can be ready for operational missions, the lower their relative cost.”¹⁴⁴

Study Methodology:

¹⁴⁰ *Ibid*, 181.

¹⁴¹ *Ibid*, 180.

¹⁴² *Ibid*, 181-182.

¹⁴³ *Ibid*, 182.

¹⁴⁴ *Ibid*, 183.

As described above, this study used three separate approaches—one of which has two variants—to estimate the comparative costs of AC and RC forces. The cost data used for the first two methods appears to be taken primarily from FY2004 and FY2005 budget documents; changes in compensation since then might generate different results. It is unclear precisely which costs are included in the individual member variants, but it appears they both include pay and allowances, retired pay, and retiree health care; inclusion of other elements might change the results. The duty day variant also appears to include “money spent for training, medical and dental readiness, equipment, and operations and maintenance” but those costs are not specified. The life cycle model makes some important assumptions about career length, eligibility for retirement, and deployment/dwell ratios (AC deployed one year out of every three; RC deployed one year out of every six); deviations from these assumptions might generate different results. Also, it is unclear how the cost for the entire life-cycle (initial entry into military service through death) is generated. Cost elements used in the analysis are not fully described (although the rough contours are). The unit cost model section appears to rely on a predecessor to Klerman’s 2008 study, whose methodology is discussed later in this report.

Potentially Contentious Issues:

- This paper describes several costing alternatives, without endorsing one specific approach; however, it largely rejects the “traditional method”: “Merely looking at gross budget share does not address the true cost of the reserves, because it ignores important differences in how each component is used.” (p. 184) Those who stress the cost advantage of the reserves may still consider this approach to have value, especially in the context of strategic reserve forces.
- It is unclear how figures used for the retired pay accrual rate under the “duty days” variant was calculated. The daily rate for a “busy reservist” was higher than that for an active component servicemember (\$31.66 vs. \$28.77 in FY2004), which seems unlikely given reservists have a lower retired pay accrual rate as they normally cannot draw retired pay immediately upon retirement as active component personnel can.
- For the unit cost model approach, the report states “using the reserve in this fashion increases their relative costs to 84% when not activated, and as high as 120% when they are.”¹⁴⁵ It is unclear how the report derives these figures, as they are based on an unpublished briefing by Jacob Klerman. Klerman’s figures accompanying his published 2008 report estimated the relative cost of RC units to range from 58% to 141% of AC units. The range of values was related to the values of key variables (deployment-to-dwell ratios, the proportion of the reserve component involved in deployments, and the relative cost of RC units when not deployed).

¹⁴⁵ *Ibid*, 182.

B. Rethinking the Reserves.¹⁴⁶

Executive Summary:

A changed threat environment and different utilization patterns suggest the need to re-think various aspects of the RC, particularly the reserve components of the Army. Reserve personnel are distinguished by the part-time nature of their service, which means that they have competing civilian obligations, are less expensive when not mobilized, and have limited training opportunities when compared to the AC. Traditional costing methods suggest that RC units, when not mobilized, cost about one-fifth to one-third as much as AC forces. However, “the relevant cost computation, and the implied relevant cost changes radically when forces are expected to be used with rotation, which is the reality of stability operations conducted as part of the ongoing Global War on Terrorism.” (p. xiv) Under current usage, RC cost computation needs to consider both “peacetime” (non-activated) and “wartime” (activated) costs. Additionally, “with rotation, the appropriate cost is not per unit but per unit “Boots on the Ground” (BOG) (i.e., actually serving in the conflict versus at the rotational base at home).” (p. xiv). Rotation policy is a critical factor in determining the relative costs of AC versus RC BOG. “It seems clear that the relative cost of the RC rises sharply when the projected use involves rotation. What was without rotation a striking cost advantage is nearly cost parity; that is, cost considerations no longer overwhelmingly favor the RC.” (p. xv) Some suggestions for modifying reserve compensation and other models of reserve service are also presented.

Findings:

- “Because they are part-time, reservists simply spend less time in uniform. Therefore, in years in which they are not mobilized, they can be paid less. For the Army National Guard, a very rough estimate is that a drilling reservist is paid for only about one-sixth as many days as an equivalent active-duty force soldier. Relative costs are slightly higher, perhaps one-fifth to one-third those of the actives, but still much, much less than the cost of the actives. Thus, in peacetime, reserves are much less expensive...The in peacetime caveat is crucial...the relative cost of reservists in wartime is subtler and likely to vary with the frequency of use and rotation policy.”¹⁴⁷
- “Because reservists are part-time, they may be less capable than AC forces. During peacetime, they train much less than AC forces (perhaps one-sixth as much). Thus, at mobilization, they are often capable of doing only a more limited range of mission-essential tasks. Rather than training intensively during peacetime, after mobilization reservists often need more time (often several months) to sharpen their existing skills and to learn new skills related to their specific anticipated mission. Despite this intensive post-mobilization training, for some tasks, the skill level (or capability) of reservists and the reserve unit may remain lower than that of AC forces, who had the benefit of more intensive training in the years before deployment. This discussion assumes that military skills atrophy when not training. That assumption seems plausible for military-specific skills (e.g., infantry). Alternatively, when a reservist uses his/her civilian

¹⁴⁶ Jacob Alex Klerman, *Rethinking the Reserves*, RAND, Arlington, VA, 2008, <http://www.rand.org/pubs/monographs/MG757.html>. RAND, *Rethinking the Reserves*, 2008.

¹⁴⁷ *Ibid*, 13-14.

career (perhaps a chaplain, civilian affairs, construction, military police), it seems plausible that the reservists is as skilled as (or even better skilled than) his/her AC counterpart.”¹⁴⁸

- “A unit-for-unit cost comparison implicitly assumes that, once trained-up, RC units are as effective as AC units. In many military forums, it is considered impolite to raise this issue, so such discussion appears to go on only in private and with little direct evidence.”¹⁴⁹
- “...It seems likely that there are several different types of military jobs. For some jobs, civilians actually get more repetitions than uniformed individuals...For these tasks we would expect the RC to perform better than the AC. For activities in which deterioration of skills is slow, older RC member might perform better than younger AC members (this has been claimed for pilots and flying hours). However, for military specific activities for which the skills deteriorate (perhaps physical condition or reaction times in combat simulations), one might expect more-intensive and longer-term AC training to yield higher proficiency than we would expect from a short-term train-up immediately post-mobilization. Whether these conjectures are correct is unclear. We are unaware of any high-quality empirical evidence.”¹⁵⁰
- “Any evidence of differential combat effectiveness should be used to adjust the earlier unit-for-unit cost estimates. Thus, for example, if it would take five RC units to do the work of four AC units, then the RC costs should be adjusted up by a quarter. Note also that each unit—AC and RC—would require equipment, so equipment costs would need to enter into this analysis.”¹⁵¹
- “When forces are used with rotation, the crucial comparison is no longer the cost of an RC unit peacetime compared with the cost of an AC unit in peacetime. Instead, the crucial comparison is: What does it cost to maintain one RC unit BOG compared to the cost to maintain on AC unit BOG.”¹⁵²
- “...What is the ratio of RC units in the force to AC units in the force to maintain one unit continuously BOG? For Army BCTs...[g]iven current rotation policy, those calculations suggest that the ratio is slightly less than three RC units in the force for every AC unit in the force in order to maintain one unit BOG. Given recent [2007-08] actual rotation practice, the ratio is slightly less than four.”¹⁵³
- “Again using plausible parameters, Appendix A of “Rethinking the Reserves” then proceeds to convert these estimates of units required in the force into relative costs. Those computations suggest that, for wars fought with rotation, much—but not all—of the RC’s cost advantage disappears. Remaining cost

¹⁴⁸ *Ibid*, 14-15.

