

NATIONAL COMMISSION ON THE FUTURE OF THE ARMY



REPORT TO THE PRESIDENT AND THE CONGRESS OF THE UNITED STATES, JANUARY 28, 2016

FOREWORD

In April 2015, the eight Commissioners appointed to the National Commission on the Future of the Army convened for the first time in Arlington, Virginia. Bringing together a wide array of experiences and backgrounds, we eight had one common goal: to conduct our work in an unbiased, transparent, and inclusive manner so that we could, to the best of our abilities, fulfill the mission assigned to us by the Congress. This report summarizes how we gathered the information we required and includes, in our best judgments, findings and recommendations regarding the future of the Army.

As we travelled across the Army and the nation, we were privileged to meet many soldiers, their families, dedicated veterans, civic leaders, and citizens committed to maintaining a strong Army. We found truth in the sentiment that soldiers are the strength of the Army. Our nation must never forget that among the many blessings bestowed upon our country, one of the greatest is the cohort of American women and men who step forward to willingly don the Army uniform in order to defend our freedom. In the hard choices that lie ahead, maintaining unfailing faith and trust with those soldiers and their families must remain a critically high priority; for, without these soldiers, America does not have an Army. As it has been since the very beginning of our nation, it is in these soldiers

that we place our full trust and confidence.

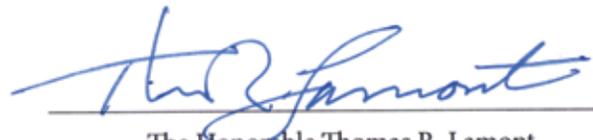
In our travels, it was disheartening to sometimes hear elements of discord from within the Army's ranks—and some from without—pitting the Army National Guard against the Regular Army. This is unacceptable behavior, especially from some senior uniformed and civilian officials. Such parochialism undermines the Army's values, does disservice to soldiers and veterans, and adversely impacts the Army's mission. We encourage the Army's most senior leaders, as well as the Congress who established this Commission, to, by their words and by their example, eliminate this unhelpful bickering among the components of America's Army.

The report which follows is our work. While aided and supported every step along the way by an incredibly talented and dedicated staff led by Major General Ray Carpenter, U.S. Army Retired, and Mr. Rickey Smith, we eight assume full responsibility for the content of our report.

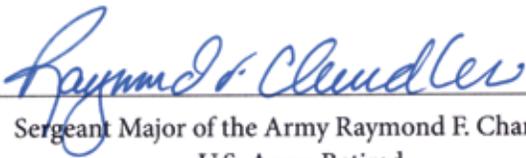
It has been our great privilege to serve on this Commission. We came to this Commission believing in the Army. We conclude our service with an ever deeper appreciation of the unmatched commitment the soldiers of America's Army make to fulfilling their oaths of service on behalf of our nation.



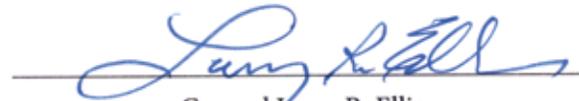
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The Honorable Thomas R. Lamont
Vice Chairman



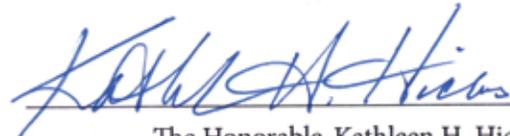
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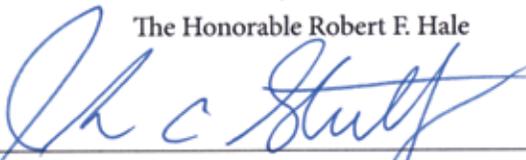
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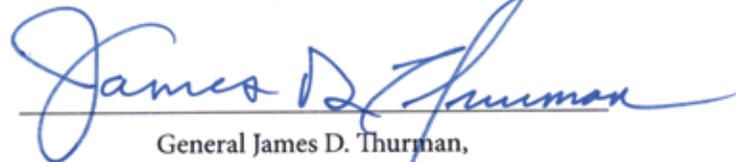
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EXECUTIVE SUMMARY

'DISTINCT, INTERDEPENDENT, ESSENTIAL'

The American people expect their Army to be trained and ready whenever called upon to achieve national objectives. In an increasingly complex world with an increasing array of diverse threats at home and abroad, America's Army must possess a wide range of capabilities to fulfill its myriad of missions. However, even as the demand for Army forces expands and diversifies, the fiscal resources necessary to meet that demand have declined and will remain challenging for several years. This tension between growing requirements and fewer resources not only creates national-level risk, it also has resulted in some unhealthy competitive tension between the Army's components, especially between the Regular Army and the Army National Guard. In large part, these factors, plus the Army's proposal endorsed by the Department of Defense to consolidate all Apache aircraft in the Regular Army, prompted the Congress to establish the National Commission on the Future of the U.S. Army (NCFA).

The Nation has one Army. For sound reasons—historical, cultural, legal, operational, and strategic—the Army has three distinct, interdependent, and essential components: the Regular Army, the Army National Guard, and the Army Reserve. The Regular Army consists of full-time soldiers and is often imperfectly referred to as the active component. The Army National Guard and Army Reserve—also known collectively as the reserve components—are comprised primarily of soldiers serving part-time but who can be ordered to full-time duty. Until mobilized by the President for federal service, the soldiers and units in the Army National Guard are commanded by the fifty-four governors of the states and territories and are available for the ever-widening range of domestic missions: disaster response, counter-narcotics, border security, and response during civil disturbances among them. Regular Army soldiers and units of the Army Reserve operate under federal direction, and while they may support “immediate response”

requirements in rapidly emerging domestic situations, they must seek federal approval to continue beyond immediate conditions. Despite the differences among the components, the nation's one Army is intended to operate under the Total Force Policy. This report will highlight some areas where that policy is not being fulfilled in the manner envisioned.

THE COMMISSION

Congress established the NCFA in the Carl Levin and Howard P. “Buck” McKeon National Defense Authorization Act for Fiscal Year 2015 (NDAA FY15). The language enacted is similar to the National Commission on the Structure of the Air Force, which was established in the NDAA FY13. Eight NCFA commissioners were appointed, four by the President and four by the Chairs and Ranking Members of the Senate and House Armed Services Committees. The commissioners were appointed as Special Government Employees for the duration of the Commission's work.

The commissioners selected a full-time executive director and a staff director who, in turn, selected a staff of about 40 individuals with experiences and backgrounds specifically relevant to the Commission's assigned tasks. The staff included broad representation from the Army Headquarters, the National Guard Bureau, and the Office of the Chief of Army Reserve as well as the Joint Staff, the Office of the Secretary of Defense, and the Congressional Research Service. Some individuals (such as the executive director) were hired specifically for this mission.

Undertaking its mission, the Commission sought, at all times, to not only comply with the governing Federal Advisory Committee Act (FACA), but to conduct its activities in a transparent, unbiased, and comprehensive manner. The Commission conducted public sessions in Arlington, Virginia, each month from May until December 2015. The Commission

also conducted nineteen site visits to directly engage with units, soldiers, senior officials, and, in many cases, the local citizenry (see Appendix F) in an effort to hear as many voices as was practical. Governors, Members of Congress, and local officials made their views known in person and in writing. Every commander of the geographic Combatant Commands presented their thoughts as did numerous other senior defense officials. The associations that represent the interests of so many soldiers also testified before the Commission in public sessions, and most followed up with written comments. Representatives of the intelligence community provided their best assessments concerning the nature of the security environment in which Army forces will operate. Numerous defense analysts, from within the government but also from think tanks and other experts outside of government, provided useful analyses.

WHAT WE FOUND

America's Army is the strongest in the world. It is made so by the extraordinary women and men who answer the call to duty and voluntarily choose to serve the nation when, frankly, they have many other opportunities. Sustaining the quality of the all-volunteer force must remain a national priority; the alternatives—accepting a less well-educated, less fit (morally or physically), or less motivated force or returning to short-term compulsory service—will not yield the Army America needs now nor in the future.

Force Structure, Readiness, and Modernization

The demands from the Combatant Commands for Army capabilities are increasing. Yet, the Army is down-sizing. After all we have heard, read, seen, and analyzed, we find that an Army of 980,000 is the minimally sufficient force to meet current and anticipated missions with an acceptable level of national risk. Within that Army of 980,000, the Commission finds that a Regular Army of 450,000, an Army National Guard of 335,000, and an Army Reserve of 195,000 represent, again, the absolute minimums to meet America's national security objectives. However, the Reserve Components must be resourced to provide both needed operational capability and the strategic depth the nation requires in the event of a full mobilization for unforeseen requirements. These forces should be maintained at currently planned readiness levels, and every effort should be made to increase funding for modernization.

The Commission finds that the nation can maintain a force of 980,000 soldiers, along with reasonable levels of readiness and modernization, only with budgets at levels at least equal to those proposed in the President's request for fiscal year 2016. Sequester-level funding established by the Budget Control Act

of 2011, as amended, will not be enough. Moreover, Congress and the Administration need to return to predictable and responsible budgeting in order to eliminate the fiscal turmoil that leads to inefficiencies and consumes time better spent managing the Army.

Even with budgets permitting a force of 980,000, the Army faces significant shortfalls. Army aviation represents a key example. Today some aviation assets cannot meet expected wartime capacity requirements. Considering all types of Army units, peacetime demand for aviation assets is among the highest, and demand may grow as threats from Russia and other nations escalate. Retaining an eleventh Combat Aviation Brigade (CAB) in the Regular Army would help meet these demands. With an eleventh CAB, the Army would be able to leave an aviation brigade in Korea—a major advantage over rotating forces as currently planned—and shortfalls in capabilities would decline significantly.

Short-range air defense represents another example of an important shortfall. In the post-Cold War era, the Army envisioned little threat from the air forces of potential adversaries. Recent activities in Ukraine and Syria have demonstrated the threat environment has changed. Yet, no short-range air defense battalions reside in the Regular Army. Moreover, a sizeable percentage of the Army National Guard's short-range air defense capability is providing essential protection in the National Capital Region, leaving precious little capability for other global contingencies, including in high-threat areas in northeast Asia, southwest Asia, eastern Europe, or the Baltics. Other capabilities with significant shortfalls include tactical mobility; missile defense; chemical, biological, radiological, and nuclear (CBRN); field artillery; fuel distribution; water purification; watercraft; and military police.

Remediating these shortfalls within a 980,000-soldier Army will require hard choices and difficult trade-offs. While the Commission believes increasing Army end strength to address these shortfalls is the best solution, budgetary pressures make end strength increases unlikely, at least for the next few years. If end strength cannot increase, the Army should consider reducing two Infantry Brigade Combat Teams in the Regular Army in order to provide the manning necessary to strengthen aviation, short-range air defense, and other capabilities. However, even if end strength constraints can be met, the Army will need significant additional funding to mitigate these shortfalls. The Army can help by working with the Administration to propose efficiencies and reduce redundancy in its operations. Congress needs to accept these changes, even though some are politically difficult to implement. But more efficiencies and fewer redundancies will not be enough; added funding will eventually be needed if major shortfalls are to be eliminated.

Developing One Army

While the Army is intended to operate as one force, integrating the efforts of the Regular Army, Army National Guard, and Army Reserve, gaps and seams exist in the implementation of the Total Force Policy. Symptoms include lack of a focus on multicomponent units that bring together capabilities from all components, the absence of an integrated recruiting force, and the inability to manage pay and personnel across the entire Army with a single system. Regrettably, parochialism, some tension among components, and the lack of predictable and responsible budgeting exacerbate the lack of unity.

As a result of the budgetary constraints imposed by the Budget Control Act of 2011, the the Army chose to replace four Army National Guard units scheduled to deploy in June 2013 for overseas operations in order to avoid about \$93 million in added costs required to mobilize and deploy the units. Given that year's tight budget situation, the decision to employ Regular Army units in lieu of reserve component units were understandable. However, these decisions caused longer-term harm by reducing opportunities for leader development and training for reserve component soldiers. The decisions also increased tension and suspicions between the Army components, leaving reserve units feeling that they were not being treated as an important part of the Army.

The Commission believes the Army must fully implement the Total Force Policy. It must capitalize on the reserve components to provide not only needed operational capabilities, but also the strategic depth required for future campaigns.

To strengthen the Total Force, the Commission makes a number of specific recommendations. One involves expanded use of multicomponent units and organizations. Such units can improve readiness and capabilities if co-located so that they can train together. Multicomponent units also offer opportunities for soldiers and leaders to learn how the components can best function together. The Army has a long (and, frankly, variable) history regarding multicomponent units, but we believe the opportunity exists for increased use. As one specific example, the Commission recommends that the Army develop a substantial pilot program to test multicomponent approaches in aviation and identifies some approaches that should be considered in designing the pilot program. Changes in recruiting and advertising can also help develop one Army. The Commission recommends pilot programs that align the recruiting efforts of the Regular Army, Army National Guard, and Army Reserve. The current practice of separate recruiting forces, programs, and incentives results in the Army competing with itself for a diminishing pool of qualified individuals. That is not only unproductive, it is inherently inefficient. Similarly, consolidating the administration and budgeting of recruiting

advertising and branding for all components will yield increased effectiveness and efficiency.

Lastly, a new approach to the issue of Apache transfers can help develop one Army.

Apache Transfers

The Commission was specifically directed to address the proposal to transfer all Apache attack helicopters (AH-64s) from the Army National Guard to the Regular Army as one part of the Army's broader Aviation Restructure Initiative (ARI). The Commission concluded that the ARI is a well-crafted plan that holds down costs while maintaining a reasonable level of wartime capacity in the Apache fleet. ARI costs are consistent with the President's budget request for fiscal year 2016, the baseline used by the Commission, and the proposal has been endorsed in the President's budget. ARI, however, results in a lack of strategic depth, providing for no wartime surge capability in the Army National Guard. It also does not support the Total Force Policy.

In response to the ARI, the National Guard Bureau (NGB) formulated an approach to aviation restructuring that would retain six Apache helicopter battalions in the Army National Guard (two of which would be in multicomponent aviation brigades). The Commission found the NGB Alternative would provide a significant wartime surge capacity for the Apache force, and it would likely reduce the peacetime stress on Regular Army Apache units. But wartime capacity declines under the NGB alternative, and costs increase.

The Commission examined numerous options to determine if any offered more advantages or fewer disadvantages compared to the ARI or the NGB Alternative. After extensive analysis, and numerous discussions with proponents of various plans, the Commission recommends that the Army maintain twenty-four manned Apache battalions—twenty in the Regular Army and four in the Army National Guard. The Commission also recommends retaining a forward stationed CAB in Korea.

Compared with the ARI, the Commission's recommended plan offers advantages in wartime capacity, wartime surge, and peacetime operational tempo. Wartime capacity and peacetime operating tempo improve compared with those under the NGB Alternative. The Commission plan also improves aviation capability in Korea. Added costs under the Commission plan are significant, but the Commission offers an illustrative approach to offset those costs through changes in the force structure and equipping of UH-60 Black Hawk assault helicopters. Perhaps most important, the Commission recommendation can help develop one Army that trains together in peacetime and, when necessary, fights together in war.

Army National Guard Allocation

A final specific consideration for the Commission was to identify and evaluate the distribution of responsibility and authority for the allocation of Army National Guard personnel and force structure in the states and territories. The NCFA found that the processes that shape and support allocating Army National Guard forces have changed over time to accommodate the Guard's dual missions under Title 10 and Title 32. The processes changed most notably when the Chief, National Guard Bureau was established by the Congress as a four-star position and designated a member of the Joint Chiefs of Staff.

The Commission found the processes employed to determine Army National Guard allocation to be sound and uses objective, quantified metrics that were verified by the states and territories. Nonetheless, the regulations governing allocation are complicated and should be clarified by the Department of the Army. The Commission recommends the Secretary of the Army codify in Army regulations the existing Army National Guard Force Program review as the formal

method to manage change on the Army National Guard force structure.

From the founding of our nation, the United States of America placed its armed forces under civilian control. Ours is an Army of the people and for the people. Since its earliest days, the United States established a multicomponent Army, with one component comprising full-time soldiers serving in federal forces, and another component comprising part-time soldiers serving in state militias but able to be called up to federal duty in times of national crisis; the federal part-time reserve force evolved later in our nation's history. These three components are distinct, interdependent, and essential. Combined, they form America's Army, the best in the world, a Total Force providing land forces and strategic depth to the Joint Force for homeland defense and power projection. By maintaining faith with the soldiers of the All-Volunteer Army, continuing to support their families, and through adoption of the recommendations included in this report, the eight commissioners of the National Commission on the Future of the U.S. Army have full confidence that America's Army will retain its global preeminence well into the future.



“It is the intent of Congress to provide an Army that is capable, in conjunction with the other armed forces, of preserving the peace and security, and providing for the defense [and] overcoming any nations responsible for aggressive acts that imperil the peace and security of the United States.”

U.S. Code Title 10, § 3062

WHY THE NATION NEEDS AN ARMY

America had an Army before it became a nation.

In 1775, volunteers from other colonies had gone to help the Massachusetts militia fight the British in Boston, but the assembled American forces lacked unity of command and organization. The Second Continental Congress gathered

in Philadelphia to coordinate a united response to the crisis, and on June 14 voted to establish the Continental Army and appoint George Washington as commander.

In times of war, the Army provides land forces that fight and win as part of the Joint Force. In times of national crises, Army forces provide response and recovery assistance to federal,

WHY THE NATION NEEDS AN ARMY

state, and local governments at home and abroad. In times of peace, Army forces help deter would-be adversaries from threatening our interests while assuring our allies and partners. The Army Corps of Engineers has a historical and enduring mission building and maintaining the Nation's infrastructure, Army expertise is used to set theaters for operations (*see Figure 1*), and the Army serves as the executive agency for forty-two functions supporting the federal government (*see Figure 2*).

Our Nation today is not in a declared state of war—but it is certainly not at peace. After fourteen years of conflict, the demands of U.S. military operations remain high, and the challenges ahead are daunting. At the same time, the federal government has faced a persistent budget crisis for more than half a decade, one that could itself evolve into a security threat.

It is in this climate that the Congress established the National Commission on the Future of the Army. The Commission's foundational purpose was to look into the future to assist the nation's political and military leaders in grappling with difficult issues surrounding the size and structure of the Army to meet the demands of an increasingly complex global security environment.

The Commission did not have a mandate to predict where and when the nation will call upon its Army to respond to an imminent threat or unexpected crisis or to secure a strategic objective. The Commission is certain, however, that such a demand will come. Land power will be required to fight and win wars now and in the future, despite the aspirations of some to fight wars at arm's length. On our current not-quite-war-but-not-quite-peace footing, all signs point to continuing demands for American land power.

The Army's foremost responsibility is to deliver ready, trained, and equipped forces to meet the operational demands put before it. The nation often comprehends these demands belatedly, placing a premium on force agility in the lack of requisite time to prepare. At key periods in our history, understrength, ill-equipped Army forces were deployed at great risk to meet emergent demands, buying time while the Army went through the laborious, time-intensive process of mobilizing reserve units or expanding the force. The Commission concluded that one of its most important services to the nation is to help the President, the Congress, the Department of Defense, and the Army appreciate these

“War is an act of politics, where one side tries to impose its political will on the other. And politics is all about people. And people live on the ground. We may wish it were otherwise, but it is not. Wars are ultimately decided on the ground, where people live, and it is on the ground where the U.S. Army, the U.S. Marine Corps, and the U.S. special operations forces must never, ever fail.”

General Mark A. Milley upon assumption as Army Chief of Staff at the Army Change of Responsibility ceremony, August 14, 2015.

“You don't dictate end states from the air. You can't control territory. You can't influence people. You can't maintain lines of control after you've established them. That will take a ground force.”

General Mark A. Welsh III, USAF, in a press briefing about the ISIS campaign, January 25, 2015.

“Our Army is the center of gravity for the U.S. military—and this center includes the Guard and Reserves. It is the best and most combat-hardened Army that the nation has ever known—indeed, the world has ever known. And we must do all we can to make sure it stays that way.”

Admiral Michael G. Mullen, Chairman of the Joint Chiefs of Staff, Joint Force Quarterly, First Quarter 2009.

Photo on page 5

Sergeant Miguel Thomas of Bravo Company, 4th Infantry Brigade Combat Team, 3rd Infantry Division, patrols near Combat Outpost Sultan Khel in Wardak Province of eastern Afghanistan.

challenges and anticipate what must be done to mitigate these risks going forward.

CIVILIAN CONTROL: THE AMERICAN WAY OF WAR

One of the nation's greatest strengths is not merely the might of its armed forces but the principles behind its structure. Aware of the danger posed by a large standing army under the sole control of the executive branch, the framers of the U.S. Constitution placed the military under the joint authority of the Congress and the President. While the President serves as Commander in Chief of the military, Congress appropriates funds and exercises governance of the military and has the sole responsibility to declare war. Civilian oversight of the military is further established in the chain of command, descending from the President through the Secretary of Defense. The Secretaries of the individual Services direct the non-operational functions of their military departments: recruiting, organizing, training, and equipping forces to be provided to combatant commanders for military operations. The highest ranking military members, the Joint Chiefs of Staff, serve as the most senior advisors, statutorily charged with rendering their best military advice to their Service Secretaries, the Secretary of Defense, and the President.

Civilian control of the military is a defining principle of our nation. It ensures that the U.S. military remains responsive to the will of the people acting through their duly elected representatives, who not only determine when to use military force but also set the parameters for the size and component mix of the Services. The Commission set about its tasks firmly rooted to the fundamental principle that, in addition to a Commander in Chief, the Army has a 535-member board of directors in the U.S. Congress and a National Guard that, until mobilized under Federal authority, also serves the 54 governors of the states and territories.

Article I, Section 8 of the Constitution grants the Congress the power to raise and support armies and to make rules governing and regulating land and naval forces. Additionally, the Constitution gives the Congress authority to call forth the militia for specific purposes—to organize, arm, and discipline the militia when in the service of the United States—and to prescribe how the militias are to be trained by the states. When not in federal service, the militias were intended to fall under the authority of their state governors. Congress exercised its constitutional authorities through legislation that has ultimately been codified in Titles 10 and 32 of the U.S. Code.

Grounded firmly in our Constitution, the decision to use military forces is a civilian one. The Army, in the past year alone, has deployed Regular Army, Army National Guard,

Figure 1

THEATER STRUCTURE ARMY CAPABILITIES

Army forces provide capabilities that help create the conditions necessary for U.S. operations through a broad range of actions found in theater of operations force structure, including logistics, air defense, network infrastructure, and port opening. The Army combines forward-deployed forces and rotational forces to develop, maintain, and operate the theater structure.

THE ARMY PROVIDES THEATER STRUCTURE CAPABILITIES TO OTHER SERVICES INCLUDING, BUT NOT LIMITED TO:

- Missile defense
- Fire support
- Base defense
- Transportation
- Fuel distribution
- Intratheater medical evacuation
- Port opening
- Veterinary services
- Logistics management
- Communications
- Chemical, biological, radiological, and nuclear defense
- Consequence management capability
- Explosive ordnance disposal

and Army Reserve forces to Iraq, Afghanistan, Korea, Eastern Europe, Africa, the Pacific, the Baltics, and Latin America (see Figure 3). In all cases, the Army's deployments reflect requirements set by Combatant Commands and approved by the Secretary of Defense and, at times, the President, in consultation with the Joint Chiefs of Staff and Army leadership.

ONE ARMY: COMPONENT ROOTS

The history of the Army and its relationship with the militia parallels the history of the nation. As the country grew throughout the 19th century, its need for a military able to defend its growing borders and secure its vital interests also grew while the militia suffered misuse and neglect. Congress began to reform an inadequately organized and equipped militia in 1903. Through a series of legislative actions between 1903 and 1933, Congress transformed state militias into the Army National Guard, standardized unit organizations, provided funding for equipment and training, and authorized situations in which the National Guard could be called into federal service by the President.

WHY THE NATION NEEDS AN ARMY

Figure 2

DOD EXECUTIVE AGENT RESPONSIBILITIES

DoD Executive Agent designations are specific responsibilities, functions, and authorities assigned by the Secretary or Deputy Secretary of Defense to the Head of a DoD Component. DoD Executive Agents are tasked to provide defined levels of support for either operational or administrative missions that involve two or more DoD Components.

ARMY: 42 RESPONSIBILITIES

Army Executive Agent Responsibilities

DoD Detainee Operations Policy
Armed Services Blood Program Office (ASBPO)
Chemical and Biological Defense Program (CBDP)
Chemical Demilitarization
DoD Combat Feeding Research and Engineering Program
CREW Technology
Defense Language Institute Foreign Language Center (DLIFLC)
DoD Level III Corrections
Explosives Safety Management
Persian Gulf War Exposure Registry
Homeowners Assistance Program (HAP)
DoD Biometrics
DoD Law of War Program (Investigation and Reporting of Reportable Incidents Against U.S. Personnel)
Management of Land-Based Water Resources in Support of Contingency Operations
Military Postal Service (MPS)
DoD Passport and Passport Agent Services
Recruiting Facilities Program
DoD Support to United Nations Missions
DoD Civilian Police Officers & Security Guards (CP/SG) Physical Fitness Standards Program
Administrative and Resource Support for the U.S. Military Entrance Processing Command (MEPCOM)
USCENTCOM R&R Leave Program
Western Hemisphere Institute for Security Cooperation (WHINSEC)
Unexploded Ordnance Center of Excellence (UXOCOE)
Joint Improvised Explosive Device Defeat Organization (JIEDDO)
Multinational Force & Observers (MFO) Sinai
Joint Center for International Security Force Assistance (JCISFA)
Medical Research for Prevention, Mitigation, and Treatment of Blast Injuries
Military Assistance to Safety and Traffic (MAST)
Contract Foreign Language Support to the DoD Components
Financial Disclosure Management (FDM) - Ethics Reporting System
Support for Non-Federal Entities Authorized to Operate on DoD Installations
Armed Forces Health Surveillance Center (AFHSC)
Commander's Emergency Response Program (CERP)
Georgia-U.S. BioSurveillance & Research Center (GUSBRC)
Forensics
Coordination of Contracting Activities in the USCENTCOM Area of Responsibility (AOR)
Operation of After Government Employment Advice Repository (AGEAR)
Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury (DCoE)
Classified DoD EA
Classified DoD EA
DoD Biological Select Agent and Toxin (BSAT) Biosafety Program

OTHER SERVICES: 29 RESPONSIBILITIES

Other Services Executive Agent Responsibilities

Air Force

Active Duty Determinations for Civilians or Contractual Groups
Armed Forces Entertainment (AFE)
Common Data Link (CDL)
Defense Equal Opportunity Management Institute (DEOMI)
Defense Language Institute English Language Center (DLIELC)
Defense Production Act (DPA) Title III Program
Designating and Naming Military Aerospace Vehicles
Federal Legal Information Thru Electronics (FLITE)
Global Command and Control System (GCCS) - (Specific Modules)
Global Positioning System (GPS) Program/NAVSTAR
Intelligence Systems Support Office (ISSO)
DoD Medical Examination Review Board (DoDMERB)
R-2508 Complex Enhancement Program
Space
Space Test Program (STP) Management and Funding
USSOUTHCOM Counterdrug Forward Operating Locations
DoD Military Working Dog (MWD) Program
National Science Foundation (NSF) Division of Polar Programs (PLR) - Support to
DoD Foreign Clearance Program (FCP)
Modeling & Simulation (M&S) Objectives in the Air and Space Natural Environment (ASNE)
Defense Cyber Crime Center (DC3)

Navy

Defense Activity for Non-Traditional Education Support (DANTES)
Defense Resources Management Institute (DRMI)
High School News Service
Maritime Domain Awareness (MDA)
Force Protection of Military Sealift Assets
Defense HIV/AIDS Prevention Program (DHAPP)
Printed Circuit Board Technology

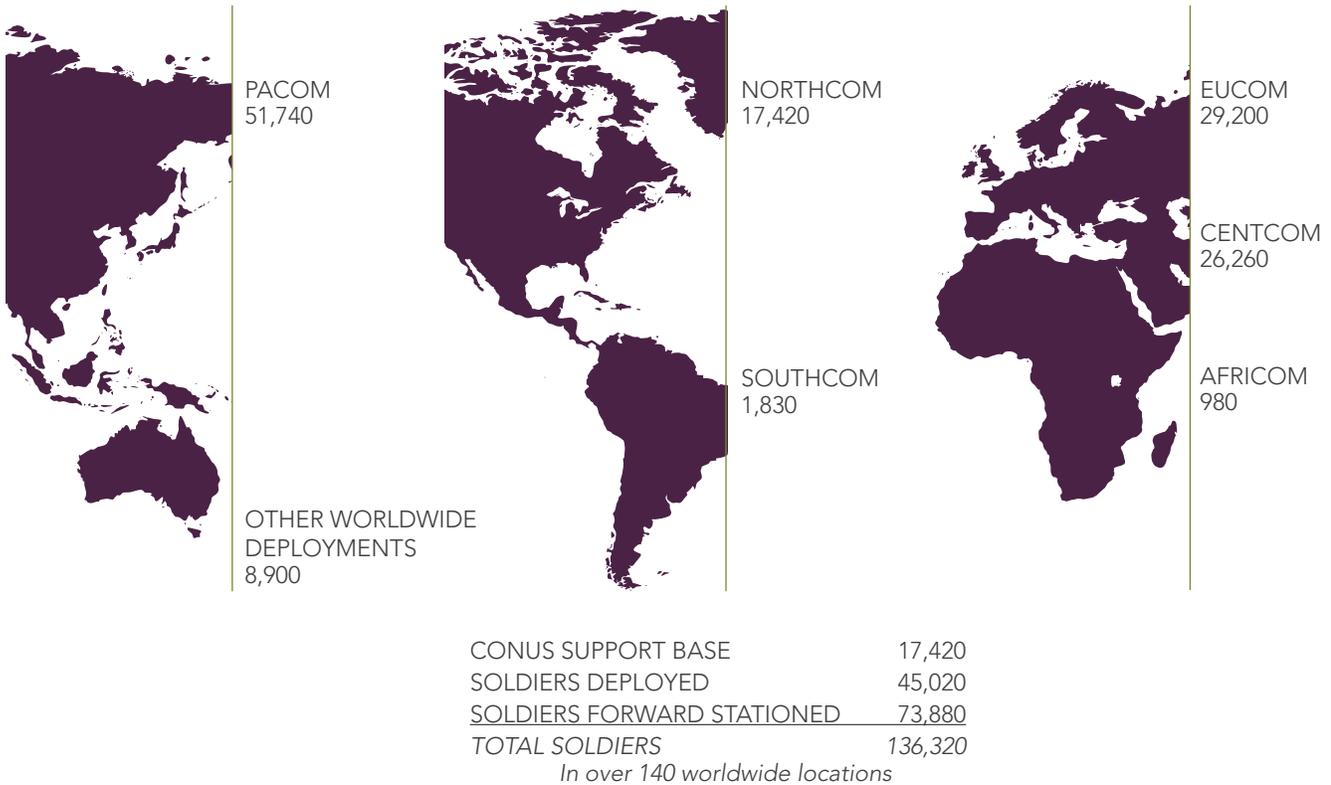
Marine Corps

Policy for Non-Lethal Weapons

Source: <http://dod-executiveagent.osd.mil>

Figure 3

SOLDIERS DEPLOYED AND FORWARD STATIONED



Source: Army Operating Center//As of 15 September 2015

At the same time that it reformed the militia system and created the National Guard, Congress created an Organized Reserve Corps of officers for the U.S. Army. This reserve corps provided more than 170,000 officers and enlisted soldiers during World War I and more than 57,000 officers during World War II. During the Cold War, Congress transformed the Organized Reserve Corps into the U.S. Army Reserve, subdivided into a Ready Reserve, a Standby Reserve, and a Retired Reserve.

Together, these three components of the Army—the Regular Army, the Army National Guard, and the Army Reserve—form one Army, a Total Force dedicated to defending the United States and implementing the nation’s defense strategy. Each component is distinct. Each is essential. All are interdependent. The individual components are connected

through a purposeful reliance on the other components to maximize reinforcing effects while minimizing component vulnerabilities. This requires a broad understanding of the differing strengths and limitations of each component’s capabilities, clear agreement about how those capabilities will be committed in any given operational setting, and absolute mutual trust that, once committed, each component will be employed as agreed.

The Army Civilian Corps also is critical to the success of the Total Army. Operations in Iraq and Afghanistan made clear that, with the current force structure, soldiers must have the support of a highly professional Civilian Corps. Army civilians led Provincial Reconstruction Teams in Afghanistan focused on rebuilding infrastructure. Civilians from Army depots were deployed in order to expedite the repair of vehicles damaged in

WHY THE NATION NEEDS AN ARMY

combat. Some 30,000 Army civilians were deployed to Iraq and Afghanistan to serve with Army Explosive Ordnance Disposal Teams, and many other civilian specialists served in medical logistics, transportation, engineering, construction, and information technology. The Army Civilian Corps, together with the industrial base and contractors, complements the three components that comprise the Profession of Arms by providing expertise in support of critical operations and management.

Together, these Total Force elements of the Army provide boots on the ground to secure our freedom, protect our vital interests, promote stability, deter aggression, and fight and win the nation's wars. The nation's need for an Army is unquestionable and enduring.

THE ALL-VOLUNTEER FORCE

The Army is an All-Volunteer Force. Conscription was used during the Civil War and World War I, and the first peacetime

draft was adopted in 1940, with the specter of World War II causing concerns about the strength of the U.S. Army. The draft continued throughout the war and ended in March 1947. However, less than a year and a half later, in July 1948, with the Army failing to meet recruitment goals and the beginning of the Cold War raising fears of communist aggression, the Congress established the Selective Service System to provide the Army with manpower. The draft remained the primary source of personnel for the Army through most of the Vietnam War. The Gates Commission was established in 1969 to develop a plan to end the draft and return to an All-Volunteer Force and came to the unanimous conclusion that "the nation's interest will be better served by an all-volunteer force, supported by an effective standby draft, than by a mixed force of volunteers and conscripts." In 1972, at the request of President Richard Nixon, Congress passed Public Law 92-129, which extended the draft for just two more years and committed the country to transition to an All-Volunteer Force, which was fully

THE LAWS THAT SHAPED THE ARMY

Act of Second Continental Congress, June 14, 1775 — approved the creation of the Continental Army.

Uniform Militia Act of 1792 — required states to establish militia units and required all men 18–45 to enroll as part of the militia, but provided no federal funding or guidance on organization.

Dick Act of 1903 — reformed the state militia system, providing federal funding and equipping while requiring states to organize and train militias according to specific standards. Subsequent amendments created the Army National Guard and strengthened the ties between the Regular Army and National Guard Units.

National Defense Act of 1920 — created the Organized Reserve, consisting of the Officer Reserve Corps, Enlisted Reserve Corps, and the Reserve Officers' Training Corps. The Organized Reserve later became the U.S. Army Reserve.

National Security Act of 1947 — established the National Military Establishment (later renamed the Department of Defense), the Department of the Air Force, and the Joint Chiefs of Staff, and renamed the Department of War as the Department of the Army.

Women's Armed Services Integration Act (1948) — enabled women to serve as permanent, regular members of the armed forces.

Military Selective Service Act of 1967 and amendments — the last of a series of four peacetime selective service acts, dating back to 1940, that authorized conscription for military service. The final draft lottery authorized under the act was held in 1972. Secretary of Defense Melvin Laird announced the creation of the All-Volunteer Armed Forces in January 1973, negating the need for the military draft.

Defense Officer Personnel Management Act (DOPMA) and Reserve Officer Personnel Management Act (ROPMA) (1980 and 1994) — DOPMA standardized officer personnel management across the U.S. armed forces, and ROPMA provided similar standardized officer personnel management for the reserve components.

Goldwater-Nichols Act (1986) — dramatically reformed the Department of Defense by strengthening the authority of the Secretary of Defense, Service Secretaries, Chairman of the Joint Chiefs of Staff, and Combatant Commanders and streamlining the chain of command.

Army National Guard Combat Readiness Reform Act (1993) — increased Regular Army authority and responsibility for advising and training of National Guard combat units.

“The American Army has become the all-around handy man of the government. But I do not suppose that even you, who are in and of the Army, have had brought home to you the extent to which this is so, and I feel sure that the country does not realize it at all. You may be called upon at any time to do any kind of service in any part of the world—and if you would not fall below the standard your fellows have set, you must be ready and you must do it, and you must do it well.”

Lindley Miller Garrison, Secretary of War, in commencement address at the U.S. Military Academy in West Point, reported in The New York Times, August 9, 1914.

implemented in 1973.

The All-Volunteer Force has had a dramatic impact on the Army. The quality of the force, as measured by test scores and high school graduation rates, has improved. The number of career personnel increased, leading to similar increases in proficiency and professionalism. Prior to the All-Volunteer Force, only 18 percent of the Army had more than four years of service; by 2006, that number stood at more than 51 percent. The increase in education and length of service has allowed the Army to develop into a true profession of arms.

However, the clear benefits of the All-Volunteer Force come with a price. Recruiting, developing, and retaining

qualified and talented personnel increases the costs of raising an army. The Army also must provide support for the families of the All-Volunteer Force who, more than any other group, share the burden of service with their soldiers and are vital in ensuring that soldiers continue to serve. The Army must maintain an All-Volunteer Force despite the pressures of economic cycles and social conditions. More than two-thirds of the current target population, ages 18–25, cannot meet current Army accession standards. They are ineligible because of physical issues, insufficient education, or violations of the law that are too serious or too frequent.

The Army is a profession dedicated to the security and defense of the nation and the U.S. Constitution. Soldiers and Army civilians, bound by the Army’s professional ethic, develop and use their expertise in the service of their country. This ethic guides professional conduct and permits self-regulation, which forms the basis of the trust the American people place in the Army. The Profession of Arms consists of uniformed soldiers, regardless of component. It is made up of volunteers who have trained to become experts in the ethical application of land combat power, serving under civilian authority and entrusted with the defense of the Constitution and the rights and interests of the American people. However, in an environment of budget constraints, competing career choices, and a diminishing percentage of the American population qualified to serve in the Army, the Commission is concerned that the All-Volunteer Force is nearing a fragile state.

So fundamental is an All-Volunteer Force to the governing principles of our nation, and so essential is an All-Volunteer Force in achieving the highest possible level of capabilities and readiness, the Commission considers sustaining the All-Volunteer Force vital to the future of the nation. All budget and force management decisions must be made with this goal in mind.

Recommendation 1: The nation must maintain and sustain an All-Volunteer Army.



“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...”

2015 NDAA, Section 1703(a)(1)

THE COMMISSION’S MISSION AND METHOD

Congress established the National Commission on the Future of the Army (NCFA) in the Carl Levin and Howard P. “Buck” McKeon National Defense Authorization Act for Fiscal Year 2015 (NDAA FY15) (Public Law 113-291). The Congress was prompted to form the NCFA, in large part, by concerns over two major concerns. The

first was how the Army should best organize and employ the reserve components in a time of declining resources. The second was whether the Army should proceed with the transfer of AH-64 Apache aircraft from the reserve components to the Regular Army, as directed by the Army’s Aviation Restructure Initiative.

THE COMMISSION'S MISSION AND METHOD

The issue of how best to organize and employ the reserve components is not new; the Army, indeed the nation, has wrestled with this question for decades. In 1993, the Regular Army, Army National Guard, Army Reserve, and the associations representing those elements met to consider how best to restructure the reserve components. The decision to include the National Guard and Army Reserve leadership in the discussion, along with providing seats at the table for the relevant associations, was important in preventing any second guessing of the agreed-upon changes. It also gave the resulting “Offsite Agreement” (Memorandum for Record, Subject: AC-RC Leaders’ Offsite Agreement as of 29 October 1993, DACS-ZB dated 10 November 1993) a desired aura of credibility and legitimacy, especially with Congress. Today’s challenges to simultaneously resource readiness, force structure, and modernization in the face of fiscal constraints are, in many ways, echoes from the past.

Understanding the history involved and appreciating both the historical and the current relationships between the components, the Commission approached its mandate with a clear understanding that in order to address the apparent rift between some elements of the Regular Army, the Army National Guard, and the Army Reserve, the Commission’s final report would have to provide policymakers with credible recommendations that could stand up to intense scrutiny. In that regard, the Commission has made every effort to be unbiased, comprehensive, inclusive, balanced, and transparent. Commissioners and staff thoughtfully and seriously considered every proposal submitted from within and outside the Army. This holistic approach maintained an eye toward what is best for the nation. No component, group, association, or individual was given short shrift or shown favoritism. The result is a final product that is thoroughly researched, based on realistic assumptions, and backed by solid data.

THE COMMISSION’S TASKS

The Congress directed the Commission to undertake a “comprehensive study of the structure of the Army” in order to assess the size and force mix of the Regular Army,

Photo on page 13

The National Commission on the Future of the Army: from left, Sergeant Major of the Army (Ret.) Raymond F. Chandler, General (Ret.) James D. Thurman, The Honorable Robert F. Hale, Mr. Don Tison (Designated Federal Officer), General (Ret.) Carter F. Ham, The Honorable Thomas R. Lamont, General (Ret.) Larry R. Ellis, The Honorable Kathleen H. Hicks, Lieutenant General (Ret.) Jack C. Stultz.

Army National Guard, and Army Reserve and make recommendations in those areas where the Commission thought appropriate. In considering recommendations, the Commission was instructed to take into account “anticipated mission requirements for the Army at acceptable levels of national risk and in a manner consistent with available resources and anticipated future resources.” Furthermore, the Commission was assigned the specific task of studying the transfer of all the Army National Guard’s AH-64 Apache helicopters to the Regular Army using the same considerations cited above regarding the Army size and force mix. The final report was due to Congress and the President by February 1, 2016.

To help commissioners organize the study efforts and allocate resources, the Commission at the outset enlisted three separate elements to conduct parallel assessments of assigned tasks. The Commission greatly appreciates the assistance provided by experts from the Center for Strategic and International Studies, the Army War College, and U.S. Army Training and Doctrine Command for their contributions in mission analysis. This mission analysis, conducted at the commissioners’ initial organizational meeting in April 2015, helped chart the Commission’s work.

Given the scope and complexity of the tasks and the limited time to accomplish them, the Commission decided to focus on several overarching principles to guide its work. Primary among those was adopting a Total Army approach in which each component would be considered distinct, essential, and interdependent. The Commission focused on the differing strengths and limitations of each component’s capabilities, particularly regarding cost efficiencies, while taking into account how the components rely on each other to achieve mission requirements.

The commissioners also agreed that all recommendations must take into account acceptable levels of risk, potential impacts on the All-Volunteer Force, and fiscal implications. Furthermore, the commissioners sought to ensure that the needs of combatant commanders and the governors were paramount. To that end, the capacity of the Regular Army, Army National Guard, and Army Reserve to support current and anticipated homeland defense and disaster assistance missions in the United States was an essential requirement.

RISK ASSESSMENT APPROACH

NDAA FY15 characterized risk in the Commission’s tasks and considerations as national, military, operational, and strategic. However, these four categories of risk were too abstract to hold a meaningful, clear discussion about the future Army. The Commission instead developed a taxonomy that is more



U.S. Coast Guard photo by Petty Officer 2nd Class Patrick Kelley.

suiting to frank conversation. The Commission chose to simplify the risk framework into the Army's ability to fulfill two basic responsibilities: (1) to provide options to the President, Secretary of Defense, and Combatant Commanders when called upon (risk to mission), and (2) to ensure the health of the force (risk to force).

"Risk to mission" addresses the Army's ability to provide well trained, appropriately equipped forces when employed. Missions are at risk when Army forces do not have appropriate or sufficient capability and capacity, or cannot bring capability and capacity to bear when needed to defeat an adversary or achieve other assigned missions. Risk to mission can be measured in the near term as comprising the manning, training, and equipping for possible "fight tonight" contingencies. Risk to mission should also be measured in the long term as an expression of the preparedness of the force to meet over-the-horizon challenges.

"Risk to force" addresses the Army's ability to maintain the health of its All-Volunteer Force. The force is at risk when units suffer undue casualties, when units deploy without being fully prepared for their assigned missions, when soldiers experience prolonged periods of repeated, extended deployments, or when

the Army cannot recruit and retain enough qualified men and women with the needed skill sets. As with risk to mission, risk to force should be measured in both the near and long term.

Other elements of the Joint Force rely on Army support, just as Army forces rely on capabilities from other Services. Because of this interdependency, Army risk to mission has a domino effect on the capability of the entire joint force.

Assessing the magnitude of a potential military challenge, its probability, and whether the force has attained an acceptable level of readiness to meet that challenge are all highly subjective. Magnitude might be best understood in terms of the cost to U.S. interests, which can range from relatively concrete measures, such as lives, property, and resources, to intangible metrics, such as deterrence and U.S. credibility. The probability of challenges that might require the use of U.S. Army capabilities is always difficult to measure, but our nation repeatedly finds itself in need of the kind of land forces only the Army can deliver. The nature of the conflict and sometimes the location are not always predictable several years out. However, by tracking geopolitical, technological, and other important trends, such as those laid out in the next chapter, and bearing in mind

THE COMMISSION'S MISSION AND METHOD

historical patterns, the Commission drew some conclusions about the general range and pace of likely threats and their potential costs to U.S. interests.

Lastly, a major concern was determining a reasonable estimate of “anticipated future resources,” illustrated by the fact that during the short lifespan of the Commission, the defense budget took a wildly unpredictable course until passage of the Bipartisan Budget Agreement of 2015, which apparently settled the matter for fiscal years 2016 and 2017. In the end, the Commission looked to the Future Year Defense Program and the Budget Control Act of 2011 (BCA), as amended, for guidance on future resources.

“To be prepared for war is one of the most effective means of preserving peace.”

—George Washington

FEDERAL ADVISORY COMMITTEE ACT

The Congress created the NCFA as a federal advisory committee subject to the Federal Advisory Committee Act (FACA) of 1972 (Public Law 92-463). FACA, while outdated in many ways by advances in technology (e.g. maintaining records for “public inspection and copying at a single location in the offices of the advisory committee”) guided the Commission in striking a balance between being inclusive and transparent with the public, yet protective of information in the interests of national security.

FACA committees must be sponsored by a federal agency that would be responsible for ensuring compliance with the law, from the creation of the committee through its expiration. The Department of Defense (DoD) sponsored the NCFA, and by working in close coordination with the Department of the Army, did much to ensure the Commission’s success. With the benefit of having learned from the experience of the National Commission on the Structure of the Air Force (NCSAF), former Secretary of the Army John McHugh nominated Mr. Don Tison, Assistant Deputy Chief of Staff, G-8, to serve as NCFA’s Designated Federal Officer (DFO). This was important because the DFO is the sponsoring agency’s representative and is responsible for ensuring compliance with FACA and all other legal requirements; as such, a senior individual with deep understanding of the Army and its culture was vital to assessing the most practical means of applying the requirements of FACA and facilitating the work of the NCFA. Moreover, the DoD appointed the NCFA’s DFO prior to the Commission

beginning its work, which provided valuable lead time to organize for success.

The DFO, with the support of former Secretary McHugh and current Army leaders, selected a core, versatile staff, as well as a few alternate DFOs to assist him in executing his responsibilities. The DFO staff worked hand-in-hand with the NCFA staff and DoD in facilitating the commissioners’ efforts. The assembled DFO team had the flexibility to expand and contract as needed to support the Commission in executing its mission. Figure 4 depicts the relationships among the sponsor, the Office of the Secretary of Defense(OSD), the Army, Commissioners, its staff, DFOs, and the legal, ethics, policy, and logistical elements of support.

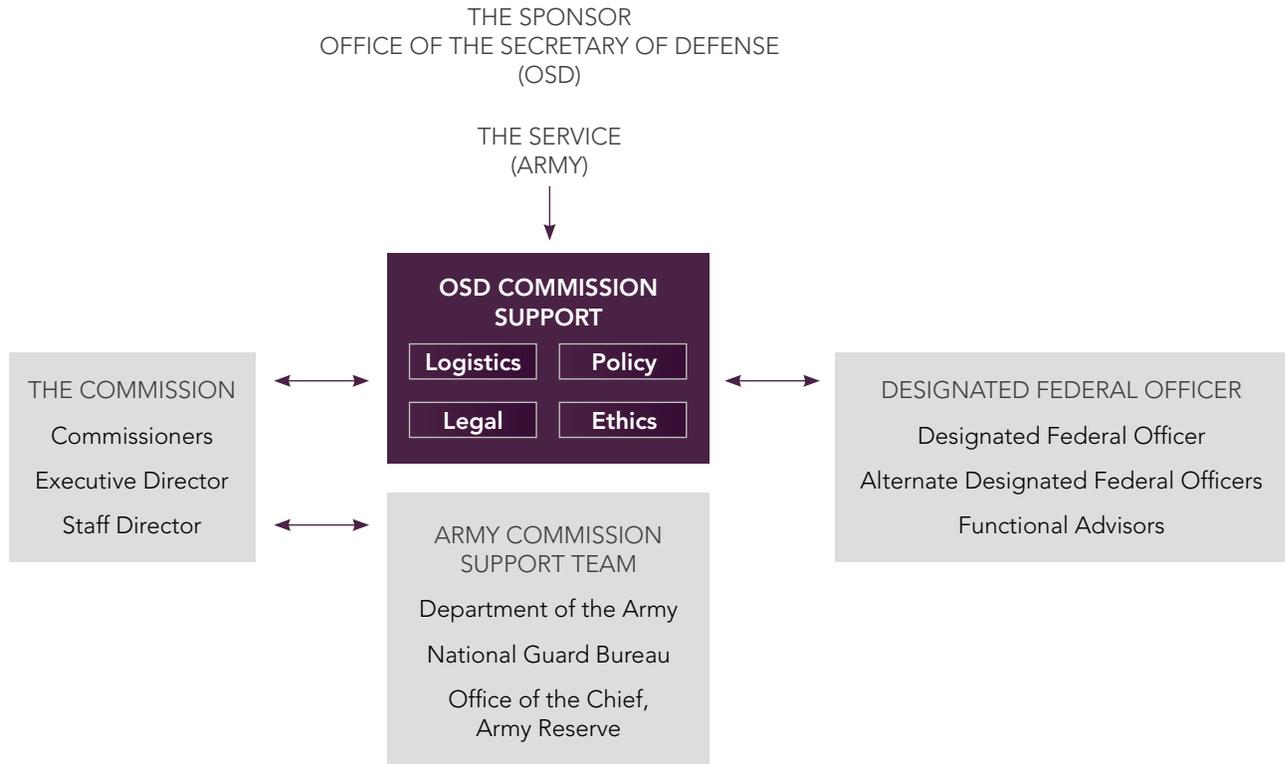
Aside from compliance with FACA, a primary objective of the DFO was to support the Commissioners’ desire for achieving as much transparency with the public as possible. To that end, the proactive efforts to prepare for the NCFA ensured that the Commission and its staff would immediately demonstrate inclusiveness and transparency with the public. Nevertheless, compliance with FACA comes at a cost in terms of personnel and resources. The Commission realized that several of the goals of FACA could be accomplished in a much more efficient manner without compromising the desired goals of the law. For example, the NCFA maintained a thorough and comprehensive website (www.ncfa.ncr.gov) that made available every aspect of NCFA activities, including minutes from proceedings, were made available. This allowed the public to track the Commission’s progress and interact with the Commission through public comment and news announcements. Yet, the NCFA, via its supporting DFO team, also had to enter information into the General Services Administration website, which is an antiquated site at best. This type of redundancy is unnecessary, given the relative ease with which websites can now be established and maintained. Moreover, FACA still requires a physical reading room when a virtual reading room is not only easier to maintain, but also easier for the public to access. It should be noted that no one registered a visit to the NCFA reading room. In short, from how meetings are conducted to how records are kept, FACA needs to be updated to reflect the advances in technology since the law’s inception in 1972.

Ultimately, a sound understanding and application of the relevant law, specifically the government in the Sunshine Act of 1976 (Public Law 94-409), and its interplay with FACA and the law establishing the Commission, as amended, provided the protections necessary to allow the commissioners to freely and thoroughly discuss and analyze the voluminous amount of classified and sensitive information provided them in DoD-approved closed meetings and in a classified setting.

The Commission did not have to draft its report in compliance with all FACA requirements. A provision (section

Figure 4

THE NATIONAL COMMISSION ON THE FUTURE OF THE ARMY



1061) of the NDAA FY16 (Public Law 114-92) permitted the NCFCA to conduct expedited meetings. This meant FACA did not apply to a meeting of four or fewer Commissioners, a change that greatly aided the drafting process.

Recommendation 2: Congress should apply the Federal Advisory Committee Act provisions of the Fiscal Year 2016 National Defense Authorization Act's Section 1061 to all similar commissions.