¹⁴⁹ *Ibid*, 20-21.

¹⁵⁰ *Ibid*, 21.

¹⁵¹ *Ibid*, 21.

¹⁵² *Ibid*, 22.

¹⁵³ *Ibid*, 23.

differences are sufficiently small that some might argue that they are not commensurate with the RC's lower combat effectiveness."¹⁵⁴

- "...this analysis suggests that the shift to a rotational scenario has substantially increased the relevant cost of the reserves. The standard economic argument would suggest the appropriate reaction would be twofold. First, decrease demand for the solution whose relative cost has risen sharply; that is, use the RC in fewer roles (e.g., only as a deeper reserve). Second, decrease supply (i.e., cut reserve force structure) by decreasing cost (e.g., reserve enlistment bonuses) until the remaining forces are closer to cost-effective. Further study is needed."¹⁵⁵

Study Methodology:

The methodology varies depending on the subject matter being discussed. Chapters 2 and 3 are based on historical data and interpretation of reserve policy and utilization from the 1970s onward. Chapter 4 discusses the implications of the part-time nature of reserve service. Chapter 5 considers costs of the reserves relative to active forces, Chapter 6 proposes three alternative reserve organizations, and Chapter 7 looks at changes in reserve compensation to support more intensive use of the reserves. The methodology with regard to Chapter 5 deserves additional description.

Chapter 5 reviews several previously published works and identifies the relative cost of the RC as falling within the range of 20-30% of AC forces, when not activated, and 100% of AC forces when activated.¹⁵⁶ The author then estimates the number of RC units and AC units required, according to various deployment-dwell ratios, to maintain one unit "boots on the ground" continuously in a given deployment location. The estimate is three for AC units and eight for RC units, assuming that AC units deploy 12 months out of 36 and that RC trains for three months and deploys for nine months out of 72. "Thus, according to policy guidance, we need 3.0 (=36/12) AC units in the force to keep one unit BOG...and 8.0 (=72/9) units in the [reserve] force to keep one unit BOG. Thus, the ratio of RC to AC units is slightly less than 3 (~2.7 = 8.0/3.0)."¹⁵⁷ These rotation estimates are based on DOD guidelines established in 2007 and still in effect today.¹⁵⁸ If actual rotation practice from 2007-2008 is used instead—AC units deploy 15 months out of 27 and RC unit train for three months and deploy for nine months out of 60—the resulting quotient is 1.8 for AC and 6.7 for RC.

Combining the average costs of AC and RC units when deployed and non-deployed, with the number of units required to sustain one unit "boots on the ground," the author generates a "cost per unit of BOG" metric. Under the DOD rotation policy guidelines (12:36 for AC; (9+3)/72 for RC)¹⁵⁹, he concludes that in peacetime, the relative cost of RC units is 67% of AC units. In wartime, the relative cost of RC units is 101%.¹⁶⁰ Subsequently, the author manipulates some of

¹⁵⁴ *Ibid*, 23.

¹⁵⁵ *Ibid*, 25-26.

¹⁵⁶ *Ibid*, 57, 59.

¹⁵⁷ *Ibid*, 58.

¹⁵⁸ Secretary of Defense Memorandum, "Utilization of the Total Force, January 19, 2007.

¹⁵⁹ The cost estimates also include an additional month of paid leave for RC personnel, earned during their one year activation.

¹⁶⁰ Klerman, 60.

the key variables—deployment-to-dwell ratios, the proportion of the reserve component involved in deployments, and the relative cost of RC units when not deployed—to generate a table illustrating a range of potential relative costs. These range from a low of 58% to a high of 141%.¹⁶¹ The more favorable cases for the reserves generally involve activating them less frequently; when activated, lengthening their deployments (one year BOG instead of nine months BOG) while holding AC rotation policy stable; reducing the amount of RC train up time from three months to two (hence, generating 10 months BOG for the RC unit); or using lower estimates of RC relative costs in peacetime. The less favorable cases for the reserves generally involve activating them more frequently coupled with intensifying the rotation of AC units (for example, one year deployed out of every two) in comparison to the RC units.

Potentially Contentious Issues:

- As the author notes, his rotational cost estimates are quite sensitive to assumptions about the proportion of the RC conducting operational missions, BOG/dwell ratios, RC post-mobilization training time, and the relative cost of the RC when not activated.¹⁶² Modest changes in these factors can cause significant changes in the comparative cost of AC and RC units.
- The author also notes that “The discussion here is deliberately exploratory. A more complete discussion would require a much more thorough analysis.”¹⁶³ Below are some areas where more the generality of the analysis might lead to disputes about the validity of the results.
- It is not clear which cost elements are involved in the calculation of AC or RC costs, but it appears to be linked primarily to basic pay (see Appendix 1 of the report, particularly those calculations performed in the footnotes). This may limit the accuracy of the relative costs, as noted in the Reserve Forces Policy Board work discussed earlier, and thereby call into question the output of this report’s relative cost model.
- This work is based on Army BCTs, and includes assumptions about their train up times and rotation rates. These are not necessarily applicable to other types of units. For example, a military police company might need only a month of post-mobilization train up, in contrast to the three months estimated for an Army BCT. In such a case, the ratio of AC to RC units needed to sustain one unit BOG would change significantly, as would the calculation of relative costs.
- Some might argue that the conclusion to cut reserve force structure does not appear to flow from the report’s logic, particularly the suggestion to “decrease demand for the solution whose relative cost has risen sharply.”¹⁶⁴ From this perspective, the increase in the relative cost of the reserves under a rotational deployment policy is not the critical consideration; more important is the actual relative cost.¹⁶⁵

¹⁶¹ *Ibid*, 62.

¹⁶² *Ibid*, 61.

¹⁶³ *Ibid*, 53.

¹⁶⁴ *Ibid*, 26.

¹⁶⁵ For example, on page 23, the report states “for wars fought with rotation, much—but not all—of the RC’s cost advantage disappears.” Here the relative cost of the reserves has increased, but the relative cost is still lower than the (continued...)

- Another conclusion—to lower the costs of the RC through reduced compensation—could create imbalances in the force. For example, cutting reserve enlistment bonuses as suggested could impact the number of new accessions, reducing the supply of entry level personnel, but not necessarily the number of more senior personnel, potentially creating a top-heavy reserve.

C. Independent Panel Review of Reserve Component Employment in an Era of Persistent Conflict.¹⁶⁶

Executive Summary:

This report was intended to provide recommendations to the senior leadership of the Army “to guide development of Army and RC policies and programs for the institutionalization of the RC as part of the operational force, and for employment of the force over the next decade.”¹⁶⁷ It looks at AC/RC mix from several perspectives, including balancing capabilities between the AC and RC, between the operating force and the generating force, and between deployments and dwell. It generally supports ARFORGEN as a model for resourcing and sourcing Army requirements, but argues that it needs to be more automated and better synchronized. The authors develop and analyze three AC/RC mix alternatives, and provide summary data on cost drawn from other works.

Findings:

- “Maintaining this careful balance of accomplishing daily missions, ensuring readiness for unplanned contingencies, protecting the All-Volunteer Force, and improving future capabilities will require the Army to institutionalize a cultural change from viewing the RC solely as a reinforcing force to viewing RC units as an operational component of the Total Army that complements AC units by providing capability packages.”¹⁶⁸
- “For the RC to perform its role and achieve even higher levels of readiness with lesser periods of pre-deployment training, it must be structured, trained, and manned accordingly. The structure should, in addition to building necessary complementary capability packages for conflict, build those capabilities that can be sustained at higher readiness levels in an inactive duty status and deployed with a minimum of pre-deployment training. Largely, the panel views the current structure of the RC as healthy and about right. But more can be done.”¹⁶⁹

(...continued)

AC. To put it another way, if the relative cost of a reserve unit doubles from 35% of a comparable AC unit to 70%, it is still comparatively less expensive than the AC unit.

¹⁶⁶ Dennis J. Reimer, Roger C. Shultz, and James R. Helmly, *The Independent Panel Review of Reserve Component Employment in an Era of Persistent Conflict*, November 2, 2010.

¹⁶⁷ *Ibid*, 64.

¹⁶⁸ *Ibid*, 10.

¹⁶⁹ *Ibid*, 11; see also Appendix 5.

- “Some have argued that the Army’s dependence on the RC over the past 20 years somehow violates the RC’s purpose and highlights a weakness in the Army. The Panel rejects this argument.”¹⁷⁰
- “A short 9 years ago the RC was largely viewed as a force of second choice for Army missions. Today, the RC has proven its worth and necessity to current operations and demonstrated a strong capability to contribute further in the future. The experience and adaptability of the RC make it fully capable of operational employment at costs comparable to the AC, yet maintained at much lower expense when not mobilized during periods of reduced operational tempo.”¹⁷¹
- Proposes 3 alternatives to supplying the forces needed under an ARFORGEN scenario necessitating rotational availability of 1 corps, 4 divisions, 15 brigades and 72,000 enablers.¹⁷²
 - Alternative 1: An all AC sourcing solution (i.e., no RC used).¹⁷³
 - Alternative 2: An AC and RC sourcing solution that is roughly based on current practice. “Requirements are filled with AC forces first, and the delta of about 37,000 [personnel] is filled with RC forces resourced at a high level or readiness as they leave the Ready pool and enter pre-deployment training in the Available pool.”¹⁷⁴
 - Alternative 3: A “hybrid” solution which provides about 37,000 RC personnel, but allocates AC and RC forces into two Deployed Expeditionary Force (DEF) “bands” and three Contingency Expeditionary Force (CEF) bands. The bands would have different purposes, resourcing levels, and training readiness goals throughout the ARFORGEN cycle.¹⁷⁵
- Analysis of these 3 alternatives led to the following conclusions:
 - “Alternative 1 (all AC) is not feasible because it causes too much turbulence in realigning operational and support skills and probably is not affordable given the cost of increased end strength necessary to embed those skills in the AC.”¹⁷⁶
 - “Alternative 2 is doable—it is essentially the current model—but is high cost.”¹⁷⁷
 - “Alternative 3 represents a hybrid approach that, we believe, best leverages the considerable investment that has been made in RC readiness, is cost-effective, and provides flexibility.”¹⁷⁸

¹⁷⁰ *Ibid*, 14.

¹⁷¹ *Ibid*, 17.

¹⁷² *Ibid*, 28-35.

¹⁷³ *Ibid*, 30.

¹⁷⁴ *Ibid*, 30.

¹⁷⁵ *Ibid*, 31-32.

¹⁷⁶ *Ibid*, 35.

¹⁷⁷ *Ibid*, 35.

- “The Panel strongly believes that both the business and operational cases provided for continued use of the RC but at a lower and more predictable level. Putting these capabilities ‘on the shelf’ and not using them until the next ‘big war’ will not only ensure that they atrophy, but also will reduce the return on the considerable investment the Nation has made. More importantly, the AC will most likely be unable to meet these demands without a considerable redistribution of operational and sustainment skill sets.”¹⁷⁹
- “...our assessment is that the RC is affordable and sustainable as an integral member of the operational force. Providing this assessment in terms of a detailed cost-benefit analysis is a challenge beyond the scope of this report.”¹⁸⁰
- Provides a table outlining four studies on cost of the RC, comparing RC costs to AC costs broken out by costs when not activated, when deployed, and when used as part of the ARFORGEN cycle. According to the table, the RC costs between 24-33% of the AC when not activated; 95-100% of the AC when deployed; and 77-104% of the AC as part of the ARFORGEN cycle.¹⁸¹

Study Methodology:

This study was directed by the Secretary of the Army, John McHugh, and the Chief of Staff of the Army, General George Casey, in June 2010. The report was completed in November 2010. The purpose was to provide for “a review of the principles, policies, and assumptions governing the employment of U.S. Army Reserve Components (Army National Guard and Army Reserve) in an era of persistent conflict where sustained commitment of U.S. ground forces is the norm.” (p. 64) The review was conducted by a panel composed of three retired general officers: General Dennis Reimer (former Army Chief of Staff), Lieutenant General Roger Schultz (former Director of the Army National Guard), and Lieutenant General James Helmly (former Chief of the Army Reserve). The methodology was essentially interviews and a literature review: “To achieve the aims of this review, the Panel conducted numerous personal interviews with key civilian and military leaders inside and outside the Army...The Panel also reviewed recent and ongoing studies related to operationalizing the RC.”¹⁸²

Potentially Contentious Issues:

- The report essentially accepts current (2010) Army structure, including RC structure, as a given. It does not assess any large scale changes in AC or RC structure and asserts that, at least with respect to transferring RC structure to the AC, such changes would be disruptive.¹⁸³ This might be contentious for those who advocate substantial changes in AC/RC force mix (including both those who advocate increasing the ratio of AC forces and those who advocate increasing the ratio of RC forces).

(...continued)

¹⁷⁸ *Ibid*, 35.

¹⁷⁹ *Ibid*, 36.

¹⁸⁰ *Ibid*, 40.

¹⁸¹ *Ibid*, 41.

¹⁸² *Ibid*, i.

¹⁸³ *Ibid*, 10.

- The recommendation to restructure the RC to build capabilities that can be sustained at higher readiness levels in an inactive duty status implies a focus on lower echelon and support-type units, rather than higher echelon combat forces. This could be controversial for the ARNG, which has a substantial amount of higher echelon, combat structure.
- With regards to AC/RC mix, the report focused primarily on the question of increasing the ratio of AC forces. While this might have been the dominant concern in 2010, there has been greater focus recently on increasing the ratio of RC forces, potentially limiting the value of its AC/RC mix conclusions.
- The report assumed that “Zero real growth will occur in the Army’s top-line total obligating authority.”¹⁸⁴ Changes in Army obligating authority that diverge from this assumption could call into question certain conclusions.
- The cost table in Chapter 5 provides little detail on the methodological underpinnings of the four studies cited. CRS did not have copies of three of these reports (the Army PA&E report is discussed below). Thus, it is difficult to evaluate the utility of this table. For example, for these three reports, it is not clear precisely which costs elements were included or whether pre-deployment training was included in the costing for rotational deployments under ARFORGEN.