Recommendation 3: Congress should update the Federal Advisory Committee Act's requirements in a way that reflects changes in information technology, allowing commissions to use their own websites for posting minutes, testimonies, and public comments, and for providing a public reading room.

THE COMMISSION'S ORGANIZATION

The commissioners decided early on to have a multidisciplinary operating staff with all components well represented; indeed, both Army Reserve and Army National Guard staff outnumbered Regular Army staff. OSD, the Joint Staff, and Congressional Research Service contributed staff as well. Overall, the staff included a mix of direct hires, employees detailed to NCFCA from other government entities, and contract employees. They came to NCFCA with a wide range of operational and institutional experience and were encouraged to speak with candor and rely on evidence in their reasoning.

The experience of the NCSAF informed many of the NCFCA's organizational decisions, allowing this Commission to get up and running in short order. The Commission is appreciative of the advice and information provided by NCSFA alumni.

THE COMMISSION'S MISSION AND METHOD

Figure 5
SUBCOMMITTEE ASSIGNMENTS / TASKS

		SUBCOMMITTEES				
		OPERATIONAL	INSTITUTIONAL	FORCE GENERATION	AVIATION	DRAFTING
		COMMISSIONERS				
		HON Kathleen H. Hicks* GEN Carter F. Ham SMA Raymond F. Chandler LTG Jack C. Stultz	LTG Jack C. Stultz* GEN Carter F. Ham SMA Raymond F. Chandler	GEN Larry R. Ellis* HON Thomas R. Lamont HON Robert F. Hale GEN James D. Thurman	HON Robert F. Hale* HON Thomas R. Lamont GEN Larry R. Ellis GEN James D. Thurman	GEN Carter F. Ham* HON Thomas R. Lamont HON Kathleen H. Hicks LTG Jack C. Stultz
		STAFF LEAD				
		Mr. Kerry Schindler	Mr. Johnny Thomas	Ms. Cherie Emerson	LTC Steven Pierce LTC Gregory Hartvigen	Mr. Eric Minton
		DFO (Commission DFO oversight: Mr. Donald Tison)				
NDA TASK	SECTION	MAJ Vince Morris	LTC Michael Lockwood	Mrs. Deborah Gantt	Mr. Mark Pizzuto	Mr. Mark Von Heeringen
FUTURE DEMAND	1703(a)(1)(A) 1703(a)(1)(B) 1703(a)(2)(A)(i)	Primary Responsibility (PR)	Secondary Responsibility (SR)	SR		
FORCE GENERATION	1703(a)(2)(A)(iii-vi) 1703(a)(2)(B)	SR	SR	PR		
COST EFFICIENCY	1703(a)(1)(B) 1703(a)(2)(A)(ii)	SR	PR	SR	SR	
APACHE TRANSFER	1703(b)	SR			PR	
ARNG ALLOCATION	1703 (a)(2)(C) 1703 (a)(2)(D)	SR	PR			
SUBMIT REPORT	1703(c)	SR	SR	SR	SR	PR

Congress mandated a broad set of tasks for the Commission. To better manage that workload, the Commission established five subcommittees: Operational, Institutional, Force Generation, Aviation, and Drafting

(Figure 5). Each subcommittee had a membership of three to four commissioners, its own dedicated staff, and a designated DFO. The OSD, as the Commission's sponsor, approved all subcommittees and their terms of reference, including

a mission statement, objectives, scope, and methodology. A DFO attended all subcommittee meetings, as required by FACA. Commissioners outside a given subcommittee did not participate in that subcommittee's activities. The subcommittees gathered information, conducted research, and analyzed relevant issues and facts for consideration and deliberation by the full Commission.

THE FACT-FINDING PHASE

Comprehensiveness and transparency drove the Commission's work. Commissioners and staff made every effort to consider all alternatives and ensure stakeholders had an opportunity to make their case before the Commission.

The overall Commission strategy during the fact-finding phase was to cover as much of the Army as feasible in the shortest time at the least cost to taxpayers. To that end, on several occasions, the Commission took advantage of commissioner travel with other organizations to schedule visits to parts of the Army that might otherwise have been omitted. For example, Vice Chairman Thomas R. Lamont's travel to the Pacific with another national commission provided the opportunity to arrange a visit to Hawaii on his way back to the continental United States. This allowed the Commission to hear directly from distant stakeholders, including U.S. Army Pacific, the Governor of Hawaii, and the Adjutants General of Guam and Hawaii. The NCF's trip to Germany was also planned around Chairman Carter F. Ham's presence in Europe on other matters. Lastly, the Commission met with leaders of the 2nd Infantry Division, U.S. Forces Korea (USFK), and U.S. Forces Japan (USFJ) when those commanders were visiting the D.C. area on other business.

The Commission conducted site visits to gather firsthand information from soldiers and leaders, looking them in the eye and hear the tones in their voices. The Commission established some basic criteria to help guide site visit selection. First, the Commission asked the Department of the Army, National Guard Bureau, and Office of the Chief of Army Reserve for recommendations. From this start point, the commissioners expanded the list to include as many geographically diffuse locations as possible. Figure 6 illustrates that most locales with heavy Army concentrations were visited.

Second, commissioners wanted to go to locations that featured a mix of Regular Army, Army National Guard, and Army Reserve units. A good example is North Carolina. Fort Bragg and the surrounding area offered a wide variety of unit types from all components. Commissioners first met with U.S. Army Forces Command, which provides trained and ready land power to combatant commanders. At the time of the Commission visit, soldiers from Fort Bragg were deployed to

dozens of countries, including Iraq, Afghanistan, and Liberia. Other major units engaged during the North Carolina site visits were U.S. Army Reserve Command, XVIII Airborne Corps, and U.S. Army Special Operations Command, as well as elements of the North Carolina Army National Guard. In short, North Carolina was an essential stop.

Third, the Commission sought formations with differing functions. Especially important for this planning parameter was the focused effort to meet with a wide variety of aviation units. Over the course of its fact-finding phase, the Commission visited seventeen states and the District of Columbia, conducting more than 320 individual engagements with Army units in the United States and Europe covering the following functions: mission command, institutional, maneuver, signal, sustainment, intelligence, protection, fires, medical, and cyber. Of these, just over 100 were Regular Army while 130 were National Guard. Army Reserve units numbered about thirty, as did multicomponent or joint units.

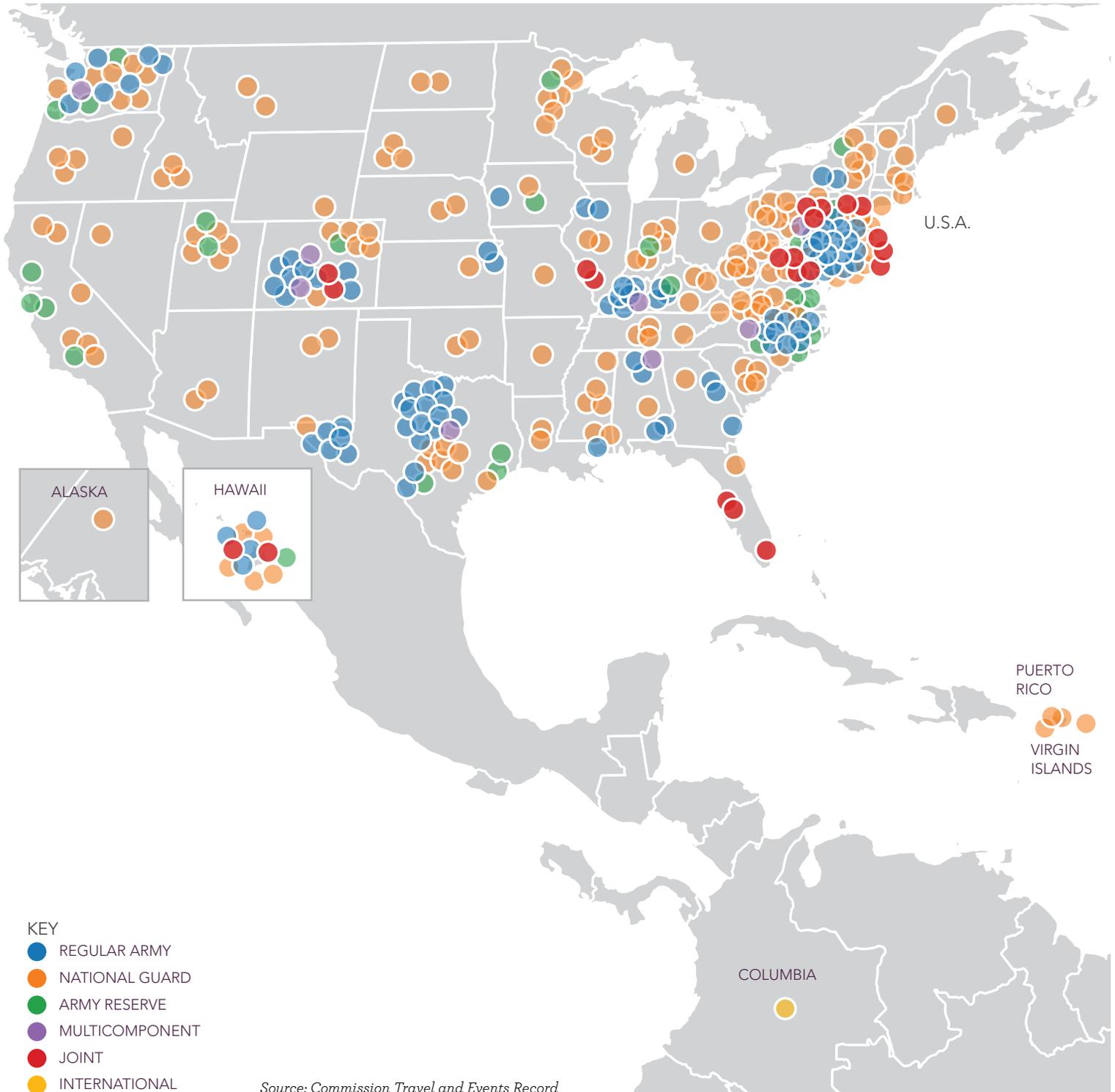
The Commission had interactions with all fifty-four Adjutants General. Commissioners also attended the Adjutants General Association of the United States (AGAUS) conference in Georgia and the National Guard Association of the United States (NGAUS) general conference in Tennessee. The Commission engaged, in person or through written correspondence, with thirty-three governors and also attended the National Governors Association's summer meeting in West Virginia. In addition, during site visits, the Commission met with fifteen General Officer Commands from the Army Reserve. Two of these units were undergoing post-mobilization training and validation during the Commission visit.

In the Washington, D.C., area, commissioners met with senior leaders from the Department of the Army, Army National Guard, Army Reserve, Reserve Forces Policy Board (RFPB), Army Reserve Forces Policy Committee (ARFPC), Association of the United States Army (AUSA), NGAUS, AGAUS, Enlisted Association of the National Guard of the United States, the Reserve Officers Association, and the National Governor's Association. The Commission also held monthly closed and open meetings in Arlington, Virginia. The closed meetings involved classified material while the open meetings allowed commissioners to hear from a wide range of witnesses and members of the public.

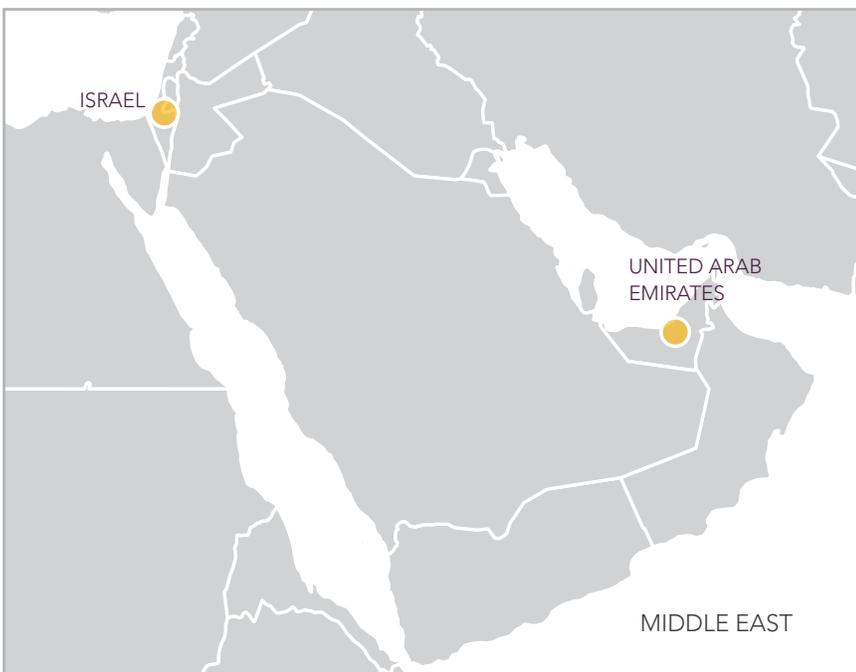
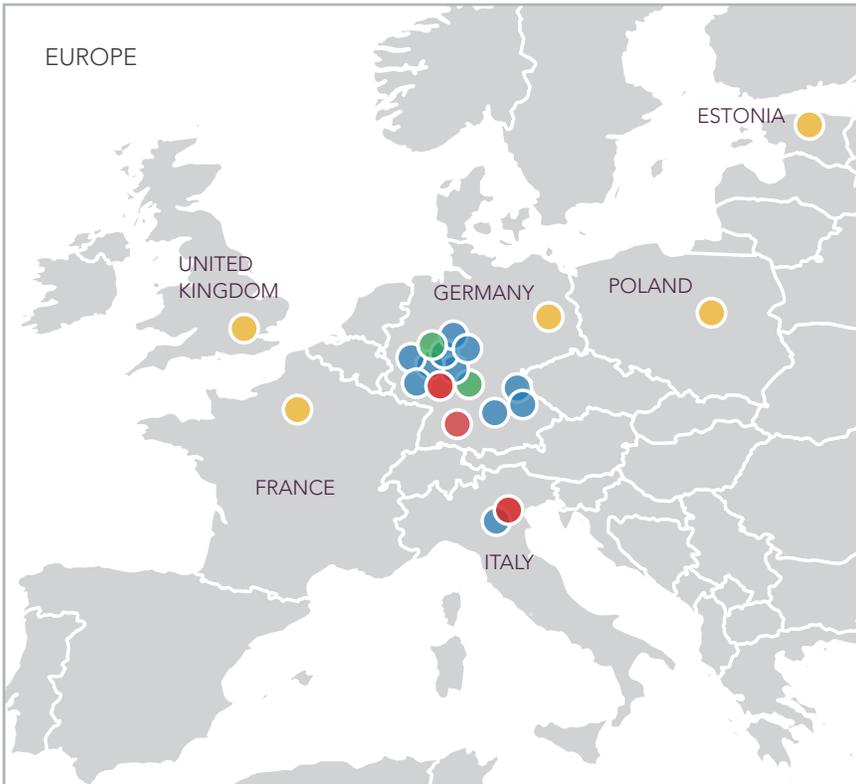
Commissioners met with all six geographic combatant commands (Pacific Command, Northern Command, Southern Command, Central Command, Africa Command, and European Command), two functional commands (Transportation Command and Space Command), and two sub-unified commands (U.S. Forces Korea and Cyber Command). Additionally, Commissioners also met with official representatives of Australia, Colombia, Estonia, France,

THE COMMISSION'S MISSION AND METHOD

Figure 6
COMMISSION ENGAGEMENTS



THE COMMISSION'S MISSION AND METHOD



- KEY
- REGULAR ARMY
 - NATIONAL GUARD
 - ARMY RESERVE
 - MULTICOMPONENT
 - JOINT
 - INTERNATIONAL

THE COMMISSION'S MISSION AND METHOD

Germany, Israel, Japan, Korea, Poland, the United Arab Emirates, and the United Kingdom.

In short, the Commission endeavored to be as comprehensive in its approach as possible.

COMMISSION TRANSPARENCY: ABOVE AND BEYOND FACA FLOORS

The Commission also strived to be available to the general public while traveling around the country. To that end, the Commission held open meetings in Fayetteville, North Carolina; Killeen, Texas; Long Beach, California; and Tacoma, Washington—all areas with a large Total Army footprint. At each of these stops, local officials had the opportunity to share their views on the Army while commissioners heard many heartfelt expressions of support for the Army, its soldiers and families, and its mission.

The Commission also received significant input from Congress, including written comments from more than eighty members. Commission staff met with professional staff of the House Armed Services Committee, the Senate Armed Services Committee, the House Appropriations Committee Subcommittee on Defense, and the Senate Appropriations Committee Subcommittee on Defense, as well as with staff and members of the House National Guard and Reserve Components Caucus.

The Commission actively used a variety of communication strategies to stimulate public interest, including Twitter. NCFA issued media advisories on upcoming events, distributed press releases about each meeting, and responded to queries from reporters. All of this activity is documented on www.ncfa.ncr.gov. The NCFA's communications staff actively worked with media to arrange coverage of open meetings in the D.C. area and around the globe, to attend the follow-on question-and-answer sessions with commissioners, and to conduct one-on-one interviews. During site visits, the NCFA staff was able to obtain on-post internal media assistance in encouraging local media to publicize the Commission's visit and support public participation in the open meetings. NCFA accommodated every media request, ensuring transparency with the public.

COMPREHENSIVE ANALYTICAL REVIEW

The Commission's comprehensive approach extended beyond site visits and face-to-face engagements to an analytical phase of research and modeling. During six months of fact-finding and information gathering, the Commission collected a mountain of data, thousands of pages of written submissions, and many hours of testimony from across the Army and around the globe. The effort to make sense of so much information was

NCFA ANALYTICAL TOOLS

System for Periodically Apportioning Demands

(SPADES): The TRADOC Analysis Center (TRAC) developed SPADES to model force sufficiency problems over time. Force sufficiency modeling done with SPADES accounts for a high amount of variability under different scenarios. This allows TRAC to examine, on a month-by-month basis, how a proposed force structure could be expected to deliver capacity during periods of both peace and war under various policy options.

MARATHON: The U.S. Army Center for Army Analysis (CAA) developed MARATHON for analyzing inventory, demand, and force generation of ready forces over time. The discrete-events simulation engine mimics, on a day-by-day basis, how the Army matches a changing supply to demands that vary over extended time periods under varying force generation policies. The Army uses MARATHON to model the entire operating force structure (over 200 unit types) for the Total Army Analysis process, as well as for ad hoc studies on force structure, demand over time, and alternative force generation policies. This model reflects a wide variety of plausible demand futures, any proposed inventories or end strengths, and virtually any force generation policy.

Joint Integrated Campaign Model (JICM): JICM is a computer simulation used by elements of the Department of Defense to analyze major combat at the strategic and operational (theater) levels. JICM was originally developed by the RAND Corporation under contract to the Office of the Secretary of Defense. While JICM reflects the entire Joint warfight, the model predominantly focuses on ground combat operations at the brigade-and-above level. JICM is used by the Army to, among other things, validate the feasibility of the force lists and concepts of operation in the jointly developed planning scenarios. In the process, JICM also provides important data on the speed of advance, casualties, equipment losses, fuel consumption, and other factors critical for analysis of support force requirements.

Analysis of Mobility Platform (AMP): AMP is a federation of computer models sponsored by the Surface Deployment and Distribution Command used as part of the budgetary decision process looking specifically at strategic and operational transportation requirements and capacity. AMP models the movement of personnel, equipment, and supplies from home station to ports and airports in the United States, transit from U.S. ports and airports to overseas ports and airports, and onward to their final destinations using all available methods of transport. AMP

is used by the Army to, among other things, validate the transportation feasibility of force deployments in the jointly developed planning scenarios. In the process, AMP provides important data on estimated arrival dates of units into a theater of war, strategic lift asset requirements, and the feasibility of maintaining the required levels of supply to meet warfighting requirements.

Force Requirements Generation (FORGE): CAA created the FORGE model to inform decisions about support force requirements at the strategic and operational (theater) levels. FORGE applies Army doctrine, the concept for providing support and sustainment elements from the jointly developed planning scenarios, JICM output, and other analytic processes to determine the doctrinal requirements for a balanced force capable of conducting and sustaining major combat operations. FORGE uses doctrine, combat forces employed, and other high-level data from the warfight plan in order to develop the required enabler capabilities such as trucks, military police, engineers, and all of the other Army capabilities required for the Joint warfight to succeed. FORGE is used by the Army to broaden the scope of the jointly developed planning scenarios beyond the brigade level to encompass all of the capabilities the Army must provide to the specified combat forces so they can conduct the operation as described in the planning scenario. In combination with the brigade-and-above force requirements listed in the jointly developed planning scenario, the FORGE output allows the Army to conduct analysis of the total force requirements for major combat operations.

Isocost Model: CAA adapted the Iso-cost model from the model developed for the National Commission on the Structure of the Air Force. The adapted version combines plausible future demands for forces and availability policies to determine what inventory mixes could meet the demands. Units are further sorted by comparing equal-cost (i.e. isocost) mixes of Regular Army, Army National Guard, and Army Reserve units of same type to determine the lowest average annual cost mix that can meet the demands. Summary data from the analysis of individual unit types was then used to consider potential trades between different types of units and different components.

Integrated Risk Assessment and Management Model (IRAMM): IRAMM is a tool to create informed estimates of the probabilities and risks associated with significant future threat scenarios. IRAMM allows knowledgeable experts to express their views on strategic risk during one-on-one, not-for-attribution interviews. Each respondent uses a common risk definition and scales for estimating consequences, and these responses are tabulated for use in group discussion among respondents following the interviews. This two-step process provides a coherent framework to help evaluators identify areas of consensus as well as differences in judgments regarding the adverse consequences to the Nation that would result under each scenario.

The Stochastic Active-Reserve Assessment (SARA) Model: The SARA model is a tool for assessing force structures and force readiness policies in diverse and uncertain scenarios with a variety of future threats. Modeled force generation policies include the force structure size and mix, rotation rate, readiness posture, and deployment lengths. The SARA model permits analysis allows consideration of a range of possible scenarios, generating 10,000 twenty-year scenarios based on user-specified expectations about the future. Users can either use default historical averages or specify the types of operations they expect to occur and, on average, how often.

Significant Activities (SIGACTs): The SIGACTS database is the most comprehensive, official military record of daily activity for the conflicts in Iraq and Afghanistan, containing some three-quarters of a million entries. Nearly one-third of those entries have been identified as having been generated by U.S. Army units; the bulk of the remainder comes from the other U.S. Services, non-U.S. coalition partners, and host nation forces. SIGACTs reporting was mandatory and a matter of command emphasis in both theaters. Commanders and staffs at all levels used the data to track enemy actions and their impacts, formulate effective countermeasures, and provide general situational awareness. SIGACTs entries typically answered questions related to who, what, where, when, and how for enemy-initiated attacks as well as friendly generated actions. Because of SIGACTs and a variety of supporting operational information, the conflicts in Iraq and Afghanistan arguably provide the most complete, near-real time, empirical documentation of warfighting in U.S. history.

“Only in America would the government sit down with its citizens and say, ‘Hey, how ought we structure our defense forces?’”

Ted Vorhees, Fayetteville City Manager, testifying before the Commission in Fayetteville, North Carolina, June 10, 2015.

daunting, and the Commission recognized early on that it would need a culminating analytical event to present analysis, integrate conflicting information, and weigh the results. The various proposals produced by the subcommittees were another key element the Commission had to discuss in a classified setting. The Commission settled on a two-day Comprehensive Analytical Review (CAR), hosted by the Institute for Defense Analyses (IDA), with several more days of follow-up analysis and discussion.

The analysis leading up to the CAR took months. The Commission used the Department of Defense integrated security scenarios, war plans, and intelligence estimates to assess Army capacity and capabilities. Staff planning products—such as estimates, intelligence on the operational environment, defense studies, reports, and histories—were used to describe and better understand the anticipated future environment. Geopolitical relationships, political actors, tactical functions, cultural tensions, economic efficiencies, and strategic importance were also added to the equation. The NCFA staff produced a detailed list of questions for the commissioners to consider during and after the CAR to ensure no gaps remained between the Commission's specified and implied tasks as well as the mandated considerations.

The Commission and multiple agencies performed redundant analysis in parallel to ensure findings were consistent or, if not, that any inconsistencies were rationalized. Participating agencies included the Center for Army Analysis, Training and Doctrine Command Analysis Center, IDA, and RAND Corporation. The goal was to identify the levers of Army force management, understand the interrelationships, and examine the implications for the size and mix of the force. Some of these activities included cost estimates, modeling of joint force campaigns, reviewing significant activities from combat operations, and interviews or seminars. These analytical

efforts incorporated the assessment of risk and identified potential trade space.

The CAR allowed commissioners to evaluate plausible relationships between supply and demand of forces over time. Applying known and projected data within simple and complex models, commissioners evaluated comparisons of these relationships. Particular conditions that can cause variations in these relationships—such as the world security environment, policy generation, political administration—are critical when identifying and integrating areas of potential risk and areas of potential material misstatement. Discussion included presentations by NCFA staff analysts, including an overview of the Army today, rules of allocation, and modeling outputs using both baseline Program Objectives Memorandum budget forecasts and forces constrained by the BCA. NCFA staff provided findings and indicators regarding force mix, stationing, rotational goals, strategic lift, expansion, generating force, training, mobilization, recruiting, and equipping. NCFA staff led a discussion on generating force size and sufficiency, and RAND provided a review of its study on “Regrets and Other Potential Contingencies.” At the end of the two days, the commissioners had a better collective understanding of the proposals under consideration as well as each proposal's feasibility and second- and third-order effects. Commissioners identified additional modeling and research questions to help transition the proposals to recommendations.

CONDUCTING THE RISK ASSESSMENT

To conduct the risk assessment, the Commission first established its view of the future strategic environment, identifying missions that might require Army forces. By looking at these missions in isolation, the Commission sought to identify capability gaps. The Commission then looked at potential combinations of missions over time to determine the appropriate overall size of the Army and the capability and component mix of forces within the Army.

The Commission's findings and recommendations are grounded in its assessment of the Army's ability to satisfy global requirements, notably those present or emerging in Europe, the Pacific, the Middle East, and at home. The most stressing combination of missions the Commission assessed involved three significant, near-simultaneous events: a large-scale homeland defense response, a large-scale conventional force operation, and a limited-duration deterrence mission elsewhere. This combination reflects the Department of Defense's current strategic guidance for force sizing and shaping. Although the world is unlikely to present exactly this set of challenges in the place, time, and order assessed, the Commission considered

the scale of these combined challenges as reasonable to comprehensively assess risk to mission and risk to force.

PREPARING THE REPORT

Following the CAR, each subcommittee developed proposals for the full Commission to consider. The task of turning the Commission's analysis, findings, and recommendations into a useful report for policymakers was the primary task of the Drafting Subcommittee. The NCFCA apparently is the first commission sponsored by OSD to use a drafting subcommittee, and the Commission suggests that future commissions consider adopting one as well. During the November closed meeting, commissioners reached agreement in principle for most recommendations. These agreements were crucial to allow the Drafting Subcommittee to move from an outline to explanatory text.

The Drafting Subcommittee assigned each chapter to one of its four members who would serve as the lead writer. Two different NCFCA staff members were also assigned to each chapter to assist in the writing by developing outlines and serving as resource channels. The editor managed the individual chapter writing process under the supervision of the Executive Director. This approach facilitated development of graphics, vignettes, and sidebar information as the outline transitioned into report text.

During the July 16, 2015, open meeting, the Commission unanimously approved a draft outline presented by the

Drafting Subcommittee for the final report. The starting outline was generated by reviewing other commission reports for best practices. This outline provided subcommittees a framework for their findings and allowed the staff to begin filling in administrative information in annexes, such as the list of site visits and public comments. While some changes occurred, the original outline served to organize information as the Commission progressed.

Prior to enactment of the NDAA FY16, which significantly freed up the writing process by limiting FACA's application to only meetings with five or more commissioners, the Commission adopted a hub-and-spoke method for getting inputs and edits from all eight commissioners while remaining FACA compliant. The editor, under the supervision of the Executive Director and Staff Director, provided each of the eight commissioners with a draft report and then received and processed comments, questions, and edits from them individually. After consolidating this input, the editor provided the new version of the report back to commissioners for further review and edits.

Once the editing process was complete, the report was approved for security review by the Commission. Following a DoD security review, the Commission gathered to address security review comments and proof read the final report before delivery to the printer for production and an on-time public release of the Commission's report.



"The Commission shall undertake a comprehensive study of the structure of the Army ... related to current and anticipated mission requirements for the Army ..."

2015 NDAA, Section 1703(a)(1)(B)

FUTURE CHALLENGES

The Army and other defense organizations conduct their missions in a continuously changing strategic environment, which both affects and is affected by U.S. policy decisions. The Army requires a flexible force capable of fulfilling land component demands in the future. The probability of challenges that might require the use of U.S. Army assets is always difficult to measure, but our nation repeatedly finds itself in need of the kind of land forces only the Army delivers.

The nature and sometimes the location of the conflict are not always predictable several years out. However, by tracking geopolitical, technological, and other important trends, and bearing in mind historical patterns, the Commission drew some conclusions about the general range and pace of likely threats and the potential costs to U.S. interests. The Commission then evaluated some of the most important and likely implications of these challenges for the U.S. Army operating as part of a U.S. joint force and usually a multinational combined force.

FUTURE CHALLENGES

An M1A2 Abrams Battle Tank from C Company, 2nd Battalion, 7th Infantry Regiment, 1st Armored Brigade Combat Team, 3rd Infantry Division demonstrates its firepower in Adazi, Latvia, during Operation Atlantic Resolve, a joint training mission with NATO allies.



Photo by U.S. Army Staff Sgt. Brooks Fletcher, 16th Mobile Public Affairs Detachment

The Commission's recommendations rest not only on a shared understanding of the likely future strategic environment, but also on the history of the Army. This understanding of the past, present, and future was informed by extensive review and consultation with experts inside the U.S. Government and beyond.

GEOPOLITICAL TRENDS

Although the Commission acknowledges the impossibility of precisely predicting the future, the Commission is relatively certain that U.S. leaders should expect to face a variety of simultaneous, diverse threats to our national interests from

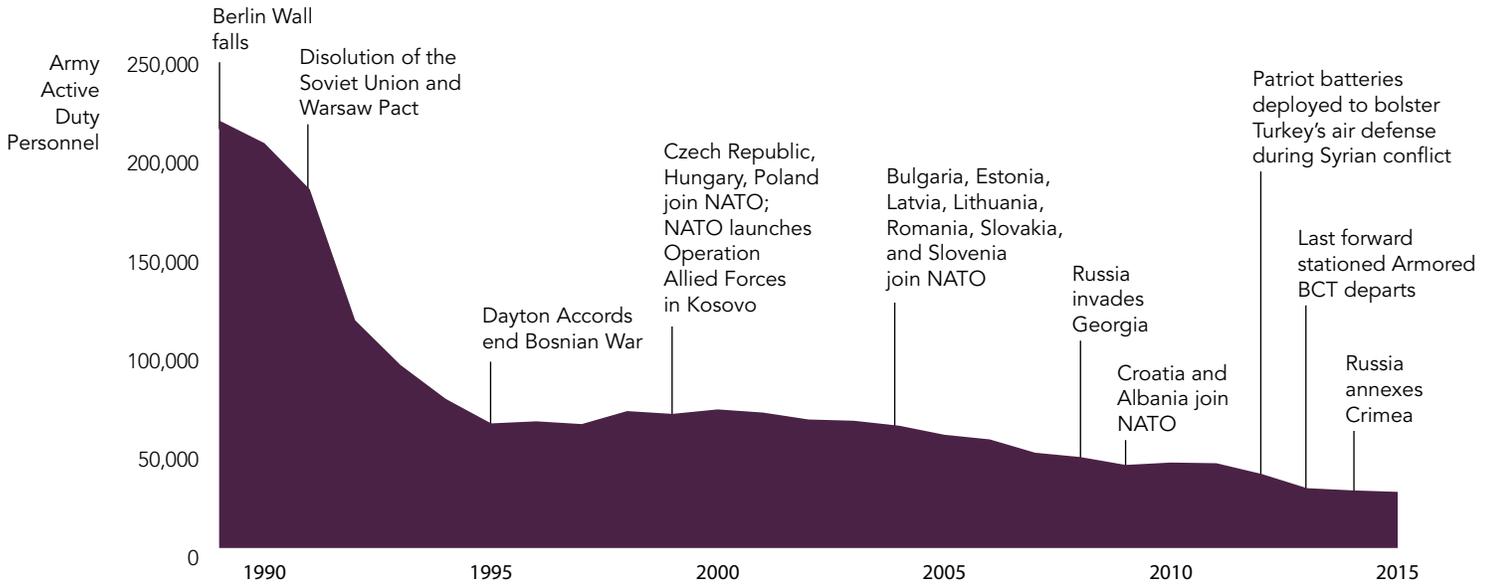
Photo on page 27

Soldiers with Bravo Company, 1st Battalion, 77th Armor Regiment, 4th Armored Brigade Combat Team, 1st Armored Division provides security with an M109A6 Paladin during a Decisive Action Rotation at the National Training Center at Fort Irwin, California.

both state and non-state actors as well as natural and man-made disasters. These threats will likely test America's security commitments to allies and partners around the world as well as Americans' expectations of their Army's ability to assist with homeland challenges.

Russia poses significant and complex challenges to American security interests due to its nuclear capabilities, sales of advanced weapon systems, willingness to violate international convention, and support for actors working against U.S. interests, as it presently is doing in Syria. Russia is facing severe challenges in demography, corruption, capital flight, and opportunities for economic growth over the next 10 to 20 years, and so may turn to military adventurism to solidify domestic support. Insufficient revenues—especially if oil prices remain low—have the potential to undermine Russian military modernization, increase Russia's willingness to sell weapons to malignant actors, decrease stability within Russia's borders, and limit the influence Russia can project internationally. Over the next two decades, the Commission expects the Russian government to prioritize military modernization with available resources and coerce or subvert its neighbors to preserve and extend Russian influence. Russia seeks to achieve its objectives

Figure 7
ARMY IN EUROPE



U.S. Forces in Europe have seen a significant drawdown since the fall of the Berlin Wall in 1989. At that time, the Army had more than 216,700 soldiers stationed in Europe. The reduction in forces continued even as NATO expanded and its borders pushed further east. Now, with Army forces numbering about 28,450, Europe is facing security threats from Russia, from the refugee crises, and from ISIL. Force decisions are made according to the risk environment of the time, and environment that can change substantially in a matter of months.

Source: U.S. European Command.

in Georgia, Crimea, and Ukraine by combining a variety of military and non-military activities with a propaganda campaign blurring the distinction between war and peace. The United States will no doubt have to contend with these “gray zone” tactics in the future.

Terrorism has emerged as the most visible threat to Americans and the nation’s allies. The organization currently receiving the most attention on the threat spectrum is the Islamic State of Iraq and the Levant (ISIL), operating in Iraq and Syria, but with devoted followers and affiliates willing to engage in acts of terrorism in nations around the globe, including the United States. The emergence of ISIL is an example of how non-state actors seize upon opportunities created by communal conflict and weak governance. ISIL’s willingness to use murder and other

forms of brutality against innocents and its ability to mobilize people, money, and weapons have enabled the organization to seize territory and establish control of populations and resources. ISIL uses social media and cyberspace to prosecute a propaganda campaign while employing terrorist tactics to control populations and territory. ISIL demonstrates the need for land forces to defeat determined enemies that operate among and control civilian populations. ISIL also highlights the need to extend efforts beyond physical battlegrounds to other contested spaces, such as public perception and political subversion. In addition to the threat of direct attacks, the activities of ISIL and other organizations in the Middle East have created a massive movement of refugees, triggering a humanitarian crisis that raises concerns for future instability in Europe and other regions.

HOMELAND DEFENSE AND DSCA

“...An evaluation and identification of a structure for the Army that...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...”

2015 NDAA, Section 1703(a)(2)(A)(iii)

The Army's top priority is the defense of the homeland. The United States is not immune to acts of war or terrorism in its territory, and each contingency plan must consider simultaneous demands for military capability in the homeland.

The Commission was directed to consider the Army capacity needed to support current and anticipated homeland defense and disaster assistance missions in the United States. The responses to such demands are captured in anticipated Homeland Defense (HD) and Defense Support of Civil Authorities (DSCA) requirements. The Commission found the Army's overall capabilities and capacity to be adequate.

The homeland is a unique and challenging theater of operation where Army forces must achieve unity of effort through the employment of both state and federal forces and authorities. The Army National Guard provides capabilities to states with regional Emergency Management Assistance Compacts facilitating the sharing of assets and resources across state borders in an emergency or disaster. In the event of a large, complex catastrophe in the homeland, the Total Force Army would provide the majority of Department of Defense capabilities and support. Such operations also are likely to involve organizations from the local, state, and federal levels. The need for integrated and well-coordinated contingency planning, training, and exercises is clear.

The Commission observed one such exercise, Vigilant Guard, in Minnesota. Army National Guard forces from multiple states participated in the exercise, which included a Joint task force lead by a Dual Status Commander (with state and federal authority), federal forces commanded by a U.S. Army North Task Force. state and federal elements from the Chemical, Biological Radiological and Nuclear Response Enterprise, and multiple civilian immediate-response entities from several counties in Minnesota and other states. The Army is the only Service that provides U.S. Northern Command a full-time three-



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star Service component command solely focused on the homeland mission, Army North. In the event of a large-scale operation, Army North will employ support and sustainment units and mission command elements from all Army components to support U.S. Northern Command.

The Commission found, through extensive discussions with and feedback from governors, state Adjutants General, DoD officials, the U.S. Northern Command Commander, and the U.S. Army North Commander, that the Army's capabilities and capacity for disaster response and homeland defense have improved and are adequate at this time. However, potential reductions in Army forces raised many concerns. The Commission shares this concern, as the Army must continue to embrace its requirement to be prepared to conduct a large, no-notice response in the homeland with trained and ready forces.

U.S. Army National Guard photo by Sgt. Juliette Morse/Released

Iran poses a multitude of potential challenges to the United States. First, its nuclear ambitions to date have created significant concerns for the United States, Israel, and other U.S. allies and partners in the Middle East. The recent nuclear agreement reached between the permanent members of the United Nations Security Council and Iran could provide for greater conventional military and nuclear stability in the region if Iran abides by its terms. However, should Tehran develop nuclear weapons, or appear to be on the verge of doing so, broader nuclear proliferation—potentially including Saudi Arabia—would be a strong possibility and would significantly complicate U.S. goals in the region.

Second, the continuation of Iran’s longstanding support for terrorism threatens the United States and its allies and partners. Iran’s own Revolutionary Guard Corps and Quds force are already undertaking actions that threaten U.S. allies in the region, both Israel and Arab partners. Iran also provides the main means of support to non-state terrorist organizations such as Hezbollah, which likewise threatens Israel and others. Although the recent nuclear deal may provide an opening for more moderate political forces in Iran, U.S. security authorities should assume that Iran will continue to

“No matter how clearly one thinks, it is impossible to anticipate precisely the character of future conflict. The key is not to be so far off the mark that it becomes impossible to adjust once that character is revealed.”

— Sir Michael Howard quotes in the Ministry of Defence: Strategic Trends Programme Future Character of Conflict, 2. Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/33685/FCOCReadactedFinalWeb.pdf



U.S. Army photo by Spc. Steven K. Young/Released

Green Berets from the 7th Special Forces Group (Airborne) and Junglas from the Colombian National Police Tegucigalpa train TIGRES commandos in Honduras. The TIGRES are the Honduran government’s force of choice to conduct operations against narco-trafficking targets.



U.S. Army photo by Spc. Steven K. Young/Released

TIGRES Commandos wait to conduct bounding over watch exercises with live rounds during training with Green Berets from 7th Special Forces Group (Airborne) and Junglas from the Columbian National Police Tegucigalpa, Honduras., May. 08,

look for unconventional and even terrorist means to pursue its regional and international goals. One bellweather of Iran's future intentions will be its investment choices following any relief from economic sanctions: whether it primarily chooses to increase spending for its conventional and unconventional military approaches or whether it grows its commercial economy and middle class.

In Asia, an area dominated by land armies, China's trajectory impacts regional security more than any other single factor. China's insistence on creating spheres of exclusive influence in the East and South China Seas will keep regional tensions high and perpetuate the risk of escalation to direct conflict with the United States. The rapid pace of China's military modernization and its actions in the air, maritime, space, and cyber domains increase the risks to U.S. forces if tensions escalate. However, China's military and economic growth trajectory may falter as demographic and citizen

demands challenge the ruling Communist party, though that could inspire China's leaders to escalate foreign issues in an effort to rally their population to the party leadership. War with China remains an important consideration due to its high impact, even if its probability remains low.

The Commission sees North Korea's volatile nature and North Korean military provocations as a possible catalyst for Sino-American confrontation and the most likely military threat to Asian stability. The moderate potential for the collapse of North Korea presents a potential threat to regional stability with conceivably greater consequences outside the region due to the possibility of loose nuclear material. Failed deterrence or rapid North Korean escalation of hostilities epitomizes the need to be ready to fight tonight and win.

Trends suggest India should grow in global importance and acquire the ability to positively influence Asia through economic and political leadership. However, India's volatile relationship with Pakistan risks destabilizing the region and creates potential for nuclear conflict. Globally, nuclear proliferation increases the opportunities for malign actors to acquire a nuclear weapon, especially in nations where violent extremism persists and tactical nuclear weapon stockpiles are growing. Violent extremist organizations in Afghanistan and Pakistan continue to support and direct attacks against American interests around the globe. Afghanistan represents a continuing commitment for U.S. forces and illustrates the challenge of anticipating the length of post-conflict military requirements. The regional threat to U.S. interests has overwhelmed strong U.S. desires to end the military mission in Afghanistan. This threat has the potential to increase significantly as Pakistan continues to expand its tactical nuclear weapon arsenal.

In Africa, unstable and corrupt governments have fomented civil strife and humanitarian crises, while weak states provide fertile ground for terrorist cells seeking members, financing, and safe havens. The continent faces several humanitarian challenges, both man-made and natural, ranging from civil strife and poverty to drought and disease.

Although the Western Hemisphere poses few direct threats to the United States, many countries in South America, Central America, and the Caribbean will probably struggle with economic growth while corruption and inadequate governance could cause civil unrest. The Commission expects transnational criminal organizations to remain entrenched and maintain sophisticated smuggling networks into the United States, which terrorists or other U.S. adversaries could leverage to attack the homeland.

Globally, climate change has numerous implications for national security. Warming trends are lessening agricultural productivity in many areas and increasing the frequency

of extreme weather events. The resulting food and water insecurities may increase resource competition between and within states. Changes in the Arctic have the potential to create benefits for the global economy, but may also become a flashpoint for confrontation. Russia has ambitious designs on the resource-rich Arctic region and has substantially expanded its Arctic forces. In addition to overlapping claims by Arctic nations, many non-Arctic nations, including China, have strong interests in facilitating access to low-cost shipping routes and Arctic resources.

Population growth across the globe is giving rise to megacities, which are frequently located in littoral regions, increasing the likelihood and scale of future natural disasters. Megacities offer the potential to foster economic growth and stability but also provide safe-haven and recruitment opportunities for criminal networks, warlords, and terrorists, especially in weakly governed but well connected slums. These dense urban areas have the potential to create unique governmental entities transcending traditional or existing state governments and could complicate U.S. involvement on multiple levels. Moreover, some weak or failed states around the globe are likely to become more vulnerable to increasingly sophisticated criminal and terrorist networks, posing serious threats to domestic and, in certain cases, international security and stability.

MILITARY TECHNOLOGY TRENDS

Many of the current and potential geopolitical challenges described above are exacerbated by the spread of advanced technologies. The United States is increasingly challenged to maintain a technological advantage. Although the United States can and should take advantage of the rapid technological transformations now underway, it is likely to lose any monopoly it might have once held over military know-how. Information technology is trending toward ever-faster data transmission at lower costs, providing poor states and criminal organizations access to capabilities traditionally monopolized by advanced countries. Such capabilities reside in a wide range of emerging technologies.

- Precision Guidance—More lethal and accurate rockets, artillery, mortars, and missile systems will place fixed and mobile sites at greater risk and deny air and sea access to others.
- Supercomputing and Big Data—Commercialized big data provides any country or terrorist group access to fast, high-powered computational and analytical capacity.
- Robotics/Autonomy—Unmanned air, ground, and undersea systems for surveillance, communication relay,

“Deterrence is tested negatively by things which do not happen. But it is never possible to demonstrate why something has not occurred...the longer peace is maintained—or the more successful deterrence is—the more it furnishes arguments for those who are opposed to the very premise of defense policy.”

Henry Kissinger, 1969.

and lethal operations will augment or replace manned systems, increasing adversary air-to-ground and terrorist strike capabilities, while autonomous or tethered robots add to the threats on battle spaces.

- Nano-technology—Nano-technology will provide forces with substantially improved capabilities (lethality, strength) while reducing logistical requirements (weight, energy consumption), which could potentially be used to make powerful explosives with lightweight composites.
- Cyber/Electro-magnetic—Nation and non-state actors already are using cyberspace attacks, espionage, and propaganda in their arsenal of weapons, and the development and proliferation of weapons producing an electro-magnetic pulse are a real possibility.
- Bio-technology—Medical and bio-technological advances have greatly improved soldier survivability, and exoskeletons and advanced prosthetics could revolutionize soldier care.
- Space Access—More nations and non-state actors will have access to space-based services, such as electro-optical imagery and satellite communications and navigation, while several nations have already developed weapons, lasers, and radio-frequency jammers to degrade or destroy satellites.

Furthermore, the speed of innovation and information technology is increasing the pace of operations and the ability of adversarial actors to spread influence and action across the battlefield.

These trends reinforce the need for multilateral approaches to security problems, as threats become greater than any one nation can address on its own. However, multilateral approaches will depend on the political will and capability to use appropriate national tools. Many American allies and

“As I’ve said from my first day in the chairman’s office, we need to think our way through our security challenges, not bludgeon our way through them.”

General Martin J. Dempsey, USA, quoted in POLITICO Magazine article by James Kitfield, September 26, 2015.

partners appear less willing to meet security threats with military force. Many also are flat-lining or reducing their defense expenditures to address competing social, demographic, and economic challenges—as has the United States. Even with current funding and complete commitment, few partners would be able to replicate advanced U.S. capabilities such as air and missile defense, technical intelligence collection, or aviation. Accordingly, the Commission anticipates significant limits on the capability of many allies and partners to contribute to combined land missions beyond supplying infantry units at brigade levels and below.

ANTICIPATED MISSIONS FOR ARMY FORCES

Based on its understanding of the future geopolitical and technological environment, the Commission concludes that the United States requires a flexible land component force capable of contributing to a wide range of future missions in a myriad of regions and circumstances. The optimum balance of Army capabilities differ for each specific threat, but all Army core capabilities are likely to be called upon in the future.

Projected Russian doctrine and capabilities to threaten U.S. interests suggest the need for an Army with sufficient ability, as part of a joint and combined NATO or other multinational force, to quickly counter Russian armor, artillery, aviation, and proxy forces attacking European allies. Deterrence and assurance will be the primary mission for these forces. U.S. success in Europe depends on partners and adversaries believing that the U.S. military has the capability and capacity to win in combat. A substantial threat from manned aircraft, numerous unmanned aerial vehicles, and rockets presents the need for robust anti-air and rocket defense capabilities. The most efficient capabilities against these threats may differ greatly from current conceptions; for example, electronic warfare may be more effective at identifying and countering small drones than traditional kinetic air defense capabilities would.

Events in the Middle East are likely to continue to demand Army counterterrorism and countering violent extremism operations. Trends suggest U.S. partners in both the Middle East and South Asia will continue to depend on U.S. weapons and training along with U.S. assistance during disasters. Army activities could include sustained land operations for a gray area, a counter-coercion campaign, or a mission to neutralize weapons of mass destruction (WMD). Increasing the Army’s expeditionary capability to quickly respond to threats in this region would improve the credibility of U.S. deterrence and expand response options during crises.

In Asia, efforts to deter potential adversaries and assure partners, along with humanitarian response and disaster relief operations, likely would constitute the most frequent Army requirements. Successful deterrence and assurance requires strong strategic lift and improving U.S. and partner-nation anti-aircraft, anti-ship, and anti-missile capabilities to ensure freedom of movement. Army power projection from land into the air, sea, and cyber domains could provide Joint Commanders with the ability to deter, assure, and sustain land forces in the region despite enemy anti-access capabilities. Army leaders will likely also serve in an important military diplomacy role in support of the State Department because the armies of Asian nations generally hold more influence than their navy or air force counterparts. All the while, the U.S. Army must maintain trained and ready forces to deter an aggressive and unpredictable North Korea, which could collapse from within or launch an unprovoked attack on its neighbors. In either case, North Korea will present substantial WMD—chemical, biological, or nuclear—and humanitarian concerns, necessitating a large and long-term commitment of U.S. Army forces.

As with the Middle East, South Asian threats indicate the Army should have the ability to proficiently conduct sustained counterterrorism and countering violent extremism operations, both independently and through partners. Security cooperation, civil affairs, counter-WMD, and information operations would be enduring regional requirements due to the many American interests at stake in the region, including the capacity of partners to contribute to counter-WMD and stability operations. However, large populations, frequency of national disasters, history of terrorism, traditions of anti-Americanism, regional tensions, and growth of nuclear weapons complicate Army operations in the region.

Expected Army missions in Africa and Latin America will focus on efforts to build partner capacity, counterterrorism missions, countering violent extremism activities, and countering transnational criminal organizations. These missions emphasize Army trainers, including Special Operations Forces,

intelligence assets, logistics, engineers, and civil affairs. The most important mission remains developing the institutional capabilities of host nations, building upon previous U.S. assistance. Generally, the evidence suggests missions to provide disaster relief or stop infectious disease outbreaks will remain steady or grow.

Despite all the threats abroad, the United States homeland will remain a chief concern for Army forces. Aside from girding against potential attacks from both state and non- or near-state actors, the nation must prepare to respond to terrorist attacks on a scale that ranges from small, localized incidents to regional events with numerous casualties and severe detrimental impact on infrastructure. Responding to natural and man-made disasters are part of the Army's purview. Governors will continue to rely on their National Guard assets in the event of severe weather events, earthquakes, wildfires, and civil unrest, and Army Reserve and Regular Army forces will likewise be called upon to render Defense Support of Civil Authorities. Responding in the homeland remains a Total Force mission.

In all these missions, the most overarching mission requirement will be developing the Army's human capital—creating flexible and adaptable personnel who can respond to adversary efforts to exploit U.S. vulnerabilities and avoid U.S. strengths. Army leaders will need to adapt available capabilities and technology to unexpected missions. To retain a competitive advantage, the Army should emphasize

1. developing leaders who can adapt to enemy actions and new technology;
2. improving Army cyber capabilities due to the Army's increasing reliance on computer networks and the growth of cyber capabilities by state and non-state actors;
3. expanding Army capabilities to operate in urban environments due to growing urbanization;
4. enabling Army units to operate in a dispersed manner, with smaller and more flexible formations that better leverage partners and respond to hybrid challenges;
5. improving air, rocket, and missile defenses against growing threats from air and ground artillery and missile systems; and
6. investing in potentially game-changing technologies and preparing Army leaders to accept and exploit



Photo by Sgt. 1st Class Andrew Porch

Private First Class Brandon Johnson, assigned to Task Force First Round at Joint Base Lewis-McChord, Washington, and other soldiers worked with wildland firefighters to help suppress the Kaniksu Complex fires.

such new technologies to provide U.S. forces with the greatest advantage possible.

Based on its survey of future requirements compared to average requirements in the past, the Commission did not find a reason to expect the use of U.S. Army forces to decline, either in the near or distant future. Rather, the current security environment could demand a greater need for U.S. Army units in missions that are more diverse and geographically dispersed than ever before.

A HISTORY OF READINESS CRISES

Though it eventually mobilized almost eight million soldiers to fight the Second World War, the U.S. Army was woefully unprepared when the war began. In three wars since, the Nation again had to play catch up with its armed forces upon the onset of conflict.

With two oceans serving as a buffer for the homeland, and with lingering regret over the casualties of 1917–1918, the United States saw no need to build a large Army. Consequently, when Germany invaded Poland in September 1939, the U.S. Army had less than 190,000 personnel on active duty. Germany's conquest of France in June 1940 convinced President Franklin D. Roosevelt and the Congress that the Army was ill-prepared should the nation go to war. So, Congress activated the National Guard in August 1940 and established the nation's first peacetime draft in September. However, both measures were to expire after one year.

Mobilization did not go smoothly. Through the winter and spring of 1941, the Army struggled to build temporary bases and gather uniforms, equipment, and supplies. General George C. Marshall, Army Chief of Staff, had trouble filling leadership ranks as almost half of the National Guardsmen who reported for duty were discharged because they were unfit, needed for essential war industries, or claimed family hardship.