D. Comprehensive Review of the Future Role of the Reserve Component, Volume I: Executive Summary and Main Report¹⁸⁵

Executive Summary:

This study examines all services, not just the Army. From the report:

During a decade of sustained engagement in combat operations, the Reserve Components of our Armed Forces have been transformed, both practically and philosophically, from a strategic force of last resort to an operational reserve that provides full-spectrum capability to the Nation. Repeated combat deployments, as well as peacekeeping and humanitarian relief missions, have produced an operationally savvy and resilient force that fully expects to be employed on a periodic basis. This new force represents a ten-year investment in resourcing commitments and the personal sacrifice of service members and their families. That investment can reliably provide the Department of Defense with essential operational capabilities and strategic agility. Good stewardship demands that we continue to capitalize on this investment. This report provides background and recommendations to inform decisions regarding the future role of the Reserve Component that are consistent with the 2010 Quadrennial Defense Review Report. (p. 1).

Findings:

¹⁸⁴ *Ibid*, ii.

¹⁸⁵ Office of the Vice Chairman of the Joint Chiefs of Staff and the Office of Assistant Secretary of Defense for Reserve Affairs, *Comprehensive Review of the Future Role of the Reserve Component, Volume I: Executive Summary and Main Report*, April 5, 2011, <https://www.hsdl.org/?view&did=685426>.

The study contains 20 pages of detailed findings and recommendations. A summary of these findings and recommendations includes:

- **Importance of the Reserve Component (RC):** The RC provides cost-effective operational forces that can be used on a regular basis and to ensure strategic depth for mid to large-scale contingencies or other unanticipated national crises. When rebalancing the force, the National Guard and Reserve should be a “force of first choice” for those tasks for which they are particularly well-suited, owing to their cost-effectiveness and skill sets. Missions that follow a predictable, operational schedule meet this criterion.
- **Establishing a Common DOD Costing Methodology for the Total Force:** Services use cost methodologies that are in line with their respective business models. Services do use some common cost-estimating methodologies (personnel composite rates and the Contingency Operations Support Tool (COST)) but cost estimating tools for different types of missions, operating profiles, and accounting systems vary greatly. In view of these findings, the report recommends that DOD make the following adjustments:
 - Refine existing methodologies to accommodate a long-term view beyond the current Future Years Defense Plan (FYDP) and better compare full-time and part-time personnel, operating, and life-cycle costs, both on an individual and unit basis.
 - Update existing methodologies to reflect emerging operational parameters and as assumptions on how the force will be used change.
 - In conjunction with the Office of Cost Assessment and Program Evaluation (CAPE), develop methods to compare costs of similar capabilities across different services.
 - Develop methods to identify and allocate overhead costs equitably for full and part-time forces and estimate costs for supporting remote and distributed reach back centers, such as the Joint Reserve Intelligence Centers.
- **Using the Guard and Reserve to Best Advantage:** RC is best suited for missions and tasks that are predictable, relatively consistent, and benefit from long-term personnel and geographic relationships. Force generation processes should consider providing predictability to RC units for those missions requiring regional expertise, as well as Homeland Defense or Defense Support to Civil Authorities missions.
- **Roles for Which the Guard and Reserve are Well Suited:** The RC is well suited to provide strategic depth in the following mission areas:
 - Rotational units for Combatant Commander needs and service requirements.
 - As units or teams to support Combatant Commander Theater Security Cooperation and Building Partner Capacity activities world-wide.
 - Individual augmentees.

- Units or teams to support Homeland Defense or Defense Support to Civil Authorities, missions as well as to support Governors in state security missions.
- Units, teams, and individuals assigned to support DOD or service institutional needs.
- **Options for Rebalancing the Total Force:** As the services manage their Active and Reserve Components as part of a Total Force, they might wish to consider:
 - Using RC to build force structure in cases where Reserves are particularly well-suited and cost is a consideration.
 - Assigning some recurring operational missions to the RC when these assignments are more cost-effective than using an AC unit.
 - Establishing habitual relationships between specific Guard and Reserve units with Combatant Commands and other DOD service components to develop long-term planning and training relationships.
 - Establishing national or regional RC units staffed with personnel willing to serve on Active Duty more frequently or for longer duration than typically expected of Reservists.
 - Fulfilling demands imposed by emerging needs such as cyber defense; intelligence, surveillance, and reconnaissance (ISR); countering weapons of mass destruction (WMD), regional engagement, and Homeland Defense or Defense Support to Civil Authorities missions.
 - Increasing integration of AC and RC forces into “blended units” with some units being predominately AC and others being predominantly RC.
 - Assigning some institutional support tasks that are the responsibilities of the secretaries of the military departments to RC units, teams, and individuals.
- **Providing for a Trained, Equipped, Available, and Ready Guard and Reserve.** DOD needs to change the way it recruits, equips, trains, employs, and cares for its RC personnel.
- **Necessary Revisions to Law, Policy, and Doctrine.** If the RC is employed as part of the operational force selected parts of Title 10 of the United States Code, DOD policy and service doctrine will need to be changed.

Study Methodology:

This report was prepared by the Office of the Vice Chairman of the Joint Chiefs of Staff (JCS) and the Office of Assistant Secretary of Defense for Reserve Affairs as directed by the 2010 Quadrennial Defense Review (QDR). Analytical support for the study was provided by the U.S. Army War College, the Johns Hopkins University Applied Physics Laboratory, and the Institute for Defense Analysis (IDA). It was a six-month collaborative effort of the Office of the Secretary of Defense (OSD), the Joint Staff, Combatant Commands, and the military services. The study does not address the absolute cost of each Service’s Reserve Component but it “makes clear the value of those organizations.”

Potentially Contentious Issues:

The report strongly argues for using the reserves as a “force of first choice” in certain circumstances:

When rebalancing the force to meet future national security challenges, the Guard and Reserve should be a “force of first choice” for those tasks for which they are particularly well suited, owing to their overall cost-effectiveness and the skill sets that they can provide. Missions that follow a predictable, operational schedule fall clearly into this category. (p. 5)

While using the RC “for those tasks for which they are particularly well suited” can be viewed as a prudent recommendation, attributing this to their “overall cost-effectiveness” appears problematic as the report does not establish RC cost-effectiveness relative to the AC. This report essentially takes it as a given that the RC is more cost-effective in many unspecified circumstances and uses this assertion as a major argument to support many of its recommendations.

Using RC forces for missions that follow a predictable operational schedule is also a central theme of the report. The implication here is that RC forces are not as useful for immediate or quick action combat roles (for example, the initial attacks on Afghanistan in 2001 or a response to an attack on South Korea). This is distinct from using the RC to conduct combat operations if sufficient time were available to adequately train and resource the units.