In August 1941, despite the growing threats around the globe, the U.S. House of Representatives extended the call-up of the National Guard and the draft by a margin of just one vote, 203 to 202. Meanwhile, President Roosevelt diverted most of the arms and equipment the Army needed to Britain and Russia to help those countries stave off defeat. The President even directed the Army in September 1941 to reduce its ranks and discharge Guardsmen and soldiers, believing they would not be needed in the near future.

That future came three months later with the attack on Pearl Harbor. In 1942, the Army rushed to build large, combat-ready forces but had too few company and field

grade officers or sergeants to train and lead new recruits. The Army drew leaders from hastily assembled units to provide cadre for other new units. Though the initial stages of the November 1942 North Africa campaign in French Morocco and French Algeria were largely successful, American forces suffered defeat in their first major engagement with German troops at the Battle of Kasserine Pass in February 1943.

The next readiness crisis for the Army came less than five years after the end of World War II—five years of reduced spending on the Army—when North Korea invaded South Korea in June 1950. The Army rushed poorly equipped and ill-trained units from Japan to South Korea, and, repeating the results of 1942, the Americans were quickly overwhelmed by North Korean armor. Unprepared Regular Army units deployed from the United States as rapidly as possible as President Harry S. Truman mobilized the National Guard and the Organized Reserve Corps. Though the Army's authorized end strength was increased, it took months to draft and train tens of thousands more soldiers and bring National Guard divisions up to full strength. By the time the Army had more ready forces to commit to Korea, the war had devolved into a stalemate leading to a ceasefire two years later.

After the Korean War, President Dwight D. Eisenhower's New Look strategy counted on nuclear retaliation to counter communist aggression, a strategy that led to the marginalization of the Army in defense strategy and significant Army reductions. The Army invested in the reserve components as a hedge against wartime operational demands, but the Berlin Crisis of 1961 demonstrated that reserve units needed more post-mobilization training than Army planners had realized. President John F. Kennedy, meanwhile, embraced Special Operations Forces as a solution for small wars, such as the growing advisory effort in Vietnam.

In 1965, as Viet Cong attacks intensified, General William Westmoreland, the commander of U.S. Military Assistance Command, Vietnam, determined he needed American ground combat forces to launch offensive operations

to prevent the South Vietnamese government from falling. President Lyndon B. Johnson approved General Westmoreland's requests for hundreds of thousands of troops, but the President rejected repeated requests to mobilize reserve component forces. Instead, President Johnson filled the Army's ranks with conscripts by doubling monthly draft calls. Because conscripts only had to serve a year in Vietnam before being discharged, the Army had to rely increasingly on career soldiers to provide experienced leadership, which put excess stress on the force as the war continued. The end of the draft and the beginning of the All-Volunteer Force became an opportunity to rebuild a professional Army, but for the remainder of the 1970s, resources were spare and defeat in Vietnam reverberated in institutional memory.

The Army in the 1980s turned the resources provided by President Ronald Reagan's buildup into ready combat power, and a generation of officers used the lessons of the past to build a force that could prevail on the battlefield. The Persian Gulf War (1990–1991) was a resounding success for the Army. It was also an anomaly, a rare moment when, due to the sudden end of the Cold War and what turned out to be months of advanced preparation before the onset of combat, the Regular Army's readiness far exceeded requirements. Although many Reserve and National Guard units deployed for the war, three Army National Guard combat brigades, designated as round out formations, did not deploy with their associated Regular Army divisions. Why was hotly debated: that they were not ready, that they required too much post-mobilization training, that readiness standards were imposed to preclude deploying the National Guard combat brigades, or that readiness requirements and reporting standards were too vague. The debate, though, helped foster a new commitment to increasing reserve component readiness.

Yet, the Army faced another readiness crisis in 2006—well after the onset of war in Iraq. Budget cuts forced the Army to shrink by a third in the early 1990s while, paradoxically, renewed confidence in military solutions led to more deployments. Demands on all the Services soon outstripped the supply of regular forces and required

greater use of the reserve components. The wars in Afghanistan and Iraq initially saw dramatic successes but did not lead to decisive victory. In late 2004, both the Army Reserve and Army National Guard warned that growing demands were having a detrimental effect on their ranks. Two years later General Peter Schoomaker, the Chief of Staff of the Army, warned that “without recurrent access to the reserve components through remobilization, we will break the active component.” When President George W. Bush decided to surge forces to Iraq, he simultaneously expanded the Army. However, growing the Army's end strength by tens of thousands in a couple of years brought its own difficulties with significant increases in enlistment bonuses and lower enlistment standards.

A readiness crisis is easier to regret in hindsight than to predict or prevent ahead of time. There are no easy paths for building a ready force before the demand for ground combat power is immediate and significant. Within the span of living memory, the United States has used multiple solutions for the problem of building readiness:

- full reserve mobilization, conscription, and expansion (World War II);
- partial mobilization, conscription, and expansion (Korea);
- no mobilization, conscription, and expansion (Vietnam);
- partial mobilization (Gulf War);
- partial mobilization and limited expansion (2001-2011).

Peacetime savings always seem pennywise at the time. But when wars come, policymakers and commanders struggle to build forces for the fight, often regretting not having made the Army ready before sending sooner and pound foolish when war breaks out and the nation sends soldiers into combat without the formations, numbers, equipment, supplies, or training they need to accomplish the mission.



"The Commission shall undertake a comprehensive study of the structure of the Army ... to make recommendations ... in a manner consistent with available resources and anticipated future resources."

2015 NDAA, Section 1703(a)(1)(B)

FISCAL CHALLENGES

Top-line budget projections for the Department of Defense have changed substantially in almost every year since 2011. Congress enacted the Budget Control Act (BCA) in August 2011. The American Taxpayer Relief Act of 2012, enacted in January 2013, made significant changes in BCA funding levels, as did the Bipartisan Budget Act of 2013, enacted in December 2014. Yet another Bipartisan Budget Act (BBA15) passed in October 2015 and made still more changes. These budgetary fluctuations have made it almost impossible for DoD and the

Army to program effectively for the future. Figure 8 shows the effects of these many changes on portions of the defense budget.

This budget uncertainty adds to the problems created by declining defense spending. From fiscal years 2010 to 2015, total DoD funding declined by 7 percent while Army funding declined by 14 percent. Investment (procurement plus research, development, test and evaluation, or RDT&E) fell by 15 percent across DoD during that same period, and by 35 percent in the Army.

There is some relatively good news. Though the Congress has funded DoD's base budget more than 3 percent below Presidential Budget requests since fiscal year 2012, it has provided more money in defense spending than the levels initially set by the BCA (which would have resulted in an almost 15 percent cut). The Army also has received substantial levels of funding from the Overseas Contingency Operations (OCO) account and has used some of that to meet readiness and other key needs. In the fiscal year 2016 budget, the Administration and the Congress permitted the Army to use OCO funding to pay for some activities that had at least some relation to contingency operations but would normally have been in the non-OCO or base budget.

Despite the use of OCO funding, no satisfactory long-term funding approach provides DoD and the Army the funds needed to build and maintain military readiness, invest in modernization, and ensure the health of the force. In this constrained budget environment, the Army appears to have prioritized manpower numbers and force readiness to hedge against near-term demands, accepting substantial risk in modernization. The Commission finds this solution regrettable but understandable, given the persistence of challenges to the United States and the ongoing strain those challenges are putting on ground forces, especially Regular Army combat formations and Army National Guard and Army Reserve enablers. Nevertheless, as discussed in the next chapter, these risks to modernization cannot be sustained if the Army is to protect the mission readiness of the force in the long term.

The current fiscal environment also complicates the Commission's task to examine Army trends well into the future. In order to carry out this mandate, the Commission first considered a range of potential future levels of budgetary resources that could be available to the Army. The Commission also considered the effects these alternative resource levels would have on the Army's ability to meet current and anticipated mission requirements at acceptable levels of risk.

With this information in mind, the Commission made assumptions about future resource levels that guided its assessment of changes in Army programs. The Commission did not attempt to create or recommend specific alternative Army budgets; rather it developed general assumptions about available resources to use in assessing alternatives.

Photo on page 39

Staff Sergeant Adolfa Mora of the Headquarters Support Company, Division Special Troops Battalion, 1st Cavalry Division, spends time with his 4-year-old daughter at Fort Hood, Texas, before his deployment to Iraq.

“The funding the way it is, we either have to educate or train. We can’t do both. I opted for education and leader development.”

Major General James R. Joseph (PAARNG), The Adjutant General, in meeting during NCFV visit to Fort Indiantown Gap, September 8, 2015.

ALTERNATIVE RESOURCE LEVELS AND THEIR EFFECTS

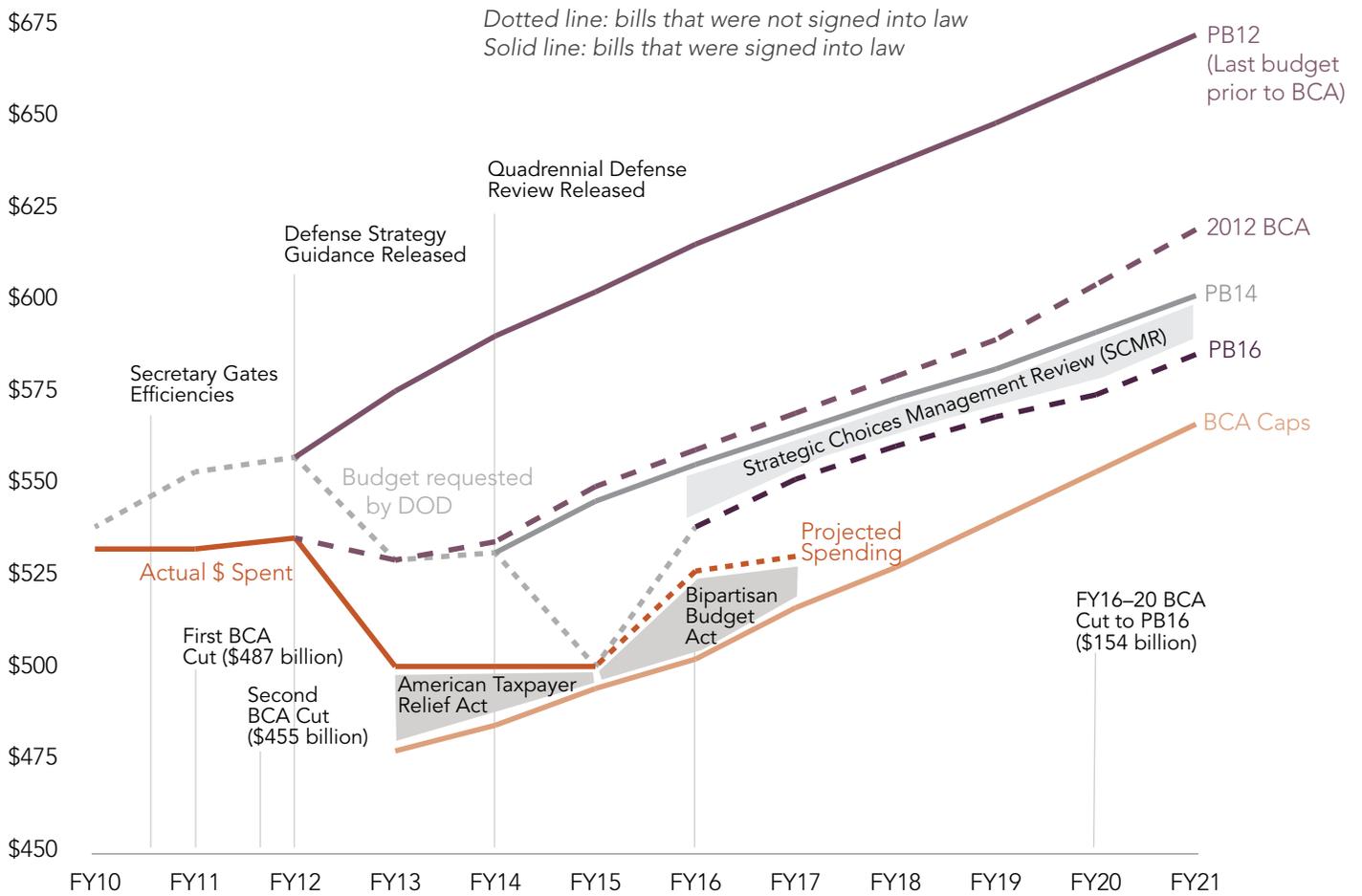
Sequester-Level Funding

The Army might only receive the funding permitted by the Budget Control Act of 2011, as amended. That act and its amendments specify the total funding available for national security activities; the Administration and eventually the Congress then allocate funding to the Army. Under the act and its amendments, Army budget authority has fallen during each of the past five years from \$140 billion in fiscal year 2010 to \$121 billion in fiscal year 2015. Under last year's budget agreement, the Army will receive about \$127 billion in fiscal year 2016 and may decline below that level in fiscal year 2017. This funding profile, often called “sequester-level” funding, will likely leave the Army budget for fiscal year 2017 about 10 percent below its fiscal year 2010 level. The 2014 DoD report, *Estimated Impacts of Sequestration-Level Funding*, suggests that funding growth in the years immediately beyond fiscal year 2017 would likely be insufficient to keep pace with anticipated inflation. There may be some offsetting increases in the OCO portion of the defense budget, but those increases are uncertain.

If it is faced with a continuation of sequester-level funding and limited OCO funding, the Army has stated that it would need to reduce its total force to 920,000 soldiers: 420,000 in the Regular Army with the remainder in the Army National Guard and Army Reserve. This compares to a total size of 980,000 soldiers in the President's Budget for fiscal year 2016 (PB16).

During testimony before the U.S. Senate Armed Services Committee in March 2015, the Army Secretary and Chief of Staff stated that sequester-level budgets had already had a detrimental impact on Army readiness and modernization. They concluded that continuation of sequester-level funding creates significant risk to the Army's ability to fulfill its national security requirements as specified in the current Defense Strategic Guidance and the Quadrennial Defense Review (QDR). Based on its own experiences and discussions with leaders and troops, the Commission concurs with these

Figure 8
BUDGET UNCERTAINTY OVER TIME
 DOD BASE BUDGET IN THEN-YEAR DOLLARS IN BILLIONS



In recent years, policies enacted to restrain spending, along with a stronger economy, have led to reductions in the budget deficit. On August 2, 2011, the President signed into law the Budget Control Act of 2011 (P.L. 112-25). The BCA contained a variety of measures intended to reduce the deficit by at least \$2.1 trillion over the FY2012-FY2021 period, along with a mechanism to increase the debt limit. Two subsequent pieces of legislation have modified the BCA since it was enacted—the American Taxpayer Relief Act of 2012 (ATRA; P.L. 112-240) and the Bipartisan Budget Act of 2013 (BBA; P.L. 113-67). Both pieces of legislation allow for more discretionary spending than was provided under the BCA for FY2013, FY2014, and FY2015. Various deficit reduction measures were included to offset the costs of the changes to spending levels in both ATRA and the BBA. The BCA and the BBA will continue to affect spending levels in FY2015 and beyond as Congress may debate whether or not to enact further changes.

Source: Joint Chiefs of Staff



Photo by Sgt. Christopher McCullough

Soldiers from 3-2 Stryker Brigade Combat Team, along with members of the B/5-20 Infantry Battalion, 18th Engineers, and Brigade Headquarters and Headquarters Company fly on a U.S. Air Force C-17 as they deploy to Afghanistan.

concerns: the size of the force would not meet national security requirements, readiness would suffer, and funding for modernization, already low, would reach levels that would leave the nation too exposed to risk.

Funding Planned in Fiscal Year 2016 Request

Rather than sequester-level funding, the Army might receive the dollars proposed in the PB16, which would have provided \$127 billion to the Army in fiscal year 2016, rising to \$129 billion in fiscal year 2017. Growth in the years beyond fiscal year 2017 would amount to a few percent a year, probably only enough to offset the effects of inflation. Last year's budget agreement chipped away at the President's plan for Army funding in fiscal year 2017, though a portion of these funding reductions would be offset by greater reliance on OCO funding.

Under the PB16, the Army would be able to remain at a total size of 980,000 soldiers. During Congressional testimony in early 2015, former senior Army leaders stated that, with this funding, the Army could pursue initiatives aimed at achieving a reasonable balance of readiness and modernization, and the Service would meet the primary missions of the Defense Strategic Guidance, though its ability to do so would become tenuous. Army Chief of Staff General Mark Milley concurred with this assessment in his confirmation hearing before the Senate Armed Services Committee in July 2015.

Higher Funding Levels

Historically, Army and overall defense funding has been cyclical. Funding has tended to rise as threats to national security increase, followed by decline as threats ease. The

Commission has concluded that threats to national security are currently increasing due to escalating threats from ISIL, Russia, and ongoing threats from North Korea and Iran, among others. Despite today's limits on funding, these increasing threats make plausible the possibility that Army and overall defense funding may increase in the longer term.

In the aftermath of the September 11, 2001, terrorist attacks, the Army base budget (that is, the budget excluding OCO funding) increased by almost \$70 billion from fiscal year 2000 to fiscal year 2010. Absent some future catastrophic events, an increase of this magnitude seems unlikely. Nevertheless, the Commission believes that, as it assesses the long-term future of the Army, it should take into account the possibility of funding increases above the levels in the fiscal year 2016 budget plan. As subsequent chapters will explain, added funding would almost certainly be required if the Army is to meet capability shortfalls identified by the Commission.

RESOURCE CONCLUSIONS

After assessing future resource levels and their effects, the Commission finds that sequester-level funding will not provide the Army with adequate finances to meet national security requirements at acceptable levels of risk. An Army that declines to 920,000 soldiers and faces limits on funding for readiness and modernization is not enough to do the job. Therefore, for purposes of assessing the long-term future of the Army, the Commission rejects the use of sequester-level funding as a guide to anticipated future resources, understanding that providing the Army with funding in excess of sequester levels will require Congress to change current law.

Instead, the Commission concludes that the funding in PB16 provides the Army with the minimum resources necessary to meet requirements at acceptable levels of risk to the nation. The Commission therefore uses BP16 as a rough benchmark for anticipated future resources necessary to meet requirements. The Commission notes, however, that the PB16 plan does not take into account recent changes in the strategic environment. The QDR, released March 4, 2014, describes the strategic environment informing the resourcing decisions in the PB16. It assumed the drawdown of combat forces in Afghanistan would continue; that drawdown has been slowed. The QDR referred to the influence of al-Qaeda "to recruit or inspire Westerners to carry out attacks against our homeland with little or no warning"; it did not take into account the ISIL, Boko Haram, or some other ongoing terrorist threats. The QDR discussed "the instability in the Balkans and on the European periphery [that] will continue to pose a security challenge"; it did not forecast the extent of the Russian involvement in Ukraine. Because PB16 does not address the

"The abrupt, deep cuts resulting from the Budget Control Act forced our military to make topline-driven decisions, such that we now have a strategy with little to no margin for surprise. Therefore, we are operating at higher levels of risk to our defense strategy. To limit adverse consequences, we need the certainty of a more predictable funding stream, time to balance force structure, modernization, compensation, and readiness, and the flexibility to make trade-offs."

General Joseph F. Dunford Jr., USMC, in testimony before the Senate Armed Services Committee considering his nomination for Chairman of the Joint Chiefs of Staff.

escalation of threats to global stability and national security, it is, at best, on the low end of needed resources.

Moreover, because last year's BBA15 budget agreement reduced funding for fiscal years 2016 and 2017 to levels below the PB16 plan, the Commission does not view that agreement as an adequate solution for national security. The Commission urges the Administration and Congress to restore fiscal year 2017 funding to the PB16 levels, whether by altering the budget caps or by providing increased OCO funding for activities that have relationship to wartime needs. The Congress should then return to PB16 levels of funding or higher in later years.

Recommendation 4: Congress should maintain future Army budgets at funding levels at least equal to those in the fiscal year 2016 Presidential budget plan due to significant and emerging threats to national security.

Consistent with its charter, the Commission focused on Army funding and programs. However, the Army can only function effectively if the other military services and DoD as a whole have adequate funding and capacity. The Army depends on the Navy and Air Force for strategic lift, close-air support, specialized training, and much more. A strong Marine Corps complements the Army's ground capability. The Commission finds that sequester-level funding would not provide adequate resources for DoD to protect the nation and win wars.

Recommendation 5: Congress should maintain future Department of Defense budgets at levels at least equal to those in the fiscal year 2016 President's budget plan.

STRETCHING ARMY RESOURCES

Even with funding at PB16 levels, the Commission agrees with senior Army leaders who stated that the Service's ability to meet national security needs at reasonable levels of risk is tenuous. The Commission has identified a number of initiatives that could reduce this risk and urges the Administration and Congress to consider these initiatives even if funding remains at the PB16 level. However, these initiatives will become financially more feasible if additional funds become available.

Additional funds may be made available to meet Army warfighting needs if DoD can implement efficiency initiatives and eliminate redundancy in its operations.

Various entities have proposed initiatives to free up funding for warfighting needs. Following are some examples:

- The Administration's proposal to slow growth in the cost of military compensation, as long as recruiting and retention needs are met
- Proposals by DoD and by the Commission on Military Compensation and Retirement Modernization to reform of the military health care system
- DoD's proposal to streamline military medical treatment facilities
- DoD's proposed legislation that would permit the department to close unneeded facilities (DoD is currently updating its capacity analysis to determine the level of facilities, including Army facilities, that are unneeded)
- Army proposals to pursue energy consumption efficiency initiatives
- This Commission's proposal for a pilot program to test the feasibility of integrating recruiting across the Regular Army, Army National Guard, and Army Reserve (see page ##). While designed primarily to better integrate the Total Force, integrated recruiting might free up resources.

The Commission has not undertaken a detailed review of these and other efficiency proposals. However, it urges the Administration and the Congress to carefully review these initiatives and enact or permit them wherever they make sense. In some cases, the proposed efficiencies are already included in the PB16 and so would not free up additional resources to meet direct warfighting needs. In other cases, such efficiencies could

“Given the harm all this politically driven madness inflicts on the U.S. military, the rhetoric coming from members of Congress about looking out for our men and women in uniform rings very hollow to me.”

Robert Gates, former Secretary of Defense, in testimony before the Senate Armed Services Committee, Oct. 21, 2015.

help finance some of the high-priority initiatives identified in this report.

It is important to note that, by themselves, these actions would not free up enough funds to pay for the many capability gaps identified in subsequent chapters of this report. If most or all of these gaps are to be closed, then funding above the levels in PB16 will be needed. Efficiencies and related actions can, however, hold down the need for added funds and should therefore be pursued aggressively.

Recommendation 6: The Congress and the Administration should look for cost-saving opportunities in areas such as the military health system, energy savings, and a reduced inventory of military facilities.

BUDGETARY TURMOIL

The Army, and DoD as a whole, could also make better use of available resources if the Congress and the Administration acts to reduce budgetary turmoil. In recent years, the Army and DoD have furloughed civilian employees twice. They have planned for government shutdowns more than half a dozen times and, regrettably, were required to execute one of those plans, resulting in many Army and government operations closing for sixteen days in 2013. The Army and DoD have operated under continuing resolutions in every year of the current Administration, including two resolutions that extended for about six months. During the short duration of this Commission, two separate government shutdowns came within days of execution. This budgetary turmoil results in inefficiencies, including higher contracting costs, and consumes time of senior leaders that would be better spent managing the Army and the Department.

A Brookings report, *Budgetary Turmoil at the Department of Defense from 2010 to 2014*, written by Robert F. Hale (a member of this Commission) and published in August 2015,

highlighted the effects of this turmoil, especially the adverse effects on the morale of Army and DoD civilian employees. Congressional testimony by Army senior leaders in March 2015 emphasized the effects of the lack of predictable funding, focusing especially on continuing resolutions. That testimony concluded that the lack of predictable funding “wreaks havoc with Army readiness, modernization, and end strength.”

The Commission agrees that budgetary turmoil is having serious adverse effects on the Army. The Commission concludes that to have an effective Army, Congress and the

Administration must find ways to provide the Army and all of DoD with adequate levels of funding under a process that is more predictable, thereby avoiding the budgetary turmoil that has plagued the federal government in recent years.

Recommendation 7: The Congress and the Administration should return to predictable and responsible budgeting processes that produce levels of defense funding at least equal to those in the fiscal year 2016 President’s budget.

MEASURING COSTS AND BENEFITS

“The Commission shall give particular consideration to ... an evaluation and identification of a structure for the Army that ... achieves cost-efficiency...and considers fully burdened lifecycle costs.”

2015 NDAA, Section 1703 (2)(A)(ii)

The 2015 National Defense Authorization Act directed the Commission to consider “fully burdened lifecycle costs” in evaluating cost efficiency among the Regular Army, Army National Guard, and Army Reserve. A report by the Reserve Forces Policy Board (RFPB) introduced the term (see *Eliminating Major Gaps in DoD data on the Fully-Burdened and Life-Cycle Cost of Military Personnel: Cost Elements Should be Mandated by Policy*). The Commission examined fully burdened lifecycle costs and found that, in principle, such a costing model could be useful in comparing personnel costs. However, the term does not appear in the Government Accountability Office publication of standard terms, definitions, and classifications for government fiscal, budget, and program information. Additionally, the Financial Management Regulation, the Federal Acquisition Regulation, and DoDI 7041.04, “Estimating and Comparing the Full Costs of Civilian and Active Duty Military Manpower and Contract Support” do not mention fully burdened lifecycle costs. Commission research into industry and academia also did not yield a methodology for fully burdened lifecycle costs.

Commission research indicates that equipment and unit structure, not the soldier’s reserve or active status, has the greatest impact on the per capita cost of a soldier.

Additionally, the costs for numerous major functions, such as recruiting, marketing, equipment procurement, training, installations, and research and development, cannot be readily segregated by component or individual soldier. Therefore, the Commission determined that the DoD’s Activity Based Costing methodology would be more appropriate for comparing per capita costs.

In evaluating the costs related to unit structure, Activity Based Costing is more reliable for estimating costs as by determining a current per capita cost (such as per person or per mile) and applying that cost to a future population or level of activity. In planning, programming, and budget execution, the Army does use a “burdened labor rate” as part of analyzing alternative courses of action during budget formulation. While the Army routinely uses burdened labor rates in order to facilitate workforce mix decisions, cost-benefit analyses, and course-of-action analysis, the Army and all other Department of Defense elements do not calculate a “fully burdened” cost factor applied by component for the duration of a service member’s military obligation.

Activity based costing produced lifecycle costs that are fully burdened in a manner that was appropriate for the Commission’s evaluations.



“The Commission shall... make recommendations on the modifications, if any, of the structure of the Army related to 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.”

2015 NDAA, Section 1703(a)(1)(B)

“The Commission shall give particular consideration to an evaluation and identification of a structure for the Army that...manages strategic and operational risk by making tradeoffs among readiness, efficiency, effectiveness, capability, and affordability.”

2015 NDAA, Section 1703(a)(2)(A)(vi)

THE ARMY FOR THE FUTURE

At the heart of the Commission’s mandate is a requirement to recommend how best the Army can meet mission requirements with “acceptable levels of national risk.” In the course of its work, the Commission encountered divergent levels of risk tolerance, both within the U.S. Government and beyond it. Circumstances believed by some to be unacceptable were perfectly palatable to others. Commissioners ultimately relied on their professional judgement and experience to evaluate the evidence presented to them regarding risk acceptability.

To conduct the operational risk assessment, the Commission reviewed the future strategic environment and the missions U.S. leaders might require of Army forces (see Future Challenges chapter page ##). By looking at these missions in isolation, the Commission sought to identify key capability gaps. The Commission then looked at potential combinations of missions over time to determine the appropriate overall size of the Army and the capability and component mix of forces within the Army. The Commission’s findings and

THE ARMY FOR THE FUTURE

recommendations are thus grounded in its assessment of the Army's ability to satisfy global requirements, notably those present or emerging in Europe, the Pacific, the Middle East, and at home.

The most pressing combination of missions the Commission assessed included three significant near-simultaneous events: a large-scale homeland defense response; a large-scale conventional force operation; and a limited-duration deterrence mission elsewhere. This combination reflects the Department of Defense's current strategic guidance for force sizing. Although this exact set of challenges in the place, time, and order assessed are unlikely, the Commission considered the scale of these combined challenges to be a reasonable baseline against which to measure risks in the capacity of the force. The Commission augmented this analysis with assessments of other potential

challenges in order to develop a more complete picture of the types of capabilities and capacities that might be required in the future. The aggregate risk assessment addresses risk to mission and risk to force.

The sections below are divided according to the major force attributes that contribute to overall mission capability: readiness, modernization and investment, and force structure. For example, the Army can spend funds to ensure existing forces are trained and ready to respond to the needs of the moment to mitigate near-term risk to mission and force. The Army can also seek to buy down risk through force modernization, often with a focus on gaining operational and technological advantage in the mid- to long-term or, in some cases, catch up to meet current threats. Additionally, leader development is the key element of investment that improves the Army's ability to adapt to unforeseen future demands.

Building additional force structure, modifying existing unit designs, adjusting force posture, and altering component mix or utilization to improve capabilities over the near- to mid-term are some of the force structure options available for reducing risk to mission and force. Force structure considerations include the appropriate balance between the size of the operating force and its generating force, the primary purpose of which is to build and sustain operational

Photo on page 47

Private Shan Irwin of Charlie Troop, 1st Squadron, 33rd Cavalry Regiment, 3rd Brigade Combat Team, 101st Airborne Division, provides security in a Baghdad, Iraq, garbage dump for a forensics archaeologist team searching for Saddam-era mass grave sites.



Photo by Sgt. Corey Confer

A Stryker vehicle, coming home after serving on a Pacific Pathways mission in Japan and Korea, is loaded onto a trailer at Fort Wainwright, Alaska.

A WORD ABOUT THE “ABRAMS DOCTRINE”

The backdrop for the National Commission on the Future of the Army’s assessment of the Army’s structure is similar in many respects to the circumstances facing Army Chief of Staff Creighton Abrams between 1972 and 1974. That was an era in which budget cuts combined with both the increased cost of fielding an All-Volunteer Force and the usual post-war impulse to reduce the military led to plans for deep cuts to active force structure.

General Abrams, however, believed the threat from the Soviet Union to Europe was severe enough that the Army should increase divisions. Defense Secretary James Schlesinger agreed, but insisted the Army could not exceed the 785,000 manpower cap authorized by Congress. The two also agreed that a greater use of the reserve component was needed. To maximize combat forces within the Regular Army, General Abrams directed reserve component units to “round out” Regular Army divisions and moved most combat support and combat service support units into the Army National Guard and Army Reserve.

The “Abrams Doctrine” is often used to justify recommendations for Army Total Force policy, such as the

proper mix between regular and reserve force structure. The “Abrams Doctrine” asserts that a significant amount of force structure must be placed in the Army reserve components so that a President sending the Army to war must mobilize the National Guard and Reserve and thereby ensure the support of the American people for that war. However, no primary evidence supports the assertion that General Abrams consciously set out to structure the force to ensure domestic support for future wars. General Abrams’ actions were designed to address the strategic challenge of the Soviet threat within manpower and budgetary constraints, nothing more.

That is not to say that support from the American people is not a mandatory goal. Testifying to the Commission, As Congressman Trent Kelly of Mississippi said during a Commission site visit to Camp Shelby, “When the Guard and Reserve go to war, their communities go to war.” Rep. Kelly’s observation is surely correct. How those communities react may not necessarily be monolithic, but the nation’s support is necessary for a Joint Force to be able to effectively and rapidly counter threats to the nation.

units. In each of these areas, the Commission provides its core recommendations for achieving the size and shape of the Army that the United States of America needs.

READINESS

The Army has appropriately placed readiness as its number one priority. The pace of the current environment and the need to recover readiness from the past fourteen years of war require nothing less. Based on discussions with Combatant Commanders and others, the Commission believes that the Army’s planned readiness path, funded through the defense budget and the Overseas Contingency Operations account, generally prepares the force at acceptable risk to mission for the requirements of the current defense strategy.

Recommendation 8: The Army must continue to treat readiness as its most important funding priority.

However, the plan for readiness in tactical mobility is one area that is alarming. Commissioners received numerous reports from soldiers and commanders about tactical wheeled vehicle shortages. These shortages are most pronounced in heavy equipment prime movers. The Army’s tactical mobility peaked in 2007 while transitioning to the modular force. Although modular reorganization provided units with increased tactical mobility, the Army determined it could not afford to sustain and modernize the entire tactical wheeled vehicle fleet. The Army thus reduced the number of tactical wheeled vehicles in its inventory to a more affordable level. Some commanders indicated to the Commission that tactical wheeled vehicle shortages in their units created significant risk.

Recommendation 9: The Army should provide the Congress with an assessment of risks in current and planned tactical mobility. This assessment should be completed within one year of publication of this report and include the costs and potential tradeoffs for closing significant readiness gaps in this area.

MODERNIZATION AND INVESTMENT

The Army has placed a priority on readiness and structure (capacity) above modernization. The Commission considers the limited investment in modernization as a source of significant long-term concern, a concern that would surface even had the less-challenging security conditions assumed in the current defense strategy held. The Army already has eliminated the Ground Combat Vehicle, Armed Aerial Scout, and Unmanned Ground Vehicle upgrades. Compounding the problem, modernization plans for Mounted Soldier System programs, aviation, communications, and ground combat vehicles remain vulnerable to further reductions. Our analysis found unacceptable modernization shortfalls in aviation survivability; short-range air defense artillery (SHORAD); chemical, biological, radiological, and nuclear (CBRN); field artillery; and Army watercraft. Those shortfalls cause major concerns across a wide range of potential contingencies, particularly in the homeland and Europe and on the Korean peninsula. More detail can be found in the NCFA Classified Annex.

Recommendation 10: The Army must reassess the risk it is assuming in modernization for aviation survivability, SHORAD, CBRN, field artillery, and Army watercraft.

The investment risks facing the Army extend to its industrial base. The Army's equipment strategy requires an industrial base that can ramp up to meet increased demand during emergencies while still providing smaller quantities between major conflicts. However, the National Defense Industrial Association's *TOP ISSUES 2014* explained "In this period of budget reductions, sequestration, and uncertainty, the threats to the defense industry are more existential than at any other time since World War II." With modernization budgets rapidly declining, companies may well exit the defense sector in order to direct their research and development efforts and production capacity towards commercial applications. Continued fiscal uncertainty and low resource availability for Army investment will also dissuade new entrants to the defense marketplace. Relying more heavily on the domestic commercial and international sectors for off-the-shelf items will ease this problem but not eliminate risk. This is especially true when unique military requirements must be met, as in major platform development.

In light of the current security environment and budget constraints, the Commission judged the Army's approach of prioritizing readiness and capacity understandable, although its consequences for modernization are regrettable. The Army's current strategy to protect science and technology investments, incrementally improve existing fleets, and delay

the procurement of the next generation of platforms strains the Army's ability to build the foundation of a force that can meet future challenges and puts major acquisition programs at risk. Nevertheless, investing in near-term readiness is a must. If more resources cannot be identified for modernization through changes in Army structure, processes, and programs, or more innovative approaches to dominating the land domain cannot be found, the long-term risk to force and mission will be high.

"Many of the challenges and commitments I dealt with twenty years ago remain relevant today. The global security environment we face now and into the future is more dynamic, more unpredictable, more complex, and certainly more dangerous than at any time in my adult life. Often the threats to our security resemble a kaleidoscope, ever changing and very complex."

General Gordon R. Sullivan, U.S. Army Retired, the 32nd Chief of Staff for the Army and currently President and Chief Executive Officer of the Association of the United States Army testifying before the Commission at Arlington, Virginia, June 18, 2015.

FORCE STRUCTURE AND END-STRENGTH

If budgets are fixed, readiness is a priority, and the Army is already accepting substantial risk in its investment accounts, then the natural place to look for offsetting resources is force structure. Due primarily to the large number of Army force structure changes, the Army has struggled to efficiently integrate the changes into doctrine and Combatant Command (COCOM) plans. As a result, fully assessing where operational excess or shortfalls in capability, responsiveness, or capacity exist in current plans is difficult. Moreover, many COCOM plans do not adequately reflect the Army's current and programmed force structure. These two conditions complicate the ability of the Army, DoD, the Congress, and the Commission to accurately assess the capacity and capability of the current force.

Recommendation 11: The Army must assist Combatant Commands and Army Service Component Commands with timely integration of force structure changes into their strategic planning process.

Recommendation 12: Combatant Commands and Army Service Component Commands must update all war plans with current and programmed force structure and doctrine and establish a process to ensure routine war plan and Time Phased Force Deployment Data updates at a minimum of once every two years.

With these assessment caveats in mind, and assuming planned readiness and investment levels, the Commission found that a force of 980,000 uniformed personnel (450,000 in the Regular Army, 335,000 in the Army National Guard, and 195,000 in the Army Reserve) provides the Army a minimally sufficient capability and capacity across a range of near-term challenges. This includes sufficient disaster response and homeland defense capabilities and capacity to support current and anticipated requirements, excepting certain key enablers detailed below. While the Total Army end strength is minimally sufficient, the Army's programmed distribution of forces across the components is about right for the range of threats assumed in existing sizing and shaping guidance. Additionally, the

450,000 Regular Army end strength provides enough soldiers as a base of trained personnel from which the Army National Guard and Army Reserve can recruit, based on data from Army G-1 showing prior service accession rates from fiscal years 2004 to 2014. As recruitment from prior service members fluctuates, the ratios among the components remain relatively steady.

Thus, in general terms, the Army is appropriately sized, shaped, and ready to meet the strategic guidance it has been given, first promulgated in 2012 and reiterated in the Quadrennial Defense Review 2014—but only just so. For some potential challenges against which the military already plans, the Army might have capability and capacity shortfalls and will be forced to deploy units not fully ready, which would not be acceptable. In addition, some units might have deployments extended beyond twelve months. Depending on the nature of the challenge, these operational conditions might persist for several years, creating risk to both mission and force. The Commission also identified concerns with the timely delivery of certain key enabling capabilities to the warfight and for homeland response, which are detailed below.

CAPABILITY AND CAPACITY

Evaluating mission risk requires an understanding of both capability and capacity. In the Army, these are terms with distinctly different meanings. However, many outsiders consider them indistinguishable, and the fact they are synonyms in a non-military context only adds to the confusion.

In short, capability represents all of the many tasks the Army can do, while capacity is how often and for how long (and perhaps where) the Army can do those tasks.

To better understand capability, consider a lone soldier. By him or herself, there is only so much he or she can do. However, if that soldier is fully trained, equipped with sophisticated gear, provided with accurate intelligence, properly sustained, supported by the other Services, and working with a large number of similar soldiers, he or she now has the capability to bring decisive power to bear on land areas around the world. Training, equipping, force size, stationing, and deployability are key.

Capacity is capability with sufficient scale and endurance. It is a recognition that capabilities are finite and cannot be used all the time everywhere. So, for example, while the Army has the capability to provide ballistic missile defense (BMD), its capacity to provide that protection at any given time or location is limited by the number and location of trained and equipped BMD units.



Soldiers from A Company, 101st Division Special Troop Battalion conduct an air assault mission in the Parwan Province of Afghanistan.

Photo by Spc. Scott Davis

Even assuming full access to all Army components, this force size provides only limited ability to react to unforeseen circumstances. Of note, under current strategic guidance, the Army and other Defense components are directed not to size themselves for large-scale, long-duration stability operations. The Commission concluded that the Army has complied with this guidance. Using directed planning assumptions and with its planned fiscal year 2017 force, the Army is, in fact, neither sized nor shaped for conducting any kind of large-scale, long-duration mission at acceptable risk.

This assessment of risk assumes the current defense strategy and associated force structure guidance are adequate. Perhaps the Commission's greatest concern is the inadequacy of that guidance in light of the evolving security environment. In Afghanistan and Iraq, missions are persisting or re-emerging, respectively, in ways not anticipated by DoD's current plans. The rise of the Islamic State of Iraq and the Levant (ISIL) as a global challenge is likewise not well accounted for in current force guidance. Moreover, Russia's actions in Crimea and Ukraine, its regular use of large-scale, snap exercises near the border of NATO countries, and its actions in Syria all create challenges for assurance and deterrence—and, unthinkable though it may be to some, may require forceful response options in the future. Given the emerging world environment, the Army's planned Total Force lacks key capabilities and the capacity to meet or deter some potential threats.

As such, the Commission has determined that a Total Force of 980,000 uniformed personnel with the current component distribution is the *minimum* sufficient force necessary to meet the challenges of the future strategic environment. In response to emerging and evolving threats, the Army, in fact, may need to develop new capabilities or invest in increased capacity of existing capabilities. The Commission cannot see either of these possibilities realized with the Army's current size, structure, and investment plan. The exact implications of this environment-to-strategy mismatch are unclear. The first step in addressing these capability and capacity questions is for DoD and the President to revise the defense strategic guidance based on the unanticipated changes in the security environment. A thorough strategic review is required to provide a frank assessment of the resources and investments necessary to ensure the Army is capable of its contributions to the joint force both today and in the future.

Recommendation 13: The President should budget for and the Congress should authorize and fund an Army that maintains an end strength of at least 980,000 uniformed personnel (450,000 in the Regular Army, 335,000 in the Army National Guard, and 195,000 in the Army Reserve) at planned readiness levels.

Recommendation 14: The President should revise strategic and budget guidance to the Department of Defense based on changes in the security environment. The Department of Defense should then use this revised guidance as the basis for revising its planning guidance, and the Army should adjust its force—structure, readiness, and modernization plan—accordingly.

REDUCING RISK THROUGH FORCE POSTURE

In many cases, and particularly as it has downsized, the Army has used soldiers and units rotating from the United States as the preferred sourcing solution to meet Combatant Commander requirements. Rotating forces can provide an optimum balance between providing for adequate readiness, leveraging the extensive training and maintenance infrastructure in the United States, and meeting the needs of the All-Volunteer Force and its families. However, frequent rotations can create operational risks in the readiness and timeliness of key capabilities. It also can create additional expense by increasing the overall amount of equipment and personnel required to create sustained forward presence. For instance, under existing rotational policies, the Regular Army (operating at a 1:2 deployment-to-dwell ratio) requires three units to sustain a deployment of one unit; the reserve component (operating at a 1:5 mobilization-to-dwell ratio) requires six units to sustain a deployment of one unit.

In Europe, the Army is currently sourcing aviation and Armored Brigade Combat Team (ABCT) presence missions rotationally. The changing security environment in Europe, its value as a stationing location for potential contingencies in the Middle East, and the relatively lengthy timelines associated with deploying an ABCT suggest the need to return to permanent stationing of this asset in the region. Based on its review, the Commission believes this adjustment would require minimal additional staffing.

Recommendation 15: The Army should forward station an Armored Brigade Combat Team in Europe.

The Commission found rotational sourcing to be a sensible approach for aviation combat units in Europe. However, those units must have an appropriately resourced mission command element to provide the familiarization and subject-matter expertise required for mission success. The Commission determined that the current administrative aviation headquarters is not sufficiently robust to accomplish this task at acceptable risk.



Photo by Sgt. 1st Class Sadie Bleistein

Soldiers from A Company, 101st Division Special Troop Battalion conduct an air assault mission in the Parwan Province of Afghanistan. Soldiers from A Company, 101st Division Special Troop Battalion conduct an air assault mission in the Parwan Province of Afghanistan.

Recommendation 16: The Army should convert the European Command administrative aviation headquarters to a warfighting mission command element similar to a Combat Aviation Brigade headquarters.

The Army currently plans to begin rotational sourcing for the Combat Aviation Brigade (CAB) requirement in Korea in 2019. The Commission is concerned that this approach may present unacceptable risk, given terrain and aviation mission complexities in Korea. Forward stationing of the CAB in Korea would assure air crews greater familiarity with the environment and ensure interoperability with our allies and partners.

Recommendation 17: The Army should maintain a forward-stationed Combat Aviation Brigade in Korea.

The chapter in this report on Apache Transfers and Related Issues (see page XX) discusses the pros and cons of this recommendation and its costs.

“Virtual presence by U.S. forces will be translated by both friends and adversaries as actual absence.”

General Philip Breedlove (USAF), Commander, U.S. European Command and Supreme Allied Commander Europe, April 2, 2014.

Photo by 316th Sustainment Command (Expeditionary)os/316thesc/8370456120/in./photostream/



Army vehicles are loaded onto an Army Reserve LSV 8 at Kuwait Naval Base, using a large ramp that extends through the open bow of the ship.

REDUCING RISK THROUGH STRUCTURE ADJUSTMENTS

The Commission found that the Army is incurring unacceptable risk in capabilities that would be required early for major contingencies. The Commission's assessment identified particular concerns with risks incurred from shortfalls in attack aviation, armored capabilities, and deployed or deployable mission command elements. Further details on the below recommendations are provided in the NCFCA Classified Annex.

Recommendation 18: The Army should retain eleven Combat Aviation Brigades in the Regular Army.

The chapter in this report on Apache Transfers and Related Issues (see page XX) discusses the pros and cons of this recommendation and its costs. The NCFCA Classified Annex provides further details on the wartime effects of retaining eleven Combat Aviation Brigades.

The possibility of forceful response options in Europe must be considered. The value of armored forces for conducting major combat operations adds to their value for deterring aggression. Such forces take significant time to prepare and resources to sustain. However, underestimating the armored force requirements increases risk to mission.

Recommendation 19: Based on the current and projected threat environment, the Army should increase Armored Brigade Combat Team (ABCT) capacity. Risk may be acceptable without additional ABCT structure if the Army stations an existing ABCT in Europe, as recommended above.

The Commission assesses that the COCOMs and their Army Service Component Commands (ASCC) are at high risk to effectively execute mission command with current capability. As part of the Army's 25 percent reduction in headquarters manning, the Army eliminated the operational command post from each of its ASCCs. As a result, European Command and U.S. Army Europe are currently dependent on a deployed mission command element from the 4th Infantry Division to provide a temporary, albeit non-sustainable, solution. An ASCC with minimal capacity degrades the effectiveness of rotational deterrence and limits the capability to provide operational mission command.

Recommendation 20: The Army should ensure Combatant Commands (COCOM) and Army Service Component Commands (ASCC) have the ability to provide operational mission command in proportion to the unique mission for each COCOM. The Army should consult closely with COCOM and ASCC commanders to assess the risks entailed in mission command changes and seek to minimize risk where possible when implementing them.

In addition to the significant findings above, the Commission identified a number of other areas of concern in the analysis of warfighter timelines (as expressed in time-phased force deployment data). The Commission concluded that several of these areas warranted further study by the Army, DoD, and the Congress to determine whether and how to decrease risk in these areas. They are detailed below and more fully described in the NCFCA Classified Annex.

Recommendation 21: The Congress should require the Secretary of Defense and Secretary of the Army to provide within a year of this report an assessment of the ways, and associated costs, to reduce or eliminate shortfalls in responsiveness (Regular Army capacity and forward posture) and capacity (total Army inventory; component non-specific) of the following capabilities:

1. AH-64-equipped Attack Reconnaissance Battalion capacity to meet war plan needs;
2. Air defense artillery (ADA) capacity, responsiveness, and the capability of Short Range ADA to meet existing and emerging threats (including unmanned aerial systems, cruise missiles, and manned aircraft), including an assessment of the potential for commercial-off-the-shelf solutions;
3. Chemical, biological, radiological, and nuclear (CBRN) capabilities and modernization as it relates to homeland missions as well as the capacity to meet overseas war plan needs;
4. Field artillery capabilities and the changes in doctrine and war plans resulting from U.S. participation in the Cluster Munitions ban (detailed in the NCFR Classified Annex) as well as required modernization or munition inventory shortfalls;
5. Quartermaster fuel distribution and water purification capacity and responsiveness to meet war plan needs;
6. Army watercraft, other port opening capabilities, modernization and responsiveness (with particular attention to the ability to flex between oceans) to meet war plan needs;
7. Transportation (fuel, water, and cargo) capacity and responsiveness to meet war plan needs;
8. Military police capacity to meet war plan needs.

REDUCING RISK THROUGH FORCE UTILIZATION

One approach for reducing risk to the force without growing end strength is through greater utilization of reserve component units. In the current security environment of persistent conflict, many Regular Army units struggle to maintain a sustainable rate of utilization. Although the total number of soldiers deployed remains below the peaks of combat operations in Iraq and Afghanistan, the range of missions and their geographic spread is now greater. Some units, such as Regular Army Patriot battalions, are operating at a high tempo for long periods of time. Sustaining such high-tempo rotation rates risks the long-term health of the force.

All too often the Army has deployed stressed Regular Army units when it could have deployed similar reserve component units. The Commission believes that the Army should better leverage the clearly expressed willingness of Army National Guard and Army Reserve units to deploy by assigning reserve component units to predictable missions. This approach would relieve stress on the Regular Army, husbanding its responsiveness for emergent requirements while continuing to build depth of operational experience in the reserve components. Importantly, the Commission does not believe that a more inclusive Total Force approach will allow the nation to assume even greater risk in its force structure by reducing end strength below 980,000. The Commission's recommendations on size and mix are, in fact, predicated on the Army faithfully executing this Total Force approach. (See the 12304b discussion in the Developing One Army section on Page XX.)

REDUCING RISK BY ADJUSTING COMPONENT SOURCING

Several unit types reside solely in the reserve components. The Commission did not have significant concerns with the vast majority of these sole sourcing approaches. There are however, concerns with the Ground-based Midcourse Defense (GMD) mission, a missile interceptor and fire control system deployed to Fort Greely, Alaska, and Vandenberg Air Force Base, California.

The GMD mission is currently being entirely sourced from the Army National Guard using 100 percent full-time support soldiers. Sole-sourcing this high-priority, one-of-a-kind capability only in the Army National Guard limits the Army's institutional investment in the mission, with the potential for negative consequences. Of note, it creates challenges for individual training, doctrine development, and organizational design updates.

Recommendation 22: The Congress should require the Secretary of Defense and Secretary of the Army to provide an assessment of the effect of the current sourcing solution for the Ground-based Midcourse Defense (GMD) mission on mission effectiveness. The assessment should consider implications for recruiting, training, career progression, doctrine development, and GMD modernization strategy. It should explicitly include consideration of Regular Army and multicomponent solutions as an alternative for the GMD mission. This assessment should be delivered no later than one year after publication of this report.

REDUCING RISK THROUGH STRUCTURE REDESIGN

The Army must innovate. During the course of its study, the Commission noted numerous instances of Army innovation in the field and an increased emphasis on leadership training and education to create the kind of force agility the broad spectrum of future challenges requires. Of note, the Commission reviewed several creative options on organizational designs for major Army combat formations. One such option involved a design for a replacement of the BCTs known as the Reconnaissance Strike Group. The Commission believes the Army and DoD should ensure such creative approaches are welcomed for examination. Alternative design and operational concepts should be routinely incorporated into Army and joint war-gaming and experimentation mechanisms.

Recommendation 23: The Congress should require the Secretary of Defense and Joint Staff to oversee the modeling of alternative Army design and operational concepts—including the Reconnaissance Strike Group, Hybrid Battalion Task Force, Stryker Global Response Force, and the Reconnaissance and Security Brigade Combat Team—and report on their findings within one year. The report to Congress should explicitly address the value of follow-on pilot programs to test further any promising alternative force design and concept approaches.

REDUCING RISK THROUGH JOINT ENABLERS

The Army relies on the strategic mobility triad—pre-positioning, airlift, and sealift—to project land power

into theaters of operation around the globe at the speed and tempo required by Combatant Commanders. This triad will be increasingly stressed by 2023 to meet war plan and scenario timelines. While current strategic mobility capacity meets timelines for the most demanding “fight tonight” contingencies, several factors will contribute to increased force projection challenges and risk over time.

The majority of Army capabilities for contingency operations are transported by sealift. Several DoD Roll-On Roll-Off (RORO) ships in the surge fleet will age out by 2023; over half of the surge fleet capacity will retire by 2030. For major combat operations, BCTs comprise only 25 percent of the Army’s initial sealift requirements with the remaining comprised of enabling forces and initial sustainment stocks on which the joint force depends.

Rail is the primary method for moving Army vehicles and equipment from fort-to-port for major contingency deployments. It is also a key mobility enabler for the U.S. Marine Corps. Almost half of the commercial chain tie-down railcar fleet will reach age-mandated retirement by 2022. The Army appears to recognize this future capability gap and has recommended exploring a commercial solution, including public-private partnerships with the rail industry and use of heavy lift trucks. Based on the Commission’s review, though, there does not appear to be a cross-DoD resourcing solution for this joint enabler gap.

The Commission is concerned that the advanced age of these sea and rail capabilities will limit the Services’ response to current and emergent challenges and also limit the deterrent value of America’s strategic depth. Further, without recapitalization or other corrective actions, the increasing dimensions of Army heavy equipment increases risk of exceeding lift capability of military or commercial assets.