E. Reshaping the Army’s Active and Reserve Components, 2011.¹⁸⁶

Executive Summary:

During the Cold War, the RC was viewed as a strategic reserve—“an expansion force and a repository for capabilities that might be needed in support of major combat operations.”¹⁸⁷ As a result of operational demands for wars in Iraq and Afghanistan, the RC was reorganized as an operational reserve, with an expected activation time of one year every six (1 to 5 dwell time). Because of the new demands placed on the RC, the Army made changes to AC and RC forces, adjusting and rebalancing authorizations within and across components. This study’s goal was to assess the Army’s utilization of AC and RC units and to analyze policy options to adjust the balance and mix of forces.

The study looked at three underlying questions: (1) are some soldiers being deployed/mobilized more than others and which occupational categories are most heavily and least heavily deployed/mobilized?; (2) do these rates of utilization exceed the planning objectives set by DOD?; and, (3) how much could high utilization rates be decreased if the Army rebalanced its forces from low utilization forces to high utilization forces?

The study also identifies cost as a factor in assignment of missions and capabilities to the AC and RC. The study suggests if AC and RC units are equally effective in performing a mission, the

¹⁸⁶ Michael L. Hansen, Celeste Ward Gventer, and John D. Winkler, et al., *Reshaping the Army's Active and Reserve Components*, RAND, Santa Monica, CA, 2011, <http://www.rand.org/pubs/monographs/MG961.html>. Hereafter, Hansen *et al.*

¹⁸⁷ *Ibid*, xiii.

mission should be assigned to the most cost-effective component. However, the study recognizes there are differences in capabilities and task efficiency between AC and RC units and this should also be considered along with cost. Noting that there are several different ways for analysts to measure relative cost of the RC, the study suggests these different approaches can lead to different conclusions. Relative cost is also sensitive to assumptions made by the analyst.

Using the “traditional approach”¹⁸⁸ of comparing component end strength to appropriations, the report suggests that the cost advantages of the RC are most prominent for strategic depth achieved by placing capabilities in the RC. These capabilities serve as an “insurance policy” for unanticipated missions and the cost of this insurance is lower if these capabilities are in the RC instead of the AC. The report also suggests that cost-effectiveness for the AC and RC is maximized when capabilities are actually used. In the AC, full-time services are cost-effective when used on a full-time basis, while the fixed-costs of part-time RC personnel are spread out over more days if RC personnel are “busy.”¹⁸⁹ On the other hand, the approach detailed by Klerman “suggest[s] that, for brigade combat teams, there are unlikely to be significant cost savings from placing operational capabilities in the RC instead of the AC. Rather, the baseline estimates suggest that the costs are roughly identical...the implication is that any rebalancing of operational units should be done for reasons other than cost.”¹⁹⁰

Finally, the study points out that the RC provides additional value not captured in traditional cost data. For example, the RC provides the opportunity to serve for those who do not wish to serve full time. In addition, RC members have civilian expertise and perspective not available to AC personnel. Finally, using the RC provides a link between otherwise distant Army operations and the public at large, perhaps bolstering public support for the operation—the supposed intent of the so-called Abrams Doctrine.¹⁹¹

Findings:

This study poses four questions to policy makers considering any reshaping of the Army’s AC and RC:

- *Are high-utilization skills likely to be in high demand in the future?* If high utilization skills are likely to be in high demand in the future, they are candidates for rebalancing. If not, current demand is temporary and analysis suggests that the force as currently configured can sustain above-average utilization.
- *Are there significant risks associated with too little strategic depth in high-utilization skills?* Even if high-utilization skills are not likely to be in high demand in the future, policymakers might determine that the risk of too little strategic depth is significant enough to warrant rebalancing.

¹⁸⁸ This is the same as the “traditional method” in Buck. This work acknowledges the cost approaches it uses “draws heavily from Buck (2008).” Hansen, *et al*, 57. For the Buck report, see “A. The New Guard and Reserves (Chapter 10: Cost of the Reserves).”

¹⁸⁹ This is the “individual members” method in Buck.

¹⁹⁰ Hansen, *et al*, 58-59. For the Klerman report, see ““B. Rethinking the Reserves.””

¹⁹¹ From page 59 of the study: “The Abrams Doctrine is named for Army Chief of Staff General Creighton Abrams, who sought to embed lessons learned from Vietnam in Army doctrine. Henceforth, U.S. military commitments with the potential for large-scale and prolonged deployments were to be “total force” propositions in which the RC would be full partners with the AC. General Abrams believed that the liberal use of reserve forces in future conflicts would cause the American people to more quickly validate long-term and large-scale use of military forces.”

- *Will converting billets from low-utilization skills result in a significant decrease in the ability to meet the demand for those skills?* If converting billets from low-utilization skills results in a significant decrease in the Army's ability to meet demand, policymakers might wish to identify other options.
- *Are there significant risks associated with less strategic depth in low-utilization skills?* Policymakers need to identify if there is risk associated with less strategic depth in low-utilization skills. If not, these skill areas are candidates for rebalancing. More generally, policymakers should determine if risks associated with less strategic depth in low-utilization skills are fewer or greater than risks associated with too little strategic depth in high-utilization skills.

There are additional insights offered in this study. The report finds that despite RAND-developed data on deployment, activation, utilization, and dwell times, DOD does not have a well-developed predictive model for deployment and utilization of individuals. It also concludes that any decisions about reshaping the Army should be based, in part, on future demands; but that any predictions of the future are inherently speculative and entail a degree of risk. Analysis also suggests the Army Reserve is the most unbalanced of the components, based on the extent to which its members in high-utilization career fields are mobilized. Also noted in the study, service members in low-utilization career fields are still performing necessary duties. Converting all of these personnel into a higher-utilization career field may result in a skills shortage if utilization patterns shift.

Study Methodology:

This study, conducted by RAND, was sponsored by the Office of the Secretary of Defense, Cost Analysis and Program Evaluation (CAPE). The study measured the utilization for each career field in the Active Army, Army National Guard, and Army Reserve. In addition, the study identified high-utilization and low-utilization career fields for all three Army components and suggested how these career fields might be rebalanced.

Potentially Contentious Issues:

RAND's findings were based on Army data from September 2001 and the study completion date in 2011. It can be argued the Army's missions during this time period were somewhat atypical and ran the gamut from brief force-on-force combat, to security assistance, to counterinsurgency. The data collected and analyzed by RAND, while useful, is directly relevant only in predicting utilization of forces should these types of operations be conducted on a similar scale and scope in the future. In the case of a protracted major regional conflict, the rebalancing insights offered by RAND could prove irrelevant and, therefore, represent an element of risk. This observation reinforces the RAND-identified need for "a well-developed predictive model for deployment and utilization of individuals" that includes data from a full spectrum of Army operations, not just the recent experiences in Iraq and Afghanistan.

Given the aforementioned caveat about data drawn from deployments and operations in Iraq and Afghanistan, RAND's analysis of high-utilization and low-utilization career fields in the Active Army, Army National Guard, and Army Reserves suggests that chemical operations and medical and health care career fields are low-utilization career fields in each of the three components. While the lack of utilization of nuclear, biological and chemical defense specialists is understandable, given the nature of the two conflicts, the low utilization of medical and health care personnel could warrant additional detailed study.