NEED PHOTO CREDIT

No info in Get Info and I can't find it online.

Recommendation 24: The Secretary of Defense and the Chairman of the Joint Chiefs of Staff should report to Congress within a year on a strategic mobility sufficiency analysis and associated risk mitigation plan from 2020 through 2040.

POSSIBLE STRUCTURE OFFSETS

Recognizing that the current strategic guidance and the Army's current end strength ceiling may stay in place, the Commission sought to identify potential manpower offsets that could be used to reduce or close important gaps. The Commission's assessment, based on current and projected threats, found the Army's capability and capacity in Infantry Brigade Combat Teams (IBCTs) created *less* risk than many of the structure shortfalls identified above. The Commission concludes that the Army could reduce overall mission and force risk by reallocating the manpower associated with up to two Regular Army IBCTs to reduce the priority structure shortfalls identified above. The Commission notes that, with the Regular Army remaining at a total end strength of 450,000, this initiative would permit reallocating more than 8,500 soldiers to help mitigate the gaps identified above. Moreover, the equipment extant in up to two IBCTs could be used for additional prepositioned equipment sets or, as the environment continues to change, for expansibility, pending more detailed assessment.

It is critical to note that while reducing up to two Regular Army IBCTs should create sufficient manpower spaces for the force structure changes recommended by the Commission, this change alone would not yield the dollars required to reduce or close most of the identified gaps. If Congress permits, the Army could move further toward offsetting required costs through efficiencies and eliminating redundancies in its operations (see the Fiscal Challenges chapter on page XX for further discussion).

Recommendation 25: The Army should consider reducing up to two Regular Army IBCTs to provide manpower spaces that could be used to decrease higher priority risks.

THE GENERATING FORCE

To build and sustain the operational forces needed for the nation's defense, the Army has maintained a generating force. It includes recruiters, the Army's training base, and Army

installations and installation support. From time to time, the generating force has also provided additional depth to the operating force by providing real-time reach-back support. The generating force provides individuals, teams, or entire units with specific capabilities and functions for employment by or in direct support of Joint Force commanders. Determining the appropriate size of the generating force is important to assessing the possible gaps and overages in Army force size.

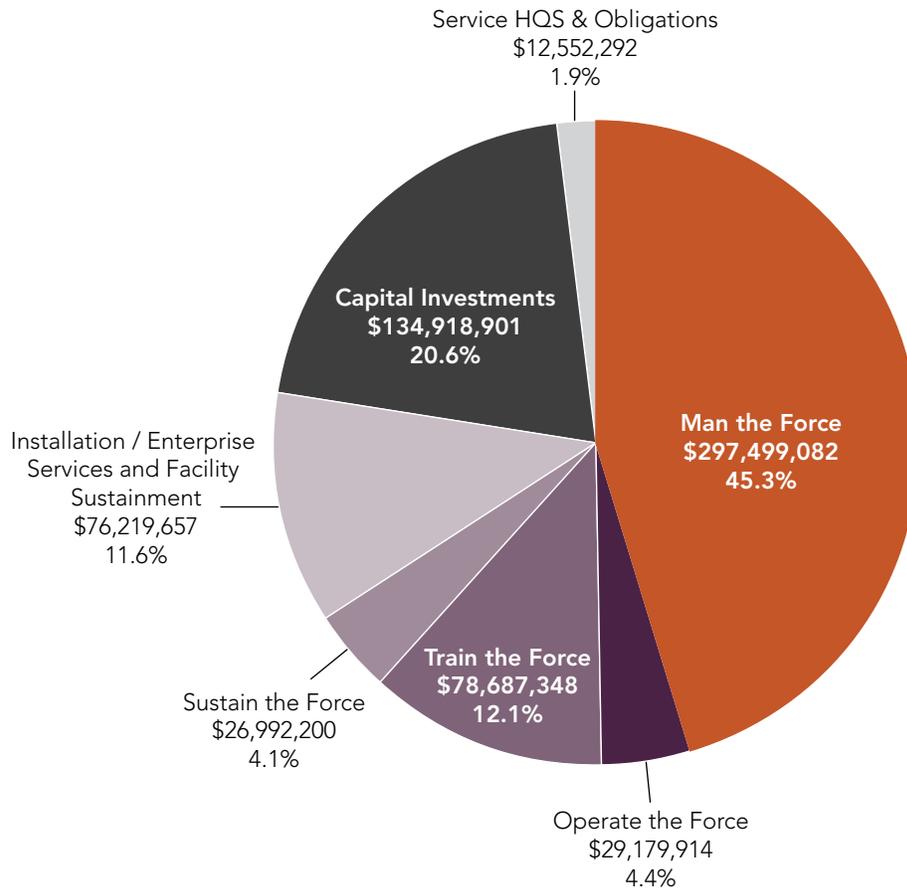
While the Army has a formal Total Army Analysis process for operational units, it lacks a similar process for the generating force. Primary generating force size drivers include, but are not limited to, number of installations; equipment density; research, development, and testing; demand for medical care for active Army personnel and other Services' personnel, dependents, and retirees; and individual and collective training.

Reducing the generating force as a simple percentage of the total force is problematic. Many of the generating force functions, such as schoolhouses, are required regardless of the size of the Army. Moreover, the generating force is a critical resource for expanding the Army. Expansibility is an attribute highlighted in current defense guidance as a critical hedge against the risks of unforeseen Army mission requirements. Significant reductions in the size of the generating force put the ability to expand the Army at risk. Given the inelastic nature of the generating force's size to reductions in the operating force, the Commission anticipates that the generating force should increase as a percentage of the total force as the total force decreases. In raw terms, this means the size of the generating force will remain relatively constant or lag behind the operational Army in size as the size of the total force decreases.

The Center for Army Analysis (CAA) and the U.S. Army Manpower Analysis Agency recently developed a methodology to assist senior leaders in determining a required size for the generating force. Because no simple correlation exists between the generating force and the size of the operating force, the methodology focuses on several drivers that impact the size of the generating force. This Generating Force Model uses a function-to-organization approach for each major Army institutional element. The model will have the ability to project generating force manpower requirements into the out-years and provide the leadership options to redistribute manpower externally, realign manpower internally, or divest the function.

Recommendation 26: The Army should complete development and fully implement the Generating Force Model to improve requirements determination and better inform generating force manpower decisions.

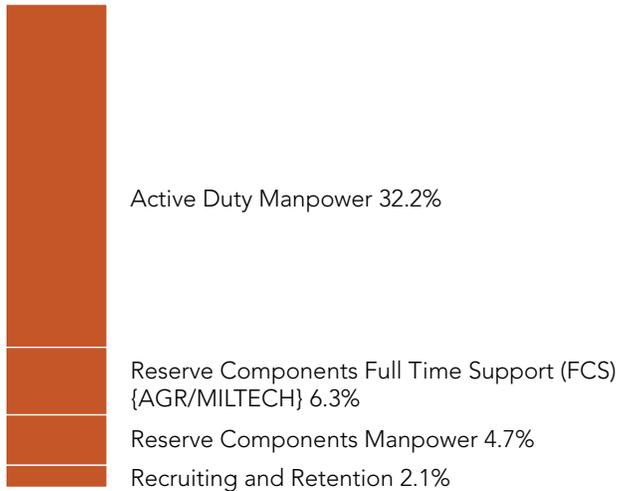
Figure 9
ARMY FRAMEWORK RESOURCES, 2016–2020



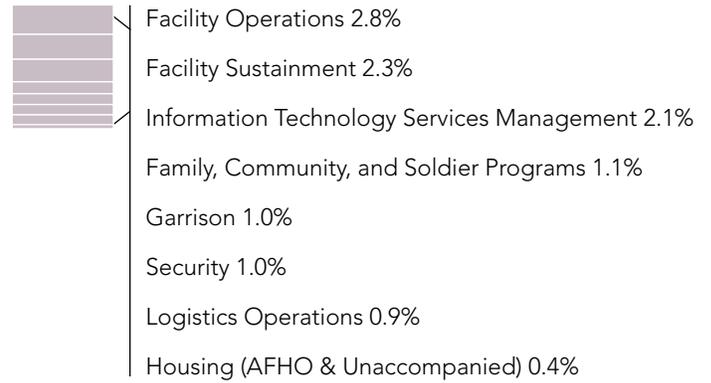
In recent years, policies enacted to restrain spending, along with a stronger economy, have led to reductions in the budget deficit. On August 2, 2011, the President signed into law the Budget Control Act of 2011 (P.L. 112-25). The BCA contained a variety of measures intended to reduce the deficit by at least \$2.1 trillion over the FY2012-FY2021 period, along with a mechanism to increase the debt limit. Two subsequent pieces of legislation have modified the BCA since it was enacted—the American Taxpayer Relief Act of 2012 (ATRA; P.L. 112-240) and the Bipartisan Budget Act of 2013 (BBA; P.L. 113-67). Both pieces of legislation allow for more discretionary spending than was provided under the BCA for FY2013, FY2014, and FY2015. Various deficit reduction measures were included to offset the costs of the changes to spending levels in both ATRA and the BBA. The BCA and the BBA will continue to affect spending levels in FY2015 and beyond as Congress may debate whether or not to enact further changes.

Source: Army President's Budget Submission 2016

MAN THE FORCE



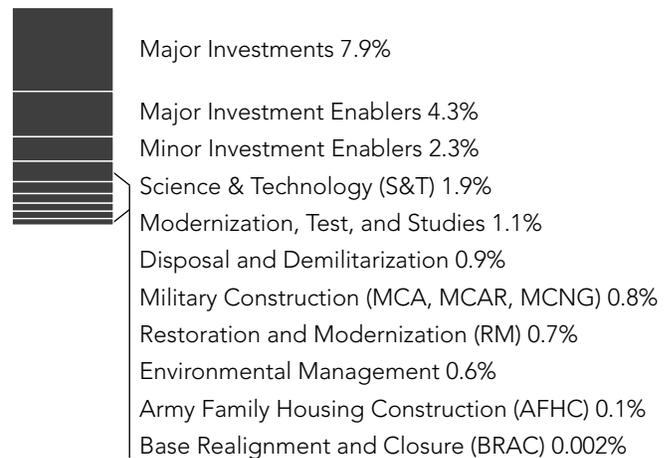
INSTALLATION / ENTERPRISE SERVICES AND FACILITY SUSTAINMENT



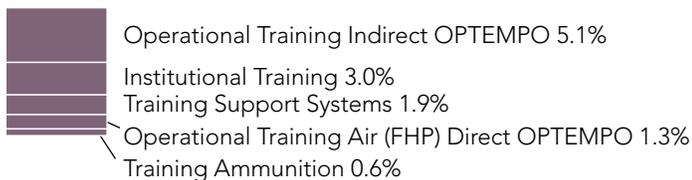
OPERATE THE FORCE



CAPITAL INVESTMENTS



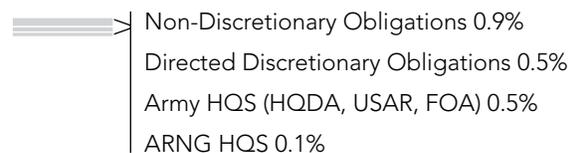
TRAIN THE FORCE



SUSTAIN THE FORCE



SERVICE HQS & OBLIGATIONS





“...An evaluation and identification of force generation policies for the Army with respect to size and force mixture in order to fulfill current and anticipated mission requirements for the Army in a manner consistent with available resources and anticipated future resources...”

2015 NDAA, Section 1703(a)(2)(B)

DEVELOPING ONE ARMY

From the mountains of Afghanistan during Operation Enduring Freedom to the streets of New Orleans after Hurricane Katrina, Americans saw images of U.S. Army soldiers doing their duty for our nation, fulfilling their oaths of service, demonstrating teamwork and a willingness to sacrifice for us all, and laying down their lives if necessary. Only by listening closely to newscasts or by reading the captions with photographs would the typical American know whether a soldier was in the Regular Army, the Army National Guard, or

the U.S. Army Reserve. In times of war and crisis, “the Army” is the only label that matters to the American people.

In legislation, administration, and funding, Army components fall into distinct categories. The Army has assigned broad mission sets to each component according to accessibility of units over time and to stretch force structure within budget constraints. A cultural divide exists between the components, as well: Some of that is good, healthy unit pride and esprit de corps; unfortunately, some of that is the result of

a long-standing—and, the Commission contends, outdated—prejudice regarding the skills and dedication of one component over the others. These differences among the components continue to be manifested in a wide range of administrative policies and traditional practices, from promotion standards and training opportunities to personnel management and human resources stove piping. These work against developing one Army.

In its travels, the Commission constantly heard the same two refrains. One, members of all three components commented about continuing obstacles facing soldiers transitioning among the Regular Army, Army National Guard, and Army Reserve. Two, once prepared, a soldier is a soldier and has the confidence of fellow soldiers and their commanders to accomplish the mission regardless of component.

What soldiers accomplish so well in the crucible of combat, the Commission challenges Army and political leaders to accomplish in managing these soldiers all the time: to take specific steps to achieve a truly Total Force with three distinct, interdependent, and essential components.

“You cannot wave a wand, you can’t throw money on it and build personal readiness overnight. Personal readiness takes time. It takes operational experience. It requires institutional experience. It requires us to invest in their professional military education. It requires us to ensure we carve out enough time for them to maintain their personal fitness, both physically and mentally. That’s why I say time is our biggest resource challenge when it comes to building and sustaining readiness.”

GEN Robert “Abe” Abrams, Comanding General, Forces Command, speaking at the Association of the United States Army’s annual meeting, Oct. 14, 2015.

Photo on page 61

Staff Sergeant Christopher Croslin, the 2014 Army Reserve Drill Sergeant of the Year, brings a group of Army Reserve soldiers to present arms during reveille at Fort McCoy, Wisconsin.

ROLE OF THE ARMY COMPONENTS

The Army’s size and diversity of capabilities distinguish it from other land forces. It provides the capabilities and capacity to fulfill its statutory mission prescribed in section 3062 of the U.S. Code:

“It shall be organized, trained, and equipped primarily for prompt and sustained combat incident to operations on land. It is responsible for the preparation of land forces necessary for the effective prosecution of war except as otherwise assigned and, in accordance with integrated joint mobilization plans, for the expansion of the peacetime components of the Army to meet the needs of war...” (*Figure 16*)

Army forces operate as part of a Joint force.

At any given time, the active Army consists of the Regular Army and any activated reservists. For example, in November 2015, the active Army included approximately 491,000 Regular Army soldiers, about 46,000 full-time active Guard and Reservists, and an additional 16,000 reserve component soldiers mobilized (activated) for active duty, for a total active force of about 553,000. This example of total active Army illustrates how the Army National Guard and the Army Reserve provide operational capabilities and strategic depth to the Regular Army to expand its collective capacity.

Among the nation’s armed services, the Army is unique in its reliance on its reserve components (*Figure 16*). The Army National Guard and Army Reserve provide over half of the Army’s total capacity. While the three Army components share the same training standards, doctrine, and equipment, each are distinct, interdependent and essential. Similar units in all Army components (such as infantry battalions and truck companies) are organized the same and follow the same operational and training doctrines. Yet, each component has unique attributes informing the distribution of capabilities.

Regular Army units are more heavily consolidated and co-located on large installations with necessary training facilities, such as weapons ranges, maneuver areas, and urban training sites. Regular Army units are intended to rapidly project capabilities to support the Joint Force, as needed, by maintaining the highest readiness to provide the greatest flexibility. Army National Guard forces, located in 2,600 communities across the 54 U.S. states, territories, and the District of Columbia, and the 2,000 units of the Army Reserve, are distributed throughout our nation’s communities and typically must travel to regional training centers to conduct collective training. Since the 1993 *AC-RC Leaders Offsite Agreement*, Army National Guard forces have focused primarily on wartime direct combat missions and peacetime domestic

Figure 15
ARMY FORMATIONS

TYPE OF FORMATION	NUMBER OF PERSONNEL IN UNIT	RANK OF COMMAND LEVEL
Army (2-5 Corps)	Task Organized with 100,000-300,000 Soldiers	General 
Corps (2-5 Divisions)	Task Organized with 40,000-100,000 Soldiers	Lieutenant General 
Division (5 or more Brigades)	Task Organized with 10,000-18,000 Soldiers	Major General 
Brigade/Regiment/Group (3 or more Battalions)	3,000-5,000 Soldiers	Colonel 
Battalion/Squadron (3-5 Companies)	400-1,000 Soldiers	Lieutenant Colonel 
Company/Battery/Troop (3-5 Platoons)	60-200 Soldiers	Captain 
Platoon (3-4 Squads)	16-50 Soldiers	Lieutenant 
Squad/Section (2-4 Teams)	4-12 Soldiers	Staff Sergeant 
Fire Team/Crew (4-6)	4-6 Soldiers	Sergeant 

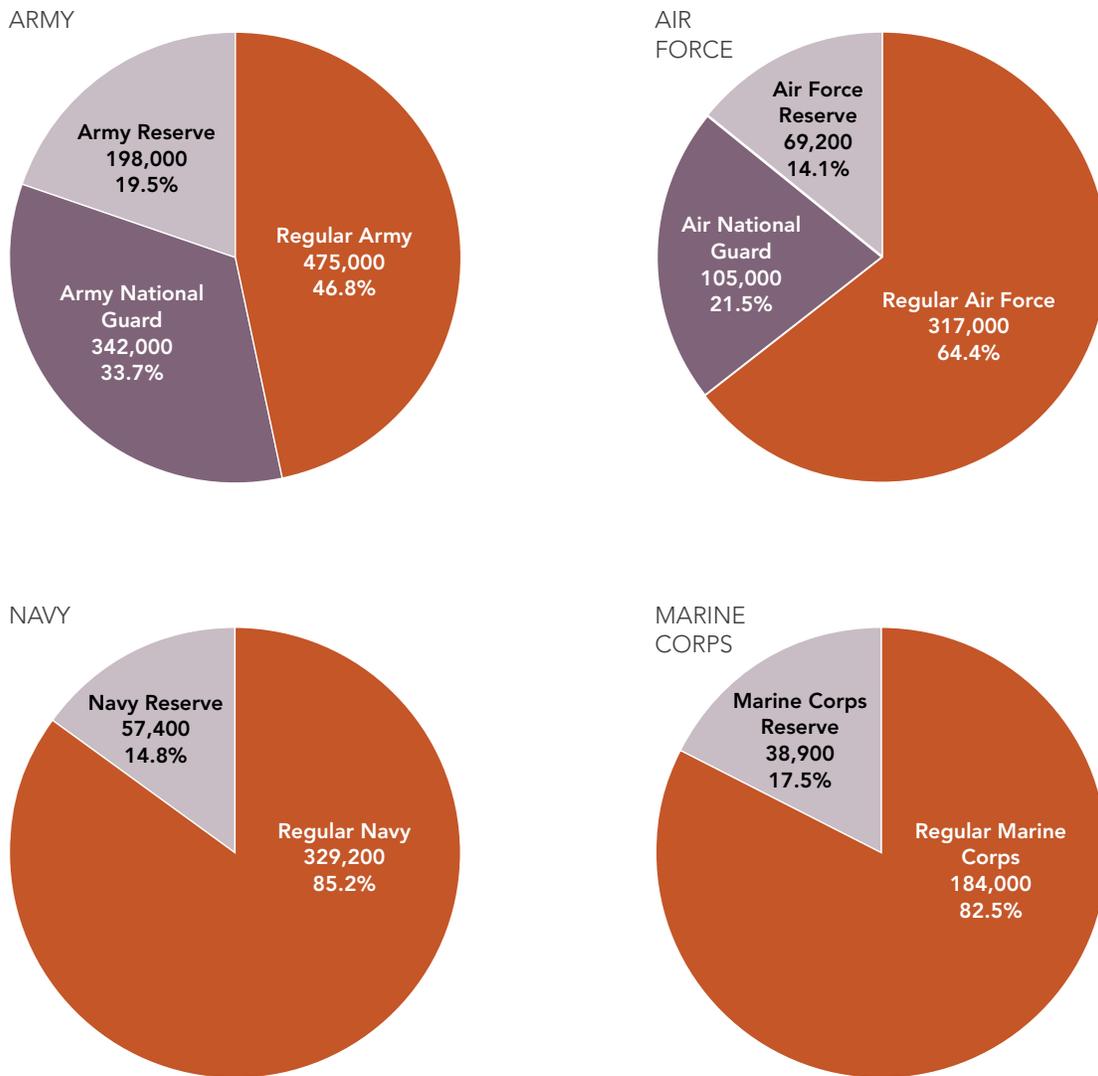
emergencies while the Army Reserve has focused on providing wartime sustainment or combat support. The Army National Guard also serves as the organized militia for the states and territories when not under federal authority.

The Regular Army provides forward stationed forces and capabilities needed twenty-four hours a day, seven days a week. This high readiness is the foundation of Army capabilities provided to Combatant Commands. The Army National Guard and Army Reserve provides additional Army maneuver

and support capacity, and each also provide selected capabilities found only in that component that may be called upon early in a conflict or crisis response. The unique civilian expertise in these part-time forces also brings capabilities that have proven essential when answering the call to our nation's defense or in time of regional disaster relief.

The Army National Guard and Army Reserve play both an operational and strategic role, providing operational capabilities and strategic depth across the full range of military operations.

Figure 16
RATIO OF RESERVE COMPONENTS PER SERVICE, 2016



Source: FY 2016 President's Base Budget Request, Feb 2015

Operational employment and strategic depth are reflected in the spectrum of collective readiness in which units exist, regardless of components, based on specific assigned mission requirements coupled with how quickly the units may be required for employment. Furthermore, an *operational* label does not infer only direct combat (infantry, aviation, armor, etc.), nor does the *strategic* label mean only support and sustainment (transportation, quartermaster, medical, etc.). All units are operational, and all contribute to the force's strategic depth. All units in every component are part of the force mix, and action must be taken to avoid a given unit suffering from a chronic lack of readiness ensuring all units have a pathway to readiness over time.

ONE ARMY IN TOTAL FORCE POLICY

Defense and Army policy directs the Army to organize, man, train, and equip the Regular Army, Army National Guard and U.S. Army Reserve as an integrated, operational Total Force. Subsequent Army Total Force implementation guidance has emphasized the importance of improved and continued integration across Army components. The Army has explored a myriad of means to integrate active and reserve forces. Such efforts achieved an unparalleled level of success during Operation Iraqi Freedom when the Army honed its ability to seamlessly employ reserve component formations in theater as

TITLE 10 AND TITLE 32

In the specific sections of Title 10 and Title 32 listed below, Congress has expressed its intent and vision for the Army and its Reserve Components.

U.S. CODE TITLE 10 § 3062

It is the intent of Congress to provide an Army that is capable, in conjunction with the other armed forces—(1) of preserving the peace and security, and providing for the defense, of the United States, the Commonwealths and possessions, and any areas occupied by the United States; (2) supporting the national policies; (3) implementing the national objectives; and (4) overcoming any nations responsible for aggressive acts that imperil the peace and security of the United States.

In general, the Army, within the Department of the Army, includes land combat and service forces and such aviation and water transport as may be organic therein. It shall be organized, trained, and equipped primarily for prompt and sustained combat incident to operations on land. It is responsible for the preparation of land forces necessary for the effective prosecution of war except as otherwise assigned and, in accordance with integrated joint mobilization plans, for the expansion of the peacetime components of the Army to meet the needs of war.

The Army consists of—(1) the Regular Army, the Army National Guard of the United States, the Army National Guard while in the service of the United States, and the Army Reserve; and (2) all persons appointed or enlisted in, or conscripted into, the Army without component.

U.S. CODE TITLE 10 § 10102

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 more units and persons are needed than are in the regular components.

U.S. CODE TITLE 32 U.S.C. §102

In accordance with the traditional military policy of the United States, it is essential that the strength and organization of the Army National Guard and the Air National Guard as an integral part of the first line defenses of the United States be maintained and assured at all times. Whenever Congress determines that more units and organizations are needed for the national security than are in the regular components of the ground and air forces, the Army National Guard of the United States and the Air National Guard of the United States, or such parts of them as are needed, together with such units of other reserve components as are necessary for a balanced force, shall be ordered to active Federal duty and retained as long as so needed.

ARNG AND ARNGUS

In Title 10, the Army National Guard of the United States (ARNGUS) is defined as a reserve component of the Army, whereas the Army National Guard (ARNG) is the collective militia forces of the 54 states, territories, and the District of Columbia. While the Commission recognizes this legal distinction, this report uses the Army National Guard to encompass all ARNG units and personnel regardless of whether they are in a Title 32 or a Title 10 status.

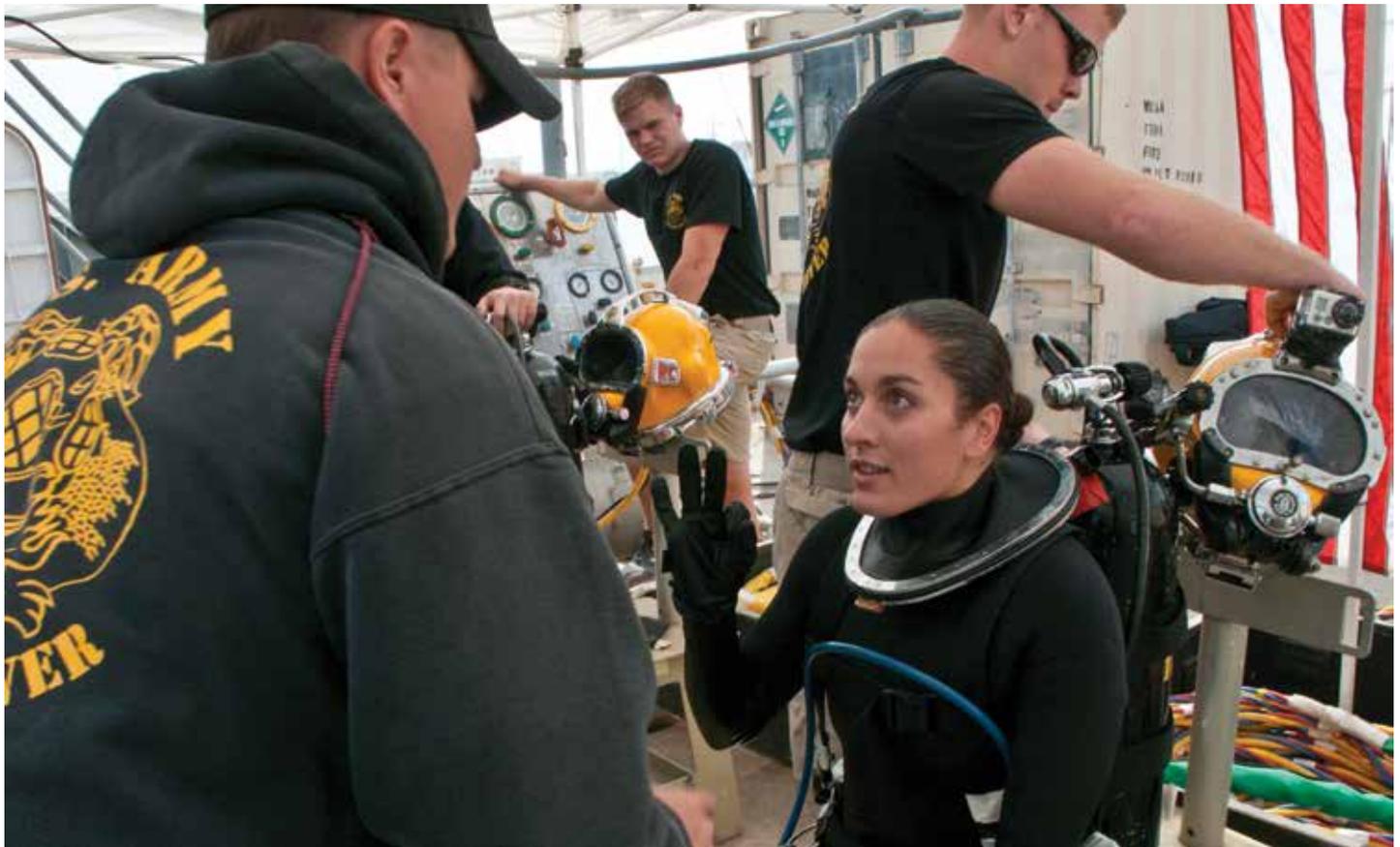


Photo by U.S. Army Sgt. Micah VanDyke, Third Army/ARCENT Public Affairs

First Lieutenant Christie Plackis gives the OK hand gesture to Staff Sergeant Eric Bailey, the dive supervisor, as he checks her for any medical concerns after a dive at the Sea Point of Debarkation/Embarkation in Shuaiba Port, Kuwait.

part of a Total Force. Sustained use of the reserve components caused Department of Defense leadership to review and adjust policies.

DoD Total Force Policy

In 2007, Defense Secretary Robert Gates issued his “Utilization of the Total Force” memo in which he stated “... the Department has been assessing a number of options on how best to support global military operational needs. A significant question addressed by the review has been whether we have the right policies to govern how we utilize members for the Reserve, National Guard, and our Active Component units.” The secretary’s direction set a goal of 1:2 deployment-to-dwell rate goal for active components. That would mean that a deployment of one year would be followed by two years in non-deployed status. The secretary also set a goal of 1:5 mobilization-to-dwell rate goal for reserve components,

meaning that a mobilization of one year would be followed by five years in non-mobilized status. The specified twelve-month mobilization period includes post-mobilization training and demobilization processing. Within a twelve-month mobilization, boots on the ground (BOG) for Army National Guard and Army Reserve units typically became nine months. In contrast, Regular Army forces would spend an entire twelve-month deployment period in theater. Furthermore, the Army has often not been able to meet the DoD dwell at home goals. From 2010 to 2014, twenty-five different types of Regular Army units and sixteen different types of reserve component units exceeded the Secretary of Defense’s dwell goals.

In his 2008 Department of Defense Directive 1200.17, “Managing the Reserve Components as an Operational Force,” Secretary Gates codified the new paradigm that “the RCs provide operational capabilities and strategic depth to meet U.S. defense requirements across the full spectrum of

conflict...Ensure total force policies encourage optimum integration of AC and RC personnel to provide the most efficient training opportunities to all personnel, allow for shared use of resources, and provide the most operational benefits and mission capability.” Army Directive 2012-08, Army Total Force Policy, further implemented lessons learned and established Army policy for integrating the Regular Army, Army National Guard, and Army Reserve as a Total Force. In support of this policy, the Army has integrated Army National Guard and Army Reserve soldiers with their Regular Army counterparts in numerous ways.

Army Total Force Policy

The Army’s existing initiatives are partially meeting the intent of Total Force integration. However, the Commission concludes that for the sake of a more effective and efficient Army and to achieve greater strategic depth, more must be done to fully implement a comprehensive partnership and integrated programs.

Recommendation 27: The Army must manage and provide forces under the Total Force approach.

Recommendation 28: The Secretary of the Army should review and assess officer and NCO positions from all components for potential designation as integrated positions that would allow individuals from all components to fill positions to foster an Army Total Force culture and expand knowledge about other components. The Secretary of the Army’s goal should be to increase billets designated for multicomponent use. A review should be completed within nine months after publication of this report, and any new designations should be completed within eighteen months.

Recommendation 29: The Secretary of the Army should develop selection and promotion policies that incentivize Regular Army, Army National Guard, and Army Reserve assignments across components and within multicomponent units. The Secretary of the Army’s goal should be to substantially increase incentives for service in multicomponent units. The Secretary of the Army should make changes within one year after publication of this report.

One means for expanding Army National Guard and Army Reserve roles within the Total Force is Title 10 USC 12304b (Active Duty for Preplanned Missions in Support



U.S. Army photo by Spc. Olanrewaju Akinwunmi, 25th Infantry Division Public Affairs

Private First Class Ricky Olivo, a gunner with Company A, 3rd Battalion, 509 Parachute Infantry Regiment, 4th Brigade Combat Team, 25th Infantry Division (Airborne), travels in an up-armored Humvee during a patrol in Iraq.

of the Combatant Commands). The 2012 National Defense Authorization Act (NDAA) created this relatively new authority in which the Services can implement an involuntary partial mobilization of up to 60,000 reserve component personnel at any one time for a maximum of 365 days. To use this authority, the Services are required, in advance, to detail manpower and costs in budget materials, including intended missions and mobilization periods, so that the funding can be approved in the programming cycle at least two years in advance of intended mobilization.

This authority provides access to the reserve components for predictable global demands on an enduring basis. Forces Command planning for priority missions outside the scope of Overseas Contingency Operations reflected a need of 3,000 man years in fiscal year 2014, fiscal year 2015, and fiscal year 2016 base budget funding. However, other funding needs led the Army to program only one-third of these man years for 12304b missions. Consequently, some Regular Army formations deployed with less than two years dwell at home stations even when Army National Guard and Army Reserve formations of the same type were available. Some examples of enduring, preprogrammed missions that could be performed by reserve component units utilizing the 12304b authority include Kosovo peacekeeping, Multi-National Forward Observer

U.S. Army photo by Pfc. Steven Young



7th Special Forces Group (Airborne) Green Berets participate in a training exercise on the beach of Eglin Air Force Base, Florida.

(Sinai), the Defense Chemical, Biological, Radiological, Nuclear Response Force, and selected Theater Security Cooperation events.

In the wake of the Budget Control Act of 2011, the Army turned several of these missions over to Regular Army units as a

way to garner savings. Army officials told the Commission that the impact of budgetary cuts has effectively limited the Army's ability to provide Army National Guard and Army Reserve forces to meet combatant command requirements. Off-ramp decisions to avoid costs after scheduling Army National Guard units for deployment increased friction and, in some cases, raised suspicions between components that other motives were in play. The Total Force Policy must be resourced if it is going to be effective, and the absence of adequate 12304b funding will limit using Army National Guard and Army Reserve forces on missions for which they are ideally suited. Meanwhile, such cost avoidance decisions increase operational tempo for many Regular Army units that may not have sufficient home station dwell time.

Recommendation 30: The Congress should expand 12304b authority to include operational requirements that emerge within the programmed budget timeline, including the year of execution.

Recommendation 31: The Army should budget for and the Congress should authorize and fund no fewer than 3,000 man years annually for 12304b utilization of the reserve components. The Secretary of Defense in conjunction with the Army and the Office of Management and Budget should also provide for the use of Overseas Contingency Operations and supplemental funding for reserve component utilization under 12304b.

12304(B), 12304A, AND 12304B

Mobilization authority for the reserve component is governed by several statutory provisions. Among these provisions is section 12304 of Title 10, which permits the President to involuntarily mobilize reserve component units, when necessary, to augment active forces for any named operational mission or in several instances mentioned in sub-paragraph (b). This subparagraph authorizes involuntary mobilization when it is necessary to provide assistance in responding to an emergency involving the use, or threatened use, of a weapon of mass destruction or a terrorist attack or threatened terrorist attack in the United States that results, or could result, in significant loss of life or property.

Two subsequent sections of Title 10 set forth additional situations in which the President could authorize the

involuntary mobilization of Reserve Component units. Section 12304a authorizes the involuntary mobilization of reserve component units for not more than 120 days when a governor requests federal assistance in responding to a major disaster or emergency. Section 12304b authorizes the involuntary mobilization of a reserve component unit when the secretary of a military department determines that it is necessary for a preplanned mission in support of a combatant command. Section 12304b requires that the manpower and associated costs for mobilizing a reserve component unit for a preplanned mission be included in the defense budget materials for the fiscal years in which the unit is anticipated to be called to active duty and further requires that this information include a description of the mission and the anticipated length of time that the units will be on active duty.

Furthermore, the Commission finds that making deployment policies consistent among the components—particularly the duration of BOG in theater—would further foster an integrated Total Force culture, as would Regular Army, Army National Guard, and Army Reserve cross-component assignments. Additionally, the Commission finds personnel from each Army component need to better understand the other components. Having all three components serve together at all levels will improve readiness, create shared understanding, and help break down cultural barriers between Army components.

Notably, the Commission heard no declarations among soldiers and leaders in Army National Guard or Army Reserve units that they were being overused. Indeed, the Commission heard more often from reserve component soldiers that they were not being used enough. Army National Guard and Army Reserve members repeatedly told the Commission that they could meet a 1:4 mobilization to dwell ratio; employers likewise endorsed such a ratio for their Army National Guard members and Army Reserve employees, and state Governors echoed the sentiment, promoting greater use of their Guard forces in federal missions. The only request for all three parties—the soldiers, the employers, and the states—was predictability of deployments whenever possible. The Commission does not recommend a change in the mobilization-to-dwell policy goals but advocates for greater flexibility to allow the Army more efficient use of its forces across all components without incurring undue risk to the force.

Recommendation 32: The Secretary of Defense should update the January 19, 2007, memo “Utilization of the Total Force” to allow flexible involuntary mobilization periods in an effort to achieve common BOG periods for all components.

ONE ARMY USING MULTICOMPONENT UNITS

The Army has a long history of mixed results using multicomponent units—that is, units that have members and organizations from the Regular Army along with members and organizations of the Army National Guard and Army Reserve. In many cases, the Army tried to implement multicomponent constructions in units or with policies that were not suited to the model. Currently, the Army has thirty-seven multicomponent units documented, including many successful examples like the Army Space and Missile Defense Command’s 100th Missile Defense Brigade (Ground-based Midcourse Defense). However, even these units suggest that much work is required to achieve success with multicomponent units.



Captain Thomas Lorenson of the 2nd Cavalry Regiment direct an AH-64 attack helicopter strike on a target during the U.S. Army Europe Best Junior Officer Competition, which tests participant on warrior tasks and drills, decision making, problem solving, and leadership skills.

Training together can help improve readiness while also helping develop one Army. It may be necessary to design multicomponent units so that the Regular Army portion of the unit can deploy independently if military needs require. Also, the reserve-component portions of the multicomponent unit must have adequate resources to maintain reasonable levels of readiness. Overall, using multicomponent units as part of implementing the Army’s Total Force Policy requires an understanding of the specific goals, benefits, and challenges associated with multicomponent units.

Other organizational structures should also be considered to further integrate components. The Commission encourages the Army to continue command emphasis on ongoing multicomponent training partnerships and associations and re-examine past efforts, such as the use of round-out units and cross-component personnel assignments—including command billets—as part of the Army’s Total Force Policy.

Despite the challenges, multicomponent units represent one of the best ways to develop one Army, especially if members of the units can train together in peacetime and, if necessary, fight together in war. Multicomponent units can also draw on the differing strengths of the Regular Army, the Army National Guard, and the Army Reserve in ways that improve readiness. The Commission therefore urges the

Army to continue creating and sustaining multicomponent units, and the Commission has offered a specific approach to increasing use of multicomponent units in Army aviation (*see page XX*).

Recommendation 33: The Army should continue using multicomponent units and training partnerships to improve Total Force integration and overall Army effectiveness.

Recommendation 34: The Army should add specific guidance on goals for future use of multicomponent units and related initiatives to the Army's Total Force Policy Implementation Guidance for fiscal year 2017.

Recommendation 35: The Army should develop a substantial pilot program to test the viability of a multicomponent aviation unit in order to improve readiness and improve integration of Regular Army, Army National Guard, and Army Reserve forces.

ONE ARMY ADMINISTRATION

Achieving the aims of the Total Force Policy requires organization and coordination of activities across the operating and generating forces. These activities occur within an entanglement of laws, policies, and procedures. People to administer, management systems to control, and authorities to regulate all come into play when administering the Total Force. The Commission believes Full-Time Support,

MULTICOMPONENT CHALLENGES

The 100th Missile Defense Brigade (Ground-based Midcourse Defense), a multicomponent unit that defends the continental United States against ballistic missile attack, demonstrates the strengths and challenges of Total Force integration.

Based in Colorado Springs, Colorado, the brigade commands a battalion in Alaska, detachments in California and New York, and early warning radar batteries in the Pacific Command, European Command, and Central Command areas of operations. Authorized over 560 soldiers—Regular Army and Army National Guard—the 100th Missile Defense Brigade falls under U.S. Army Space and Missile Defense Command (SMDC), which supports U.S. Strategic Command (STRATCOM).

Operationally, the brigade is part of a joint, global network of space, sea, and ground-based sensors and missile systems designed to defeat intercontinental missile threats. Legally, the brigade's chain of command reflects the complexities of state and federal authorities embodied in Title 32 and Title 10 of the U.S. Code.

The 100th Brigade benefits from having a combination of Regular Army and Army National Guard members. Regular Army soldiers facilitate planning, training, and integration with the rest of the Army. In 2014, for example, the Army began to transition the brigade's detachments to batteries and convert the operations and maintenance personnel from contractors to soldiers. During this on-going transition, one of the brigade's Regular Army officers

coordinated new equipment training at Fort Bliss, Texas, and Fort Sill, Oklahoma for the brigade's Guard members. This required extensive coordination with the posts to take care of the National Guard soldiers, including their housing, vehicle support, and leave. Meanwhile, the Army National Guard soldiers provide long-term stability to the brigade's small, highly technical force for the brigade's daily missions.

At the same time, the 100th Brigade demonstrates challenges for multicomponent units implementing Total Force integration. Because the brigade falls under SMDC, a Regular Army chain of command, all deployments and exercises are credited to the Regular Army without National Guard credit. This skews Service-level reporting on the components' respective operational tempo in favor of the Regular Army. The 100th Brigade also demonstrates limitations created by separate Regular Army, Army Reserve, and National Guard human resource networks and data systems. The Army is working to integrate these systems in the Integrated Personnel and Pay System—Army (IPPS-A), but the system will not be fully fielded until 2020. In the meantime, the chain of command must rely on multiple and separate personnel and pay systems to manage Regular Army and National Guard soldiers.

The 100th Missile Defense Brigade's experience demonstrates that soldiers can achieve Total Force integration and make multicomponent units work; it's systems and policies that need to get up to speed.

Integrated Personnel and Pay System-Army (IPPS-A), and authorities within duty status reform will play critical roles in administering one Army.

Full-Time Support

Full-Time Support (FTS) personnel are assigned to work day-to-day operations for reserve component units, performing such duties as recruiting, organizing, administering, maintaining, instructing, and training for a particular Army National Guard or Army Reserve unit. FTS personnel accomplish those foundational tasks separate from the unit drill periods allowing the traditional drilling soldier to focus on individual and collective activities. The productivity of the drill periods is dramatically enhanced because the conditions are set for the reserve component unit to achieve higher levels of readiness.

The Army's universal workload-based process, which sets manpower requirements to accomplish the directed tasks for Tables of Distribution and Allowance organizations, determines FTS levels. In 2005, the FTS requirement methodology was revalidated, and in 2012 the Secretary of the Army reported to the Congress a total FTS requirement of 123,000. The November 2014 Army Management Action Group FTS Review reported that FTS requirements determined by workload based processed were filled at 67 percent for fiscal year 2016.

About 85 percent of reserve component soldiers are traditional drilling reservists with twenty-four drill days and fifteen annual training days a year. FTS personnel (soldiers and technicians) comprise 17 percent of the Army National Guard and 14 percent of the Army Reserve end strength. About 90 percent of FTS personnel are deployable, unlike the preponderance of Army civilians. During the peak of reserve component contributions to the wars in Iraq and Afghanistan from 2006 to 2009, the FTS shortage was mitigated through temporary FTS personnel, primarily Active Duty for Operational Support and selective early mobilization.

A key aspect to achieving integration of the components is providing officers and enlisted soldiers opportunities to serve in other components, but statutory limitations impede such integration. Statute does not permit the assignment of Regular Army officers and enlisted soldiers into Army National Guard positions to execute Full-Time Support functions. Currently, Regular Army personnel can only be detailed to serve with Army National Guard units, resulting in limits on authorities and permitted actions. In the case of the Army Reserve, no statute prohibits assigning Regular Army officers and NCOs to do Full-Time Support functions, but it has been a matter of policy to not routinely make such assignments.

“Are you going to optimize where you can put super units who can do the great job we’re going to ask them? Or are you going to be fair and leave everybody at the same level? On both those questions, goodness or fairness, I always vote for goodness.”

General Robert Shoemaker (USA, Ret.), former commander of the U.S. Army Forces Command an inductee into the Aviation Hall of Fame, speaking at the Commission’s listening session in Killeen, Texas, July 9, 2015.

Recommendation 36: Congress should enact legislation to allow assignment of Regular Army officers and enlisted soldiers to Army National Guard positions to execute all functions without prejudice to their federal standing. The legislation should also permit the similar assignment of National Guard officers and enlisted soldiers to Regular Army units. Assignment to another component should be considered a key developmental experience and could be considered criteria for promotion. Notwithstanding the legislative reform, a pilot program to test the concept should be established in the Army Reserve within one year of publication of this report and evaluated in two years to determine the effectiveness of such a program.

Integrating Personnel Management and Pay

Fundamental to managing the Total Force as one Army are personnel management and pay. The three Army components currently operate separate personnel and pay systems, thus creating barriers to personal readiness and a career of service allowing soldiers to transition among components, popularly known as “continuum of service.” The Commission has determined that achieving a singular personnel management and pay system for the whole Army will promote and provide the greatest administrative step toward implementing the Total Force Policy.

The Integrated Personnel and Pay System-Army (IPPS-A) program offers a means to provide this improvement. IPPS-A is a web-based human resources system that will provide, for the first time, a personnel and pay capability that cuts across all components of the Army. IPPS-A will create an integrated personnel and pay record for each soldier that covers their entire career and allows personnel actions to drive associated pay events. It will be self-service and available twenty-four

DEVELOPING ONE ARMY

hours a day, provide commanders personnel asset visibility, and facilitate movement of soldiers across Army components by maintaining benefits, personnel information, and training in accordance with the Army Total Force Policy.

The timeline calls for IPPS-A to begin implantation in 2018:

- Replacing the Army National Guard personnel system in the second quarter of fiscal year 2018;
- Replacing the Regular Army and Army Reserve personnel systems in first quarter fiscal year 2019;
- Establishing one pay system for Regular Army, Army National Guard, and Army Reserve in fourth quarter fiscal year 2019;
- Establishing a unified evaluation and retention management system in third quarter fiscal year 2020.

The Commission acknowledges that many view IPPS-A with skepticism based on the Army's unfortunate history with the Defense Integrated Military Human Resources System (DIMHRS). The 2010 decision to terminate the DIMHRS program, a similar and more expansive personnel and pay integrated system, was succinctly explained by former Chairman of the Joint Chiefs of Staff Admiral Michael Mullen when he stated: "This program has been a disaster." However, the Army will not fully implement the Total Force Policy without a single, integrated personnel and pay system.

The Commission considers IPPS-A a critical underpinning and key to achieving the Total Force in reality. IPPS-A will facilitate the continuum of service for soldiers by enabling and streamlining soldiers' movement between statuses (transfers



Photo by Capt. Chad Nixon

Specialist Sierra Chanel, an optical laboratory specialist with the 362nd Medical Logistics Company, measures the eye curvature of a patient during an exercise in Bryson City, North Carolina, that provides training for soldiers while offering free medical services to local civilians.

among the Regular Army, Army National Guard, and Army Reserve). The IPPS-A program management made significant adjustments after under-executing the funding provided, and now it is on schedule.

CONTINUUM OF SERVICE

When she was 17 years old, Holly Donica joined the Army to become an aircraft mechanic. That was 2005, and a year later she was serving with the 4th Infantry Division in Camp Taji, Iraq. In 2008, she became a single mother and active service no longer fit her family's needs, so she transitioned from the Regular Army to the Army Reserve as a civilian maintenance technician at the Conroe Aviation Support Facility in Conroe, Texas.

After becoming a warrant officer and inspired by her daughter to take on still bigger challenges, CW2 Donica applied for flight school at Fort Rucker, Alabama. However, she needed help with child care. Her mother gave up a job to move to Fort Rucker and care for her granddaughter for the two years CW2 Donica needed to complete basic

flight training and qualification courses for two aircraft, the UH-60 A/L Blackhawk and the AH-64D Apache. Thanks to her mother's commitment that allowed time for study, CW2 Donica became the Distinguished Honor Graduate of the UH-60 A/L course.

CW2 Donica said she is planning to complete a bachelor's of science degree in aeronautics soon, and plans to continue her studies in aeronautics. This 27-year-old soldier also aspires to become a maintenance test pilot in the UH-60 A/L, and in the long term study medicine to become a flight surgeon. CW2 Donica, her daughter, and her mother are a family that are part of the Army family. They bring strength, talent, and depth to the Army thanks to CW2 Donica's continuum of service.

Recommendation 37: The Congress, the Department of Defense, and the Army should continue to support and adequately fund the Integrated Personnel & Pay System-Army (IPSS-A) as the cornerstone to the effective management and enhanced integration of the components of the Army. The Army must maintain the program's current schedule as a critical underpinning capability for the Army to support the Total Force.

Authorities / Duty Status Reform

The Congress continues to provide a wide variety of authorities to bring reserve members to active duty. The multitude of authorities is not a recent phenomenon; most were established prior to 1980. Over time new authorities for duty were created to codify new roles and missions for the National Guard and Reserves or a new purpose of the duty. Each individual modification was made to address a specific issue but resulted in a patchwork of laws and administrative fixes that complicate personnel management and employment of the reserves.

“Duty status reform” is frequently, but incorrectly, used as a synonym for a reduction in the number of authorities. The authority to order a reserve member to perform duty is the first of four parts of the reserve duty system. The second part is the purpose of the duty; the third is restrictions or limitations that may be associated with the duty; the fourth is the funding source. Collectively, the four parts comprise a duty status. Modifying one of the four parts does not constitute full “duty status reform”; however, it can begin to simplify the complex system. A parallel effort, which will materially simplify the reserve duty system, is implementing IPPS-A.

Regular Army members have a single duty status: active duty. Reserve component members have three duty statuses: inactive duty, active duty, or full-time National Guard duty. More than 30 legal authorities further delineate these three duty statuses. The 30-plus authorities simultaneously provide more detailed accountability. Each authority is a distinct delegation of authority to order a reserve member to duty and provides an accountability mechanism when used.

Currently, section 515 of the 2016 NDAA requires the Secretary of Defense to assess the impact of consolidating the current statutes into six within 180 days of enactment, and desired alternate approaches are due to the Congress October 1, 2016. The Commission endorses the findings of the National Commission on the Structure of the Air Force in its report of January 20, 2014, on this topic, and applauds and supports the Congress's efforts to simplify the authorities and reduce this friction to achieving a Total Force.



Photo by Capt. Carlos Cuebas

Lieutenant Colonel Louis Feliciano, commander of the 393rd Combat Sustainment Support Battalion, shares the contents of an MRE with children during the Beyond the Horizon mission in the Dominican Republic.

ONE ARMY RECRUITING

Recruiting is the primary function required to raise and sustain an Army. The Army assessed 114,800 Soldiers in fiscal year 2014, more than the other Services combined and, in fact, more soldiers than constitute the total end strength of some allies' ground forces. The Army achieved the 2014 recruiting mission by employing 11,114 total Army recruiters across the nation. The 2015 Army recruiting force has decreased to 10,955 (5,833 Regular Army, 3,210 Army National Guard, and 1,912 Army Reserve recruiters). As part of the recruiting effort, the total Army spends more than \$280 million annually on marketing, generating more than 118,000 potential recruits.

Local Army National Guard and Army Reserve commanders have additional recruiting responsibilities. Local unit commanders also are accountable for the manning of their units. These commanders usually have end strength performance objectives included in their evaluations. This responsibility manifests at a local level with Army National Guard recruiters assigned to specific units for which they are to recruit. These unit recruiters succeed by having a working knowledge of the unit, its members, leadership, activities, and

mission, as well as the community. Likewise the unit members and the community know the recruiter.

Unity of Effort

The Commission observed a lack of recruiting unity of effort at the Army Headquarters and local levels. The U.S. Army Recruiting Command is responsible for Regular Army and Army Reserve recruiting; consistent with law and tradition, each state is responsible for Army National Guard recruiting. The Assistant Secretary of the Army for Manpower and Reserve Affairs has strategic oversight of the recruiting function, but each component and state establishes its own recruiting goals. Similarly, Regular Army and the Army Reserve marketing is controlled by the Army Marketing and Research Group while Army National Guard marketing is managed by the National Guard Bureau on behalf of the states. This results in inconsistent branding and different marketing campaigns for the Army and the Army National Guard. At the local level, recruiters from each component vie for the dwindling population of potential recruits, possibly influencing an individual to join a component that may not be the best fit for that individual.

The Commission concludes that, to the maximum extent feasible, the Army should be managed as one Army. Certain

practices, policies, and statutes currently prevent the Army from managing the three components as one Army. These legal and policy structures create inefficiency and encourage competition—contributing to continued tension—among the components. This is readily apparent in the area of recruiting and marketing; therefore, any effort to truly manage one Army must include aligning recruiting efforts for all three components. Such unity of effort can achieve efficiencies and effectiveness while ensuring recruiting consistently produces the requisite quality and quantity of soldiers that all three components need.

The Army has had some success aligning recruiting efforts in the past. As part of its attempt to grow structure during Operation Iraqi Freedom and Operation Enduring Freedom, the Army initiated the “Active First” program. Army National Guard recruiters offered Active Duty contracts to individuals who then agreed, at the end of their active duty commitment, to do a Selected Reserve tour in the Army National Guard, unless they elected to re-enlist in the Regular Army. During the program’s run, from 2007 to 2011, Active First assessed more than 4,900 individuals into the Army, thus illustrating that unity of effort is possible in the realm of recruiting, despite the different legal status of components. The Commission concludes that the Army should do more such efforts.

SHRINKING RECRUITING POOL

Only 0.7 percent of the U.S. population served in one of the nation’s armed forces in 2015. That’s a small pool of talent that’s could shrink even more.

Current U.S. population projections indicate potential future challenges for military recruiting. RAND Corporation projections show that by 2025, the military age population will decline by 2.1 percent for ages 17–24, and 3.1 percent for ages 23–27, even as the total population grows. This decline in the recruiting-eligible population is particularly concerning given that less than half of the military age population is eligible for military service due to physical, educational, or behavioral (e.g. criminal records) fitness. As a result, the enlistment-eligible population could drop from about 10.3 million in 2015 to 9.9 million in 2025.

Increased disqualifications for health will overwhelm small improvements in educational attainment and aptitude (as assessed by the Armed Forces Qualification Test). The

military’s recent decision to allow women into all combat roles may slightly increase the eligible population, but women might not voluntarily join direct combat career fields in overly large numbers. The military could relax some criteria (e.g. tattoo restrictions or body piercings) without harming the quality of recruited personnel, but significant changes in the standards for physical fitness will likely result in a less-capable force. However, there may be room for carefully considered adjustments to physical standards for specific career fields, such as cyberspace operations).

The Army will continue to have the most difficult recruiting challenge within the Department of Defense based on the volume of enlistments needed and public perceptions concerning risk to the force. The nation’s Army is recruited from the society it serves. The Army will need to adopt policies to support effective recruiting of the best and brightest of those ready to serve while upholding the standards that make the U.S. All-Volunteer Force the envy of the world.

Recommendation 38: Congress should authorize and direct the Secretary of the Army to establish a substantial pilot program in which recruiters from all three components are authorized to recruit individuals into any of the components and receive credit for an enlistee regardless of the component. The Secretary of the Army should conduct a multiyear pilot program with a requirement to present annual reports to Congress with the results of the pilot along with recommendations as to whether to make the temporary authorities permanent. Congress should specifically authorize the pilot program “notwithstanding any other laws” in order to avoid potential fiscal law concerns. The Army should complete a detailed design for a pilot program within one year after publication of this report and fully implement the pilot program within one year after completion of the design work.

Recommendation 39: Congress should authorize, and the Secretary of the Army direct, the consolidation of marketing functions under the authority of the Army Marketing Research Group (AMRG) to gain unity of effort. The AMRG must employ marketing strategies to achieve recruiting goals of the Army Reserve, Army National Guard, and Regular Army.

The NDAA FY15 considerations for the Commission include identifying a structure that “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.” The Army National Guard and Army Reserve recruit among Regular Army soldiers leaving active duty. Department of the Army G-1 data for fiscal year 2015 reflected over 4,000 soldiers joined the Army National Guard after serving in the Regular Army, and more than 5,500 joined the Army Reserve. The Commission determined that a Regular Army of 450,000 soldiers will provide sufficient trained personnel for Army National Guard and Army Reserve recruitment.

Rather, the challenge is in the lack of a unified personnel management system that can align soldiers with available positions, and perceived policy limits to continuum of service. The Army’s successful “365 AC to RC Pilot” program implemented in 2014 at Fort Hood, Texas, focused on increasing the number of soldiers transitioning to Army National Guard and Army Reserve units. Incentives for high-demand skills included the chance to transition up to a year earlier than the original contract, opportunities to become a warrant officer, and chances to retrain for a new military job skill. This program revealed that policy road blocks are more imagined than tangible with visibility of opportunities as

the key. As noted above, the Commission considers IPPS-A a much-needed means to provide the visibility needed for continuum of service.

“What makes us different than any other army in the world are our noncommissioned officers. They are our standard bearers. They are what changed our Army over the last 40 years that I have had the opportunity to serve. It’s been the changing nature of our noncommissioned officers that has transformed our Army, and they continue to do that today.”

General Raymond T. Odierno, retirement remarks at the Army Change of Responsibility ceremony, August 14, 2015.

ONE ARMY LEADER DEVELOPMENT

Leader development is the deliberate, continuous, and progressive process that grows soldiers and Army civilians into competent, committed, professional leaders. Leader development is attained through the combination of training, education, and experiences acquired through opportunities in the operational, institutional, and self-development domains, supported by peer and developmental relationships.

Army training and education are highly regarded globally for producing excellent leaders with proven adaptability. However, new technology, advances in management science, and cultural changes suggest careful adjustments to the Army’s accession, training, education, assignment, and personnel evaluations and assessments can improve the Army’s agility, adaptability, and effectiveness. Improving the Army’s ability to acquire, develop, retain, and employ talent potentially offers the most important method to prepare for a complex, unknowable future.

The Army continues to make substantial strides toward improving leadership development and talent management for both uniform and civilian personnel. However, the high operational tempo and continual deployments over the past thirteen years placed a huge stress on the time soldiers had available to attend formal leader development courses. In some cases, course attendance was waived. In other instances, the length of a course was reduced significantly in order to allow soldiers to complete the requirement. For example, the original



Corporal Brock O'Shaughnessy and Corporal James Farran, combat engineers with the 374th Engineer Company (Sapper), take part in a night land navigation course in the hills and mountains of Camp San Luis Obispo Military Installation, California.

four-week Primary Leader Development Course with extensive leadership training to prepare enlisted soldiers to become Non-Commissioned Officers adjusted numerous times, at one point getting down to a seventeen-day course.

Some Army National Guard and Army Reserve units must choose between soldiers and their leaders attending schools or annual training periods where collective unit training is paramount. The Commission also noted some military education courses are stretched over a year or more in the reserve components, yet completed in weeks or months for Regular Army soldiers.

Additionally, the importance and relevance of Joint professional military education (JPME) continues to increase. The 1986 passage of the Goldwater-Nichols Act created a standard for officer JPME. While the Army has made senior enlisted JPME a prerequisite for attending the Sergeants Major Academy, career-long mandatory JPME standards are not mandated similar to officer standards.

The Army recognizes the sacrifice made in leader development across the institution and how critical training and education are to sustaining the All-Volunteer Force. Nevertheless, the Commission encountered uneven resourcing for military and civilian leader development, especially

professional education. The Commission is concerned that, as budgets tighten, sustaining investments in Army human capital could again wane without continued senior leader emphasis.

In an era of tremendous budgetary pressure, the Army must continue to focus on developing today's leaders for tomorrow's war. This includes greater innovation and assuming more risk to provide the right education to the right leader at the right time.

Recommendation 40: The Army should retain formal leader development activities as a high priority for all uniform and civilian personnel.

Recommendation 41: Congress should direct the Department of Defense to review enlisted Joint Professional Military Education (JPME) requirements, determine which should become mandatory requirements, and report within one year.

Total Army School System

In the 1990s, the Army started a series of initiatives to improve, streamline, and consolidate its school system due to budgetary constraints. The primary goal was to develop The Army School System (TASS) that improved the performance and efficiency of the Army's existing school system by raising standards and consolidating facilities. TASS consists of initial military training; reclassification training; officer, warrant officer, noncommissioned officer, and Department of the Army civilian professional development training; functional training; and education. The long-term goal of TASS was to be more efficient and integrated across the components of the Army. The resulting program centered on a regional system for reserve component schools with the first pilot program established in the southeastern United States (North Carolina, South Carolina, Georgia, and Florida).

In 2009, the Army implemented the One Army School System (OASS) as a set of processes synchronizing all three components to further improve the efficiency and effectiveness of TASS. Army Regulation 350-1 states, "the One Army School System is comprised of RC and AC institutions that utilize training resources to train soldiers in the most efficient and effective manner possible without regard to component." OASS leverages existing infrastructure in all components to efficiently project training requirements and program training capacity.

The U.S. Army Training and Doctrine Command (TRADOC) commands twenty-nine Army schools, colleges, and institutions and provides accreditation and quality control across all Army schools inside and outside of TRADOC. These

schools and training sites fall into six training regions. The highest density of schools outside TRADOC is in the Army National Guard, which has eighty-five training institutions at sixty-six locations across the fifty-four states, territories, and the District of Columbia. Each state, territory, and the District has a Regional Training Institute. As of September 2015, TRADOC has fully accredited eighty-three of the eighty-five Army National Guard training institutions.

TRADOC has made notable progress by reorganizing its existing structure and capacity to meet training requirements and improve the quality of its programs. For example, the Army projects a \$5 million savings in travel and 77,000 training days returned to operational units by fiscal year 2018. OASS implementation and refinement continues to address capacity, law, and policy, standardizing programs of instruction and expanding the Army Training Requirements and Resources System. The Commission concludes that OASS is not only a worthwhile effort, but its timeline should be accelerated. This may increase initial costs, but recent savings OASS has achieved indicate more money would be saved in the long run.

During its site visits to training facilities for the Regular Army, Army National Guard, and Army Reserve, the Commission encountered incidents of under-utilized training facilities and inefficient choices in training dollars spent. Many facilities belonging to different components are co-located on the same installation or in close geographic proximity. These facilities often offer the same courses of instruction and technical training that soldiers travel to other regions to attend. Consequently, though fully staffed, many of these schools were not filled to student capacity. Additionally, the Commission found that Regular Army soldiers were traveling to Regular Army training facilities at other installations—consuming travel funds doing so—though the required course was being taught at a TRADOC-certified reserve component school on or near their home installation.

If there is one Army schools system, the Commission concludes that it must be managed under one organization that controls staffing, student attendance, and the types of instruction offered at each training or education location.

Recommendation 42: The Army should conduct an end-to-end review of The Army School System and report to Congress within a year of publication of this report on the efficiencies gained by consolidating under-used capacity that does not contribute to the ability to regenerate and expand the Army if needed. The review should take a holistic look at successes and shortfalls from current strategy and ensure consistent naming conventions to minimize confusion.



Photo by Sgt. 1st Class Matthew Chlosta

Two members of the 773rd Civil Support Team, 7th Civil Support Command, take part in a Training Proficiency External Evaluation of the of the unit's readiness to respond to a real-world chemical, biological, radiological, or nuclear event.

Recommendation 43: The Army should establish true regionalization of the Army's school system and continue to consolidate the infrastructure where efficiencies can be gained. The Army should acknowledge and explain any unused capacity, and develop a plan to retain or eliminate the unused capacity, ensure the correct balance of infrastructure and capacity to meet the nation's needs, and take into consideration the ability to regenerate and expand the Army. The Army should complete this plan within a year of publication of this report.

Recommendation 44: The Army should immediately implement the entire One Army School System to realize savings sooner.

ONE ARMY IN ACTION

The Army has generated forces and evolved its processes and readiness models as demand, operational conditions, and military strategies have changed. During the Cold War, the Army developed a static, tiered readiness methodology



Captain Kris Chamales, a paratrooper with the Headquarters and Headquarters Company, 2nd Brigade Combat Team, 82nd Airborne Division, maneuvers through the obstacle course at the division's Pre-Ranger Course on Fort Bragg, North Carolina.

designed to prepare forces according to war plan timelines. This readiness model enabled the Army to sustain a large, standing force (augmented by the draft until 1973) even in periods of active peace to deter possible acts of large-scale aggression and respond quickly to small-scale, short-duration aggression.

From the Vietnam War to initiating Operation Enduring Freedom, the Army deployed soldiers for short-duration missions that did not require a rotational or replacement force. In 2004, the Army needed to replace the units deployed for Operation Iraqi Freedom with follow-on forces. The response was the Army Force Generation (ARFORGEN) model, which generated cyclical readiness rather than tiered readiness. ARFORGEN also enabled the Army to effectively integrate the reserve component, reset returning units, and incorporate lessons from prior rotations.

In 2015, the Army moved toward a force generation method known as the Sustainable Readiness Model (SRM). SRM's intent is to optimize available readiness resources that would enable more units, across all components, to generate and maintain higher levels of readiness over time. The model addresses improvements in assessing and maximizing unit readiness necessary to meet global Army requirements while maximizing available capabilities for unforeseen requirements.

SRM provides improved readiness visibility on a quarterly basis and forecasts readiness out three to four years. This improved visibility is expected to better inform the budgeting and programming of funds.

SRM is a work in progress that adopts elements from both cyclic and tiered readiness methods. The Army's force generation regulation does not yet reflect SRM. With Total Force end strength at 980,000 soldiers, the Army will need more reliance on the reserve components to meet Combatant Command requirements while reducing stress on the Regular Army.

Training

The Army's shift toward a more quantifiable assessment of collective unit training for evaluating readiness is known as the Objective T-Level Assessment (Objective-T for short). This composite assessment includes three foundational aspects of training to determine the training days required to achieve the highest rating of T1:

1. Collective task proficiency for mission-essential tasks demonstrated through a command post or field training exercise;
2. Individual and crew qualifications;
3. Collective live-fire proficiency demonstrated through both a fire coordination and maneuver live-fire exercise.

Objective-T enables training assessments to enumerate actions that build and sustain measured readiness. The Objective T-Level Assessment provides a much more quantifiable and objective assessment of unit collective training readiness.

Recommendation 45: The Army should implement the Objective-T methodology for assessing the progression of training readiness and revise readiness reporting using the quantifiable criteria.

Combat Training Center (CTC) programs are intended to generate ready units and agile leaders confident in their ability to operate in complex operational environments. The CTCs conduct scenario-driven, instrumented, force-on-force and live-fire training using a professional opposing force. Training occurs under tough, realistic, combat-like conditions across a wide range of likely tactical operations.

CTCs currently serve as capstone training events to determine if units are ready to progress to the available force pool within the force generation model or as a mission rehearsal exercises. Regardless of component, the Brigade Combat Team (BCT) training proficiency level upon completing a CTC rotation improves. However, the force

generation process produces a different training level for a Regular Army BCT (available for deployment) than for an Army National Guard BCT (entering its available year but still requiring post mobilization training for deployment). Due to much shorter deployment response requirements, Regular Army BCTs are resourced to arrive and depart a CTC rotation at a higher collective training level than Army National Guard BCTs with longer deployment timelines. Additionally, the number of BCTs has exceeded the CTC capacity to the point that some BCTs are not benefiting from CTC training within their projected readiness cycle (e.g. more than a decade between rotations for Army National Guard Infantry Brigade Combat Team).

During site visits to the National Training Center and Joint Multinational Readiness Center, Commissioners noted the emphasis for every rotation to include units from all components. However, the Commission also heard concerns about insufficient number of observers, coaches, and trainers to support events, as well as not having enough operational support and sustainment units, particularly from the Army Reserve. Some units participating in the same CTC event are not aligned in their readiness cycles, which can lead to manning and funding shortfalls. Synchronizing the preparation and scheduling of multiple Army National Guard and Army Reserve units is challenging, but necessary. Continued priority support for CTC activities and proper alignment of resourcing will enable the Army to increase readiness to support current and projected operational demands. Greater participation of the Army National Guard BCTs and Army Reserve supporting units for CTC rotations will enhance Total Army readiness, provide greater leader development opportunities, and build interoperability among the components.

Recommendation 46: The Army should increase the number of annual rotations for Army National Guard Brigade Combat Teams at combat training centers beginning fiscal year 2017 without decreasing the number of Regular Army Brigade Combat Team rotations.

Training Support

Forces Command (FORSCOM) employs First Army to assess training and ensure units are ready before they deploy. To support the intent of the Total Force Policy, First Army undertook a major reorganization and adjusted its primary mission focus from post-mobilization to pre-mobilization training support for Army National Guard and Army Reserve units. First Army partners with reserve component

units throughout their readiness cycle to support the units' pre-mobilization training and provide an estimate of post-mobilization training time needed for those units to complete their culminating training exercise or capstone event.

First Army has the majority of Regular Army soldiers assigned as required by the Army National Guard Combat Readiness Reform Act of 1992. They provide the engagement and habitual relationships with reserve component units throughout the force generation cycle to enhance readiness while minimizing redundant training costs. In addition to the Regular Army personnel, First Army manning includes Army National Guard and Army Reserve soldiers (both Active Guard and Reserve, or AGR, and traditional drilling soldiers) and so is a multicomponent unit. All three components have an obligation to provide adequate full-time manning within First Army to foster Total Force integration. However, in fiscal year 2014, the Army National Guard and Army Reserve manning rates for First Army authorizations were about 16 percent and 80 percent, respectively.

Recommendation 47: The Army should resource First Army's Active Guard and Reserve (AGR) positions from the Army National Guard and the Army Reserve at the aggregate manning level provided for each component not later than fiscal year 2017.

“When you join the Guard today, you expect to deploy, and when you don't have that opportunity, there's a lot of disappointment.”

*Major General John L. Gronski (PAARNG),
Commander, 28th Infantry Division during
NCA tour of Fort Indiantown Gap.*

Mobilization

In addition to generating near-term readiness, the Army must plan for mobilizing the entire Army to a state of readiness for war, contingency, or national emergency. This includes activating all or part of the reserve components, as well as assembling and organizing personnel, supplies, and materiel. The Army does not mobilize forces in isolation, but does so as part of the DoD enterprise. The Commission noted that in his assessment of the 2014 Quadrennial Defense Review, (QDR) the Chairman of the Joint Chiefs of Staff, General Martin Dempsey highlighted the acceptance of risk in the capacity of land and called for a comprehensive review of the Nation's ability to mobilize the entire force.



Photo by Army Sgt. Rigo Cisneros/Released

Engineers with the 416th and 412th Theater Engineer Commands work on an improved ribbon bridge across the 300-meter-wide Arkansas River in a multinational exercise at Fort Chaffee. The bridge, requiring 42 segments, took three hours to complete.

Recommendation 48: As recommended in Quadrennial Defense Review 2014, the Secretary of Defense should plan in fiscal year 2017 and execute no later than the end of fiscal year 2018 a comprehensive review of the nation's ability to mobilize its existing reserves as well as its preparedness for the potential of national mobilization.

Mobilization Support

The Army National Guard mobilized in excess of 102,000 Soldiers and the Army Reserve over 77,000 soldiers in 2003. Twenty-five installations conducted mobilization and demobilization operations that year. These mobilization locations, known as Mobilization Force Generation Installations (MFGI), operated at various levels of preparation: seven primary,

five secondary, and thirteen contingency MFGIs.

Today, the Army has only two active MFGIs, at Fort Hood and Fort Bliss, both in Texas. Only Fort Hood has a Pre-Deployment Training Equipment (PDTE) set permanently located on the site. Before determining which MFGIs would remain active, the Army located PDTE sets at the three Army Corps locations of Fort Lewis, Washington; Fort Bragg, North Carolina; and Fort Hood. Because Fort Bliss has no PDTE site, the Army transports equipment to and from Fort Hood and other locations to support Army National Guard and Army Reserve post-mobilization training.

The Commission found that the lack of a PDTE set at Fort Bliss increases transportation costs and reduces post-mobilization training time while units await equipment delivery.

Recommendation 49: The Army should provide a Pre-deployment Training Equipment set to Fort Bliss, Texas, for its Mobilization Force Generation Installation role no later than fiscal year 2017.

ONE ARMY EXPANDING

Because the future strategic environment cannot be predicted with certainty, the Army needs to protect its ability to regenerate capabilities and expand the force whenever necessary. The 2012 Defense Strategic Guidance stated “...DoD will manage the force in ways that protect its ability to regenerate capabilities that might be needed to meet future, unforeseen demands, maintaining intellectual capital and rank structure that could be called upon to expand key elements of the force.” The 2014 QDR specified, “We will protect the ability to regenerate capabilities that might be needed to meet future demands.” The guidance of these two documents is further amplified in Defense Planning Guidance 17-21 for the Army.

The Army established an Investment and Regeneration Task Force in 2012 and issued an Army Posture Statement on Investment and Regeneration in 2013 to concentrate planning for expanding the Army. The Under Secretary of the Army expounded on the need for planning with a 2014 information paper titled: “How Fast Can the Army Grow? Implications of Regeneration Decisions.” Nevertheless, the Army’s most recent response on planning for expansion noted that end strength reductions and funding decrements resulting from the Budget Control Act made resourcing expansion infeasible. With the shortfalls in funding and manning, the Army appears to have halted planning for expanding the force.

One key finding from the October 2013 RAND study “Estimating Institutional Army Manpower Requirements” addresses part of the expansion paradox. “If the Army indeed means to support expansion, the size of the institutional Army should paradoxically grow as the Army shrinks.” While rapid expansion of the Army is not feasible, without personnel management actions to retain mid-grade leaders, the Army risks diluting leaders’ average levels of professional experience, as occurred during World War II and the Vietnam War. Many of the billets and personnel eliminated from the Regular Army to achieve mandated budget cuts are the same mid- and senior-level NCOs and mid-grade officers needed to support future regeneration efforts.

Ideally, force expansion would start months or years before the forces are required to be deployed, but at such times much of the Army’s infrastructure would be occupied by existing units preparing for deployment. Retaining excess infrastructure



Specialist Brandon Bordner, an infantryman with Company A, 2nd Battalion, 8th Infantry Regiment, 2nd Armored Brigade Combat Team, 4th Infantry Division assembles a radio at Camp Buehring, Kuwait.

in peacetime could facilitate future expansion, but at a cost—and such costs do not easily compete in an environment of declining resources. Differentiating between unused capacity necessary for expansion and excess capacity would lead to better planning and decisions.

The expansion paradox: preserving the ability to grow the Army can be in direct conflict with garnering efficiencies from a smaller force. However, the benefits of investing in certain key areas, such as recruiting and accessions, placing facilities in caretaker status, financing certain industrial production lines, and overmanning mid-grade positions within the institutional force could outweigh the risk and time that would confront the Army in a national crisis. The Commission considers a formal plan that enhances the understanding of the difficulties involved in expanding the force should inform force sizing and shape DoD and Army drawdown decisions.

Recommendation 50: The Congress should require the Army to develop, by the end of fiscal year 2017, a plan for expansion to execute a large-scale sustained operation. The plan would include maintaining a running estimate for long-lead equipment production and modification as well as personnel accession and training for anticipated capability shortfalls that occur after reorganization and mobilization. The plan should address each of the statutory Department of the Army functions as articulated in 10 U.S. Code Section 3013 and examine and report annually to the Secretary of Defense on the necessary requirements to expand the Army’s capacity.

Recommendation 51: The Secretary of Defense should incorporate in defense planning and fiscal guidance the analysis of Army expansion requirements for force-sizing and capability-mix analyses in fiscal year 2017. This guidance would give priority to the retention of expansion-required leaders, infrastructure, and materiel in the defense budget and program.

Individual Ready Reserve

In addition, the Individual Ready Reserve (IRR) could support future regeneration efforts. However, the IRR program has significant challenges. It primarily comprises individuals who have previously served in the Active Army or Selected Reserves and are not assigned to a unit but still have a military service obligation remaining. The IRR currently has about 93,000 soldiers managed by the Human Resources Command (HRC). Subject matter experts from various Army agencies described to the Commission the multiple challenges associated with meeting IRR readiness management requirements outlined in Title 10 of the U.S. Code and the February 22, 2006, Secretary of the Army memo, "Individual Ready Reserve Transformation." For example, HRC is not resourced to manage a population of this magnitude. The Army struggles to maintain an accurate database of IRR troops, so contact information is outdated. Additionally, the Army does not gain

or share information with other government agencies, such as the Internal Revenue Service, to maintain contact information for IRR members.

Recommendation 52: The Secretary of the Army should perform a top-to-bottom review in fiscal year 2017 of the Individual Ready Reserve program to ensure compliance with existing statutes.

Recommendation 53: Congress should amend 10 USC 10205 to authorize the Secretary of Defense to coordinate with other federal agencies to obtain updated contact information on Individual Ready Reserve soldiers.

Recommendation 54: Congress should amend Title 10 USC to authorize a virtual muster that does not include a physical examination or review.

Recommendation 55: The Secretary of the Army should rescind the February 22, 2006, memo "Individual Ready Reserve Transformation."



“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.”

2015 NDAA, Section 1703(b)(1)

APACHE TRANSFERS AND RELATED ISSUES

Army aviation makes a substantial contribution toward the service’s warfighting capability. Apache helicopters (AH-64s) provide attack/reconnaissance capability in support of ground operations. Black Hawk helicopters (UH-60s) provide assault capability by transporting troops and equipment into

battle and support logistics activities and medical evacuation. Shadow and Gray Eagle unmanned aerial systems, teamed with Apache helicopters, are being integrated into Army aviation units to provide increased attack and reconnaissance capability. Other aircraft support Army operations with heavy lift and

general support.

Army aviation capability resides in all three Army components: the Regular Army, the Army National Guard, and the Army Reserve. While Army aviation provides substantial capability, it is also expensive: Army leaders stated that aviation accounts for the largest portion of Army funding for both training and modernization.

To respond to declining total budgets while maintaining critical aviation capability, the Army presented the Aviation Restructure Initiative (ARI) as part of its budget plan for fiscal year 2015. The initiative was supported by the Department of Defense (DoD) and became part of the President's plan. The ARI proposed numerous changes, including the transfer of all Apache helicopters out of the Army National Guard. Under the ARI, all Apaches would be operated in the Regular Army.

During discussions with the Commission, Regular Army leaders strongly endorsed the ARI as a way to accommodate budget limits while maintaining a reasonable level of wartime capacity and sustaining a modernization program for aviation forces. Specifically, the ARI permitted the Army to accommodate aviation budgets that, according to Army estimates, will decline by 40 percent between fiscal year 2012 and fiscal year 2020.

However, leaders of the Army National Guard expressed strong concerns about the ARI. They argued that the initiative eliminates a cost-effective portion of the National Guard force and leaves the Guard without full-spectrum combat capability. As an indication of the strength of their concern, the National Guard Bureau (NGB) formulated an alternative to the ARI that retained a number of Apache helicopters in the National Guard and altered other aspects of the plan. The NGB presented its plan to the Department of the Army and the Congress.

Faced with strongly conflicting views and alternative approaches, the Congress directed that the Commission review the Apache transfer and make specific recommendations regarding the transfer of all Apache helicopters to the Regular Army. That and related aviation issues is the focus of this chapter.

Photo on page 83

An AH-64E Apache rises from behind a hill during an exercise at the Yakima Training Center.

INFORMATION GATHERED

The Commission, working partly through its Aviation Subcommittee, gathered extensive information about the Apache helicopter transfer and other Army aviation topics, drawing on a wide variety of personnel with differing backgrounds and points of view. The Commission's information came from

- multiple discussions with Regular Army leaders about the ARI and the NGB Alternative;
- multiple discussions with Army National Guard leaders about the NGB Alternative and the ARI;
- multiple discussions with Army Reserve leaders about the ARI;
- a briefing on Army Aviation, including the ARI, from the Commanding General, U.S. Army Aviation Center of Excellence at Fort Rucker, Alabama;
- a briefing on the overall Army program from the officer on the Army headquarters staff responsible for formulating Army programs (G8);
- a briefing on the overall aviation modernization program from the aviation expert in the financial branch of the Army headquarters staff (G8);
- a briefing on the ARI from the director of Cost Analysis and Program Evaluation (CAPE) in the Office of the Secretary of Defense;
- discussions with a number of former senior Army leaders, including several with extensive aviation experience;
- letters and communications from members of Congress and discussions with Congressional staff members;
- assistance from expert analysts at the Army's Training and Doctrine Command Analysis Center (TRAC), the Institute for Defense Analyses (IDA), and the Center for Army Analysis (CAA);
- cost analysts at the RAND Corporation; and
- experts on the Commission staff.

The Commission also heard from senior state leaders. Numerous governors either discussed or provided written input to the Commission. These communications addressed the ARI and the governors' concerns regarding the transfer of all Apaches out of the National Guard. Commissioners also held discussions with The Adjutants General (TAGs) who expressed serious concerns about the ARI.

U.S. Army photo by Spc. Creighton Holub, CAB PAO, 4th Inf. Div.



An AH-64D Apache Longbow pilot with the 4th Infantry Division's Combat Aviation Brigade communicates with a crew chief before taking off on a mission in Camp Taji, Iraq.

During its travels, Commissioners or staff held meetings with personnel in thirty-one aviation units: twelve Regular Army aviation units, sixteen National Guard aviation units, and three aviation units in the Army Reserve. During its public meetings, the Commission heard from sixty-six public witnesses; several addressed the ARI and alternatives to it.

CRITERIA FOR ASSESSING OPTIONS

Armed with this extensive information, the Commission formulated criteria to be used in assessing alternative aviation approaches. Overall, the Commission assessed alternatives based on their wartime capability, because wartime capability remains the fundamental reason for maintaining a military force. Wartime capability requires forces at a high state of readiness and able to be deployed quickly, as future wars may begin with little or no notice. However, forces must also be scalable—that is, they must be able to expand reasonably rapidly should wartime conditions require.

The military also deploys during periods of relative peace. To maintain readiness during peacetime periods, the military must have enough forces to allow units sufficient time to train and military personnel time to be with their families. The pace of peacetime operations, therefore, constitutes another criterion for assessing alternatives.

Costs must be considered. The Commission heard testimony that, in large part, the ARI reflects a response to budget limits imposed in recent years. The budgetary effects of alternative approaches thus constitute an important criterion.

The Commission also considered how alternatives affect the integration of the Regular Army, the Army National Guard, and the Army Reserve. The Commission believes that this nation needs one Army, with units from all components training together where feasible and fighting together when necessary. How well alternatives support this goal constitutes a key criterion.

As it applied these general criteria to assess options, the Commission considered many qualitative factors and relied on its own judgments. The Commission also made use of some quantitative assessments.

- **Wartime capacity.** The Commission utilized assessments of the wartime capacity under a relevant DoD wartime scenario (see the NCFA Classified Annex for details). In that scenario, Army aviation units play a substantial role. The capacity assessments take into account numbers of units but also the time required to deploy and the need to rotate forces.
- **Surge capacity.** No one can be sure where U.S. military forces will be engaged in the future, nor can we know how much time will be available to prepare for war. Therefore, forces must have the depth and scalability that permits them to surge in time of war. As one measure relevant to the Apache surge capacity, the Commission considered the number of Apache pilots in the reserve components that have required training and are in units that have necessary equipment and command structure.
- **Peacetime deployment rates.** For Regular Army units in peacetime, the Army's goal calls for one cycle deployed followed by two equivalent cycles in non-deployed status. Stated another way, if a deployment lasts one year, the unit should spend two years in non-deployed status. For reserve components, the current goal requires that a one-year deployment should be followed by five years in non-deployed status.
- **Cost.** The law establishing the Commission directed that its recommendations be "consistent with available resources and anticipated future resources." For reasons

noted earlier in this report, the Commission designed aviation options at levels of funding roughly consistent with the President's budget plan submitted with the fiscal year 2016 budget request (PB16). The Commission also identifies high-priority initiatives that would require significant funding.

OPTIONS FOR APACHE TRANSFERS

Using these criteria and the information gathered from the sources noted above, the Commission carefully considered both the ARI and the NGB Alternative. The Commission also examined options that would keep varying numbers of Apache battalions in the National Guard along with approaches that would alter the number of aircraft in units and change numbers of aircraft available for maintenance and other activities. In its final analysis, the Commission focused on three options.

OPTION 1: AVIATION RESTRUCTURE INITIATIVE (ARI)

The Army proposed the ARI as part of the budget plan submitted for fiscal year 2015.

Description

Under the ARI, all Apache helicopters would be transferred to the Regular Army. Fully implemented, the Regular Army would have twenty manned Apache battalions and the Army National Guard would have none. Thus, compared with the force structure plan in place just before the ARI, the new initiative transfers six Apache battalions from the Army National Guard to the Regular Army. There would also be two unmanned Apache battalions in the Regular Army as part of the Korea equipment set. Each of these battalions would have twenty-four Apaches but no assigned personnel.

The ARI would also create four additional Black Hawk battalions in the Army National Guard. The aircraft required to create these four new battalions would be made available because of the inactivation of three aviation brigades in the Regular Army.

The ARI has made or will make other changes. Most notably, under the ARI all Kiowa Warrior armed reconnaissance helicopters (OH-58Ds) are retired and Lakota helicopters (UH-72As) become the primary training aircraft for initial rotary wing training. The ARI also will require some changes among facilities used to maintain Apache helicopters. Currently, five National Guard facilities—known as Theater Aviation Support Maintenance Groups (TASM-Gs)—provide intermediate-level depot maintenance for Apaches and other

aircraft in the National Guard and the Regular Army. National Guard personnel provide all of the staff for these facilities and often deploy to provide maintenance capability. Under the ARI, the National Guard would have no Apache helicopters to maintain. The TASM-G facilities may respond to the ARI by revising their business practices in order to provide maintenance for Apaches in the Regular Army. Alternatively, the Army will have to reconsider the size and role of the TASM-G facilities.

When it is fully implemented at the end of fiscal year 2019, the ARI would result in a net reduction of 798 Army rotary wing aircraft. Reductions will occur in all three Army components, including 687 fewer aircraft in the Regular Army, 104 fewer in the National Guard, and seven fewer in the Army Reserve.

Advantages of the ARI

The Commission concluded that the ARI is a well-crafted plan that holds down costs while maintaining a reasonable level of wartime capacity. The ARI also retains funds for a modernization program required to support future Army aviation forces.

Analyses performed by TRAC suggest that the ARI fares well in terms of wartime capacity, though it does lead to shortfalls. TRAC concludes that under the ARI, aviation capacity would see modest shortfalls early in the wartime scenario used in the analysis and larger shortfalls later in the scenario. However, TRAC concluded that, overall, compared with the NGB Alternative discussed below, the ARI consistently provided the lowest risk in terms of wartime capacity. This TRAC conclusion represents a key advantage for the ARI.

The Commission relied on TRAC analyses of aviation options because the general results were unclassified and were available at a level of detail sufficient to distinguish among the various aviation alternatives considered in this report. We also considered other analyses provided during the Commission's Comprehensive Analytic Review. The detailed results of these other analyses are described in the NCFCA Classified Annex, but they generally corroborate the TRAC findings.

The ARI supports modernization of Army aviation assets. According to Army officials who briefed the Commission, the ARI maintains a substantial program of aircraft modernization, not just for major aircraft but also for critical enablers such as aviation rockets and missiles, aircraft survivability equipment, and avionics. The Army argues that the ARI accomplishes these goals while holding down costs. ARI costs are consistent with PB16, the baseline used by the Commission.



Photo by Sgt. 1st Class David Wheeler (USFORA)

Chief Warrant Officer 2 Tristan Archambault with the Task Force Wolpack of the 82nd Combat Aviation Brigade stands near her AH-64D Longbow Apache at Bagram Airfield in Afghanistan.

Disadvantages of the ARI

The initiative offers little help in reducing the high levels of peacetime operational tempo anticipated for Regular Army Apache units. The Army expects that, given current assumptions about future peacetime demands, Regular Army Apache units that deploy for one year will spend about twenty-three months (1.9 years) in non-deployed status. This projection falls slightly short of the goal of two years in non-deployed status, a shortfall that could grow in size if world events lead to greater demand for Apache helicopters. No National Guard Apache units would be available to deploy and help reduce this operational stress.

More important, the ARI provides no wartime surge capacity for Apache aircraft. In the period before ARI and other force changes, about 700 pilots serving in reserve components were trained to fly Apaches and had assigned aircraft and other equipment. In past conflicts, reserve component Apache

pilots, and the units in which they serve, have provided surge capacity in time of war by deploying to wartime theaters, acting as trainers or handling other tasks. Under the ARI, the Army would have no such depth. The Commission is concerned about the lack of wartime surge capacity.

The Army would have no reserve component backup in case of peacetime problems. In 1999, for example, transmission problems led to the grounding of many Apache helicopters, and transmissions were taken from reserve component aircraft to maintain Regular Army units until needed rework could be accomplished. Under the ARI, this approach to resolving such an issue would not have been possible.

Finally, the Commission notes that the ARI exacerbates a problem highlighted in this report: the lack of unity between Regular Army and National Guard forces. The ARI will further reduce the “connective tissue” that binds the Regular Army and National Guard together. Under the ARI, Apaches will

constitute an area where Regular Army and National Guard units cannot work closely together as one Army.

OPTION 2: NATIONAL GUARD BUREAU ALTERNATIVE

In response to the ARI, the National Guard Bureau formulated its own plan to restructuring Army aviation, including a significantly different approach to shaping the Apache force.

Description

The NGB Alternative would provide twenty-four manned Apache battalions. Of these, eighteen are in the Regular Army (compared to twenty under ARI) and six are in the National Guard (compared to zero under ARI). Two of the six National Guard battalions would be in multicomponent aviation brigades that have one Apache battalion from the Regular Army and one from the National Guard.

The eighteen Regular Army Apache battalions and the two National Guard battalions in multicomponent brigades would be equipped with twenty-four helicopters. The other four National Guard battalions would be equipped with eighteen Apaches. When called to active duty, these four battalions would acquire Apache helicopters from other National Guard battalions, a procedure called cross-leveling that the National Guard commonly employs today.

In order to equip additional Apache battalions, the NGB Alternative makes use of forty-eight Apache helicopters involved in Korean rotational operations. Once ARI is fully implemented, the personnel associated with a Combat Aviation Brigade (including two Apache battalions) will rotate annually to Korea and operate helicopters already in place there as part of an equipment set. The forty-eight Apache helicopters at the stateside locations of these two battalions may not be actively used by operational units. The NGB Alternative would transfer these forty-eight helicopters to units that need them, a procedure that is employed today. When the Regular Army units rotate home, aircraft would be rotated back to their unit. This approach eliminates the need to purchase forty-eight additional new Apaches, though the NGB Alternative does call for procuring eleven new or remanufactured Apache helicopters.

The NGB Alternative also alters the Black Hawk helicopter force. Under the ARI, three Regular Army Combat Aviation Brigades (CABs) would be inactivated and the Black Hawks in these brigades would be used to create four additional Black Hawk battalions that would be added to the Army National Guard. Under the NGB Alternative, only two additional battalions would be added; the remaining Black Hawk helicopters would be retired. As a result, the NGB Alternative

offers about 3 percent fewer operational Black Hawk helicopters compared with the ARI.

While the NGB Alternative makes significant changes in portions of the ARI, it leaves many ARI proposals intact. Most notably, the NGB Alternative does not alter the ARI proposal to retire all the Kiowa Warrior armed reconnaissance helicopters. The NGB Alternative also leaves in place the ARI proposal to utilize the Lakota helicopter as the primary training aircraft for initial rotary wing training.

Advantages of the NGB Alternative

The NGB Alternative provides a significant wartime surge capacity for the Apache force. Approximately 420 Apache pilots would remain in the National Guard in a trained status with equipment, which would enhance the depth and scalability of the force. These pilots, and the units in which they serve, could be made available during a war, whereas no National Guard pilots would be available under the ARI. In the Commission's view, this wartime surge capacity constitutes a significant advantage.

The NGB Alternative might be able to reduce the stress on Regular Army Apache forces during peacetime. Under current plans, a National Guard Apache battalion that deployed for one year would be in non-deployed status for five years. Thus, the six battalions could provide an average of one deployed battalion each year, which would more than offset the loss of deployed capacity associated with two fewer Regular Army battalions. This favorable outcome would require a decision to deploy the National Guard Apache battalions on a regular basis along with the funding needed to implement that decision.

Notably, the NGB Alternative would also permit the Regular Army and National Guard Apache units to continue to work together, training together in peacetime where feasible, and fighting together in war if necessary. The plan would contribute to maintaining one Army that draws as needed on the capabilities of the Regular Army and the reserve components.

Disadvantages of the NGB Alternative

The NGB Alternative provides less wartime capacity than the ARI, based on TRAC analyses of capacity during a wartime scenario. Shortfalls early in the conflict are greater because, even with limited warning, Regular Army units can be available in the first few weeks of a conflict, and the NGB Alternative maintains two fewer Regular Army Apache battalions. The NGB Alternative also provides less wartime capacity later in a conflict. The six National Guard Apache battalions in the NGB Alternative do not fully offset the loss of the two Regular Army battalions because some of the Guard battalions have fewer

aircraft and because Guard units are available in theater for shorter periods. As a result, TRAC concludes that, compared with the ARI, the NGB Alternative increases the risk of not having sufficient aviation capacity.

In addition to adding to wartime risks, the NGB Alternative increases costs. DoD established a Tiger Team to examine ARI and NGB costs. The Tiger Team, which included analysts from CAPE as well as Regular Army and National Guard experts, concluded that the NGB Alternative would add between about \$90 million and \$175 million a year to the aviation operating costs compared to costs budgeted in PB16. The range depends on assumptions about the amount of training required after mobilization. These cost estimates reflect the net effect of adding six National Guard Apache battalions, eliminating two Regular Army Apache battalions, and adding two fewer Black Hawk battalions compared to the ARI. The NGB Alternative would also involve between \$220 million and \$420 million in one-time costs to provide an additional eleven Apache helicopters. The range depends on whether the additional eleven Apaches are new or remanufactured aircraft.

These added costs are small as a percentage of total Army and DoD funding. However, finding offsets for these added costs in order to comply with limits on defense funding imposed by law would be challenging.

OPTION 3: ARI MODIFIED TO MAINTAIN FOUR NATIONAL GUARD APACHE BATTALIONS

The Commission examined numerous additional options to determine if any offered more advantages or fewer disadvantages compared with the ARI and the NGB Alternative. The Commission determined the option below best meets that test.

Description

Option Three would maintain twenty-four manned Apache battalions. Of these twenty-four battalions, twenty would be in the Regular Army (same as under the ARI) and four would be in the National Guard (compared to zero under the ARI). All the Regular Army battalions would be equipped with twenty-four aircraft. The four National Guard battalions would be equipped with eighteen aircraft and thus would have to cross-level helicopters before deploying.

To hold down costs, Option Three assumes that only two Black Hawk battalions are added to the National Guard (compared with four under the ARI). This approach, which is the same one used by the NGB Alternative, would result in a reduction in operational Black Hawk aircraft by about 3 percent.

REGULAR ARMY COMBAT AVIATION BRIGADE

A Combat Aviation Brigade (CAB) is designed to be modular and is organized to support offensive, defensive, and stability operations in support of ground maneuver forces or in defense support to civil authorities. A CAB comprises the following:

- a headquarters and headquarters company
 - an attack reconnaissance squadron of AH-64 Apaches and RQ-7 Shadow unmanned aerial systems (UAS)
 - an attack reconnaissance battalion of Apaches and MQ-1C Gray Eagle UAS
 - an assault helicopter battalion of UH-60 Black Hawks
 - a general support aviation battalion with Black Hawks for support missions and medical evacuation, and CH-47 Chinook heavy lift helicopters
 - an aviation support battalion (maintenance).
-

Option Three proposes that the Army commit to use the National Guard battalions regularly—mobilizing them and deploying them in peacetime. National Guard personnel told the Commission that they wanted to be mobilized and deployed on a regular basis. They would be less willing to stay in the National Guard if they cannot periodically participate in meaningful military missions. National Guard leaders agreed with this assessment in testimony before the Commission. To make regular deployments feasible, the costs for Option Three include funds to pay for mobilization and employment of National Guard units. Cost estimates assume the current deployment policy, which requires that a National Guard unit deployed for one year would spend five years in non-deployed status. Costs would be slightly higher if deployments are more frequent.

To equip the National Guard units retained in Option Three, the option assumes use of the forty-eight Apache aircraft left at home station when unit personnel rotate to Korea. This approach was described above in the NGB Alternative. Option Three also assumes the remanufacture of an additional twenty-four Apache helicopters to convert them from D models to E models. The E model provides greater capability to work with unmanned reconnaissance assets and has a new drive train and rotors for improved aircraft performance, significantly enhancing safety and combat performance.

APACHE TRANSFERS AND RELATED ISSUES

Photo by 4th Brigade Combat Team, 25th Infantry Division Public Affairs



An Apache crewmember with Company C, 4th Battalion, 227th Attack Reconnaissance Battalion prepares the helicopter for take-off in Iraq.

Option Three also proposes changes to aviation forces in Korea. Once the ARI is fully implemented, personnel from aviation units (including Apache units) would rotate from stateside locations and serve roughly nine months in Korea, using equipment that is prepositioned there. The personnel from these units would then return and be replaced with personnel from other stateside units. Based on the experience of commissioners and discussions with senior Army leaders, the Commission concludes that these short-term rotations will not permit aviation units the time needed to properly mitigate risks posed by the threat situation in Korea, which features a volatile military environment and the potential for no-notice hostilities. Specifically, rotating units will not have time to master the geographic and environmental conditions well enough to operate effectively and safely in the region. Rotating units also will make building and retaining enduring relationships

with our Korean allies more difficult, relationships that are critical to warfighting success.

Rather than rotating a Combat Aviation Brigade, Option Three calls for a CAB to be forward stationed in Korea, which is the current practice. This would mean that the CAB would remain while individual soldiers rotate, providing a more stable fighting force. Forward stationing has disadvantages. It would increase costs by a net amount of about \$40 million a year, largely because of added costs for permanent-change-of-station moves and personnel allowances. Additionally, with forward stationing, a stateside Army division would not have an assigned CAB and would have to work with other stateside aviation units to provide needed training capability. Nevertheless, greater stability for the fighting force in Korea argues for accepting these disadvantages.

Finally, Option Three calls for the Army to review its emerging requirements for aviation in Europe, taking into

account recent Russian adventurism. The Commission concluded that it makes sense to rotate aviation units to Europe, but these units must have an appropriately resourced mission command element to ensure mission success.

Consistent with its charter and its time constraints, the Commission focused on the issue of Apache transfers and did not make recommendations regarding other aspects of the ARI, including retirement of all Kiowa Warrior armed reconnaissance helicopters and use of Lakota helicopters for initial training. For purposes of costing, Option Three assumes implementation of the ARI proposals regarding retirement of all the Kiowa Warrior armed reconnaissance helicopters and using Lakota helicopters for initial rotary wing training.

Advantages of Option Three

According to TRAC analyses provided to the Commission, Option Three would offer more wartime capacity compared to the ARI. Capacity early in the war would be similar to the ARI because both maintain the same number of Regular Army Apache units. Later in the conflict, the four National Guard battalions would be mobilized and would provide added capacity. Classified analyses considered during the Comprehensive Analytic Review generally corroborate these findings (see NCFA Classified Annex for details).

Option Three also provides wartime surge capacity by maintaining approximately 280 Apache pilots and associated helicopters and equipment in the National Guard. These pilots and their units would be available for surge during wartime. This is less than the NGB Alternative's 420 pilots but significantly more than the zero level of surge capacity offered under the ARI.

Option Three would also help with peacetime operational tempo. The forward stationing of an aviation brigade in Korea significantly reduces the number of deployed units because forward-stationed units are not considered to be deployed under Army counting rules. Primarily for this reason, the peacetime operational tempo for Regular Army Apache battalions improves significantly. Nevertheless, forward-stationed units could be away from their families and experience many of the stresses associated with deployments. Even if forward-stationed units were counted as deployed units, however, regular call up and use of the National Guard Apache battalions provided under this option would permit Regular Army units to slightly exceed the goal that calls for units deployed for one year to spend two years in non-deployed status. The added peacetime capacity available under Option Three would be particularly useful if world events in Europe or elsewhere increase the demand for Apache units.

Finally, assessments by the CAA suggest that Option Three would be more cost effective than the ARI. The CAA analysis

considers the time to deploy active and reserve units in a wartime scenario and the average annual costs of keeping and using them in both the Regular Army and reserve components. CAA did not attempt detailed budgetary analyses and did not consider all operational impacts. However, based on average annual costs, CAA concludes that options with Apaches in the reserve components would be more cost effective than the ARI.

Disadvantages of Option Three

Option Three would add to costs, a significant disadvantage. However, the Commission offers an illustrative proposal to offset those added costs.

Under Option Three, operating costs would increase by a net of about \$165 million a year. This figure reflects the added costs of four National Guard Apache battalions (including costs to deploy them on a regular basis) and costs to forward station a CAB in Korea. These additional operating costs are partially offset by savings from foregoing the operation of two National Guard Black Hawk battalions.

In addition, Option Three would result in one-time costs of about \$420 million to remanufacture twenty-four Apache helicopters from the D to E models. These remanufactures would likely occur at some time beyond the next five years.

These added operating and procurement costs are small compared to the total defense budget. The Administration or the Congress may therefore be able to offset added costs through savings in budgets outside of the Army or in the non-aviation portions of the Army budget. In earlier chapters the Commission offered some alternatives for offsetting costs.

However, the Commission recognizes that some or all of the offsets required to pay for this Apache option may have to come from within Army aviation. Therefore, the Commission proposes an illustrative approach to offsetting the added costs of Option Three from within aviation funds. The Commission did not attempt to create a detailed, time-phased budget plan; instead these illustrative savings examine a five-year period when all changes are in place.

A portion of the added costs in Option Three would be offset by maintaining two fewer Black Hawk battalions in the National Guard. Another offset would be the savings from personnel cuts designed to leave National Guard personnel at the level of 335,000 planned in PB16. The remaining offsets could be achieved through a modest slowdown in the procurement program for Black Hawk helicopters. Option Three makes no change in the L-to-V conversion program for Black Hawks, a program that produces a fully digitized Black Hawk and, according to Army aviation leaders, a highly capable aircraft. However, buys of new Black Hawks (UH-60M) could be slowed. To offset the added costs of Option Three, the Army would probably have to buy five to ten fewer

APACHE TRANSFERS AND RELATED ISSUES



Photo by Staff Sgt. Ryan Matson

An AH-64D Apache Longbow attack helicopter with the 101st Combat Aviation Brigade flies over the desert terrain between Tal' Afar and Mosul, Iraq.

new Black Hawks a year. Based on information available to the Commission, in most years the Army should be able to adjust the annual buys so as not to undermine the multiyear contract for Black Hawks. It should be noted that reductions in buys of new Black Hawks would need to continue beyond the next five years in order to offset operating costs and provide funds needed to remanufacture twenty-four Apache helicopters.

Eliminating two National Guard battalions of Black Hawks and slowing the pace of new buys does have drawbacks. As has been noted, the Army will have about 3 percent fewer operational Black Hawk helicopters even though the Black Hawks are heavily used in wartime. Buying fewer new Black Hawks each year would also modestly slow efforts to modernize the Army National Guard's fleet. The Commission recognizes the important role of the Black Hawk and urges the Administration and Congress to examine other possible offsets.

However, if costs must be offset within Army aviation, the Black Hawk changes should be considered. The 3 percent reduction in operational Black Hawks would match the percentage reduction in operational Apaches under this option, leaving the reductions in the two fleets balanced. (If the Kiowa Warrior armed reconnaissance helicopter is included in the count of "shooter" helicopters, then the reduction in shooters equals about 35 percent compared with the 3 percent reduction in Black Hawks.) Also, the modest reduction in Black Hawks does not significantly affect the TRAC or other assessments of wartime capacity. Finally, the slowdown in buys of new Black Hawks should not delay the date for completion of modernization of the fleet because of the reduction in the overall size of the Black Hawk fleet by sixty helicopters.

Figure 17 summarizes the descriptions and effects of the three options.