F. AC/RC ARFORGEN Costing Model, 2012¹⁹²

Executive Summary:

This PowerPoint briefing was provided to CRS by the Army G-8 Programs Analysis and Evaluation (PA&E) branch in response to a CRS request for a briefing on Army AC/RC costing and force structure mix studies. The task of this study is limited in scope—to determine the comparable costs to provide like AC and RC units in an ARFORGEN¹⁹³ cycle. Because this analytic study takes the form of a Power Point briefing, there was no Executive Summary or a “Bottom Line Up Front” (BLUF) slide that typically is part of Army briefings.

Findings:

With regard to personnel and Operations and Support (O&S) costs for AC and RC units going through the ARFORGEN process (“pipeline”):

- In general, RC ARFORGEN pipeline costs are lower for Personnel and O&S.
- Personnel, O&S, and equipment reset costs for an ARFORGEN-equivalent cycle for units that will be deployed compare the AC at \$1.00 to the RC at a range of \$0.71 to \$1.02, depending on unit type.
- Cost differential is greatest in units with lower equipment operating costs.
- The 12-month limit on RC unit mobilization can, when demand is high, cause the RC to provide more units over time at increased cost.
- Cost to operationalize the RC relative to personnel and O&S costs is small—about 2%-3% of the total ARFORGEN cycle cost for any given unit type.
- With regards to equipment value and costs:
 - Equipment recapitalization costs can be a significant factor for equipment-intensive units.
 - For the Army National Guard (ARNG), the benefit of Critical Dual Use (CDU)¹⁹⁴ equipment for Title 32 has an additional advantage as the percentage of CDU in ARNG is 25%-94% as a cost of unit equipment.
 - High cost and complex units such as Armored Brigade Combat Teams (ABCTs), Stryker Brigade Combat Teams (SBCTs) and Combat Aviation Brigades (CABs) have more expensive pipeline costs for the RC, especially if demand is low. However, the RC remains a cost-effective measure to

¹⁹² Army G-8 PA&E, AC/RC ARFORGEN Costing Model, January 5, 2012.

¹⁹³ For more details on the ARFORGEN cycle, see **Appendix D**.

¹⁹⁴ Critical Dual Use equipment is equipment that supports both the operational requirements of active and reserve Army units and enable those units to assist civil authorities (for example, in response to disasters or acts of terrorism). In other words, they are essential to providing defense support of civil authorities. The Army’s list of CDU equipment is developed and updated by the Director of the Army National Guard, approved by the Army’s Deputy Chief of Staff for Operations and Plans (DCS, G-3/5/7), and maintained by the Army’s Deputy Chief of Staff for Programs (DCS, G-8). Headquarters, Department of the Army, *Army Regulation 220-1*, Army Unit Status Reporting, Washington, DC, April 15, 2010, p. 59, http://www.apd.army.mil/pdffiles/r220_1.pdf.

preserve strategic depth as an RC unit can be available in months vice years (e.g., it takes five to seven years to build a new active duty CAB).

Study Methodology:

In addition to Army PA&E, study participants included the Army National Guard and Army Reserve, the Army G-3/5/7 and the G-8 Quadrennial Review (QDR) office. Units examined included:

- Armored BCTs (AC and Army National Guard)
- Infantry BCTs (AC and Army National Guard)
- Stryker BCTs (AC and Army National Guard)
- Combat Aviation Brigades (AC and Army National Guard)
- Engineer Battalions (AC, Army Reserve, and Army National Guard)
- Civil Affairs Battalions (AC and Army Reserve)
- Medium Truck Companies (AC, Army Reserve, and Army National Guard)
- Military Police Companies (AC, Army Reserve, and Army National Guard)
- Cost estimates for these units are provided for a variety of ARFORGEN deployment scenarios. These estimates could serve as useful benchmark costs for future Army cost and AC/RC force mix studies.

Potentially Contentious Issues:

While the cost elements used in this study appear to be fairly broad, the briefing slides do not include a detailed discussion of methodology. As a result, it is not clear how various figures are determined. It also appears that the study assumed two months of post-mobilization training for deploying reserve units. While this might be appropriate for battalion and smaller units, some might question this for brigade combat teams. It is not entirely clear from the slides, but it appears that the cost ratios cited are for one active and one reserve unit over the course of an entire ARFORGEN cycle, rather than the cost to sustain one active and one unit “boots on the ground” in a deployed location. If this is the case, it may understate the cost of reserve units by omitting the cost factors associated with limits on reserve rotation policy (that is, a reserve unit which is activated for a year can typically spend 9 or 10 months “boots on the ground,” thus necessitating more than one reserve unit to equal the output of an active unit which serves 12 months “boots on the ground”).

G. Sustainable Pre-eminence: Reforming the U.S. Military at a Time of Strategic Change.¹⁹⁵

Executive Summary:

¹⁹⁵ David Barno, Nora Bensahel, and Matthew Irvine, et al., *Sustainable Pre-eminence*, Center for a New American Security, Reforming the U.S. Military at a Time of Strategic Change, May 2012, http://www.cnas.org/files/documents/publications/CNAS_SustainablePreeminence_BarnoBensahelIrvineSharp_0.pdf.

From the report:

Maintaining the U.S. military's global preeminence is vital to protect American interests and promote American values. Yet, in order to sustain U.S. military pre-eminence in an emerging strategic environment characterized by new threats and constrained resources, the Department of Defense (DOD) will need to organize and operate America's armed forces in new ways.

In early 2012, DOD released new strategic guidance and a corresponding budget reflecting \$487 billion in cuts over 10 years as imposed by the 2011 Budget Control Act. The guidance directs the U.S. military to prioritize the Asia-Pacific and greater Middle East.

However, the Pentagon still has not enacted the types of reforms that we believe are necessary to sustain U.S. military pre-eminence into the future. Too many DOD structures, processes, programs and operational concepts are legacies of the past, which create unnecessary redundancies, waste valuable resources and encourage unproductive competition among the services rather than cooperation. These practices are no longer acceptable in the current fiscal environment.

Regarding the AC/RC mix:

To accommodate budget cuts and the end of two major ground wars, the Army should shrink to about 480,000 active-duty troops and continue its plans to reset the force after wartime operations. It should transfer up to one-quarter of its active component armored brigades to the reserve component, and mandate more lateral personnel assignments between the active and reserve components.

Findings:

The primary Army force structure-related recommendation of this report is to “shrink to 480,000 active-duty troops, transfer up to one quarter of its AC armored brigades [ABCTs] to the RC, and mandate more lateral personnel assignments between the AC and RC.” To support this recommendation, the study notes:

DOD has announced that the planned end strength of the Army will decrease from 520,000 to 490,000 active-duty soldiers by 2017. DOD should further reduce Army end strength, to about 480,000, by downsizing redundant headquarters and overhead support and shifting some capabilities to the Guard and Reserve. These changes will incur minimal risk to the force and the capabilities of the nation. A force of about 480,000 would replicate the size of the Army before the attacks of September 11, 2001, but would possess much greater capabilities. The Army-wide reorganization of combat forces into highly capable brigade combat teams (BCTs), now robustly outfitted with combat-proven weaponry and equipment, makes today's Army substantially more capable than its predecessors. Furthermore, since DOD will have to accept risk in certain areas to reduce its budget, it should accept the risks that result from trimming ground forces because they can be reconstituted more rapidly than either air or naval forces in the event of a crisis.