Figure 17

DESCRIPTION AND ASSESSMENT OF OPTIONS

	OPTION #1: AVIATION RESTRUCTURE INITIATIVE (ARI)	OPTION #2: NATIONAL GUARD BUREAU ALTERNATIVE PROPOSAL	OPTION #3: NCFA RECOMMENDATION
DESCRIPTIONS			
<u>AH-64 APACHES</u>			
Regular Army battalions	20 ^a	18	20
National Guard battalions	0	6	4
Total aircraft	690	701	714
<u>UH-60 BLACK HAWKS</u>			
Regular Army battalions	10 ^a	10	10 ^a
National Guard/Army Reserve battalions	20	18	18
Total aircraft	2135	2075 ^b	2075
ASSESSMENTS			
Wartime capacity (compared to ARI)	- - -	Less than ARI	More than ARI
Wartime surge (Apache pilots in ARNG)	0	420	280
Peacetime deployment (BOG:Dwell) for Regular Army Apache battalions	1:1.9	1:2	1:3.2/1:2:2 ^c
COST (ABOVE PRESIDENT'S FY 2016 BUDGET PLAN)			
Increased annual operating	0	\$89M to \$176M ^d	0 ^e to + \$165M ^f
Increased one-time procurement	0	\$220M to +\$420M ^d	0 ^g to + \$420M ^h

^aDoes not include Korea equipment set battalions

^bAssumes NGB Alternative results in force structure reduction

^cNumber in italics assumes that forward-stationed units count as deployed

^dAccording to OSD-CAPE report to Congress ("Independent Cost Analysis of the ARI and the NGB Alternative")

^eAssumes offsets in Black Hawk program and other changes

^fIncludes about \$40 million in added costs to forward station a CAB in Korea

^gAssumes remanufactured Apaches and offsets in Black Hawk program along with other changes

^hAssumes remanufactured Apaches and no offsets

Overall, Option Three offers significant advantages. The option provides greater wartime capacity than the ARI or the NGB Alternative, which is a key advantage. Peacetime operating tempo also improves compared to the ARI and NGB approaches. Wartime surge capacity (measured by trained pilots in units) is higher than under the ARI. Option Three also improves aviation capabilities in Korea. Added costs under Option Three are significant but could be offset by either modest changes in the Black Hawk fleet or other offsets identified by the Administration or Congress. Perhaps most important, Option Three maintains Apaches in the National Guard and assumes a commitment to regular use of those forces, therefore contributing to a key Commission goal of achieving one Army that works and trains together in peacetime and, if necessary, fights together in war.

Recommendation 56: Congress, DoD, and the Army should implement the Commission's plan (Option Three) for distribution of the Apache fleet. The Commission's plan maintains twenty-four manned Apache battalions including twenty in the Regular Army equipped with twenty-four aircraft each and four in the National Guard equipped with eighteen aircraft each. The plan adds only two Black Hawk battalions to the National Guard. The Army should commit to using the four National Guard Apache battalions regularly, mobilizing and deploying them in peacetime and war.

Recommendation 57: The Army should maintain a forward-stationed Combat Aviation Brigade in Korea.

MULTICOMPONENT UNITS

Multicomponent units combining Regular Army, Army National Guard, and Army Reserve Soldiers, can improve readiness and, importantly, force integration. Multicomponent aviation units could also improve readiness by exploiting the differing strengths of Regular Army and reserve component units. Training together would help integrate the Regular Army with the National Guard and Army Reserve and so move toward greater adherence to the Army's desire for total force integration. To achieve this goal, multicomponent units should be co-located so that they can train together in peacetime.

The U.S. Air Force makes substantial use of multicomponent approaches to achieve these goals. For example, the Air Force has associate unit programs that pair Air National Guard or Air Force Reserve units with active-duty

units. These associate units share equipment, train together, and conduct missions and maintenance activities together. The Air Force believes that initiatives like the associate program provide better training and leverage the skills and experience of different components. The associate program also helps integrate active and reserve component units.

The Army has begun limited use of multicomponent approaches in aviation units with fixed-wing C-12 aircraft. Some National Guard and Regular Army units operating C-12s will be co-located and will train and potentially deploy together. Other co-located units—such as Black Hawk and Chinook (heavy lift) helicopters in some states—permit units from different components to train together.

The Commission concludes that the Army should try to make greater use of multicomponent aviation units in order to improve readiness and better integrate Regular Army, Army National Guard, and Army Reserve forces.

Recommendation 58: The Army should develop a substantial pilot program to test multicomponent approaches, such as the following options:

- Appending an existing Army National Guard or Army Reserve aviation company to a Regular Army aviation battalion. The Commission strongly recommends that units be co-located so that they can train together.
- Applying the shared-equipment approach used in Air Force associate units to Army general support aviation. General support aviation units fly fewer multiple-aircraft missions and so might be able to share equipment. Multicomponent units should be co-located so that they can train together.
- Assigning Regular Army pilots to Army National Guard or Army Reserve units, or vice versa, in order to leverage the unique skills and experience present in different components. This approach could be used for all types of Army aircraft.
- Other approaches proposed by Army experts.

The Army should complete a detailed design for a pilot program within one year after publication of this report and fully implement the pilot program within one year after completion of the design work.

Some of the above approaches would not work for all Army aircraft and missions. The specific structure of the Air Force reserve associate program, and especially the sharing of equipment, would not work well for some types of Army aviation units (including Apache units) in which pilots routinely fly the unit's assigned aircraft simultaneously in collective training missions involving multiple helicopters. Appending a co-located reserve component unit to a Regular Army unit would



U.S. Army National Guard Photo/1st Lt. Aaron Decapua/Released

Soldiers and UH-60 Black Hawks from 1st Battalion, 140th Regiment, 40th Combat Aviation Brigade take part in an air assault exercise at the Combined Arms Collective Training Center at Camp Roberts, California.

probably not work for Apaches because it would be difficult to find Regular Army and Guard Apache units that are located close together. However, some of the above approaches, or others identified by the Army, should permit use of multicomponent units for many types of Army aircraft.

The multicomponent approach does have potential disadvantages that would have to be considered during design of the pilot program. To avoid adding to costs, the pilot program should use existing units that already have equipment and operating funds. Units would have to be chosen at locations that offer enough space for appended companies to train. Design of the pilot program will have to consider how best to integrate reserve component weekend training with Regular Army training, and how to avoid adverse effects on promotion opportunities for participating personnel. Importantly, multicomponent units should be designed so that the Regular Army units can deploy

effectively without their affiliated reserve units if that is required to meet military needs. Some of the proposals noted above (such as appending reserve component units) should help the Army achieve this goal. While these challenges are potentially significant, the Army should strive to overcome them in order to achieve the overarching goal of better integration of Regular Army, Army National Guard, and Army Reserve forces.

ADDITIONAL RECOMMENDATIONS

The recommendation regarding Apache transfers is intended to be generally consistent with the funding proposed in the President's budget plan submitted along with the fiscal year 2016 budget request. The Commission also identified other high-priority aviation initiatives that would require significant funding.

If current funding limits remain in place, the Army would need to identify offsets in order to pursue these initiatives. However, the Commission believes that significant threats to national security may eventually lead to defense funding that substantially exceeds the funding recommended in PB16. Potential efficiencies identified in the “Fiscal Challenges” chapter of this report (see page XX), may also free up funding. Added funding is not certain and, even if it eventually occurs, might not materialize for several years. Nevertheless, because the Commission is charged with a long-term look at the future of the Army, it determined that identifying high-priority initiatives is appropriate even though they require substantial funding.

The Commission places the highest priority on efforts to retain eleven Combat Aviation Brigades in the Regular Army. Considering all types of Army units, the demand for aviation forces is among the highest, and the addition of an eleventh CAB would help meet this strong demand.

The eleventh CAB would be used in Korea. Under the current ARI plan, the CAB located in Korea will inactivate in fiscal year 2019, and personnel from stateside CABs would rotate to Korea and operate helicopters already in place in the region. If an eleventh CAB is retained, the CAB in Korea would remain fully manned, and rotational units would not be needed.

An eleventh CAB offers important advantages. Peacetime operational tempo for Regular Army Apache units would meet the Army’s goals because the CAB would be permanently stationed in Korea rather than deploying to the region. Most wartime capacity shortfalls, including some early shortfalls identified by TRAC analyses discussed above, would be eliminated. Importantly, the nation would have a stable force of Army aviation in Korea rather than the rotating force planned under the ARI. As noted above, stability would be a major advantage in a region that is volatile and could become involved in combat with little or no notice.

Retaining an eleventh Regular Army CAB would, however, add substantially to costs. Compared to those under the Commission’s recommended Apache transfer option, annual operating costs would increase by between about \$185 million and \$450 million a year. The range depends on whether other force structure changes are made to offset the added personnel required to retain the CAB. Procurement costs would grow by even more. For aircraft other than Apaches, the eleventh CAB would draw from the equipment set already planned for Korea. For Apaches, however, the Commission’s Apache transfer recommendation uses the forty-eight stateside Apaches belonging to units that would rotate to Korea. If an eleventh CAB is added to this plan, and units no longer rotate, then forty-eight additional Apaches would have to be purchased to outfit stateside units. The

one-time cost to purchase forty-eight new Apaches—which are the most expensive Army helicopters with a per-aircraft cost of about \$40 million—would total roughly \$1.9 billion. A combination of higher defense budgets, efficiencies, and internal Army offsets would be needed to pay this bill. In earlier chapters the Commission offered some alternatives to help offset these added costs.

Recommendation 59: The Commission recommends that the Army retain eleven Combat Aviation Brigades in the Regular Army. The Commission understands that significant funding will be required and has identified some potential sources to help offset the added costs.

The Commission learned from senior Army leaders that the current level of flying hours for the Regular Army (an average of about eleven hours per pilot per month) permits typical aviation units to maintain platoon- to company-level proficiency, whereas collective proficiency at the battalion level is appropriate and requires an average of about 14.5 hours per pilot per month. Aviation units in the reserve components typically maintain individual- to team-level proficiency using about seven hours per pilot per month for mission aircraft, whereas platoon-level proficiency is appropriate and requires about eight hours per pilot per month. Some of these shortfalls can be offset with Overseas Contingency Operations money, but that type of funding is becoming less available.

Without additional flying hours, individual and collective training proficiency will decline, contributing to further declines in readiness and possible increases in accident rates. According to Army data, the rate of serious aviation accidents in fiscal year 2015 stood about 16 percent above the average level in the fiscal years from 2006 to 2010 (these results are based on Army aviation accidents in Classes A, B, and C and so include serious and less serious accidents). Last year aviation units stood down because of concerns stemming from a series of serious accidents. Many factors influence accident rates, such as operational tempo and the introduction of new aircraft models. But the relatively low level of training flight hours could be one cause of the increase in accident rates, a trend that is worrisome to the Commission.

The Army should determine the exact level and composition of the increase in flying hours. However, an increase of about two hours per pilot per month in both the Regular Army and Reserve Components may be appropriate. Such an increase would apply to all types of Army rotary wing aircraft and, compared to the PB16, would add between \$250 million and \$300 million a year in costs.



Photo by Sgt. 1st Class Sadie Bleistein

A CH-47 Chinook door gunner with Task Force Destiny of the 101st Combat Aviation Brigade surveys the ground on a flight from Kandahar Airfield, Afghanistan, to Forward Operating Base Tarin Kowt.

Recommendation 60: The Army should consider increasing flying hours available for peacetime training. The Commission understands that significant added funding would be required.

The Commission heard from Army aviation officials who believe that modernization is key to maintaining aviation capability given the reductions in force size. The Army should pursue a robust science and technology effort designed to offset evolving threats and ensure the survivability of helicopters flying in hostile environments (the NCFA Classified Annex contains some additional detail about this important issue). The Army should also consider a program to develop a future armed reconnaissance helicopter. Finally, the Army should continue to place a high priority on development of technologies for future vertical lift.

In the nearer term, added modernization funds could be used to offset reductions to the Black Hawk procurement program discussed as part of the Commission's Apache transfer recommendation, and perhaps even accelerate the Black Hawk modernization. Added modernization funds could also be used to buy more Apache helicopters, thereby avoiding the need to equip National Guard battalions with only eighteen aircraft under the Commission's approach.

Recommendation 61: The Army should implement a more aggressive modernization program for its aviation forces. The Commission understands that significant funding would be required.



“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.”

2015 NDAA, Section 1703(a)(2)(C)

“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.”

2015 NDAA, Section 1703(a)(2)(D)

ARMY NATIONAL GUARD ALLOCATION

As part of the study of the Army’s size and force mixture, the Fiscal Year 2015 National Defense Authorization Act (NDAA FY15) directed the Commission to consider how Army National Guard personnel and force structure are allocated, including the rationale and decision-making

processes. The Commission’s evaluation involved an assessment of Army force management processes in general and a detailed review of the specific processes for the Army National Guard.

How the Army Runs: A Senior Leader Reference Handbook, 2013-2014 (Carlisle, Pennsylvania, U.S. Army War College)

describes force management as the overall framework on which the Army is raised, maintained, and sustained. This force management framework applies to all components of the Army, including the Army National Guard. Force management encompasses concept development, capabilities requirements generation, force development, organizational development, force integration functions, and resourcing. Force development, a sub-process, determines organizational and materiel requirements and translates them into force structure to accomplish Army missions and functions (AR 71-32, *Force Development and Documentation*, July 1, 2013, Section 1-5.a). Army National Guard force structure allocation decisions are part of force development.

LEGISLATIVE, REGULATORY, AND POLICY FRAMEWORK

The processes that shape and support the allocation of National Guard forces have changed over time to better execute the National Guard's dual missions under Title 32 and Title 10 United States Code. Title 32 firmly establishes the dual mission requirements of the National Guard. In section 102, the law describes the strength and organization of the Army National Guard as "essential" and requires that it be an integral part of the first line defenses of the United States" maintained and assured at all times. That section goes on to say, "Whenever Congress determines that more units and organizations are needed for the national security than are in the regular components ... the Army National Guard of the United States ... together with such units of other reserve components as are necessary for a balanced force, shall be ordered to active federal duty and retained as long as so needed."

Additionally, Title 32, section 104 specifies that "the organization of the Army National Guard and the composition of its units shall be the same as those prescribed for the Army, subject, in time of peace, to such general exceptions as the Secretary of the Army may authorize." Furthermore, section 104 stipulates that "(e)ach State, the Commonwealth of Puerto Rico, Guam, and the Virgin Islands may fix the location of the units and headquarters of its National Guard." Meanwhile, Title 10, section 18238, stipulates that no National Guard unit may be relocated or withdrawn without the consent of the governor of the state.

Photo on page 99

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Pursuant to Title 10, section 10503, the Secretary of Defense, consulted by the Chairman of the Joint Chiefs and the Secretaries of the Army and Air Force, developed a charter for the National Guard Bureau (NGB) that defines its scope and duties. Under this charter, the NGB is responsible for "allocating unit structure, strength authorizations, and other resources to the Army National Guard." The charter defines the role of the NGB in support of the Secretaries of the Army and the Air Force and establishes responsibility for the training discipline, training requirements, and the allocation of federal funds for training to ensure that states train National Guard units and members in accordance with approved programs and policies of, and guidance from, the Chief, National Guard Bureau (CNGB), the Secretary of the Army, and the Secretary of the Air Force. The NGB thus monitors and assists the states in organizing, maintaining, and operating National Guard units to provide well-trained and well-equipped units capable of augmenting the active forces in time of war or national emergency.

To implement these statutory requirements, the Department of the Army uses a force management process that defines military capabilities, designs unit organization, allocates force structure to provide these capabilities, and produces plans and programs that translate these organizational concepts into a trained and ready Army. This force management framework is comprehensive and collaborative. It brings together representatives from all components, the Combatant Commands, Army commands, and other key stakeholders to ensure that Army capabilities are developed and resourced to address Title 10 and Title 32 mission requirements. The forces developed by the Army force management process are distributed across the components to optimize capabilities of the Total Force. Title 32 demands are included in assessments and evaluations of force structure requirements and considered in decisions on allocating National Guard forces. Consequently, within the Army National Guard and the Army writ large is an understanding of the collective obligation to provide adequate forces to all states that meet their statutory requirements as the first-line defense and can execute their duties as the organized militias of the several states, Puerto Rico, the Virgin Islands, Guam, and the District of Columbia.

ASSESSMENT OF AUTHORITIES AND RESPONSIBILITIES FOR ALLOCATION

Numerous laws, policies, and legal precedents articulate how responsibilities and authorities are distributed between the legislative and executive branches of the federal government, within the executive branch, and between federal and state government. Through numerous additional statutory

Figure 18
AUTHORITIES

SECRETARY OF DEFENSE	Subject to the Direction of the President...has authority, direction, and control over the Department of Defense.
SECRETARY OF THE ARMY	Responsible for, and has authority necessary to conduct, all affairs of the Department of the Army including...(2) Organizing.
CHIEF, NATIONAL GUARD BUREAU	The principal adviser to the Secretary of the Army and CSA on matters relating to the National Guard.
	The Chief, NGB is under the authority, direction, and control of the Secretary of Defense. The Secretary normally exercises authority, direction, and control through the Secretaries of the Army and the Air Force for matters pertaining to their responsibilities in law or DoD policy.
	Implements DoD, Department of the Army, and Department of the Air Force guidance on the structure, strength authorizations, and other resources of the Army National Guard of the United States and the Air National Guard of the United States.
	Approval authority for Army National Guard Stationing.
	Issues the Troop Structure Program to the adjutants general of the states.
	Reviews, monitors, and provides input to the requirements and authorizations development process.
	Recommends specific types of units to be activated, inactivated, or converted in the ARNG in accordance with policy from the ASA(M&RA).
ASA (M&RA)	Secretary of the Army's principal adviser for reserve issues; responsible for ensuring Army policies, plans, and programs regarding force structure are managed properly.
	Establishes overall Army policy for Army organization and force structure, responsible for oversight and review of all RC policies addressing stationing actions.
DCS, G-3/5/7	Responsible for developing and implementing policies for managing/accounting for Total Army.
	Army Staff proponent for Stationing actions and responsible for the force management process.
	Approval authority for Multi-Component Unit policies.
DIRECTOR, ARMY NATIONAL GUARD	Staff proponent for ARNG stationing actions, coordinate with Chief, NGB for all stationing actions.
	Forward brigade and division stationing actions to DCS, G-3/5/7 for Secretary of the Army and Secretary of Defense approval.

Inconsistencies in policy stem from out dated regulations and pamphlets.

■ Law ■ Policy

provisions, Congress has given the President, the Secretary of Defense, and the Secretary of the Army authority and responsibility for allocating Army National Guard force structure (see Figure 18).

The Secretary of the Army ultimately is responsible for the allocation of Army National Guard personnel and force

structure to the states and territories and has delegated this authority to the CNGB through a complicated, although still identifiable, chain of authority. Under the current NGB process, the Director, Army National Guard (DARNG) makes Army National Guard force structure allocation decisions on behalf of the CNGB.

distribute force structure generated by the TAA resourcing phase.

Two tools are fundamental to Army National Guard force structure analysis when divesting or allocating forces identified in the early steps of TAA: the Unit Analysis Tool (UAT) and the Force Structure Decision Support Tool (FSDST). These tools generate an order of merit list (OML) of units for divestment and a given state’s potential for success if receiving new structure (see *Figures 20 and 21*). The UAT is a metric-based model designed to assess and compare the reported readiness criteria of “like-type” capabilities across multiple states. The FSDST uses similar metrics and criteria for all capabilities in a given state for stationing new structure and re-stationing existing units. The generated OML ranks capabilities based on personnel and Unit Status Report metrics to help identify quantitative priorities for both divesting and stationing capabilities across the Army National Guard. Both the UAT and FSDST use a set of evaluation criteria fully vetted across the National Guard community.

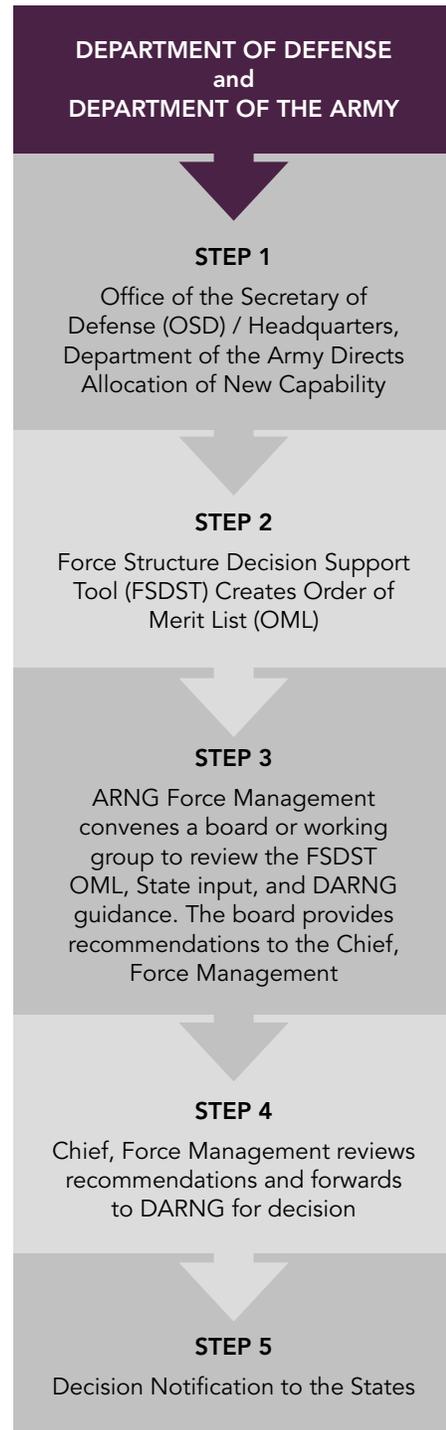
These National Guard-unique tools are used when the TAA process determines the need for force structure changes in the Army National Guard. When stationing new force structure is required, a stationing analysis memo prepared by a state provides qualitative information to be reviewed by a board or working group. Upon the need to inactivate or move a unit, the Chief, Force Management (CFM) at the NGB notifies the Force Structure General Officer Advisory Committee and all fifty-four states and territories of the reductions. Depending on the complexity and magnitude of the force structure reductions, one of two processes occurs.

If structure reductions or moves are limited in scope, then the Standard Reduction Process is used to make routine recommendations for the reduction of Army National Guard Force Structure. This process combines the quantitative metrics of the Unit Analysis Tool with qualitative input from the TAGs. A Force Management Unit Review Board (FMURB), with membership from the ARNG Directorate and the fifty-four states and territories, convenes to make recommendations. The FMURB consolidates the “science” and “art” portions of this process and reports recommendations to the TAGs with courses of action and recommendations for submission to the DARNG for decision.

The Complex Reduction Process is used to implement large-scale systemic force structure changes in the Army National Guard, such as reduction from a 350,000 to a 335,000 force-structure allowance. To manage the intricacy of large-scale changes, a Complex Force Management Working Group is convened comprising designated representatives from the fifty-four states and territories as well as limited representation from the Army National Guard Directorate. The

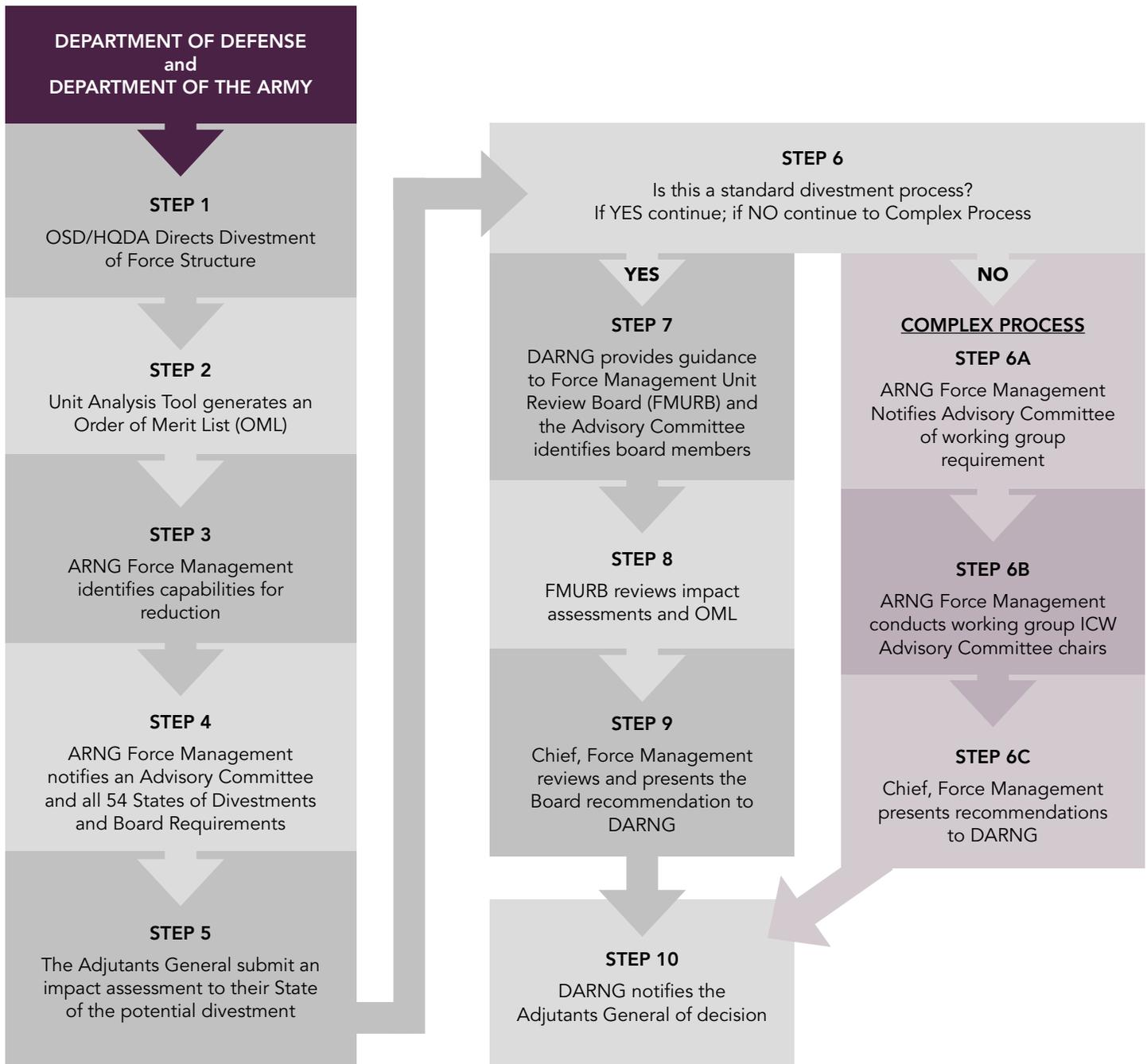
Figure 20

STATIONING PROCESS FLOW CHART



ARMY NATIONAL GUARD ALLOCATION

Figure 21
DIVESTMENT PROCESS FLOW CHART



working group reports the recommendations to the CFM, who reviews them with a General Officer Advisory Committee prior to submission to the DARNG for decision.

Representation and state involvement through either the standard or complex process provides transparency to the states in their roles as voting members or observers. The transparency and quantitative data directly address the concerns of state and territory leaders when past allocation actions were perceived as neither analytical nor transparent. Adopting these qualitative and quantitative allocation processes provides a holistic look when stationing or reducing force structure.

The Force Program Review process allows the Army National Guard to balance the aggregate force among the states. The process also provides senior leaders the ability to shape the force by looking at the supportability, suitability, and balance of personnel and capabilities across the fifty-four states and territories. Applying collective obligation as a shaping tool within the Force Program Review ensures that the fifty-four states and territories are balanced, with no one state's force structure disproportionately reduced or increased.

Collective obligation also helps in assessing whether each state has sufficient forces for both Title 32 requirements and Title 10 requirements, especially the capacity needed to support current and anticipated homeland defense and disaster assistance missions in the United States.

In accordance with National Guard procedures, state governments participate in the NGB allocation process by providing input as well as detailing personnel to the boards responsible for allocating new force structure and making decisions on force structure reductions. State governors are not directly involved in the allocation process; however, by statute, a governor's approval is required for any change in the branch, organization, or allotment of a unit located entirely within a state, although the Secretary of the Army has final approval authority on all force structure changes. National Guard Bureau regulation 10-1 goes further than the statute and requires a governor's approval for all actions requesting organization, reorganization, re-designation, consolidation, conversion, and withdrawal of federal recognition from any structure within a state.

TOTAL FORCE TRAINING

During force-on-force training at Camp Shelby, Mississippi, in August 2015, tank platoons from the 155th Armored Brigade Combat Team, Mississippi Army National Guard, maneuvered against the 3d Brigade's 1-12 Cavalry, home based at Fort Hood, Texas. The training was in preparation for a platoon-level, live fire exercise. In that exercise the 155th ABCT was joined by the 142d Battlefield Surveillance Brigade, Alabama Army National Guard, which identified targets in the engagement area and called for indirect fire, delivered by the 2-114th Field Artillery Battalion, Mississippi Army National Guard, using unmanned aerial systems to support intelligence collection and monitor round impacts. After an attack weapons team of Apache helicopters from A/1-149 Attack Reconnaissance Battalion, Texas Army National Guard, engaged targets using diving rocket fire, the 155th tank platoon maneuvered and engaged stationary and moving targets. The 143d Expeditionary Sustainment Command, U.S. Army Reserve, provided sustainment support, and joint tactical air controllers from the Mississippi Air National Guard's 238th Air Support Operations Squadron controlled the airspace.

While the active and reserve components must overcome real or perceived legislative and administrative hurdles to function effectively together—hindering the implementation of the Army's Total Force Policy—mission-mindedness within the Profession of Arms eclipses

component affiliation during operations. This was clear during the Total Force live-fire exercise at Camp Shelby's eXportable Combat Training Center in August 2015.

The foundation for such training is the Total Force Partnership Program the U.S. Forces Command established in 2014. The program pairs Regular Army, Army National Guard, and Army Reserve formations to best use limited resources and develop leaders. Multicomponent training events enhance understanding across all the components and will pay off when the components conduct missions together during deployments.

Coordination for the August exercise began in 2014 when Colonel Jeffrey Van, commander of the 155th ABCT, called Colonel Matthew Van Wagenen, commander of the 3d Brigade, to coordinate their partnership training plans. Key enabler units were eager to join the training exercise. Each unit performed their mission-essential tasks using common graphics and a common scenario for day and night operations.

"The lessons learned here about successful partnerships—how BCT commanders who are 'all in' backed up by two-star leaders who value partnership enough to provide funding to ensure proper coordination occurs—must be codified fully into policy," said COL Van.



Photo by Staff Sgt. Jason van Mourik, Oregon Military Department Public Affairs

Chief Warrant Officer 4 Dennis Cooper, Chief Warrant Officer 2 Logan Bass, and Crew Chief Specialist Beth Bechard with Charlie Company, 7-158th Aviation, navigate their HH-60M Black Hawk with a “Bambi bucket” containing 500 gallons of water through the smoke of a wildfire.

“I would not want to deploy to the streets of Baltimore with the National Guard from the 1980s or early ‘90s.”

Major General Linda L. Singh (MDARNG), The Adjutant General, in meeting with NCFA staff July 14, 2015, on concerns over returning to a pre-Total Force structure for the components.

NCFA FINDINGS

The Commission found that allocation of Army National Guard personnel and force structure to the states and territories

is accomplished within the Army’s Total Army Analysis process managed by the Army G-3/5/7. Within that process, Army G-3/5/7 informs the Chief, National Guard Bureau of the overall personnel and force structure changes to be applied to the Army National Guard. The CNGB has processes within the Army National Guard for making recommendations for allocating these changes to states and territories that are consistent with national security objectives and priorities to produce allocation recommendations. The process depends on the complexity of the changes, as well as whether decrements or increases are to be allocated. Employing these processes, the DARNG reviews and approves the proposed changes before the CNGB provides an allocation recommendation that is incorporated into the overall Army personnel and force structure changes generated by TAA. All changes are submitted to the Secretary of the Army for review and approval.

Additionally, the Commission found that the allocation processes used by the NGB begins by using objective, quantified metrics vetted with the states and territories. The metrics produce an order of merit list of either specific reductions or increases to be applied. A board or working group then uses the analytical products as well as input from the states and territories that addresses the types of force structure under consideration. An additional consideration is the balance of National Guard forces across the states and territories to provide capacity for both domestic and overseas contingency operations. These boards and working groups are conducted in a transparent manner, either with representatives from the states and territories on the board or having representatives present to observe these boards or working groups. Having Department of the Army representatives observe the boards and working groups would further increase transparency and shared understanding from a Total Force perspective.

The Commission also noted several minor issues within the policy documents. The regulations concerning the allocation of Army National Guard personnel and force structure are complicated and should be clarified by the Department of the Army. For example, older Army regulations delegate authority to the DARNG, but the more recent applicable regulations correctly delegate authority to the CNGB. Ideally,

the CNGB should provide a written delegation of authority to the DARNG. After extensive research and requests, the Commission has been unable to verify whether such a written delegation exists. Updating regulations and policy at Army level to reflect the existing processes is overdue.

Recommendation 62: The Secretary of the Army should codify the delegation of authority from the Chief, National Guard Bureau to the Director, Army National Guard in Army regulations for force structure allocation among the states, territories, and the District of Columbia.

Recommendation 63: The Secretary of the Army should codify in Army regulations the existing Army National Guard Force Program Review process as the formal way to manage change in the Army National Guard.

Recommendation 64: The Army National Guard Force Program Review process should add representatives from the office of the Secretary of the Army and from the Army Staff to the Force Program Review working groups and boards as observers.

APPENDIX A:

NDAA

NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2015 (PUBLIC LAW 113-291)

SEC. 1701. SHORT TITLE.

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

SEC. 1702. NATIONAL COMMISSION ON THE FUTURE OF THE ARMY.

(a) ESTABLISHMENT.—There is established the National Commission on the Future of the Army (in this subtitle 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 one 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. 1703. 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 related to 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) manages strategic and operational risk by making tradeoffs among readiness, efficiency, effectiveness, capability, and affordability.

(B) An evaluation and identification of force generation policies for the Army with respect to size and force mixture in order to 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 subsections (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. 1704. 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 subtitle.

(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 subtitle. 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. 1705. 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. 1706. TERMINATION OF THE COMMISSION.

The Commission shall terminate 90 days after the date on which the Commission submits its report under this subtitle.

SEC. 1707. 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 subtitle.

NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2016 (PUBLIC LAW 114-92)

SEC. 1061. EXPEDITED MEETINGS OF THE NATIONAL COMMISSION ON THE FUTURE OF THE ARMY.

Section 1702(f) of the National Defense Authorization Act for Fiscal Year 2015 (Public Law 113–291; 128 Stat. 3665) is amended by adding at the end the following new sentence: “Section 10 of the Federal Advisory Committee Act (5 U.S.C. App. I) shall not apply to a meeting of the Commission unless the meeting is attended by five or more members of the Commission.”

RECOMMENDATIONS BY RESPONSIBLE OFFICIAL

NATION

Recommendation 1: The nation must maintain and sustain an All-Volunteer Army.

PRESIDENT

Recommendation 6: The Congress and the Administration should look for cost-saving opportunities in areas such as the military health system, energy savings, and a reduced inventory of military facilities.

Recommendation 7: The Congress and the Administration should return to predictable and responsible budgeting processes that produce levels of defense funding at least equal to those in the fiscal year 2016 President's budget.

Recommendation 13: The President should budget for and the Congress should authorize and fund an Army that maintains an end strength of at least 980,000 uniformed personnel (450,000 in the Regular Army, 335,000 in the Army National Guard, and 195,000 in the Army Reserve) at planned readiness levels.

Recommendation 14: The President should revise strategic and budget guidance to the Department of Defense based on changes in the security environment. The Department of Defense should then use this revised guidance as the basis for revising its planning guidance, and the Army should adjust its force—structure, readiness, and modernization plan—accordingly.

CONGRESS

Recommendation 2: Congress should apply the Federal Advisory Committee Act provisions of the Fiscal Year 2016 National Defense Authorization Act's Section 1061 to all similar commissions.

Recommendation 3: Congress should update the Federal Advisory Committee Act's requirements in a way that reflects changes in information technology, allowing commissions to use their own websites for posting minutes, testimonies, and public comments, and for providing a public reading room.

Recommendation 4: Congress should maintain future Army budgets at funding levels at least equal to those in the fiscal year 2016 Presidential budget plan due to significant and emerging threats to national security.

Recommendation 5: Congress should maintain future Department of Defense budgets at levels at least equal to those in the fiscal year 2016 President's budget plan.

Recommendation 6: The Congress and the Administration should look for cost-saving opportunities in areas such as the military health system, energy savings, and a reduced inventory of military facilities.

Recommendation 7: The Congress and the Administration should return to predictable and responsible budgeting processes that produce levels of defense funding at least equal to those in the fiscal year 2016 President's budget.

Recommendation 13: The President should budget for and the Congress should authorize and fund an Army that maintains an end strength of at least 980,000 uniformed personnel (450,000 in the Regular Army, 335,000 in the Army National Guard, and 195,000 in the Army Reserve) at planned readiness levels.

Recommendation 21: The Congress should require the Secretary of Defense and Secretary of the Army to provide within a year of this report an assessment of the ways, and associated costs, to reduce or eliminate shortfalls in responsiveness (Regular Army capacity and forward posture) and capacity (total Army inventory; component non-specific) of the following capabilities:

1. AH-64-equipped Attack Reconnaissance Battalion capacity to meet war plan needs;
2. Air defense artillery (ADA) capacity, responsiveness, and the capability of Short Range ADA to meet existing and emerging threats (including unmanned aerial systems, cruise missiles, and manned aircraft), including an assessment of the potential for commercial-off-the-shelf solutions;
3. Chemical, biological, radiological, and nuclear (CBRN) capabilities and modernization as it relates to homeland missions as well as the capacity to meet overseas war plan needs;

APPENDIX B: RECOMMENDATIONS BY RESPONSIBLE OFFICIAL

4. Field artillery capabilities and the changes in doctrine and war plans resulting from U.S. participation in the Cluster Munitions ban (detailed in the NCFCA Classified Annex) as well as required modernization or munition inventory shortfalls;
5. Quartermaster fuel distribution and water purification capacity and responsiveness to meet war plan needs;
6. Army watercraft, other port opening capabilities, modernization and responsiveness (with particular attention to the ability to flex between oceans) to meet war plan needs;
7. Transportation (fuel, water, and cargo) capacity and responsiveness to meet war plan needs;
8. Military police capacity to meet war plan needs.

Recommendation 22: The Congress should require the Secretary of Defense and Secretary of the Army to provide an assessment of the effect of the current sourcing solution for the Ground-based Midcourse Defense (GMD) mission on mission effectiveness. The assessment should consider implications for recruiting, training, career progression, doctrine development, and GMD modernization strategy. It should explicitly include consideration of Regular Army and multicomponent solutions as an alternative for the GMD mission. This assessment should be delivered no later than one year after publication of this report.

Recommendation 23: The Congress should require the Secretary of Defense and Joint Staff to oversee the modeling of alternative Army design and operational concepts—including the Reconnaissance Strike Group, Hybrid Battalion Task Force, Stryker Global Response Force, and the Reconnaissance and Security Brigade Combat Team—and report on their findings within one year. The report to Congress should explicitly address the value of follow-on pilot programs to test further any promising alternative force design and concept approaches.

Recommendation 30: The Congress should expand 12304b authority to include operational requirements that emerge within the programmed budget timeline, including the year of execution.

Recommendation 31: The Army should budget for and the Congress should authorize and fund no fewer than 3,000 man years annually for 12304b utilization of the reserve components. The Secretary of Defense in conjunction with the Army and the Office of Management and Budget should also provide for the use of Overseas Contingency Operations and supplemental funding for reserve component utilization under 12304b.

Recommendation 36: Congress should enact legislation to allow assignment of Regular Army officers and enlisted soldiers to Army National Guard positions to execute all functions without prejudice to their federal standing. The legislation should also permit the similar assignment of National Guard officers and enlisted soldiers to Regular Army units. Assignment to another component should be considered a key developmental experience and could be considered criteria for promotion. Notwithstanding the legislative reform, a pilot program to test the concept should be established in the Army Reserve within one year of publication of this report and evaluated in two years to determine the effectiveness of such a program.

Recommendation 37: The Congress, the Department of Defense, and the Army should continue to support and adequately fund the Integrated Personnel & Pay System-Army (IPSS-A) as the cornerstone to the effective management and enhanced integration of the components of the Army. The Army must maintain the program's current schedule as a critical underpinning capability for the Army to support the Total Force.

Recommendation 38: Congress should authorize and direct the Secretary of the Army to establish a substantial pilot program in which recruiters from all three components are authorized to recruit individuals into any of the components and receive credit for an enlistee regardless of the component. The Secretary of the Army should conduct a multiyear pilot program with a requirement to present annual reports to Congress with the results of the pilot along with recommendations as to whether to make the temporary authorities permanent. Congress should specifically authorize the pilot program “notwithstanding any other laws” in order to avoid potential fiscal law concerns. The Army should complete a detailed design for a pilot program within one year after publication of this report and fully implement the pilot program within one year after completion of the design work.

Recommendation 39: Congress should authorize, and the Secretary of the Army direct, the consolidation of marketing functions under the authority of the Army Marketing Research Group (AMRG) to gain unity of effort. The AMRG must employ marketing strategies to achieve recruiting goals of the Army Reserve, Army National Guard, and Regular Army.

Recommendation 41: Congress should direct the Department of Defense to review enlisted Joint Professional Military Education (JPME) requirements, determine which should become mandatory requirements, and report within one year.

Recommendation 50: The Congress should require the Army to develop, by the end of fiscal year 2017, a plan for expansion to execute a large-scale sustained operation. The plan would include maintaining a running estimate for long-lead equipment production and modification as well as personnel accession and training for anticipated capability shortfalls that occur after reorganization and mobilization. The plan should address each of the statutory Department of the Army functions as articulated in 10 U.S. Code Section 3013 and examine and report annually to the Secretary of Defense on the necessary requirements to expand the Army's capacity.

Recommendation 53: Congress should amend 10 USC 10205 to authorize the Secretary of Defense to coordinate with other federal agencies to obtain updated contact information on Individual Ready Reserve soldiers.

Recommendation 54: Congress should amend Title 10 USC to authorize a virtual muster that does not include a physical examination or review.

Recommendation 56: Congress, DoD, and the Army should implement the Commission's plan (Option Three) for distribution of the Apache fleet. The Commission's plan maintains twenty-four manned Apache battalions including twenty in the Regular Army equipped with twenty-four aircraft each and four in the National Guard equipped with eighteen aircraft each. The plan adds only two Black Hawk battalions to the National Guard. The Army should commit to using the four National Guard Apache battalions regularly, mobilizing and deploying them in peacetime and war.

DEPARTMENT OF DEFENSE

Recommendation 24: The Secretary of Defense and the Chairman of the Joint Chiefs of Staff should report to Congress within a year on a strategic mobility sufficiency analysis and associated risk mitigation plan from 2020 through 2040.

Recommendation 31: The Army should budget for and the Congress should authorize and fund no fewer than 3,000 man years annually for 12304b utilization of the reserve components. The Secretary of Defense in conjunction with the Army and the Office of Management and Budget should also provide for the use of Overseas Contingency Operations and supplemental funding for reserve component utilization under 12304b.

Recommendation 32: The Secretary of Defense should update the January 19, 2007, memo "Utilization of the Total Force" to allow flexible involuntary mobilization periods in an effort to achieve common BOG periods for all components.

Recommendation 37: The Congress, the Department of Defense, and the Army should continue to support and adequately fund the Integrated Personnel & Pay System-Army (IPSS-A) as the cornerstone to the effective management and enhanced integration of the components of the Army. The Army must maintain the program's current schedule as a critical underpinning capability for the Army to support the Total Force.

Recommendation 48: As recommended in Quadrennial Defense Review 2014, the Secretary of Defense should plan in fiscal year 2017 and execute no later than the end of fiscal year 2018 a comprehensive review of the nation's ability to mobilize its existing reserves as well as its preparedness for the potential of national mobilization.

Recommendation 51: The Secretary of Defense should incorporate in defense planning and fiscal guidance the analysis of Army expansion requirements for force-sizing and capability-mix analyses in fiscal year 2017. This guidance would give priority to the retention of expansion-required leaders, infrastructure, and materiel in the defense budget and program.

Recommendation 56: Congress, DoD, and the Army should implement the Commission's plan (Option Three) for distribution of the Apache fleet. The Commission's plan maintains twenty-four manned Apache battalions including twenty in the Regular Army equipped with twenty-four aircraft each and four in the National Guard equipped with eighteen aircraft each. The plan adds only two Black Hawk battalions to the National Guard. The Army should commit to using the four National Guard Apache battalions regularly, mobilizing and deploying them in peacetime and war.

JOINT STAFF

Recommendation 24: The Secretary of Defense and the Chairman of the Joint Chiefs of Staff should report to Congress within a year on a strategic mobility sufficiency analysis and associated risk mitigation plan from 2020 through 2040.

APPENDIX B: RECOMMENDATIONS BY RESPONSIBLE OFFICIAL

COMBATANT COMMANDS

Recommendation 11: The Army must assist Combatant Commands and Army Service Component Commands with timely integration of force structure changes into their strategic planning process.

Recommendation 12: Combatant Commands and Army Service Component Commands must update all war plans with current and programmed force structure and doctrine and establish a process to ensure routine war plan and Time Phased Force Deployment Data updates at a minimum of once every two years.

ARMY

Recommendation 8: The Army must continue to treat readiness as its most important funding priority.

Recommendation 9: The Army should provide the Congress with an assessment of risks in current and planned tactical mobility. This assessment should be completed within one year of publication of this report and include the costs and potential tradeoffs for closing significant readiness gaps in this area.

Recommendation 10: The Army must reassess the risk it is assuming in modernization for aviation survivability, SHORAD, CBRN, field artillery, and Army watercraft.

Recommendation 11: The Army must assist Combatant Commands and Army Service Component Commands with timely integration of force structure changes into their strategic planning process.

Recommendation 15: The Army should forward station an Armored Brigade Combat Team in Europe.

Recommendation 16: The Army should convert the European Command administrative aviation headquarters to a warfighting mission command element similar to a Combat Aviation Brigade headquarters.

Recommendation 17: The Army should maintain a forward-stationed Combat Aviation Brigade in Korea.

Recommendation 18: The Army should retain eleven Combat Aviation Brigades in the Regular Army.

Recommendation 19: Based on the current and projected threat environment, the Army should increase Armored Brigade Combat Team (ABCT) capacity. Risk may be acceptable without additional ABCT structure if the Army stations an existing ABCT in Europe, as recommended above.

Recommendation 20: The Army should ensure Combatant Commands (COCOM) and Army Service Component Commands (ASCC) have the ability to provide operational mission command in proportion to the unique mission for each COCOM. The Army should consult closely with COCOM and ASCC commanders to assess the risks entailed in mission command changes and seek to minimize risk where possible when implementing them.

Recommendation 25: The Army should consider reducing up to two Regular Army IBCTs to provide manpower spaces that could be used to decrease higher priority risks.

Recommendation 26: The Army should complete development and fully implement the Generating Force Model to improve requirements determination and better inform generating force manpower decisions.

Recommendation 27: The Army must manage and provide forces under the Total Force approach.

Recommendation 28: The Secretary of the Army should review and assess officer and NCO positions from all components for potential designation as integrated positions that would allow individuals from all components to fill positions to foster an Army Total Force culture and expand knowledge about other components. The Secretary of the Army's goal should be to increase billets designated for multicomponent use. A review should be completed within nine months after publication of this report, and any new designations should be completed within eighteen months.

Recommendation 29: The Secretary of the Army should develop selection and promotion policies that incentivize Regular Army, Army National Guard, and Army Reserve assignments across components and within multicomponent units. The Secretary of the Army's goal should be to substantially increase incentives for service in multicomponent units. The Secretary of the Army should make changes within one year after publication of this report.

Recommendation 31: The Army should budget for and the Congress should authorize and fund no fewer than 3,000 man years annually for 12304b utilization of the reserve components. The Secretary of Defense in conjunction with the Army and the Office of Management and Budget should also provide for the use of Overseas Contingency Operations and supplemental funding for reserve component utilization under 12304b.

Recommendation 33: The Army should continue using multicomponent units and training partnerships to improve Total Force integration and overall Army effectiveness.

Recommendation 34: The Army should add specific guidance on goals for future use of multicomponent units and related initiatives to the Army's Total Force Policy Implementation Guidance for fiscal year 2017.

Recommendation 35: The Army should develop a substantial pilot program to test the viability of a multicomponent aviation unit in order to improve readiness and improve integration of Regular Army, Army National Guard, and Army Reserve forces.

Recommendation 37: The Congress, the Department of Defense, and the Army should continue to support and adequately fund the Integrated Personnel & Pay System-Army (IPSS-A) as the cornerstone to the effective management and enhanced integration of the components of the Army. The Army must maintain the program's current schedule as a critical underpinning capability for the Army to support the Total Force.

Recommendation 38: Congress should authorize and direct the Secretary of the Army to establish a substantial pilot program in which recruiters from all three components are authorized to recruit individuals into any of the components and receive credit for an enlistee regardless of the component. The Secretary of the Army should conduct a multiyear pilot program with a requirement to present annual reports to Congress with the results of the pilot along with recommendations as to whether to make the temporary authorities permanent. Congress should specifically authorize the pilot program "notwithstanding any other laws" in order to avoid potential fiscal law concerns. The Army should complete a detailed design for a pilot program within one year after publication of this report and fully implement the pilot program within one year after completion of the design work.

Recommendation 39: Congress should authorize, and the Secretary of the Army direct, the consolidation of marketing functions under the authority of the Army Marketing Research Group (AMRG) to gain unity of effort. The AMRG must employ marketing strategies to achieve recruiting goals of the Army Reserve, Army National Guard, and Regular Army.

Recommendation 40: The Army should retain formal leader development activities as a high priority for all uniform and civilian personnel.

Recommendation 42: The Army should conduct an end-to-end review of The Army School System and report to Congress within a year of publication of this report on the efficiencies gained by consolidating under-used capacity that does not contribute to the ability to regenerate and expand the Army if needed. The review should take a holistic look at successes and

shortfalls from current strategy and ensure consistent naming conventions to minimize confusion.

Recommendation 43: The Army should establish true regionalization of the Army's school system and continue to consolidate the infrastructure where efficiencies can be gained. The Army should acknowledge and explain any unused capacity, and develop a plan to retain or eliminate the unused capacity, ensure the correct balance of infrastructure and capacity to meet the nation's needs, and take into consideration the ability to regenerate and expand the Army. The Army should complete this plan within a year of publication of this report.

Recommendation 44: The Army should immediately implement the entire One Army School System to realize savings sooner.

Recommendation 45: The Army should implement the Objective-T methodology for assessing the progression of training readiness and revise readiness reporting using the quantifiable criteria.

Recommendation 46: The Army should increase the number of annual rotations for Army National Guard Brigade Combat Teams at combat training centers beginning fiscal year 2017 without decreasing the number of Regular Army Brigade Combat Team rotations.

Recommendation 47: The Army should resource First Army's Active Guard and Reserve (AGR) positions from the Army National Guard and the Army Reserve at the aggregate manning level provided for each component not later than fiscal year 2017.

Recommendation 49: The Army should provide a Pre-deployment Training Equipment set to Fort Bliss, Texas, for its Mobilization Force Generation Installation role no later than fiscal year 2017.

Recommendation 52: The Secretary of the Army should perform a top-to-bottom review in fiscal year 2017 of the Individual Ready Reserve program to ensure compliance with existing statutes.

Recommendation 55: The Secretary of the Army should rescind the February 22, 2006, memo "Individual Ready Reserve Transformation."

Recommendation 56: Congress, DoD, and the Army should implement the Commission's plan (Option Three) for distribution of the Apache fleet. The Commission's plan maintains twenty-four manned Apache battalions including twenty in the Regular Army equipped with twenty-four aircraft

APPENDIX B: RECOMMENDATIONS BY RESPONSIBLE OFFICIAL

each and four in the National Guard equipped with eighteen aircraft each. The plan adds only two Black Hawk battalions to the National Guard. The Army should commit to using the four National Guard Apache battalions regularly, mobilizing and deploying them in peacetime and war.

Recommendation 57: The Army should maintain a forward-stationed Combat Aviation Brigade in Korea.

Recommendation 58: The Army should develop a substantial pilot program to test multicomponent approaches, such as the following options:

- Appending an existing Army National Guard or Army Reserve aviation company to a Regular Army aviation battalion. The Commission strongly recommends that units be co-located so that they can train together.
- Applying the shared-equipment approach used in Air Force associate units to Army general support aviation. General support aviation units fly fewer multiple-aircraft missions and so might be able to share equipment. Multicomponent units should be co-located so that they can train together.
- Assigning Regular Army pilots to Army National Guard or Army Reserve units, or vice versa, in order to leverage the unique skills and experience present in different components. This approach could be used for all types of Army aircraft.
- Other approaches proposed by Army experts.

The Army should complete a detailed design for a pilot program within one year after publication of this report and fully implement the pilot program within one year after completion of the design work.

Recommendation 59: The Army should retain eleven Combat Aviation Brigades in the Regular Army. The Commission understands that significant funding will be required and has identified some potential sources to help offset the added costs.

Recommendation 60: The Army should consider increasing flying hours available for peacetime training. The Commission understands that significant added funding would be required.

Recommendation 61: The Army should implement a more aggressive modernization program for its aviation forces. The Commission understands that significant funding would be required.

ARMY SERVICE COMPONENT COMMANDS

Recommendation 11: The Army must assist Combatant Commands and Army Service Component Commands with timely integration of force structure changes into their strategic planning process.

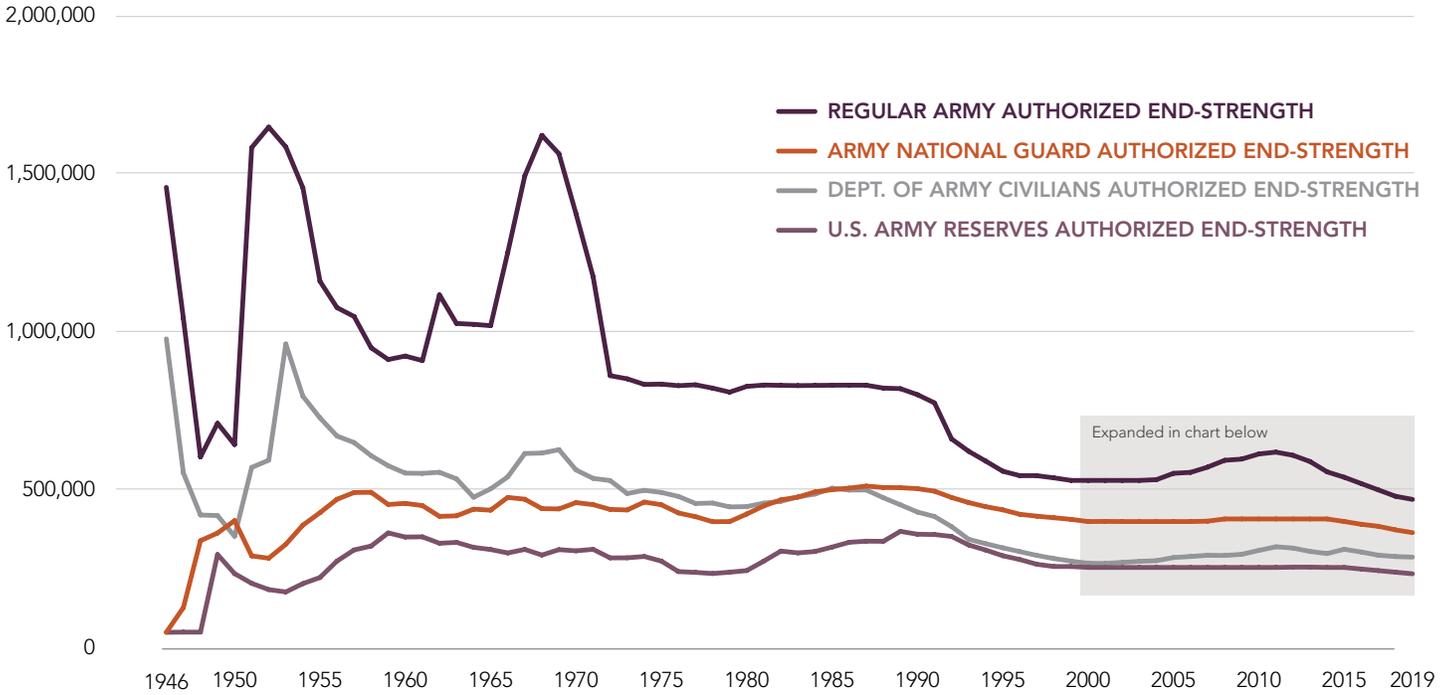
Recommendation 12: Combatant Commands and Army Service Component Commands must update all war plans with current and programmed force structure and doctrine and establish a process to ensure routine war plan and Time Phased Force Deployment Data updates at a minimum of once every two years.

Recommendation 20: The Army should ensure Combatant Commands (COCOM) and Army Service Component Commands (ASCC) have the ability to provide operational mission command in proportion to the unique mission for each COCOM. The Army should consult closely with COCOM and ASCC commanders to assess the risks entailed in mission command changes and seek to minimize risk where possible when implementing them.

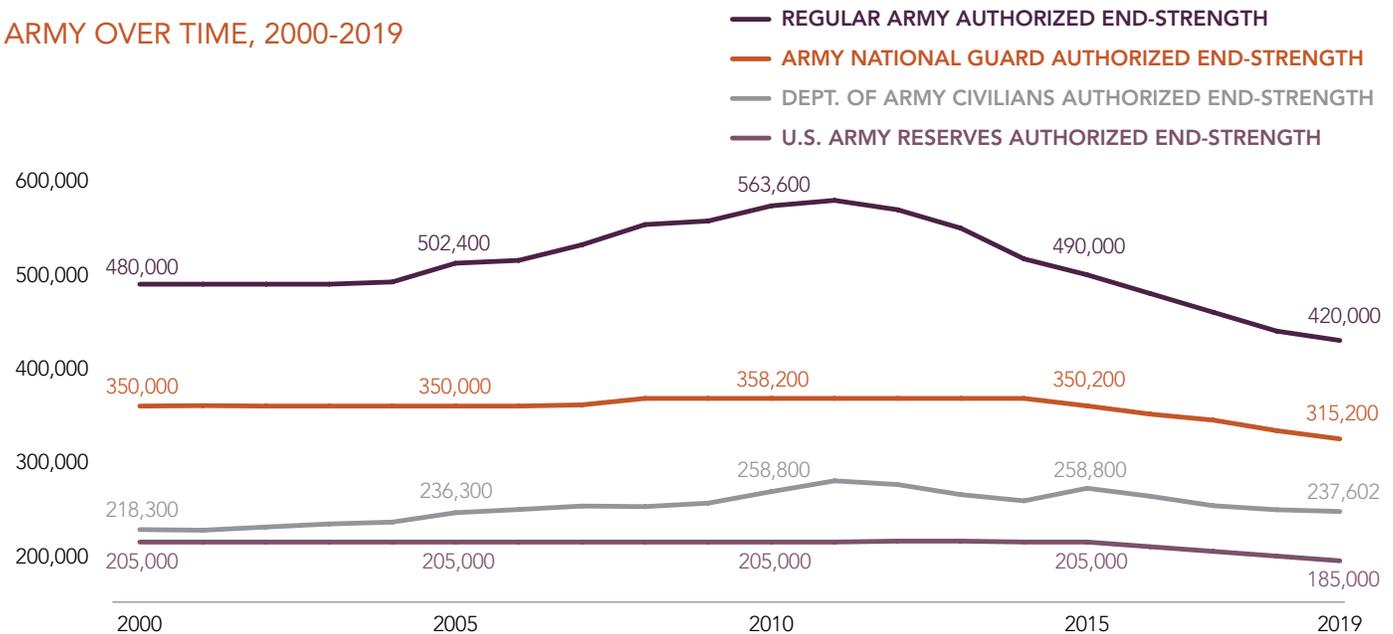
ARMY END STRENGTH OVER TIME

These charts illustrate authorized end-strength levels for the three components and the Civilian Corps past and present, as well as projected over the next five fiscal years in current budget planning documents.

ARMY OVER TIME, 1946-2019



ARMY OVER TIME, 2000-2019

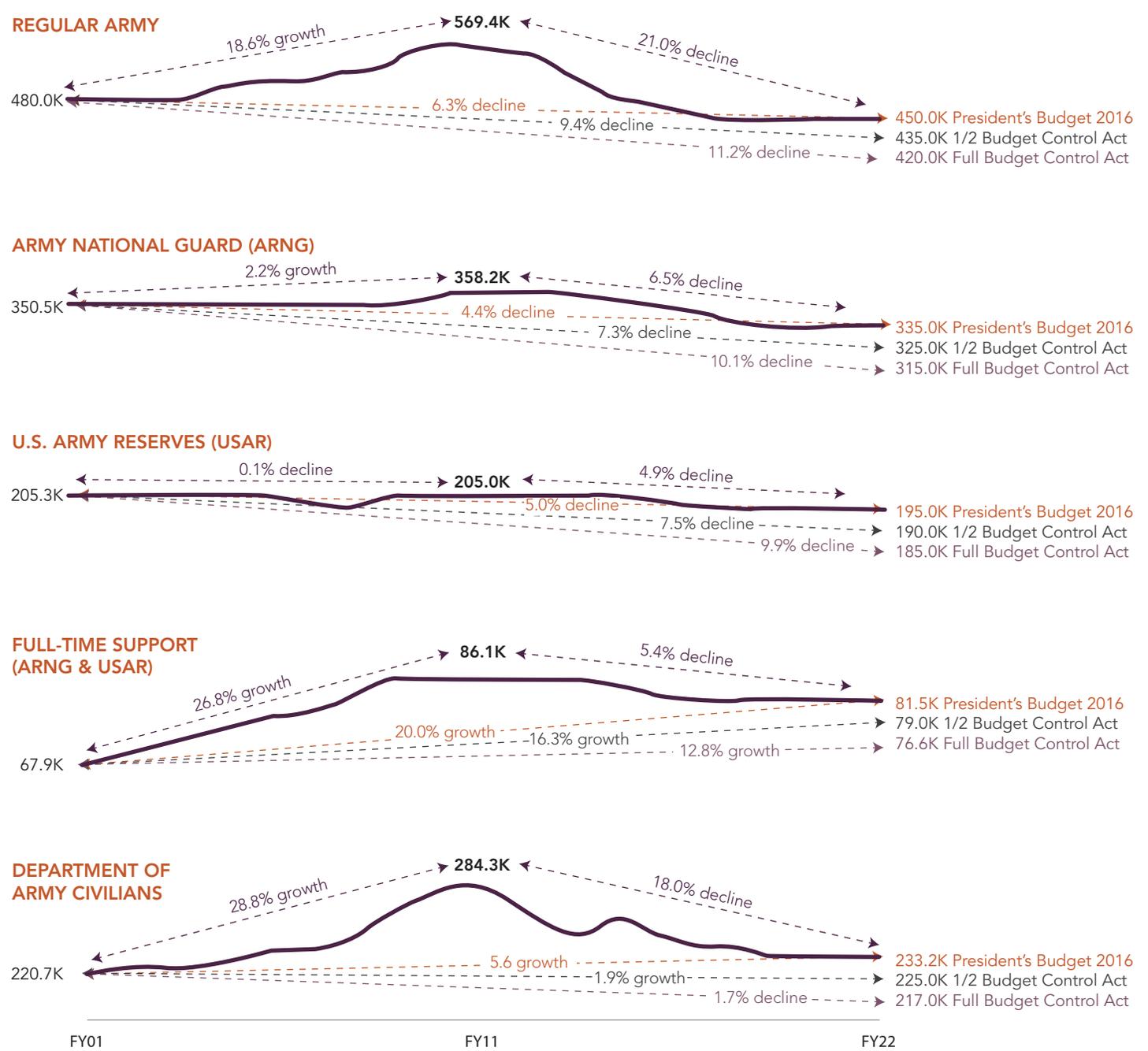


Sources: Army, PB16 Submission; National Defense Budget Estimates for FY 2016 (DoD Green Book); HQDA, G-8, Program, Analysis and Evaluation

APPENDIX C: ARMY END STRENGTH OVER TIME

END STRENGTH RAMPS UNDER DIFFERENT FUNDING LEVELS, FY01-22

REGULAR ARMY, FULL TIME SUPPORT, ARMY NATIONAL GUARD & U.S. ARMY RESERVES, AND CIVILIANS



Sources: Army, PB16 Submission; National Defense Budget Estimates for FY 2016 (DoD Green Book); HQDA, G-8, Program, Analysis and Evaluation

APPENDIX D:

NCFA CLASSIFIED ANNEX

The classified annex provides information and findings for the projected strategic environment, force size and composition analysis, and other issues related to the comprehensive study of the structure of the Army.

Contents:

1. Strategic Environment
 - a. Homeland Threat
 - b. Gray-Zone Warfare and Information Operations
 - c. Functional Threats

2. Modeling and Analysis of Force Structure (Size and Mix)
 - a. NCFA Analysis: Refining Timing
 - b. “Base Case”
 - c. Demand Excursions
 - d. Policy Excursions
 - e. New “Base Case”
 - f. Brigade Combat Team and Aviation Analysis
 - g. Time-Phase Force Deployment Data Analysis

3. Other Issues
 - a. Strategic Lift
 - b. Cluster Munitions Ban
 - c. Cyber

Access to the National Commission on the Future of the Army’s Classified Annex will be made available for individuals with appropriate security clearance and need to know.

APPENDIX E:

GLOSSARY OF ACRONYMS

AASF – Army Aviation Support Facility	CBCT — Cavalry Brigade Combat Team
ABCT – Armored Brigade Combat Team	CBRN – Chemical, Biological, Radiological, and Nuclear
AC – Active Component	CCMD – Combatant Command
ACB - Air Cavalry Brigade (1 CAV)	CCTT — Close Combat Tactical Trainer
ADA – Air Defense Artillery	CDR – Commander
ADFO – Alternate Designated Federal Officer	CENTCOM – U.S. Central Command
AFRICOM – U.S. Africa Command	CFM – Chief, Force Management
AGAUS – Adjutants General Association of the United States	CG – Commanding General
AGR – Active Guard Reserve	CNGB – Chief, National Guard Bureau
AH-64 – Apache Attack Helicopter	COCOM – Combatant Command
AHB – Assault Helicopter Battalion	COL – Colonel
AMP model – Analysis of Mobility Platform model	COMPO – Component (1- Active Duty, 2- Army National Guard, 3 – Reserve)
AOR – Area of Responsibility	CoS – Chief of Staff
ARI – Aviation Restructuring Initiative	CPT – Captain
ARNG – Army National Guard	CSA – (Chief of Staff of the Army)
ARNGUS – Army National Guard of the United States	CSS – Combat Service Support
ARSTAF – Army Staff	CTC – Combat Training Center
ASCC – Army Service Component Command	CWOB – Chief Warrant Officer
BBA 15 – Bipartisan Budget Act	DARNG – Director, Army National Guard
BCA – Budget Control Act	DCG – Deputy Commanding General
BCT – Brigade Combat Team	DCRF – Defense Chemical, Biological, Radiological, and Nuclear Response Force
BG – Brigadier General	DFO – Designated Federal Officer
BOG – Boots on Ground	DIMHRS – Defense Integrated Military Resources System
BOG:DWELL - Boots on the Ground: Dwell (not deployed) ratio	DIVARTY – Division Artillery
BMD – Ballistic Missile Defense	DoD – Department of Defense
BPC- Building Partner Capacity	DSCA – Defense Support to Civil Authorities
CAA – Center for Army Analysis	E-7 – Pay grade Enlisted Sergeant First Class
CAB – Combat Aviation Brigade	E-8 – Pay grade Enlisted Master Sergeant
CAPE –Cost Assessment and Program Evaluation	

E-9 – Pay grade Enlisted Sergeant Major of the Army, Command Sergeant Major, and Sergeant Major	JS – Joint Staff
EUCOM – U.S. European Command	KFOR- Kosovo Force
FACA – Federal Advisory Committee Act	LTC – Lieutenant Colonel
FORSCOM – Forces Command	M2D – Mobilization to Dwell time period
FMURB – Force Management Unit Review Board	MCU – Multi Component Unit
FSSP – Force Structure Strategic Plan	MEB – Maneuver Enhancement Brigade
FTS – Full-Time Support	MEDEVAC – Medical Evacuation
FY – Fiscal Year	MEPS – Military Entrance Processing Station
FYDP – Future Years Defense Program	MFGI – Mobilization Force Generation Installation
G-3 – General staff for operations and plans	MFO – Multinational Force and Observers
GEN – General	MG – Major General
GFM – Global Force Management	MOS – Military Occupational Specialty
GMD – Ground-based Midcourse Defense	MP – Military Police
GO – General Officer	MRX – Mission Rehearsal Exercises
HD – Homeland Defense	MTP – Maintenance Test Pilot
HQ – Headquarters	MUTA – Multiple Unit Training Assembly
HQDA – Headquarters Department of the Army	NATO – North Atlantic Treaty Organization
HRC – Human Resources Command	NCFA – National Commission on the Future of the Army
IBCT – Infantry Brigade Combat Team	NCO – Noncommissioned Officer
ID – Infantry Division	NCSAF – National Commission on the Structure of the Air Force
IDA – Institute for Defense Analysis	NDAA – National Defense Authorization Act
IED – Improvised Explosive Device	NGAUS – National Guard Association of the United States
IPPS-A – Integrated Personnel and Pay System – Army	NGB – National Guard Bureau
IRAMM – Integrated Risk Assessment and Management Model	NOS – Notification of Sourcing
IRR – Individual Ready Reserve	O-6 – Officer rank of Colonel
ISIL – Islamic State in Iraq and the Levant	OCO – Overseas Contingency Operations (funding)
J8 – Joint Staff Directorate for Force Structure, Resource and Assessment	OC/T – Observer Controller Trainer
JFC-UA—Joint Force Command—United Assistance	OH-58– Observation Helicopter (Kiowa Warrior Reconnaissance Helicopter)
JFHQ – Joint Force Headquarters	OPFOR — Opposing Force (in training exercises)
JICM – Joint Integrated Campaign Model	OPLAN – Operational Plan
JOAX – Joint Operational Access Exercises	OPTEMPO – Operational Tempo
	OSD – Office of the Secretary of Defense

APPENDIX E: GLOSSARY OF ACRONYMS

PACOM – U.S. Pacific Command	TSC – Theater Security Cooperation
PDTE – Pre-Deployment Training Equipment	TTHS – Trainees Transients Holders and Students
PME – Professional Military Education	UAS – Unmanned Aircraft System
POM – Program Objective Memorandum	USAFMSA – United States Army Force Management Support Agency
QDR – Quadrennial Defense Review	USAR – U.S. Army Reserve
RAF – Regionally Aligned Force	USARPAC – U.S. Army Pacific
RC – Reserve Component	VCSA – Vice Chief of Staff Army
RDT&E – Research, Development, Test & Evaluation	WMD – Weapons of Mass Destruction
RFI – Rapid Fielding Initiative (also Request for Information)	xCTC – eXportable Combat Training Center
RFPB – Reserve Forces Policy Board	
RL1 – Readiness Level 1	
RORO – Roll-On Roll-Off	
RSG – Reconnaissance Strike Group	
RTI – Regional Training Institute	
SA – Secretary of Army or Situational Awareness	
SARA model – Stochastic Active-Reserve Assessment model	
SBCT – Stryker Brigade Combat Team	
SECDEF – Secretary of Defense	
SHORAD – Short Range Air Defense Systems	
SIGACTS – Significant Activities reports	
SPP – State Partnership Program	
TAA – Train Advise Assist or Total Army Analysis	
TAB – Theater Aviation Brigade	
TAG – The Adjutant General	
TASMG – Theater Aviation Support Maintenance Group	
TDY – Temporary Duty	
THAAD – Terminal High Altitude Area Defense	
TPFDD – Time Phased Force Deployment Data	
TPU – Troop Program Unit	
TRAC – TRADOC Analysis Center	
TRADOC – Training and Doctrine Command	
TRANSCOM – U.S. Transportation Command	
TR3 – Trained and Ready (3)	

TESTIMONIES AND COMMENTS

SITE VISITS, ENGAGEMENTS, AND WEBSITE

NATIONAL CAPITOL MEETINGS, MAY 19-20

The Honorable Robert Scher, Assistant Secretary of Defense for Strategy, Plans & Capabilities

Major General Gary Thomas, Deputy Director, Force Management, Application & Support, Joint Staff J-8

Brigadier General Chris McPadden, Deputy Director, Strategy & Policy, Joint Staff J-5

Mr. Jim Mitre, Foreign Affairs Specialist, Office of the Under Secretary of Defense for Policy

Major General William Hix, Director, Strategy, Plans & Policy, HQDA G-3/5/7

Mr. Dan Klippstein, Deputy Director, Strategy, Plans & Policy, HQDA G-3/5/7

Dr. Thomas F. Carney, Vice Director for Force Structure, Resources & Assessment, Joint Staff J-8

Dr. Steve Stoddard, Technical Director, Center for Army Analysis Institute for Defense Analyses (CAA)

General Frank Grass, Chief, National Guard Bureau

Lieutenant General Timothy J. Kadavy, Director, Army National Guard

Lieutenant General Jeffrey Talley, Chief, Army Reserve

The Honorable John McHugh, 21st Secretary of the Army
General Raymond Odierno, 38th Chief of Staff of the Army

Major General (retired) Gus Hargett, President, National Guard Association of the United States

Major General Jeffrey E. Phillips, Executive Director, Reserve Officers Association

Major General Edward W. Tonini, The Adjutant General of Kentucky, & former President, Adjutant Generals Association of the United States

Brigadier General (retired) E.J. Sinclair, President, Army Aviation Association of America

Colonel John J. Lindsay, HQDA G-3/5/7 Aviation Directorate

Brigadier General Walter Fountain, Special Assistant to the Director, Army National Guard

Mr. John H. Pendleton, Director, Force Structure & Readiness Issues, Government Accountability Office

HAWAII SITE VISIT, MAY 28-29

The Honorable David Y. Ige, Governor of Hawaii

General Vincent K. Brooks, Commanding General, U.S. Army Pacific

Brigadier General Arthur J. Logan, The Adjutant General of Hawaii

Brigadier General Roderick R. Leon Guerrero, The Adjutant General of Guam

Major General Gary M. Hara, Deputy Commanding General-Army National Guard, U.S. Army Pacific

Major General Gregory C. Bilton (Australian Army), Deputy Commanding General-Operations, U.S. Army Pacific

Major General Todd B. McCaffrey, Chief of Staff, U.S. Army Pacific

Major General Lawrence Brock III, Commanding General, 311th Signal Command

Mr. Jon Lee, Deputy, Management & Support, 9th Mission Support Command

Mr. Lee, 351st Civil Affairs Command (CACOM)

Brigadier General Keith Y. Tamashiro, Director of Joint Staff, Hawaii Army National Guard

Brigadier General Robert J. Ulses, Assistant Chief of Staff of Operations G-3, U.S. Army Pacific

Colonel Stephen F. Logan, Commander, 29th Infantry Battalion Combat Team

Colonel Scott Mitchell, Commander, 196th Infantry Brigade

Colonel Courtney Varfes-Lum, Commander, Recruiting & Retention Battalion, Hawaii Army National Guard

Colonel Robert Leshner, G1, Hawaii Army National Guard

Colonel Roger Pukahi, Commander of the 103rd Troop Command, Hawaii Army National Guard

Colonel Tomasa, Hawaii Army National Guard

APPENDIX F: TESTIMONIES AND COMMENTS

Colonel Paul Nanamori, Deputy Chief of Staff for Logistics,
Hawaii Army National Guard

Lieutenant Colonel Tucker, Hawaii Army National Guard

Colonel Robert Crisistomo, Chief of Joint Staff, Guam Army
National Guard

Colonel George Charfauros, Guam Army National Guard

Captain Darrell Fejarang, Aide-de-Camp, Guam Army
National Guard

Colonel Jon Howerton, Staff, U.S. Army Pacific

25 Officers and NCOs from USARPAC

26 Officers and NCOs from 2nd Brigade/25th Infantry
Division

NATIONAL CAPITAL REGION MEETINGS JUNE 3-4

The Honorable Robert Work, 32nd Deputy Secretary of
Defense

Lieutenant General (retired) Dennis McCarthy, USMC, former
Chairman, National Commission on the Structure of the Air
Force

FORT BRAGG, FAYETTEVILLE & RALEIGH, NORTH CAROLINA SITE VISIT, JUNE 9-10

The Honorable Thom Tillis, United States Senator, North
Carolina

The Honorable David Price, United States House of
Representatives, North Carolina 4th District

The Honorable Richard Hudson, United States House of
Representatives, North Carolina 8th District

Colonel George Hanhauser, G-3/5/7, U.S. Army Civil Affairs
& Psychological Operations Command

Lieutenant Colonel Donald Kettering, 6-108th Military
Intelligence Battalion

Colonel Manley James, Commander, 139th Regiment-North
Carolina National Guard Regional Training Institute

Colonel Jeffrey Copeland, Commander, 449th Theater
Aviation Brigade

Command Sergeant Major Gary Hamm, Command Sergeant
Major, 449th Theater Aviation Brigade

Lieutenant Colonel Joseph Bishop, Commander, 1-130th
Attack Reconnaissance Battalion

Command Sergeant Major Derwood Norris, Command
Sergeant Major, 1-130th Attack Reconnaissance Battalion

Major John McElveen, Commander, 1-151st Attack
Reconnaissance Battalion

Command Sergeant Major Roy Sullivan, Command Sergeant
Major, 59th Aviation Troop Command

Lieutenant Colonel James Fidler, Commander, Army Aviation
Support Facility, South Carolina Army National Guard

Colonel Michael Musiol, Commander, 82nd Combat Aviation
Brigade

Command Sergeant Major William Yeargan Jr., Command
Sergeant Major, 82nd Combat Aviation Brigade

Captain Jason Stanley, Company Commander, Alpha
Company, 1-169th Aviation Regiment

Sergeant First Class Scott King, First Sergeant, Alpha
Company, 1-169th Aviation Regiment

Chief Warrant Officer 3 Daniel Rittler, Company
Standardization Pilot (AGR), Alpha Company, 1-169th
Aviation Regiment

DAC Kevin Erickson, ASF Supervisor (MILTECH), Alpha
Company, 1-169th Aviation Regiment

Chief Warrant Officer 2 Michael Argus, UH-60 Instructor
Pilot (TPU) and ASF Employee (MILTECH), Alpha
Company, 1-169th Aviation Regiment

Warrant Officer 1 David Silvia, UH-60 Pilot (TPU), Alpha
Company, 1-169th Aviation Regiment

Staff Sergeant Marshall Lindsay, E Detachment NCOIC
(TPU), Alpha Company, 1-169th Aviation Regiment

Sergeant Samuel Hubbard, Company Standardization
Instructor and ASF Employee (MILTECH), Alpha Company,
1-169th Aviation Regiment

Sergeant Jeffrey Cox, UH-60 Flight Instructor (TPU), Alpha
Company, 1-169th Aviation Regiment

Sergeant Philip Tarvin, UH-60 Crewchief (TPU), Alpha
Company, 1-169th Aviation Regiment

Major General Gregory Lusk, The Adjutant General of North
Carolina

Major General Robert Livingston Jr., The Adjutant General of
South Carolina

Major General Glenn Curtis, The Adjutant General of
Louisiana

Major General (retired) Cornell Wilson Jr, North Carolina
Military Affairs Advisor

Command Sergeant Major John Swart, Command Senior
Enlisted Leader, North Carolina Army National Guard

Chief Warrant Officer 5 James Herring, Command Chief
Warrant Officer, North Carolina Army National Guard

Colonel Bernard Williford, Commander, 113th Sustainment Brigade

Colonel Ephraim Grubbs, Commander, 60th Troop Command

Colonel Luke Burnett, Commander, 130th Maneuver Enhancement Brigade

Captain Kofi Adih, Plans Officer, 518th Sustainment Brigade

Captain Joseph Gorgacz, Engineer Officer, 518th Sustainment Brigade

Ms. Kim Barnes, Deputy State Director for U.S. Senator Thom Tillis, North Carolina

Mr. Jack Rostetter, Chief Executive Officer, Chamber of Commerce, Fayetteville, North Carolina

Mr. Steve Mannell, Chairman, Chamber of Commerce Military Affairs, Fayetteville, North Carolina

Mr. Rodney Maddox, Chief Deputy Secretary, North Carolina Secretary of State

Mr. Ted Vorhees, City Manager, Fayetteville, North Carolina

Mr. Mike Moose, North Carolina Chapter, Reserve Officers' Association

Mr. Jimmy Keefe, Commissioner, Cumberland County, North Carolina

Mr. Imam Eronomy Mohammed Smith, private citizen

Major General (retired) Rodney Anderson, private citizen

Mr. Asher Hildebrand, Chief of Staff for U.S. Representative David Price, 4th Congressional District, North Carolina

Mr. Tad Davis, private citizen

Mr. Chris Carter, Deputy Chief Of Staff for U.S. Representative Richard Hudson, 8th Congressional District, North Carolina

Chief Warrant Officer 5 Rick Comer, North Carolina Army National Guard

Chief Warrant Officer 4 Thomas McAuliffe, Brigade Standardization Pilot

Chief Warrant Officer 4 Christopher Wilson, Battalion Standardization Pilot, 1-130th Attack Reconnaissance Battalion

Chief Warrant Officer 4 Kurt Cunningham, Battalion Master Gunner, 1-130th Attack Reconnaissance Battalion

Chief Warrant Officer 4 John Piland, Battalion Aviation Maintenance Officer, 1-130th Attack Reconnaissance Battalion

Chief Warrant Officer 4 Austin Norris, Battalion Master Gunner and Standardization Pilot

Chief Warrant Officer 2 George Protzman, Company A Standardization Pilot, 1-151st Attack Reconnaissance Battalion

Major Mark Vanveldhuizen, Battalion Operations Officer, 1-130th Attack Reconnaissance Battalion

Staff Sergeant Breann Williamson, Signal Support Specialist, 492nd Signal Company

Sergeant James Warren, Supply Sergeant, 492nd Signal Company

First Lieutenant Michael Ashburn, Commander, 1006th Quartermaster Company

Second Lieutenant Esponinisa Eatmon, Platoon Leader, 1006th Quartermaster Company

Specialist First Class John Evers, Food Service Specialist, 1006th Quartermaster Company

Sergeant Jamason Campbell, Motor Transport Operator, 1006th Quartermaster Company

Sergeant Shamari Carmen, Automated Logistical Specialist, 1006th Quartermaster Company

Specialist Stephanie Lanham, Human Resources Specialist, 1006th Quartermaster Company

Major Alexia Fields, U.S. Army Civil Affairs Psychological Operations Command

Captain Robert Villa, Unit Administrator, U.S. Army Civil Affairs Psychological Operations Command

Staff Sergeant Chatchai Brunosky, U.S. Army Civil Affairs Psychological Operations Command

Sergeant Jonathan Watkins, Student, U.S. Army Civil Affairs Psychological Operations Command

Mr. Raymond Silva, Chief of Readiness, U.S. Army Civil Affairs Psychological Operations Command

Captain Norian Medina, Student, U.S. Army Civil Affairs Psychological Operations Command

Master Sergeant Richard Trujillo, U.S. Army Civil Affairs Psychological Operations Command

Staff Sergeant Daniel Thomas, U.S. Army Civil Affairs Psychological Operations Command

First Lieutenant Vanessa McCormick, Course Manager, 6-108th Military Intelligence Battalion (USAR)

Captain Jeremy Vantress, Battalion S-1, 6-108th Military Intelligence Battalion (USAR)

Staff Sergeant Son Joi Brantley, Battalion S-1 NCOIC, 6-108th Military Intelligence Battalion (USAR)

Staff Sergeant Nicole Dial, Battalion S-3 ATRRS NCO, 6-108th Military Intelligence Battalion (USAR)

Staff Sergeant Christopher Lytle, Instructor (MOS 35L), 6-108th Military Intelligence Battalion (USAR)

APPENDIX F: TESTIMONIES AND COMMENTS

Staff Sergeant Oswaldo Ramos Ortiz, Instructor (MOS 35M),
6-108th Military Intelligence Battalion (USAR)

Staff Sergeant Tyra Supranovich, Instructor (MOS 35M),
6-108th Military Intelligence Battalion (USAR)

Staff Sergeant Amanda Wenk, Instructor (MOS 35F), 6-108th
Military Intelligence Battalion (USAR)

Staff Sergeant Derek Williams, Instructor (MOS 35M),
6-108th Military Intelligence Battalion (USAR)

Staff Sergeant Bradley Cox, Instructor (MOS 35L), 6-108th
Military Intelligence Battalion (USAR)

Command Sergeant Major Jerry Martin, Command Sergeant
Major, 139th Regiment

Major Christina Gilroy, Commander, Regional Training Site-
Maintenance, 139th Regiment

Chief Warrant Officer 4 William Horne, OIC/Director/
Senior Instructor, Regional Training Site-Maintenance, 139th
Regiment

Master Sergeant James Alexander, NCOIC/Chief Instructor,
Regional Training Site-Maintenance, 139th Regiment

ADJUTANT GENERALS ASSOCIATION OF THE UNITED STATES CONFERENCE, ATLANTA, GEORGIA, JUNE 15

Major General Donald P. Dunbar, The Adjutant General of
Wisconsin

Major General Daniel R. Hokanson, The Adjutant General of
Oregon

Major General Edward Tonini, The Adjutant General of
Kentucky

AVIATION SUBCOMMITTEE MEETINGS, JUNE 17

Mr. Bradley Pippin, Director, TRAC-FLVN, TRADOC
Analysis Center, U.S. Army Training & Doctrine Command

Mr. Russell Shim, Modeling Analyst, TRADOC Analysis
Center, U.S. Army Training & Doctrine Command

Mr. Westin Castenberg, Modeling Analyst, TRADOC Analysis
Center, U.S. Army Training & Doctrine Command

Mr. Edward Koucheravy, Director, Land Forces Division, Cost
Assessment & Program Evaluation Office, Office of Secretary
of Defense Legislative Affairs

Colonel John J. Lindsay, HQDA G-3/5/7 Aviation Directorate

Colonel J. Ray Davis, National Guard Bureau (NGB) Aviation
Directorate

NATIONAL CAPITAL REGION MEETINGS, JUNE 17-18

Mr. Bruce Busler, Director, Joint Distribution Process Analysis
Center & U.S. Army Transportation Engineering Agency, U.S.
Transportation Command

Dr. Jamie Morin, Director, Cost Assessment & Program
Evaluation Office, Office of the Secretary of Defense

Mr. Bryan Paarmann, Deputy Assistant Director, Counter
Terrorism Division & National Counter Terrorism Center,
Federal Bureau of Investigation

Ms. Jennifer Turner, Group Chief, Directorate of Intelligence,
Federal Bureau of Investigation

Admiral William E. Gortney, Commander, U.S. Northern
Command

Lieutenant General Perry Wiggins, Commander, U.S. Army
North

Mr. Robert Salesses, Deputy Assistant Secretary of Defense for
Homeland Defense, Integration & Defense Support of Civil
Authorities

Lieutenant General Timothy J. Kadavy, Director, Army
National Guard

General (retired) Gordon R. Sullivan, President, Association of
the United States Army

Chief Master Sergeant (retired) John Harris, President, Enlisted
Association of the National Guard of the United States

Major General William D. Waff, Chairman, Army Reserve
Forces Policy Committee

Major General Thomas A. Horlander, Deputy Assistant
Secretary of the Army for Budget

Major General John Ferrari, Director, Program Analysis &
Evaluation, HQDA G-8

Colonel (retired) Thomas Hueg, President, Department of
Virginia, Reserve Officers Association

FORCE GENERATION SUBCOMMITTEE MEETING, JUNE 18

Lieutenant Colonel Richard Johnson, Plans & Policy, HQDA
G-35

Mr. Earnest Boyd, Branch Chief, Force Provider Division, U.S.
Army Forces Command

INSTITUTIONAL SUBCOMMITTEE MEETING,
JUNE 18

Mr. Mike Bush, Acting Division Chief, Force Accounting & Documentation, HQDA G-3/5/7 Force Management
Major Kevin Larrabee, Deployment & Enablers Division, Center for Army Analysis, HQDA G-8
Mr. Jack Zeedo, Center for Army Analysis Institute for Defense Analyses (CAA)
Mrs. Robin Mealer, Director, U.S. Army Manpower Analysis Agency

FORT HOOD, AUSTIN & HOUSTON, TEXAS SITE
VISITS, JULY 9-10

Lieutenant General Sean MacFarland, Commanding General, III Corps & Fort Hood, Texas
Major General Michael A. Bills, Commanding General, 1st Cavalry Division
Colonel John DiGiambattista, Commander, 1st Armored Brigade Combat Team, 1st Cavalry Division
Colonel Cameron Cantlon, Commander, 3rd Cavalry Regiment
Colonel James C. Markert, Chief of Staff, III Corps & Fort Hood
Colonel Adam Lange, G-3 Air, III Corps
Brigadier General Michael Dillard, Commanding General, 310th Expeditionary Sustainment Command
Brigadier General Kenneth D. Jones, Commanding General, 4th Expeditionary Sustainment Command
Colonel Christopher Beaudoin, Commander, Fort Hood Mobilization Brigade
Lieutenant Colonel William Rockefeller III, Commander, 2-12th Cavalry Regiment
Major General Jeffrey N. Colt, Commanding General, First Army Division West
Command Sergeant Major Patrick Akuna, Jr., Command Sergeant Major, First Army Division West
Colonel John Leffers, Chief of Staff, First Army Division West
Colonel Randall Wickman, Commander, 189th Infantry Brigade, First Army Division West
Colonel Daniel Hurlbut, Commander, 120th Infantry Brigade, First Army Division West
Lieutenant Colonel George Hodges, G-3 Plans, First Army Division West

Lieutenant Colonel Oscar Pintado, Deputy Chief of Staff G3, First Army Division West
Lieutenant Colonel Sean Smith, Chief of Operations G3, First Army Division West
Chief Warrant Officer 5 James O’Gorman, 120th Infantry Brigade, First Army Division West
Mr. Chip Hickman, Mobilization Officer, G-3, First Army Division West
Mr. Jeff Kramer, Training Officer, G-3, First Army Division West
Colonel Jeffery Thompson, Commander, 1st Air Cavalry Brigade
Command Sergeant Major Sean M. Dunn, Command Sergeant Major, 1st Air Cavalry Brigade
Major Matthew R. Minear, Operations Officer, 1st Air Cavalry Brigade
Major James G. Campbell, Assistant G3 Air, 1st Cavalry Division
Captain Kyle Rogers, Fox Company, 227th Aviation Regiment
Major General James Young Jr., Commanding General, 75th Training Command
Colonel (retired) George Penrod, Chief Executive Officer, 75th Training Command
Captain Rafael Perez, Supervisory Staff Administrator, 75th Training Command
First Sergeant Sabrina Aja, 75th Training Command
Major Tyson Voelkel, 75th Training Command
Chief Warrant Officer 3 Timothy Taite, 75th Training Command
Sergeant Valerie Wilhoite, 75th Training Command
Captain Renee Taylor, Aide-de-Camp, 75th Training Command
Mrs. Scheyda Stasik, Family Programs Director, 75th Training Command
Mr. Eric Hopkins, IT Specialist, 75th Training Command
Master Sergeant Patricia White, 75th Training Command,
Sergeant First Class Carlos Gutierrez, 75th Training Command
First Lieutenant Christian Bionat, 75th Training Command
Chief Warrant Officer 3 Elmer Brewer, 75th Training Command
Major General William Smith, Deputy Adjutant General of Texas
Colonel James “Bo” Kenyon, Commander, 36th Combat Aviation Brigade

APPENDIX F: TESTIMONIES AND COMMENTS

Colonel Richard P. Adams, State Aviation Officer, Texas Army National Guard

Colonel Stanley Jones, Commander, Ellington Field Joint Readiness Base & 147th Reconnaissance Wing, Texas Air National Guard

Lieutenant Colonel Nigel Atkins, Commander, 147th Air Support Operating Squadron, Texas Air National Guard

Lieutenant Colonel Robert T. Jarrett Jr, Executive Officer, 36th Combat Aviation Brigade

Lieutenant Colonel Derrek Hryhorchuk, Commander, Houston Army Aviation Support Facility, Texas Army National Guard

Major (P) Scott P. Nicholas, Commander, 1-149th Attack Reconnaissance Battalion

Chief Warrant Officer 5 Stephen P. White, Battalion Maintenance Officer, 1-149th Attack Reconnaissance Battalion

Lieutenant Colonel Edmund Naughton, Commander, 1-158th Attack Reconnaissance Battalion

Major Derrick Hart, Executive Officer, 1-158th Attack Reconnaissance Battalion

First Lieutenant Nathaniel Guthrie, Commander, Alpha Company, 1-158th Attack Reconnaissance Battalion

Major Marisol Chalas, S-3, 1-158th Attack Reconnaissance Battalion

Chief Warrant Officer 4 Melvin DeJesus, 1-158th Attack Reconnaissance Battalion

Chief Warrant Officer 3 James Villareal, 1-158th Attack Reconnaissance Battalion

Chief Warrant Officer 2 Holly Donica, 1-158th Attack Reconnaissance Battalion

Staff Sergeant Angel Melendez, S-3 NCOIC, 1-158th Attack Reconnaissance Battalion

Sergeant Taniqua Grant, Training NCO, 1-158th Attack Reconnaissance Battalion

Sergeant First Class David Rodriguez, Training NCO, Echo Company, 1-158th Attack Reconnaissance Battalion

Sergeant First Class Lowell Tack, 1-158th Attack Reconnaissance Battalion

Specialist Michael Valladares, 1-158th Attack Reconnaissance Battalion

Mr. James Lynch, Facility Supervisor, Army Reserve Aviation Support Facility-Conroe

Mr. Juan Gonzalez, Maintenance Supervisor, Army Reserve Aviation Support Facility-Conroe

The Honorable Greg Abbott, Governor of Texas

Major General John Nichols, The Adjutant General of Texas

Major General Robbie Asher, The Adjutant General of Oklahoma

Major General Lester Simpson, Commanding General, 36th Infantry Division

Colonel Greg Barrow, G-3 Training, Plans & Operations, Texas Army National Guard

Lieutenant Colonel Max Krupp, Commander, 1-143 Infantry Regiment (Airborne)

Major General (retired) Darren Owens

Colonel (retired) Mark Campsey

Colonel (retired) Cindy Smith

Mr. Anthony Triola, aide for REP John Carter

Ms. Candis Martin, Army Reserve Ambassador

Lieutenant General (retired) Dave Palmer

Lieutenant General (retired) Paul Funk

Lieutenant General (retired) Pete Taylor

Command Sergeant Major (retired) Joe Gainey

Colonel (retired) Kenneth J. Crawford

Colonel (retired) John White

General (retired) Robert Shoemaker

Mr. Scott Cospers, Mayor of the City of Killeen and Vice Chairman of the Killeen Temple Metropolitan Planning Organization (KTMPO)

Dr. John Craft, Superintendent of Schools for Killeen Independent School District

Dr. Marc Nigliazzo, President Texas AM

Colonel (retired) John L. Ballantyne, Chief Operating Officer, Military Child Education Coalition

Mr. Glenn Morrison, Killeen City Manager

Dr. Don Daniels, MD, Metroplex Health System

Ms. Susan Kamas, Executive Director of Workforce Solutions of Central Texas

Mr. Bill Parry, the City Manager of the City of Gatesville, Texas

OPERATIONAL SUBCOMMITTEE MEETING, JULY 14

Lieutenant General (retired) David Barno, Center for Strategic & International Studies

Dr. Douglas MacGregor, Burke-MacGregor, LLC

Dr. Gian Gentile, Center for Strategic & International Studies

Dr. Nora Bensahel, Center for Strategic & International Studies

Dr. Nadia Schadlow, Center for Strategic & International Studies

Mr. Frank Hoffman, Center for Strategic & International Studies

FORT MEADE, MARYLAND SITE VISIT, JULY 14

Colonel Tim Newsome, Chief of Staff, First Army Division East

Colonel Michael ShROUT, Operations Officer, First Army Division East

Major Stephanie Lawrence, Staff Officer, First Army Division East

Major General Phillip Churn, Commanding General, 200th Military Police Command

Brigadier General Marianne Garcia, Deputy Commanding General, 200th Military Police Command

Colonel Eric Folkestad, Office, Chief of the Army Reserve

Colonel Robert Dinenna, G-3, 200th Military Police Command

Command Sergeant Major Craig Owens, Command Sergeant Major, 200th Military Police Command

Major General Linda Singh, The Adjutant General of Maryland

Major General Timothy Williams, The Adjutant General of Virginia

Colonel Sean Casey, Director, Joint Staff, Joint Force Headquarters-Maryland

Colonel Charles Kohler, Public Affairs Officer, Joint Force Headquarters-Maryland

Lieutenant Colonel Drake McGraw, Commander, 32nd Civil Support Team

Major James Sheldon, Executive Officer for The Adjutant General of Virginia

First Sergeant Sergio Alcantara, 32nd Civil Support Team

Staff Sergeant Montgomery – Public Affairs NCO, Fort Meade, Maryland

FORCE GENERATION SUBCOMMITTEE MEETING, JULY 15

Mr. Edward Agee, Chief Materiel Integration, U.S. Army Material Command

Mr. Greg Singleton, Liaison Officer, U.S. Army Material Command

Mr. Paulus Hay, Logistics Management Specialist, HQDA G-4

Mr. Robert Grundy, Logistics Management Specialist, HQDA G-4

Chief Warrant Officer 4 Onedia S. Clark, Senior Mobility Warrant Officer, HQDA G-4

NATIONAL CAPITAL REGION MEETINGS, JULY 15-17

General Philip Breedlove, Commander, U.S. European Command (USEUCOM) and NATO Supreme Allied Commander Europe

Lieutenant General William Garrett, Deputy Commander, U.S. European Command (USEUCOM)

Major General (P) Michael Garrett, Chief of Staff, U.S. Central Command (USCENTCOM)

General David Rodriguez, Commander, U.S. Africa Command (USAFRICOM)

Mr. Daniel Feehan, Deputy Assistant Secretary of Defense (Readiness)

Dr. Jamie Morin, Director, Cost Assessment & Program Evaluation Office, Office of the Secretary of Defense (CAPE)

Lieutenant General Joe Anderson, Deputy Chief of Staff G-3/5/7, HQDA

The Honorable Debra S. Wada, Assistant Secretary of the Army for Manpower & Reserve Affairs

Major General (retired) Arnold Punaro, USMCR

Mr. Ben Banchs, Business Manager, Laborers International Union of North America, National Guard Council 1776

INSTITUTIONAL SUBCOMMITTEE MEETING, JULY 16

Ms. Jeanne Brooks, Director, Technology & Business Architecture Integration, HQDA G-1

Mr. David Paschal, Deputy Director Operations, G-3/5/7, U.S. Army Training & Doctrine Command

APPENDIX F: TESTIMONIES AND COMMENTS

Colonel Christopher Croft, Director, Center for Army Leadership, Combined Arms Center

Colonel Michael Harlan, Director, Department of Logistics & Resource Operations, Combined Arms Center

AVIATION SUBCOMMITTEE MEETINGS, JULY 16-17

Major General Michael Lundy, Commanding General, U.S. Army Aviation Center of Excellence

Colonel Ken Hawley, Chief, Aviation Division, U.S. Army Forces Command

Mr. Jack Parkhurst, Deputy Chief, Aviation Division, U.S. Army Forces Command

Mr. Josh Klimas, Policy Researcher, RAND Corporation

STAFF MEETING WITH SASC PROFESSIONAL STAFF, JULY 17

Mr. Jim Hickey, Professional Staff Member, U.S. Senate Armed Services Committee

Ms. Jody Bennett, Professional Staff Member, U.S. Senate Armed Services Committee

OPERATIONAL SUBCOMMITTEE MEETINGS, JULY 20-21

Major General Kyoung Soo Shin, Defense Attaché, Embassy of the Republic of Korea

Colonel Masashi Yamamoto, Military Attaché, Embassy of the Japan

Mr. Kyosuke Matsumoto, Counselor, Embassy of the Japan

FORT KNOX, FORT CAMPBELL, KENTUCKY & CAMP ATTERBURY, INDIANA SITE VISITS, JULY 20-21

Major General Peggy C. Combs, Commanding General, U.S. Army Cadet Command

Colonel Sean A. Gainey, Deputy Commanding Officer, U.S. Army Cadet Command

Command Sergeant Major Gabriel Arnold, Command Sergeant Major, U.S. Army Cadet Command

Colonel BJ Constantine, Chief of Staff, Human Resource Command

Colonel Randall L. Haws, Deputy Chief of Staff-Operations, Human Resource Command

Command Sergeant Major Charles E. Smith, Command Sergeant Major, Human Resource Command

Mr. David Martino, Officer Personnel Management Director, Human Resource Command

Mr. Freddie Blakely, Deputy Director, Personnel Information Systems, Human Resource Command

Major General Jeffrey Snow, Commanding General, U.S. Army Recruiting Command

Brigadier General Troy D. Kok, Deputy Commanding General-Support, U.S. Army Recruiting Command

Colonel (P) Donna W. Martin, Deputy Commanding General-Operations, U.S. Army Recruiting Command

Command Sergeant Major Willie C. Clemmons, Command Sergeant Major, U.S. Army Recruiting Command

Colonel Brian Bassett, Chief of Staff, U.S. Army Recruiting Command

Colonel Terrence Murrill, Commandant, Recruiting/Retention School, U.S. Army Recruiting Command

Brigadier General Aaron T. Walter, Deputy Commanding General, 84th Training Command

Command Sergeant Major Thomas Jennings, Command Sergeant Major, 84th Training Command

Colonel Kenneth G. Holley, Operations Officer, U.S. Army Cadet Command /104th Training Command

Lieutenant Colonel Andreas McGhee, 84th Training Command

Chief Warrant Officer 2 Orlando Freeman, 84th Training Command

Sergeant First Class Pamela Jackson, 104th Training Command

Staff Sergeant Michael Stoddard, 104th Training Command

Corporal Henry Quinones-Ayala, 104th Training Command

Major General Edward W. Tonini, The Adjutant General of Kentucky

Major General David C. Wood, Commanding General, 38th Infantry Division

Brigadier General Charles Jones, Deputy Adjutant General of Kentucky

Brigadier General Benjamin F. Adams III, Director, Joint Staff, Joint Force Headquarters-Kentucky

Major General Omer “Clif” Tooley, Jr, Commander,
Atterbury-Muscatatuck Center for Complex Operations
Colonel Ronald Westfall, Director, Joint Staff, Joint Force
Headquarters-Indiana
Captain Morgan Seitz, Director of Plans & Integration, Camp
Atterbury, Indiana
Colonel Rodney Babb, Commander, 138th Regiment-Indiana
National Guard Regional Training Institute
Command Sergeant Major James Forbes II, Command
Sergeant Major, 138th Regiment-Indiana National Guard
Regional Training Institute
Major General Jeffrey Holmes, Deputy Adjutant General of
Tennessee
Brigadier General Tommy H. Baker, Assistant Adjutant
General of Tennessee
Colonel Darrell Darnbush, Commander, 278th Armored
Cavalry Regiment
Command Sergeant Major Daniel Jennings, Command
Sergeant Major, 278th Armored Cavalry Regiment
Major General Gary Volesky, Commanding General, 101st
Airborne Division
Brigadier General Steve Gilland, Deputy Commanding
General-Operations, 101st Airborne Division
Colonel Valery C. Keaveny, Jr., Chief of Staff, 101st Airborne
Division
Command Sergeant Major Gregory F. Nowak, Command
Sergeant Major, 101st Airborne Division
Colonel James R. Salome, Garrison Commander, Fort
Campbell
Colonel Kyle J. Marsh, Commander, 101st Division Artillery
Command Sergeant Major Carl Fagan, Command Sergeant
Major, 101st Division Artillery
Colonel Brett G. Sylvia, Commander, 502nd Infantry
Regiment
Command Sergeant Major John A. Brady, Command Sergeant
Major, 502nd Infantry Regiment
Colonel J.B. Vowell, Commander, 187th Infantry Regiment
Colonel Kimberly J. Daub, Commander, 101st Sustainment
Brigade
Lieutenant Colonel Joseph Halloran, Commander, 2-320th
Field Artillery Regiment
Lieutenant Colonel Marc Cloutier, Commander, 1-187th
Infantry Battalion

Lieutenant Colonel Patrick Harkins, Commander, 3-187th
Infantry Battalion
Lieutenant Colonel Kurt Smith, Commander, 2-506th Infantry
Battalion
Command Sergeant Major James R. Basham, Command
Sergeant Major, 1-502nd Infantry Battalion
Lieutenant Colonel Nikolaus Guran, Commander, 101st
Headquarters & Headquarters Battalion

NATIONAL CAPITAL REGION MEETING, JULY 24

Mr. Paul Terry, Professional Staff Member, Appropriations
Defense Committee, U.S. House of Representatives

NATIONAL GOVERNORS ASSOCIATION MEETING, WHITE SULPHUR SPRINGS, WEST VIRGINIA, JULY 24

The Honorable Terry Branstad, Governor of Iowa
The Honorable Bill Walker, Governor of Alaska
The Honorable Pat McCrory, Governor of North Carolina
The Honorable Asa Hutchinson, Governor of Arkansas
The Honorable Doug Ducey, Governor of Arizona
The Honorable Jack Markell, Governor of Delaware
The Honorable Jeremiah Nixon, Governor of Missouri
The Honorable Mary Fallin, Governor of Oklahoma
The Honorable Dennis Daugaard, Governor of South Dakota
The Honorable Robert Bentley, Governor of Alabama
The Honorable Jack Dalrymple, Governor of North Dakota
The Honorable Steven Beshear, Governor of Kentucky
The Honorable Kate Brown, Governor of Oregon
The Honorable Steve Bullock, Governor of Montana
The Honorable Earl Ray Tomblin, Governor of West Virginia
The Honorable Matthew Mead, Governor of Wyoming
The Honorable Maggie Hassan, Governor of New Hampshire
The Honorable Richard Herbert, Governor of Utah
The Honorable John Hickenloope, Governor of Colorado
The Honorable Terry McAuliffe, Governor of Virginia
The Honorable Gina Raimondo, Governor of Rhode Island
The Honorable Dan Malloy, Governor of Connecticut
Ms. Virginia Johnson, Director of Federal Relations, Office of
the Governor, State of North Carolina