The Army should adjust the balance between its active and reserve components, relying more on the reserves for key roles and missions. Reserve formations are highly capable and are significantly less expensive to maintain than active forces. Their costs only rise to the level of active forces when activated for full-time duties. The Army should migrate as many as one-quarter of armored brigades found in the active component today to the National Guard. After all, the invasion of Iraq—which still had a sizable army in 2003—only required three U.S. Army armored or mechanized brigades alongside their U.S. Marine and British

counterparts. Today, the U.S. Army has 17 of those brigades in the active force alone. Moving four of those brigades to the Army National Guard would save considerable resources, assuming they are employed sustainably, while still enabling the Army to react quickly and effectively to any threats that require those capabilities.

The Army should develop a robust program of lateral personnel assignments between the active and reserve components to ensure continued readiness. Regularly exchanging officers and NCOs between active and reserve would strengthen the readiness of reserve formations to move rapidly into active operations if required. Army National Guard officers should be able to move onto active duty to command companies or serve on staff, and active officers should be permitted to shift to reserve status and serve as staff officers or commanders in reserve units—perhaps as part of a broader professional development program. Doing so would support the concept of reversibility and help ensure that the Army maintains one readiness standard, while continuing to break down the cultural barriers between the active and reserve components.

Study Methodology:

This report was published by the Center for a New American Security (CNAS) as a part of its ongoing project titled “Responsible Defense at the Center for a New American Security.” This project examines how the U.S. should maximize its national security in an era of defense spending reductions. The first report in this project, “Hard Choices: Responsible Defense in an Age of Austerity,” was published in October 2011.

Potentially Contentious Issues:

There are several assertions in this report that might be considered contentious. The CNAS study cites both the military and cost-effectiveness of RC forces—“Reserve formations are highly capable and are significantly less expensive to maintain than active forces”—noting that the cost of the RC rises only when they are activated. The citation supporting this assertion notes:

The comparative cost of active versus reserve component units is a subject of continual debate. The 2010 Quadrennial Defense Review concluded that effective use of the National Guard and Reserves “will lower overall personnel and operating costs, better ensure the right mix and availability of equipment, provide more efficient and effective use of defense assets, and contribute to the sustainability of both the Active and Reserve components.”¹⁹⁶

Upon examination, the citation from the Quadrennial Defense Review (QDR) does not appear to fully support the assertion; the quotation notes only that comparative costs between the AC and RC are the subject of debate and that the effective use of the RC will lower personnel and operating costs. There is no quantification of these savings, nor are personnel and operating costs the only costs that could be considered. Similarly, data that demonstrate the capabilities of reserve formations are not provided, particularly in comparison to active forces. This is significant, because the report recommends moving four ABCTs from the AC to the RC, and some would argue that National Guard ABCTs are significantly less effective than AC ABCTs due to the highly sophisticated weapon systems in an ABCT and the limited training time National Guard units have to master the employment of these systems for combat.

¹⁹⁶ CNAS, page 58, footnote 131, citing Department of Defense, Quadrennial Defense Review Report (February 2010), p. 53.

H. Eliminating Gaps in DOD Data on the Fully-Burdened and Life-Cycle Cost of Military Personnel: Cost Elements Should be Mandated by Policy.¹⁹⁷

Executive Summary:

The Reserve Forces Policy Board (RFPB) “found that the Department does not know, use, or track the fully-burdened and life-cycle costs of its most expensive resource—its military personnel. Thus, major military manpower decisions are uninformed by the real present and future costs.”¹⁹⁸ According to the report, this data is important for decisions regarding the optimal mix of Active and Reserve forces, but previous Active-Reserve costing studies varied widely in the cost elements used to make comparisons. The RFPB report presents a methodology which, it argues captures the “fully-burdened” costs of AC and RC forces on a “per-capita” basis so that senior leaders can “make more fully-informed decisions about the long-term sustainability of the All-Volunteer Force and the future mix of Active and Reserve Component Forces.”¹⁹⁹ Although “life-cycle” costs are mentioned, no specific life-cycle cost methodology is proposed; rather, the report proposes that DOD develop such a model in light of previous work done by the Air Force Reserve and Jennifer Buck, a former Deputy Assistant Secretary of Defense for Reserve Affairs.

Findings:

- “The Department of Defense has no policy in place to define or require complete analytical data for the comparison of Active and Reserve Component cost to determine Total Force mix options. As a result, senior leaders within DOD do not have complete or uniform data on the total costs associated with such forces. Therefore, decisions about the optimal mix of future Active and Reserve Component forces are not fully informed, and an ‘apples to apples’ comparison is not possible.”²⁰⁰
- “...the services were neither complete nor consistent in the use and consideration of the various cost factors in determining Reserve Component costs. All components (predictably) used personnel costs such as Basic Pay and Housing Allowances in their costs analysis, but there was wide variance in the use of many other costs factors. No component consistently took into consideration the military-related costs borne by other federal agencies such as the Departments of Education, Treasury, Labor or Veterans Affairs.” (p. 12)
- The DOD Deputy Comptroller’s “Composite Rates” for full-time manpower includes a limited number of cost elements, but “The annual cost memo includes a statement that says, ‘the composite standard pay rates will be used when determining the costs of military personnel for budget/management studies.’ This guidance is in clear conflict with [Directive Type Memorandum] 09-007 (draft DOD Instruction 7041.dd) which states ‘the DOD composite rates, as published by the [DOD Comptroller], used to calculate manpower costs for program and

¹⁹⁷ Reserve Forces Policy Board, *Eliminating Gaps in DOD Data on the Fully-Burdened and Life-Cycle Cost of Military Personnel: Cost Elements Should be Mandated by Policy*, Washington, DC, January 7, 2013, http://rfpb.defense.gov/Portals/67/Documents/RFPB_Cost_Methodology_Final_Report_7Jan13.pdf, hereafter RFPB.

¹⁹⁸ *Ibid*, p. 4.

¹⁹⁹ *Ibid*, p. 7.

²⁰⁰ *Ibid*, p. 11.

budget submissions do not account for the full costs of military or DOD civilian personnel...For this reason, composite rates should not be the only source of data used when answering questions about the cost of the defense workforce, making workforce-mix decisions, or determining the cost impact of manpower conversions.”²⁰¹

- “The current DOD Directive (DTM 09-007), and the DODI to replace it (DODI 7041.dd) does NOT include all relevant cost factors.”²⁰²
- “The retirement and health care costs for RC forces as compared to their AC counterparts are far lower. The RFBP believes that DOD needs to have improved visibility on these costs over the long term. To assist the Department with the development of a life-cycle model, the Board provides two specific examples that already exist where life-cycle costs are examined and modeled.”²⁰³
- The costs which should always be included in “any study conducted or contracted by the Services or other DOD component for the purposes or comparing the costs of active and reserve component personnel or forces” are: basic pay, retired pay accrual, allowances, special and incentive pay, PCS costs, and Medicare-Eligible Retiree Health Fund contribution, DOD healthcare costs, DOD and Department of Education dependent education costs, DOD and Service family housing costs, DOD commissary costs, Treasury contributions for concurrent receipt, and base operations support costs.²⁰⁴
- The costs that should be considered for inclusion in such studies are: Treasury contribution to MERHCF [the Medicare-Eligible Retiree Health Fund] and military retirement fund, the budget for the Department of Veterans Affairs, the Department of Labor’s Veterans Education and Training Service, and “service-level non-compensation costs such as Other Operations and Maintenance, Procurement, Military Construction, Research and Development, and training costs....”²⁰⁵
- The fully-burdened, per-capita, cost to the U.S. government in FY2013 was \$384,622 for Active Component personnel and \$123,351 for Reserve Component personnel. These figures include not only costs associated with compensation—funded by DOD and other federal agencies—but also DOD procurement, operations and maintenance, military construction, and RDT&E. If only DOD compensation costs are included, the cost is \$108,307 for AC personnel and \$34,272 for RC personnel.²⁰⁶ Adding the compensation related costs from other federal agencies (e.g., Treasury, Veterans Affairs, Labor, and Education) to the DOD compensation costs increases the figure to \$162,586 for AC personnel and \$57,242 for RC personnel.²⁰⁷

²⁰¹ *Ibid*, 22.

²⁰² *Ibid*, Slide 9.

²⁰³ *Ibid*, 23.

²⁰⁴ *Ibid*, 12.

²⁰⁵ *Ibid*, 19.

²⁰⁶ The figure for RC personnel appears to include the cost of Active Guard and Reserve (AGR) personnel, who provide full-time support to the reserve components.

²⁰⁷ *Ibid*, Slide 17.

Study Methodology:

Costing experts from all the services and components “reviewed previous costing studies, then identified the various fully-burdened and life-cycle individual cost elements and developed options and recommendations for use.”(p. 10) This work was vetted by active duty and reserve leaders from each of the military services, key decision makers in the Office of the Secretary of Defense (OSD), and subject matter experts within and outside the Department of Defense (p. 10, slide 15). The result of this process was a list of costs that should always be included in manpower cost studies and others that should be considered for inclusion.

Potentially Contentious Issues:

The report mainly focuses on average annual costs associated with “traditional” reserve duty (i.e., drilling reservists and AGRs) to the costs of active component forces. It does not address differential costs by community (e.g., those reserve unit with higher training demands) nor does it regularly factor in reserve costs associated with periodic mobilization. Slide 37 does contain a “Notional AC/RC Fully Burdened / Life Cycle Cost Illustration based on work by Jennifer Buck” which, assuming a notional reservist is mobilized four times over a career, estimates a life-cycle cost of an AC member at \$10.3 million and an RC member at \$4.8 million. However, the relationship between these costs and an output such as “days deployed” is unclear.

The report also suggests inclusion of some costs that have not historically been linked to personnel costs—procurement, RDT&E, military construction, and large parts of O&M—and allocates those costs between the AC and the RC in ways to which some may object. For example, it allocates procurement costs almost exclusively to the AC and does not appear to factor in each Service’s provision of equipment to their respective reserve components. Allocation of certain O&M and military construction costs could also be criticized as inadequately reflecting the comparative consumption of these resources by AC and RC forces.

Some might object to the way in which the costs of veterans’ benefits are determined. The average cost of veterans’ benefits is determined by taking the total VA budget and the veterans education and training budget of the Department of Labor (about \$140.5 billion) and dividing by the total number of veterans (22.2 million), to generate a cost per veteran of \$6,200 per year. It adds this figure equally to its cost estimate for active and reserve personnel. This methodology may incorrectly estimate the cost of veterans’ benefits for currently serving personnel, who may be entitled to different benefits than previous generations of veterans (for example, in the area of educational benefits). Additionally, as the report notes, there may be differences in the consumption of veterans’ benefits by active and reserve personnel which, if true, would argue against allocating these costs equally to active and reserve personnel.²⁰⁸

Some elements of “fully burdened and life cycle costs” may be less sensitive to changes in force mix than others. For example, changes in AC manning levels may result in changes to health program costs that are proportionately lower than changes in cash compensation costs, due to the overhead and infrastructure associated with the former. This can generate a differential between cost projections based on the cost estimate used and actual costs when modifying the force mix.

²⁰⁸ *Ibid*,

I. National Defense in a Time of Change, February 2013.²⁰⁹

Executive Summary:

From the paper:

The current international order provides an opportunity for U.S. policymakers to put the defense budget in order, and the long-term federal budget outlook makes seizing this opportunity essential. Defense spending has come under scrutiny during budget negotiations; most recently, the Budget Control Act of 2011 (BCA) calls for reductions of \$500 billion in defense spending over the next ten years. Although defense can and should contribute to spending reductions, the BCA's across-the-board cuts would significantly impair the U.S. military's ability to execute its duties. Instead, responsible reductions in defense spending should be spread more practically across a ten-year period and be designed to strategically focus on the threats we are likely to face and to address internal pressures in the defense budget. Certain internal cost pressures in the defense budget make reductions in spending especially difficult, but unless these areas of cost growth are addressed, they will crowd out spending in other areas and begin to remove military capacity and capability.

This paper lays out a strategy to address these challenges in three parts:

- (1) Design a force better aligned to face future challenges,
 - (2) Improve the efficiency and efficacy of the acquisition system, and
 - (3) Control rising personnel costs.
- (4) Together, these reforms set the stage for a sustainable defense budget—one that preserves our capability both to face challenges in the near future and to rebuild as new challenges arise.

Findings:

Army force structure-related recommendations from the paper:

The active duty Army would be reduced by 200,000 soldiers from the 490,000 planned in the FY2013 budget, with an increase of 100,000 reservists and National Guardsmen closely entwined in the regular rotation whose principal mission would be arriving in a mature theater for sustained combat. Putting more of the responsibilities for ground combat into the combat-proven reserve component is both consistent with the new demands of the evolving international order and justified by the superb performance of National Guard and reserve units in our recent wars.

Study Methodology:

From the paper:

²⁰⁹ Gary Roughead and Kori Schake, *National Defense in a Time of Change*, Brookings (The Hamilton Project), February 2013, http://www.brookings.edu/~media/research/files/papers/2013/02/us%20national%20defense%20changes/thp_rougheaddiscpaper.pdf.

This discussion paper is a proposal from the authors. As emphasized in The Hamilton Project’s original strategy paper, the Project was designed in part to provide a forum for leading thinkers across the nation to put forward innovative and potentially important economic policy ideas that share the Project’s broad goals of promoting economic growth, broad-based participation in growth, and economic security. The authors are invited to express their own ideas in discussion papers, whether or not the Project’s staff or advisory council agrees with the specific proposals. This discussion paper is offered in that spirit.

Potentially Contentious Issues:

This paper is billed as a “discussion paper” and, in that regard, can be viewed as simply a collection of creative ideas as opposed to an analytical undertaking. In this regard, the recommendations in this paper can be viewed as contentious due to the lack of strong analytical underpinnings. With regard to Army force structure recommendations, this paper recommends a wide scale change—decreasing the Active Army by 200,000 soldiers and increasing the RC by 100,000 soldiers. Issues such as comparative costs, availability for surge deployments, as well as capabilities are not examined. Because of the magnitude of these proposed changes, it can be inferred that such changes would carry a relatively high degree of risk, but this paper does not discuss associated risks in any degree of detail.

Author Contact Information

Andrew Feickert
Specialist in Military Ground Forces
afeickert@crs.loc.gov, 7-7673

Lawrence Kapp
Specialist in Military Manpower Policy
lkapp@crs.loc.gov, 7-7609