APPENDIX F: TESTIMONIES AND COMMENTS

Major General James Hoyer, The Adjutant General of West Virginia

Major General Michael McGuire, The Adjutant General of Arizona

Command Sergeant Major Chris Belford

Sergeant Major Alex Coy

Master Sergeant Dennis Riggs

Master Sergeant Tom Edmunds

Master Sergeant Jeff Wales

Lieutenant Colonel Greg Grant

Major Wallie Hatfield

Major Robert Kincaib

Mr. Bill Suver

Master Sergeant Angie Coleman

Lieutenant Colonel Kevin Ray

Staff Sergeant Bradley Convrey

Captain Jason Freeman

Sergeant Sean Courtney

Lieutenant Colonel Patrick Chard

Staff Sergeant Katie Nesselrodt

Sergeant Rob Cunningham

GERMANY SITE VISITS, JULY 28-30

Lieutenant General Fredrick Hodges, Commanding General, U.S. Army Europe

General (retired) George Joulwan, Former Supreme Allied Commander Europe

Major General William Gayler, Deputy Commanding General, U.S. Army Europe

Brigadier General Markus Laubenthal (German Army), Chief of Staff, U.S. Army Europe

Command Sergeant Major Sheryl Lyon, Command Sergeant Major, U.S. Army Europe

Brigadier General John Hort, G-3, U.S. Army Europe

Colonel Rob Dixon, U.S. Army Europe

Mrs. Cathy Vandermaarel, U.S. Army Europe

Captain Herman Wu, U.S. Army Europe

Ms. Stephanie Otto, U.S. Army Europe

Lieutenant Colonel James Brady, U.S. Army Europe

Brigadier General Arian Deblieck, Commanding General, 7th Civil Support Command

Brigadier General Timothy Daughtery, Deputy Commanding General, 4th Infantry Division

Colonel Willburn Williams, Deputy Chief of Staff, U.S. Army Europe

Colonel Laura Potter, G-2, U.S. Army Europe

Colonel Edward Burke, G-4, U.S. Army Europe

Colonel David Pendall, Commander, 66th Military Intelligence Brigade

Colonel Vincent Torza, Commanding Generals' Executive Officer, U.S. Army Europe

Major General Darryl Williams, Commanding General, U.S. Army Africa

Mr. John Frame, G-5, U.S. Army Africa

Mr. Jim McMillian, G-5, U.S. Army Africa

Mr. Jim Motties, G-7, U.S. Army Africa

Major General Duane Gamble, Commanding General, 21st Theater Sustainment Command

Command Sergeant Major Rodney Rhoades, Command Sergeant Major, 21st Theater Sustainment Command

Mr. Dan McCormack, G-3 Staff, U.S. Army Europe

Colonel Todd S. Beatulis, Commander, 405th Army Field Support Brigade

Lieutenant Colonel Steven Schultz, Commander, Field Support Battalion, 405th Army Field Support Brigade

Colonel Adam Loveless, Chief of Staff, 7th Army Joint Multinational Training Command

Lieutenant Colonel Jennifer L. Schulke, Executive Officer, 10th Army Air & Missile Defense Command (AAMDC)

Brigadier General Norvell V. Coots, MD, Commander, U.S. Army Regional Health Command Europe & Command Surgeon, U.S. Army Europe

First Lieutenant Daniel Miller, Aide-de-Camp, U.S. Army Regional Health Command Europe

Command Sergeant Major William O'Neal, Command Sergeant Major, U.S. Army Regional Health Command Europe

Lieutenant Colonel Phil Mazingo, Commander, 4th Battalion, 3rd Aviation Regiment

Major Luke Chivers, S-3, 12th Combat Aviation Brigade

Colonel Jimmie Hall, Commander; 5th Signal Command

Command Sergeant Major Harry Mercado, Command Sergeant Major, 5th Signal Command

First Sergeant Matthew McLeod, acting Command Sergeant Major, 4/3 Assault Helicopter Battalion

CAMP SHELBY, MISSISSIPPI SITE VISIT, AUGUST 4

The Honorable Phil Bryant, Governor of Mississippi
The Honorable Trent Kelly, U.S. Representative, 1st Congressional District, Mississippi
Lieutenant General Joseph Lengyel, Vice Chief, National Guard Bureau
Major General Augustus Collins, The Adjutant General of Mississippi
Major General William Hill, Assistant Adjutant General (Air) of Mississippi
Brigadier General Jessie Robinson, Assistant Adjutant General (Army) of Mississippi
Brigadier General Allen Brewer, Joint Staff Director, Joint Force Headquarters-Mississippi
Colonel Jeffrey P. Van, Commander, 155th Armored Brigade Combat Team
Colonel Matthew VanWagener, Commander, 3rd Armored Brigade Combat Team, 1st Cavalry Division
Colonel Brandon Robins, Commander, 177th Armor Brigade, First Army
Colonel Dane Powell, Aviation Safety Officer, Joint Staff, Joint Force Headquarters-Mississippi
Colonel Amos Parker, Commander, 154th Regiment-Mississippi National Guard Regional Training Institute
Colonel Greg Michel, Garrison Commander, Camp Shelby, Mississippi
Lieutenant Colonel James Haynie, Commander, 1-185th Attack Reconnaissance Battalion
Brigadier General Wendul Hagler, Special Assistant to the Director, Army National Guard
Mr. Dave Norton, Exercise Director, Exportable Combat Training Center

OPERATIONAL SUBCOMMITTEE MEETINGS,
AUGUST 13

Colonel Kajari Klettenberg, Defense Attaché, Embassy of Estonia
Lieutenant General Robert Brown, Commanding General, Combined Arms Center, U.S. Army Training & Doctrine Command
Lieutenant General Mary Legere, Deputy Chief of Staff G-2, HQDA

Lieutenant General H.R. McMaster, Deputy Commanding General, Futures & Director, Army Capabilities Integration Center, U.S. Army Training & Doctrine Command
Mr. Mike Pappas, Senior Advisor, Intelligence Capabilities & Requirements, HQDA G-2
Mr. David J. Clark, Foreign Intelligence Technical Advisor, HQDA G-2
Major General William Hix, Deputy Chief of Staff G-3/5/7 Strategy, Department of the Army

OPERATIONAL SUBCOMMITTEE MEETING,
AUGUST 13

Lieutenant General Robert Brown, Commanding General, Combined Arms Center, U.S. Army Training & Doctrine Command
Lieutenant General Mary Legere, Deputy Chief of Staff G-2, HQDA
Lieutenant General H.R. McMaster, Deputy Commanding General, Futures & Director, Army Capabilities Integration Center, U.S. Army Training & Doctrine Command
Major General William Hix, Director, Strategy, Plans & Policy, HQDA G-3/5/7
Mr. Mike Pappas, Senior Advisor, Intelligence Capabilities & Requirements, HQDA G-2
Mr. David J. Clark, Foreign Intelligence Technical Advisor, HQDA G-2

OPERATIONAL SUBCOMMITTEE MEETING,
AUGUST 17

Mr. Chris Reddish, Chief, Strategy, Policy & Transformation Division, U.S. Army Forces Command
Colonel Mark Berglund, Chief, Force Management, National Guard Bureau

AVIATION SUBCOMMITTEE MEETINGS,
AUGUST 17-18

Mr. Josh Klimas, Policy Researcher, RAND Corporation
Mr. Bradley Pippin, Director, TRAC-FLVN, TRADOC Analysis Center, U.S. Army Training & Doctrine Command
Colonel Walter Rugen, Director, Aviation Force Development, HQDA G-8

APPENDIX F: TESTIMONIES AND COMMENTS

Mr. Bill Pardue, Deputy Director, Aviation Force Development, HQDA G-8

Lieutenant Colonel John Cochran, Aviation Force Development, HQDA G-8

Mr. Mark Riddle, UH-60 Staff Synchronization Officer, Aviation Force Development, HQDA G-8

Mr. James St. Amour, AH-64 Staff Synchronization Officer, Aviation Force Development, HQDA G-8

General (retired) Richard Cody, 31st Vice Chief of Staff of the Army & former commander 101st Airborne Division

Lieutenant General (retired) Thomas Metz, former III Corps Commander

Major General (retired) Rudolph Ostovich III, former Commander, U.S. Army Aviation Center

Major General (retired) Jeffrey Schloesser, former Director of Army Aviation, HQDA & past commander 101st Airborne Division

FORCE GENERATION SUBCOMMITTEE MEETING, AUGUST 18

Lieutenant General Michael Tucker, Commanding General, First Army

Mr. Chris Reddish, Chief, Strategy, Policy & Transformation Division, U.S. Army Forces Command

Mr. Dana Luton, Army Campaign Plan Integrator, U.S. Army Forces Command

NATIONAL CAPITAL REGION MEETING, AUGUST 17-20

Lieutenant General James McLaughlin, Deputy Commander, U.S. Cyber Command

Lieutenant General Edward Cardon, Commander, U.S. Army Cyber Command

General John Kelly, Commander, U.S. Southern Command

Lieutenant General Joseph DiSalvo, Deputy Commander, U.S. Southern Command

Admiral Harry B. Harris, Jr, Commander, U.S. Pacific Command

Lieutenant General Anthony Crutchfield, Deputy Commander, U.S. Pacific Command

Lieutenant General James B. Laster, Director, U.S. Marine Corps Staff

Major General Scott A. Vander Hamm, Assistant Deputy Chief of Staff Operations, U.S. Air Force

Rear Admiral Lawrence Jackson, Reserve Deputy Director, Warfare Integration Division, U.S. Navy

Major General H. Stacy Clardy III, Deputy Director, Force Management, Application & Support, Joint Staff J-8

Mr. Timothy Bonds, Vice President, RAND Army Research Division & Director, RAND Arroyo Center

Major General Glenn H. Curtis, President, Adjutant Generals Association of the United States

Ms. Andrea Peterson, Legislative Affairs Manager, National Guard Association of the United States

Lieutenant General Michael Tucker, Commanding General, First Army

Mr. Chris Reddish, Chief, Strategy, Policy & Transformation Division, U.S. Army Forces Command

Mr. Dana Luton, Army Campaign Plan Integrator, U.S. Army Forces Command

Colonel Mark Berglund, Chief, Force Management, National Guard Bureau

Major General Glenn Curtis, The Adjutant General of Louisiana & President, Adjutant Generals Association of the United States

Mr. Bradley Pippin, Director, TRAC-FLVN, TRADOC Analysis Center, U.S. Army Training & Doctrine Command

OPERATIONS SUBCOMMITTEE MEETING, AUGUST 20

Brigadier General David Creagh, Defense Attaché, Embassy of Australia,

Ms. Sheridan Kearnan, Minister-Counselor (Defence Policy), Embassy of Australia,

Dr. Michael Lankowski, First Secretary (Defence Strategic Policy), Embassy of Australia

FORT IRWIN & LOS ALAMITOS, CALIFORNIA SITE VISITS, AUGUST 24-25

Major General Megan Tatu, Commanding General, 79th Theater Sustainment Command

Command Sergeant Major Ted Copeland, Command Sergeant Major, 79th Theater Sustainment Command

Chief Warrant Officer 5 Michael Hanten, Command Chief Warrant Officer, 79th Theater Sustainment Command

Colonel Anthony Francia, G-3, 79th Theater Sustainment Command

Colonel Arthur Turnier, Comptroller, 79th Theater Sustainment Command

Lieutenant Colonel David Sonnek, Inspector General, 79th Theater Sustainment Command

Lieutenant Colonel Mercedes Murillo, Assistant G-3, 79th Theater Sustainment Command

Major Henry Empeno, Commander, Headquarters & Headquarters Company, 79th Theater Sustainment Command

First Sergeant Shamika Copenhagen, Headquarters & Headquarters Company, 79th Theater Sustainment Command

Master Sergeant Joshua Troche, G-1, 79th Theater Sustainment Command

Sergeant Jesus Lopez, Headquarters & Headquarters Company, 79th Theater Sustainment Command

Mr. Jimmy Crisp, Security Specialist, 79th Theater Sustainment Command

Ms. Murnike Stevenson, SHARP Program Manager, 79th Theater Sustainment Command

Major Joycelyn Magday, Scribe, 79th Theater Sustainment Command

Colonel Jan C. Norris, Garrison Commander, Fort Hunter-Liggett, California

Command Sergeant Major Tracy E. Barlogio, Command Sergeant Major, Fort Hunter-Liggett, California

Lieutenant Colonel David L. Phillips, Deputy Director, Plans, Training, Mobilization, & Security, Fort Hunter-Liggett, California

Colonel Bradley Upton, Deputy Commander, 91st Training Division

Major General David Baldwin, The Adjutant General of California

Major General Jefferson Burton, The Adjutant General of Utah

Major General Lawrence Haskins, Commanding General, 40th Infantry Division

Brigadier General John Lathrop, Deputy Commanding General, 40th Infantry Division

Command Sergeant Major William Clark Jr, Senior Enlisted Advisor to the Adjutant General of California

Colonel Laura Yeager, Chief of Staff, Joint Force Headquarters-California

Colonel Jeffrey Smiley, J-3, Joint Force Headquarters-California

Colonel Michael Leeney, Chief of Staff, 40th Infantry Division

Major Adam Rix, Operations Officer, 40th Infantry Division

Chief Warrant Officer 5 Kenneth Jones, Instructor Pilot, 1-211th Attack Reconnaissance Battalion

Chief Warrant Officer 5 Chris Good, Instructor Pilot, 40th Combat Aviation Brigade

Chief Warrant Officer 4 Stephen Rugg, Instructor Pilot, 1-211th Attack Reconnaissance Battalion

Chief Warrant Officer 4 Ryan Eyre, Instructor Pilot, 1-211th Attack Reconnaissance Battalion

Chief Warrant Officer 4 Robert Williams, Instructor Pilot, 1-211th Attack Reconnaissance Battalion

Lieutenant Colonel Richard Mifsud, Commander, 1-160th Infantry Regiment

Command Sergeant Major Sergio Porras, Command Sergeant Major, 1-160th Infantry Regiment

Lieutenant Colonel Jilian Bond, Commander, 224th Sustainment Brigade

Sergeant Major Gregory Silva, 746th Combat Sustainment Support Battalion

Colonel Peter Cross, Commander, 49th Military Police Brigade

Sergeant Major Cari Beetham, Operations Sergeant Major, 49th Military Police Brigade

Command Sergeant Major Rodney Plamondon, Command Sergeant Major, 1-184th Infantry Regiment

Captain Manuel Arino, 40th Infantry Division

Second Lieutenant Jawana McFadden, 40th Infantry Division

Sergeant First Class Ben Nievera, 132nd Engineer Company (Multi-Role Bridge)

Sergeant First Class Jose Garcia, 40th Infantry Division

Master Sergeant Emily Toomey, 224th Sustainment Brigade

Staff Sergeant Jeffrey Nelan, California Army National Guard

Staff Sergeant Ian Tashima, 40th Infantry Division

Mr. Andrew Wiktorowicz, Chairman, California Employer Support for the Guard & Reserve

Mr. Gary Elliott, Under Sheriff for Solano County, California

The Honorable Alan Lowenthal, U.S. Representative, 47th Congressional District, California

Major General (retired) Dennis Kenneally, Council Member, Governor of California's Military Council

Major General (retired) Mark McCarley, private citizen

Chief Robert Paoletti, Chief of Police, Redding, California

Colonel (retired) Daniel Furtado, California Army Reserve Ambassador

APPENDIX F: TESTIMONIES AND COMMENTS

Major General (retired) Paul Mock, National Chair for Employer Support for the Guard & Reserve

Mr. Dean Grose, City Council Member, City of Los Alamitos, California

Specialist Brendan Zachery, 224th Sustainment Brigade

Lieutenant Colonel (retired) Dr. Milton D. Houghton, private citizen

Captain Gerrelaine Alcorido, 40th Infantry Division

Colonel (retired) Alfred Diaz, Reserve Officer Association of the United States

Major General (retired) Robert Grant, private citizen

Staff Sergeant (retired) Emmett Spraktes, private citizen

Colonel Clay Garrison, Commander, 144th Fighter Wing, California Air National Guard

Colonel Mark Van Dyke, Commander, 1106th Theater Aviation Sustainment Maintenance Group (TASM-G), California Army National Guard (CAARNG)

Major General Joseph Martin, Commanding General, National Training Center and Fort Irwin

Colonel David Lesperance, Chief, Operations Group, National Training Center

Colonel Matthew Moore, National Training Center

Colonel Cark Michaud, National Training Center

Lieutenant Colonel Paul Cunningham, National Training Center

Major Ian Lauer, National Training Center

Command Sergeant Major Noe Salinas, National Training Center

Brigadier General Mark Malanka, Deputy Commanding General, 40th Infantry Division

Lieutenant Colonel Ray Hoeflein, Chief of Operations, 40th Infantry Division

Colonel Russell Johnson, Commander, 116th Cavalry Brigade Combat Team (116th ABCT)

Command Sergeant Major Henry Chin, 116th Cavalry Brigade Combat Team (116th ABCT)

Lieutenant Colonel Scott Nauman, NTC Senior Brigade Trainer, 116th Cavalry Brigade Combat Team (116th ABCT)

Lieutenant Colonel Brian Dean, Commander, 3rd Squadron, 116th ABCT, ORARNG

Command Sergeant Major Ronald Bloker, 3rd Squadron, 116th ABCT, ORARNG

Lieutenant Colonel Michael Moreni, Commander, 1st Squadron, 163rd Cavalry Regiment, MTARNG

Sergeant Natasha MacKenzie, Vulture Team Operations SGT, NTC Urban Warfare Media Center

Major General Gary Saylor, The Adjutant General, Idaho National Guard

Brigadier General John Goodale, Assistant TAG, Idaho National Guard

Colonel Michael Garshak, Chief of Staff, Idaho Army National Guard

Brigadier General Michael Stencil, Chief of Staff, Oregon Army National Guard

Colonel William Pendergast, Commander, 41st Infantry Brigade Combat Team

Brigadier General Kenneth Koon, Assistant TAG, Wisconsin National Guard, and Deputy Commander, Division West, 1st Army

NATIONAL CAPITAL REGION MEETINGS, AUGUST 27-28

The Honorable Brad Carson, Acting Under Secretary for Personnel & Readiness

Brigadier General Abdelraham Al Mazmi, Defense Attaché, Embassy of the United Arab Emirates

Brigadier General James Illingworth, Military Attaché, Embassy of the United Kingdom

MINNESOTA SITE VISIT, AUGUST 25-27

The Honorable Mark Dayton, Governor of Minnesota

Major General Richard Nash, The Adjutant General of Minnesota

Major General Courtney Carr, The Adjutant General of Indiana

Major General David A. Sprynczynatyk, The Adjutant General of North Dakota

Major General Timothy Reisch, The Adjutant General of South Dakota

Major General Donald P. Dunbar, The Adjutant General of Wisconsin

Brigadier General Richard Hayes, The Adjutant General of Illinois

Major General Neal Loidolt, Commanding General, 34th Infantry Division

Major General Brian Harris, Commander, Task Force 51, U.S. Army North

Major General Jonathon McColum, Commanding General,
103rd Expeditionary Sustainment Command

Colonel John Rosnow, Commander, 644th Regional Support
Group & Minnesota Emergency Preparedness Liaison Officer

Colonel Kevin Olson, Public Affairs Officer, Joint Force
Headquarters-Minnesota

Colonel Scott St. Sauver, Garrison Commander, Camp Ripley
Training Center, Minnesota

Colonel Shawn Manke, Commander, 34th Combat Aviation
Brigade

Lieutenant Colonel Jeff Merricks, Executive Officer, 34th
Combat Aviation Brigade

Lieutenant Colonel Jess Ulrick, Secretary to the General Staff,
Minnesota Army National Guard

Major Jonathon Dotterer, Commander, Minnesota CBRNE
Enhanced Response Force Package (CERF-P)

Private Vaughn Austin, Minnesota CBRNE Enhanced
Response Force Package (CERF-P)

Mr. Ed Dankbar, Hazmat Officer, Canadian Pacific Rail
Emergency Response

Mr. Clem Schimikowski, Hazmat Officer, Canadian Pacific
Rail Emergency Response

Mr. Uli Seal, Task Force 1 Commander, Bloomington,
Minnesota Fire Department

Mr. Scott Vadnais, Task Force 1, Edna, Minnesota Fire
Department

Mr. Mike Pott, Task Force 1, South Metro Twin Cities,
Minnesota Fire Department

Mr. Ron Crosby, Systems & Scheduling Chief, Camp Ripley
Training Center, Minnesota

OPERATIONAL SUBCOMMITTEE MEETINGS, SEPTEMBER 1-3

Colonel Didier Gros, Military Attaché, Embassy of France

Brigadier General Jarosław Stróżyk, Defense Attaché, Embassy
of Poland

COLORADO SITE VISITS, SEPTEMBER 2-3

Major General H. Michael Edwards, The Adjutant General of
Colorado

Major General Daryl Bohac, The Adjutant General of Nebraska

Major General Robbie Asher, The Adjutant General of
Oklahoma

Major General Jefferson Burton, The Adjutant General of Utah

Brigadier General Thomas Bump, Land Component

Commander-New Mexico Army National Guard
Brigadier General Pete Byrne, Commander, Joint Task Force-
Centennial

Colonel Dave Burwell, Defense Coordinating Officer, Federal
Emergency Management Agency Region 8

Colonel Gaylene Weber, Emergency Preparedness Liaison
Officer, Region 8

Colonel James Bledsoe, Army Aviation Officer, Colorado Army
National Guard

Colonel Kevin Kick, Special Projects, Colorado Army National
Guard

Colonel Bobby Yandell, G-3, Oklahoma Army National Guard

Colonel John Harrison, Chief of Staff, Colorado Army
National Guard

Lieutenant Colonel Shannon Espinoza, Senior Army Advisor
Colorado Army National Guard

Lieutenant Colonel Scott Sherman, J-3, Joint Force
Headquarters-Colorado

Lieutenant Colonel Chris Lowman, Deputy J-3, Joint Force
Headquarters-Colorado

Major Kerry Davis, G-3 Operations, Colorado Army National
Guard

Master Sergeant Luis Luna Rodriguez, J-3 NCO, Joint Force
Headquarters-Colorado

Major Jason Stuchlik, J-35, Joint Force Headquarters-Colorado
Colonel James D. Bischoff, Commander, Army Reserve
Element, U.S. Pacific Command Joint Intelligence Operations
Center (PACOM JIOC ARE)

Lieutenant Colonel Jason Ball, Deputy Commander, PACOM
JIOC ARE

Sergeant Major Gary Stockdale, PACOM JIOC ARE

Major Melvin Brown, Executive Officer, PACOM JIOC ARE

Chief Warrant Officer 5 Manuel Ramos, Senior All-Source
Analyst, PACOM JIOC ARE

Lieutenant Colonel Kevin Schooner, Chief-Minneapolis
Detachment, PACOM JIOC ARE

Master Sergeant Ryan Peterson, Senior NCO Imagery Analyst,
PACOM JIOC ARE

Captain Charles Kelsey, Intelligence Officer, PACOM JIOC
ARE

APPENDIX F: TESTIMONIES AND COMMENTS

Sergeant Ana Nunez, Imagery NCO, PACOM JIOC ARE
Mr. Michael Lombard, Unit Administrator, PACOM JIOC ARE

Sergeant First Class Katherine Phelps, Senior Human Resource NCO, PACOM JIOC ARE

Master Sergeant Benjamin Prebble, Senior Imagery Analyst, PACOM JIOC ARE

The Honorable John Hickenlooper, Governor of Colorado

Colonel Laura Clellan, Land Component Commander-Colorado Army National Guard

Command Sergeant Major Bill Woods, State Senior Enlisted Leader, Colorado Army National Colonel Chief Warrant

Officer 5 Steve Imeraj, State Command Chief Warrant Officer, Colorado Army National Guard

Chief Warrant Officer 5 Matt Dorram, Former State Command Chief Warrant Officer, Colorado Army National Guard

Colonel Adam Silvers, G-3, Colorado Army National Guard

Colonel Mike Willis, Commander, 169th Field Artillery Brigade

Command Sergeant Major Ed Macias, Command Sergeant Major, 169th Field Artillery Brigade

Lieutenant Colonel Craig Jones, G-4, Colorado Army National Guard

Lieutenant Colonel Josh Day, State Aviation Officer, Colorado Army National Guard

Lieutenant Colonel Isaac Martinez, Commander, 193rd Military Police Battalion

Lieutenant Colonel Bren Rogers, J-57, Joint Force Headquarters-Colorado

Major Brett Martin, Executive Officer, Theatre Special Operations Detachment

Chief Warrant Officer 5 Steve Imeraj, State Command Chief Warrant Officer, Colorado Army National Guard

Major Cara McLean, S-1, 89th Troop Command

Command Sergeant Major Jim Bunch, Command Sergeant Major, 168th Regiment-Colorado Army National Guard Regional Training Institute

Sergeant Major Seth Yount, Operations Sergeant Major, 89th Troop Command

Command Sergeant Major Greg Clancy, Command Sergeant Major, 2-135th Aviation Regiment

Master Sergeant Denise Drummond, G-3 NCO, Colorado Army National Guard

Brigadier General Gregory Bowen, Deputy Commanding General-Operations, U.S. Army Space & Missile Defense Command, Army Forces Strategic Command (SMDC/ARSTRAT)

Major General Daniel York, Commanding General, 76th Operational Response Command

Brigadier General Donald Laucirica, Assistant Adjutant General of Colorado

Colonel Kelly Spillane, Deputy Commander for Support, SMDC/ARSTRAT

Colonel Deborah Wilson, Reserve Affairs Officer, SMDC/ARSTRAT

Colonel Michael Rowells, Deputy Commander, 76th Operational Response Command

Lieutenant Colonel Rolland Quidachay, 100th Missile Defense Brigade

Lieutenant Colonel Bryan Ross, National Guard Bureau

Lieutenant Colonel Thomas Rivenbark, National Guard Bureau

Major Elizabeth Helland, 1st Space Brigade

Major General Ryan Gonsalves, Commanding General, 4th Infantry Division & Fort Carson

Command Sergeant Major Michael Crosby, Command Sergeant Major, 4th Infantry Division & Fort Carson

Colonel Douglas Sims, Chief of Staff, 4th Infantry Division & Fort Carson

Colonel Gregg Engler, Staff Judge Advocate, 4th Infantry Division

Colonel Lori Robinson, Commander, 4th Combat Aviation Brigade

Lieutenant Colonel Robert Sketch, Commander, Headquarters & Headquarters Battalion, 4th Infantry Division

Lieutenant Colonel Christine Enriquez, G-1, 4th Infantry Division

Lieutenant Colonel Bryan Love, G-2, 4th Infantry Division

Lieutenant Colonel Steven Cho, G-3, 4th Infantry Division

Lieutenant Colonel Christine Massey, G-4, 4th Infantry Division

Lieutenant Colonel Jason Rosenstrauch, G-5, 4th Infantry Division

Lieutenant Colonel Shawn Carden, G-6, 4th Infantry Division

Lieutenant Colonel Matthew Sheiffer, G-7, 4th Infantry Division

Lieutenant Colonel Garvey Wright, G-8, 4th Infantry Division

Lieutenant Colonel Robert Price, Division Surgeon, 4th Infantry Division

Lieutenant Colonel James Cutchin, G-9, Colorado Army National Guard

Master Sergeant Brent Williams, Public Affairs Officer, 4th Infantry Division

Colonel Michael Oeschger, Commander, 4th Infantry Division Artillery

Command Sergeant Major Thomas Parsley, Command Sergeant Major, 4th Infantry Division Artillery

Major Charles Knoll, Executive Officer, 4th Infantry Division Artillery

Major Samuel Linn, S-3, 4th Infantry Division Artillery

Lieutenant Colonel Neil Snyder, Commander, 2-77th Field Artillery Battalion

Command Sergeant Major Eric Macher, Command Sergeant Major, 2-77th Field Artillery Battalion

Lieutenant Colonel Cory Delger, Deputy Fires Support Coordinator, 4th Infantry Division

Major Royce Baker, Fire Support Officer, 4th Infantry Division Fire Support Element

Colonel Matt Cody, Commander, 2nd Infantry Brigade Combat Team, 4th Infantry Division

Command Sergeant Major Sammy Sparger, Command Sergeant Major, 2nd Infantry Brigade Combat Team, 4th Infantry Division

Lieutenant Colonel Damon Knarr, Division Engineer, 4th Infantry Division

Major Louis Johnson, Assistant Division Engineer, 4th Infantry Division

Lieutenant Colonel Ralph Radka, Commander, 52nd Brigade Engineer Battalion

Command Sergeant Major John Johnson, Command Sergeant Major, 52nd Brigade Engineer Battalion

Major Stewart Gast, Executive Officer, 52nd Brigade Engineer Battalion

First Lieutenant Nolan Miles, Platoon Leader, 52nd Brigade Engineer Battalion

First Lieutenant Lamar Cravens, Platoon Leader, 52nd Brigade Engineer Battalion

Staff Sergeant Jon Stone, Squad Leader, 52nd Brigade Engineer Battalion

Staff Sergeant Ryan Burke, Squad Leader, 52nd Brigade Engineer Battalion

Captain Andrew Lohrenz, S-4, 2-77th Field Artillery Battalion

First Lieutenant Elyse Ping Medvigy, Fire Direction Officer, 2-77th Field Artillery Battalion

Sergeant First Class Floyd Dugan, Fire Direction Center NCOIC, 2-77th Field Artillery Battalion

Sergeant First Class Matthew Burdick, Platoon Sergeant, 2-77th Field Artillery Battalion

Colonel Isaac Peltier, Commander, 10th Special Forces Group (Airborne)

Chief Warrant Officer 5 Kirk Teaney, Command Chief Warrant Officer, 10th Special Forces Group (Airborne)

Command Sergeant Major Lou Pauka, Command Sergeant Major, 10th Special Forces Group (Airborne)

Lieutenant Colonel James Bekurs, Executive Officer, 10th Special Forces Group (Airborne)

Major Michael Lueckeman, S-3, 10th Special Forces Group (Airborne)

Major Matthew Chaney, S-3, 10th Special Forces Group (Airborne)

Major Matthew Crawford, S-2, 10th Special Forces Group (Airborne)

Captain Benjamin Monson, 10th Special Forces Group (Airborne)

Captain Eric Barger, 10th Special Forces Group (Airborne)

Master Sergeant Kevin Burford, 10th Special Forces Group (Airborne)

Sergeant First Class (P) Jacob Lindholm, 10th Special Forces Group (Airborne)

Chief Warrant Officer 3 Jerry Brown, S-8, 10th Special Forces Group (Airborne)

Colonel Jesse Morehouse, Commander, 168th Regiment-Colorado Army National Guard Regional Training Institute (COARNG RTI)

Command Sergeant Major James Bunch, Commandant, Warrior Leader Course (WLC), 168th Regiment-COARNG RTI

Major Robert Weeks, Operations Officer, 168th Regiment-COARNG RTI

Master Sergeant Christine Wilkins, WLC Manager, 168th Regiment-COARNG RTI

Sergeant First Class Johnny Napier, WLC Chief Instructor, 168th Regiment-COARNG RTI

Sergeant Stephen Fleming, WLC Operations NCO, 168th Regiment-COARNG RTI

APPENDIX F: TESTIMONIES AND COMMENTS

Lieutenant Colonel Rick Burtt, Commander, Centennial Training Site, 168th Regiment-COARNG RTI

Command Sergeant Major Brandon Marx, Command Sergeant Major, Centennial Training Site, 168th Regiment-COARNG RTI

Major Bryan Murphy, Executive Officer, Centennial Training Site, 168th Regiment-COARNG RTI

Staff Sergeant Anthony Chavez, Centennial Training Site Housing Manager, 168th Regiment-COARNG RTI

Lieutenant Colonel Stephen Weidenbeck, Commander, 5th Battalion, 19th Special Forces Group

Captain Clint Davis, Assistant Operations Officer, 5th Battalion, 19th Special Forces Group

Chief Warrant Officer 3 Andrew Hilton, Operations Warrant Officer, 5th Battalion, 19th Special Forces Group

Colonel Adam Silvers, Commander, Special Operations Detachment-Korea, Colorado Army National Guard

Lieutenant Colonel Douglas Paul, G-3, Special Operations Detachment-Korea, Colorado Army National Guard

FORT INDIANTOWN GAP, PENNSYLVANIA SITE VISIT, SEPTEMBER 8

Major General James Joseph, The Adjutant General of Pennsylvania

Major General John Gronski, Commanding General, 28th Infantry Division

Brigadier General Timothy Hilty, Assistant Adjutant General of Pennsylvania

Colonel Mark Schindler, Chief of Staff, Joint Force Headquarters-Pennsylvania

Colonel David Wood, Chief of Staff, 28th Infantry Division

Lieutenant Colonel Robert Hepner, Garrison Commander, Fort Indiantown Gap (FTIG), Pennsylvania

Major Kenneth Smith, Supervisory Instructor Pilot/Operations Officer, Army Aviation Support Facility-FTIG

Major George Giles, Maintenance Officer, Army Aviation Support Facility-FTIG

Chief Warrant Officer 5 Wendell Smith, AH-64D Standardization Instructor Pilot, Army Aviation Support Facility-FTIG

Lieutenant Colonel Richard Cottage, Counter Drug Coordinator, Pennsylvania Army National Guard

Lieutenant Colonel Gregg Clark, Commander, Eastern Army National Guard Aviation Training Site (EAATS)

Command Sergeant Major Dale Miller, Command Sergeant Major, EAATS

Major Phillip Peters, Commander, Aviation Training Battalion-Utility, EAATS

Chief Warrant Officer 4 Richard Adams, UH-60 Standardization Instructor Pilot, EAATS

Captain Nathan Smith, Enlisted Training Company Commander, EAATS

Sergeant First Class Shawn Merrill, Enlisted Flight Platoon Sergeant, EAATS

Staff Sergeant Ronald McAndrew, Flight Standards Instructor, EAATS

Staff Sergeant Jacob Bermudez, Pennsylvania Army National Guard

Colonel James G. McCormack, Operations Officer, 166th Regiment-Pennsylvania Army National Guard Regional Training Institute

Chief Warrant Officer 4 Ronald Magaro, Supervisor, Unit Training Equipment Site-FTIG

Chief Warrant Officer 5 Dave Behm, Commander, Tactical Unmanned Aircraft System Operations Facility (TUASOF)

Warrant Officer 1 Tyler Smith, Unmanned Aircraft Systems Operator, 556th Military Intelligence Company, 56th Stryker Brigade Combat Team

Warrant Officer 1 Robert Reed, Unmanned Aircraft Systems Operator, 556th Military Intelligence Company, 56th Stryker Brigade Combat Team

Sergeant First Class Robert Frey, Unmanned Aircraft Systems Facility NCOIC, TUASOF

Sergeant Allen Capps, Unmanned Aircraft Systems Operator Instructor, TUASOF

FORT DRUM, NEW YORK SITE VISIT, SEPTEMBER 9-10

Major General Jeffery Bannister, Commanding General, 10th Mountain Division

Brigadier General Andrew Rohling, Acting Senior Commander, 10th Mountain Division

Brigadier General Michael Howard, Deputy Commanding General-Operations, 10th Mountain Division

Command Sergeant Major Rodney Lewis, Command Sergeant Major, 10th Mountain Division

Colonel Mark O'Donnell, Chief of Staff, 10th Mountain Division

Colonel Bryan Laske, Garrison Commander, Fort Drum, New York

Colonel Mark Himes, G-3, 10th Mountain Division

Colonel Michael McCurry, Commander, 10th Combat Aviation Brigade

Mr. Eric Wagenaar, Director of Plans, Training, Mobilization & Security, Fort Drum

Major General Patrick Murphy, The Adjutant General of New York

Major General Anthony German, Assistant Adjutant General of New York

Major General Harry Miller, Commanding General, 42nd Infantry Division

Brigadier General Raymond Shields, Director, Joint Force Headquarters-New York

Brigadier General Michael Swezey, Commanding General, 53rd Troop Command

Colonel Jack James, Commander, 42nd Combat Aviation Brigade

Brigadier General Miyako Schanley, Deputy Commanding General-Operations, 412th Theater Engineer Command

Lieutenant Colonel (P) Robert McCaskell, Office, Chief of the Army Reserve

Lieutenant Colonel Robert L. Hohman, Office, Chief of the Army Reserve

Command Sergeant Major Dennis Jacques, Command Sergeant Major, 479th Engineer Battalion

Chief Warrant Officer 2 Kevin Gabrielson, Maintenance Warrant Officer, 479th Engineer Battalion

Master Sergeant Jason Miller, Operations NCO, U.S. Army Reserve Command

Staff Sergeant Kevin Irving, Supply Sergeant, 479th Engineer Battalion

Sergeant First Class Terrance Pollard, Senior Human Resources Sergeant, 479th Engineer Battalion

Mr. Jamie Bresett, Staff Operations & Training Specialist, 479th Engineer Battalion

Mr. Kenneth Jenkins, Unit Administrative Technician, 479th Engineer Battalion

Mrs. Alexis Felix, Unit Administrator, 479th Engineer Battalion

Mr. John Christensen, Reserve Component Training Coordinator, 10th Mountain Division

Mr. Lynn Petrie, Facilities Support Technician, Operational Readiness Training Center-Fort Drum

Mr. Ron Vogt, Contractor, Operational Readiness Training Center-Fort Drum

NATIONAL GUARD ASSOCIATION OF THE UNITED STATES GENERAL CONFERENCE, SEPTEMBER 12

Major General (retired) Gus Hargett, President, National Guard Association of the United States

Captain Mark Timmons, Director, Company Grade Committee (Army), National Guard Association of the United States

FORCE GENERATION MEETING, SEPTEMBER 16

Brigadier General John Johnson, Director of Training, HQDA G-3/5/7

Colonel Shawn Reger, National Guard Bureau

Major Brad Bradford, National Guard Bureau

Lieutenant Colonel Brent Haas, Office of the Chief of Army Reserve

AVIATION SUBCOMMITTEE MEETING, SEPTEMBER 16-17

Colonel J. Ray Davis, National Guard Bureau (NGB) Aviation Directorate

Colonel John J. Lindsay, HQDA G-3/5/7 Aviation Directorate

Mr. Josh Klimas, Policy Researcher, RAND Corporation

NATIONAL CAPITAL REGION MEETING, SEPTEMBER 16-17

Mr. Tucker Hughes, Branch Chief, Center for Army Analysis Institute for Defense Analyses (CAA)

Dr. Kathy Conley, Institute for Defense Analyses (IDA)

Dr. Steve Stoddard, Technical Director, Center for Army Analysis Institute for Defense Analyses (CAA)

The Honorable Terry Branstad, Governor of Iowa, Co-Chair of the Council of Governors

The Honorable Mark Dayton, Governor of Minnesota, Member of the Council of Governors

APPENDIX F: TESTIMONIES AND COMMENTS

Dr. Michael E. O'Hanlon, Director of Research for Foreign Policy, Brookings Institution

INSTITUTIONAL SUBCOMMITTEE MEETING, SEPTEMBER 17

Mr. Mark Davis, Deputy Assistant Secretary of the Army-Manpower & Reserve Affairs & Director, Army Marketing & Research Group

OPERATIONAL SUBCOMMITTEE MEETING, SEPTEMBER 21

Colonel Horst Busch, Military Attaché, Embassy of Federal Republic of Germany

NATIONAL CAPITAL REGION MEETINGS, SEPTEMBER 21-22

General Joseph L. Votel III, Commander, U.S. Special Operations Command

General Curtis M. Scaparrotti, Commander, U.S. Forces Korea

General Robert B. Abrams, Commanding General, U.S. Army Forces Command

General David G. Perkins, Commanding General, U.S. Army Training & Doctrine Command

General Dennis L. Via, Commanding General, U.S. Army Materiel Command

Lieutenant General (retired) Jim Campbell, Senior Advisor to the Chief of Staff of the Army

General Frank Grass, Chief, National Guard Bureau

General Vincent K. Brooks, Commanding General, U.S. Army Pacific

JOINT BASE LEWIS-MCCHORD & TACOMA, WASHINGTON SITE VISITS, SEPTEMBER 24

Major General Bret D. Daugherty, The Adjutant General of Washington

Brigadier General Wally Turner, Assistant Adjutant General of Washington

Colonel Curt Simonson, Commander 56th Information Operations Brigade

Colonel Bruce Linton, Commander, 66th Theater Aviation Command

Colonel Bryan Grenon, Commander, 81st Armored Brigade Combat Team

Colonel Larry Edwards, Commander, Medical Command, Washington Army National Guard

Colonel Daniel Dent, Commander, 96th Troop Command

Colonel Shaun Hodge, J-3, Joint Force Headquarters-Washington

Brigadier General Michael Stencil, Chief of Staff, Oregon Army National Guard

Brigadier General Todd Plimpton, Land Component Commander, Oregon Army National Guard

Colonel Jeffrey Sabatine, Chief Of Staff, Washington Army National Guard

Command Sergeant Major David Nunn, Command Sergeant Major, 66th Theater Aviation Command

Command Sergeant Major Shane Lake, Senior Enlisted Advisor, Oregon Army National Guard

Lieutenant Colonel Brian Dean, Commander, 3-116th Cavalry Regiment

Sergeant Major Brian Rikstad, 81st Armored Brigade Combat Team

Mr. John Bower, Joint Operations Watch Duty Specialist, Washington Army National Guard

Specialist Richard Shaffer, Joint Operations Watch Duty Specialist, Washington Army National Guard

Private First Class Alyssa Holden, Washington Army National Guard

Specialist Sera McArthur, Washington Army National Guard

Brigadier General James Mason, Deputy Commanding General, 807th Medical Command (Deployment Support)

Brigadier General Darrell Guthrie, Commanding General, 104th Training Division

Brigadier General Kurt Hardin, Deputy Commanding General, 79th Sustainment Support Command

Colonel Katherine Simonson, Commander, 396th Combat Support Hospital

Colonel George Dukes, Office, Chief of the Army Reserve

Colonel Eric Folkstead, Office, Chief of the Army Reserve

Colonel Charles Cumiskey, Executive Officer, 396th Combat Support Hospital

Colonel Bryan Phillips, 2nd Medical Brigade

Lieutenant Colonel Donald Johnson, S-3, 2nd Medical Brigade

Lieutenant Colonel Cora Courage, Commander, 1972nd Combat Operational Stress Control Detachment

Major Douglas Ryle, Deputy G-5, 807th Medical Command (Deployment Support)

Master Sergeant Joshua Davis, 807th Medical Command (Deployment Support)

Sergeant First Class Eric Kolar, 1972nd Combat Operational Stress Control Detachment

Specialist Heather Rusaw, 1972nd Combat Operational Stress Control Detachment

First Lieutenant Christine Kim, Administrative Assistant, 145th Multi-Functional Medical Battalion

Command Sergeant Major Rodney Wionowsky, Command Sergeant Major, 2nd Medical Brigade

Sergeant Jesus Morales, 145th Multi-Functional Medical Battalion

Sergeant Russel Philips IV, 1972nd Combat Operational Stress Control Detachment

Specialist Marcus Waters, 145th Multi-Functional Medical Battalion

Specialist Brittany Trevarthen, 1972nd Combat Operational Stress Control Detachment

Lieutenant General Stephen Lanza, Commanding General, I Corps

Command Sergeant Major James Norman, Command Sergeant Major, I Corps

Major General Kurt Fuller, Deputy Commanding General, I Corps

Major General Tom James, Commanding General, 7th Infantry Division

Brigadier General Jack Haley, Commanding General, 593rd Expeditionary Sustainment Command

Colonel Joe Wawro, Chief of Staff, I Corps

Mr. Mike Fuller, Senior Readiness Officer, I Corps

Colonel Alan Kellogg, Assistant Chief of Staff, G-1, I Corps

Colonel Tim Parker, Assistant Chief of Staff, G-2, I Corps

Colonel Ross Davidson, Assistant Chief of Staff, G-3, I Corps

Colonel Mark Weinerth, Assistant Chief of Staff, G-4, I Corps

Colonel Edward J. Hunter, Assistant Chief of Staff, G-6, I Corps

Colonel Mark Bennett, Assistant Chief of Staff, G-6, I Corps

Colonel Todd Jones, Director, Total Force, I Corps

Lieutenant Colonel Erik Krivda, G-5, I Corps

Mr. Lars Liden, G-3 Force Modernization, I Corps

Lieutenant Colonel Blake Lackey, G-33 Chief, Command Operations & Information Center (COIC), I Corps

Major Nathaniel Conkey, G-33 Battle Major, COIC, I Corps

Captain Jason Kneib, G-33 Orders Chief, COIC, I Corps

Captain Michael Rochford, G-33 Battle Captain, COIC, I Corps

Captain Tyler Mayes, G-33 Battle Captain, COIC, I Corps

Master Sergeant Maleatasi Togafau, G-33 Operations NCO, COIC, I Corps

Sergeant First Class Clinton Hamilton, G-33 Fires, COIC, I Corps

Staff Sergeant Daron Williams, COIC, I Corps

Staff Sergeant Kelby Faulk, G-2, COIC, I Corps

Chief Warrant Officer 3 Christopher Whalen, G-3 Aviation, COIC, I Corps

Captain Jesse Cornett, Staff Judge Advocate, COIC, I Corps

Master Sergeant Roberto Valencia G-9, COIC, I Corps

Sergeant Jeremiah Berry, Surgeon Cell, COIC, I Corps

Master Sergeant Samantha Stryker, G-7, COIC, I Corps

Chief Warrant Officer 2 Joan Hills, G-1, COIC, I Corps

Major Seangthip Chittaphong, G-4, COIC, I Corps

Captain Kyle Aagard, G-3 Protection, COIC, I Corps

Master Sergeant Richard Hannah, G-6, COIC, I Corps

Colonel Michael Harvey, Assistant Chief of Staff, G3 Aviation, I Corps

Colonel Bill Ryan, Commander, 16th Combat Aviation Brigade

Command Sergeant Major Kirk Coley, Command Sergeant Major, 16th Combat Aviation Brigade

Lieutenant Colonel Stephen Ladd, Commander, 2nd Battalion, 214th Aviation Regiment

Lieutenant Colonel Daniel Brewer, S-3, 66th Theater Aviation Command

Major Gabriel Wolfe, Executive Officer, 4th Battalion, 160th Special Operations Aviation Regiment

First Sergeant Luis DeJesus, First Sergeant, 4th Battalion, 160th Special Operations Aviation Regiment

Mr. Nicholas Kostelecky, Installations Transportation Officer, Joint Base Lewis-McChord

Captain Abe Payne, Commander, 1st Squadron, 14th Cavalry Regiment

APPENDIX F: TESTIMONIES AND COMMENTS

First Sergeant Robert Porter, First Sergeant, 1st Squadron, 14th Cavalry Regiment

First Lieutenant Bryant Volling, 1st Squadron, 14th Cavalry Regiment

First Lieutenant Daniel Jester, 1st Squadron, 14th Cavalry Regiment

Chief Warrant Officer 3 Richmond Minton, 1st Squadron, 14th Cavalry Regiment

Sergeant First Class Ryan Hill, 1st Squadron, 14th Cavalry Regiment

Specialist Joseph Monaco, 1st Squadron, 14th Cavalry Regiment

Specialist Ryan Mason, 1st Squadron, 14th Cavalry Regiment

Staff Sergeant Timothy Oremus, 1st Squadron, 14th Cavalry Regiment

Sergeant Gavin Ros, 1st Squadron, 14th Cavalry Regiment

Specialist Charles Moerke, 1st Squadron, 14th Cavalry Regiment

Lieutenant Colonel Charles Ward, Commander, 13th Combat Sustainment Support Battalion

Captain Devin Richter, Commander, 63rd Ordnance Company

Chief Warrant Officer 2 Luis Alvarado, 63rd Ordnance Company

Sergeant First Class Pablo Munoz, 63rd Ordnance Company

Specialist Joseph Mena, 63rd Ordnance Company

Private First Class Michael Gonzales, 63rd Ordnance Company

Colonel Sydney Smith, Commander, 404th Army Field Support Brigade

Mr. Bill Brugge, Operations Chief, Regional Logistic Readiness Center, Joint Base Lewis-McChord

Colonel Ethan Griffin, Vice Commander, 62nd Airlift Wing

Colonel Anthony Clavenna, Commander, 62nd Maintenance Group

Lieutenant Colonel Brian Smith, Deputy Commander, 62nd Operations Group

Major Will Medlicott, Director of Staff, 62nd Airlift Wing

Major William Wilkerson, Assistant Director of Operations, 8th Airlift Squadron

Captain Justin Jarrell, Standardization & Evaluations Pilot, 62nd Operations Group

Chief Master Sergeant John Frazier, 62nd Maintenance Group

Master Sergeant Douglas McGregor, 62nd Operations Support Squadron

Mr. Charles Thornton, 627th Security Forces Squadron

Mrs. Bonnie Longie, 62nd Airlift Wing Protocol Office

Staff Sergeant Katherine Jackson, 62nd Airlift Wing Public Affairs

Senior Airmen Gunnar Algott, Crew Chief, 62nd Aircraft Maintenance Squadron

Senior Airmen Naomi Griego, 62nd Airlift Wing Public Affairs

Senior Airmen Corbyn Campbell, Loadmaster, 8th Airlift Squadron

Senior Airmen Dustin Unnerstall, Loadmaster, 8th Airlift Squadron

Airmen First Class Jeremy Kosick, Loadmaster, 8th Airlift Squadron

Airmen First Class Benjamin Person, Loadmaster, 8th Airlift Squadron

Mr. Miguel Jimenez, Director, Surface Deployment & Distribution Command, Seattle

Mr. Bruce Leach, Director, Military Sealift Command, Seattle

Mr. Ted Musselman, U.S. Government Stevedoring Contractor

Mr. Chris Donohoe, Marine Cargo Specialist, SS Cape Intrepid (AKR-11)

Captain Joe Raymond, Sector Commander, Puget Sound, U.S. Coast Guard

Mr. Andre Elmaleh, Military Liaison, Port of Tacoma

Mr. Sean Eagan, Director, Governmental Affairs, Port of Tacoma

Mr. Robert Meyer, Senior Manager, Port Operations, Port of Tacoma

Mr. Gerry Fiola, Chief of Security, Port of Tacoma

Mr. Louis Cooper, Senior Director, Security & Labor Relations, Port of Tacoma

Ms. Bari Bookout, Executive for Non-Containerized Business & Commercial Strategy, Port of Tacoma

Ms. Tiffany Speir, Program Manager, South Sound Military & Communities Partnership

Brigadier General (retired) Dr. Stan Flemming, MD

Mr. Wayne Perry, Military spouse

Mr. Tom Pierson, President & CEO, Tacoma-Pierce County Chamber

Mr. Nico Guzman, Owner, Mind & Body Boot Camp

Mr. Jim Baumgart, Policy Advisor for Governor of Washington

The Honorable Jay Inslee, Governor of Washington

The Honorable Don Anderson, Mayor of Lakewood,
Washington

Mr. Michael Brandstetter, Councilmember, Lakewood City
Council, Lakewood, Washington

Mr. Lourdes E. 'Alfie' Alvarado-Ramos, Director, Washington
State Department of Veterans Affairs

Mr. Roel van der Lugt, Military Affairs Director/Senior
Policy Advisor for U.S. Representative Denny Heck, 10th
Congressional District, Washington

Mr. Eric Williams, Staff Member for U.S. Representative Derek
Kilmer, 6th Congressional District, Washington

The Honorable Graham Hunt, State Representative, 2nd
Legislative District, Washington

The Honorable Derek Kilmer, United States Congress, 6th
District Representative, Washington

The Honorable Denny Heck, United States Congress, 10th
District Representative, Washington

Mrs. Najla Munshower-Neumann, Military spouse

FORT BLISS, TEXAS & WHITE SANDS, NEW MEXICO SITE VISIT, SEPTEMBER 26-27

Brigadier General Terrence McKenrick, Commander, Brigade
Modernization Command (BMC)

Brigadier General Jeffery Broadwater, Deputy Commanding
General-Support, 1st Armored Division

Colonel Charles Masaracchia, Commander, 2nd Armored
Brigade Combat Team, 1st Armored Division

Lieutenant Colonel Kevin Beagle, Commander, 1-1st Cavalry
Regiment, 2nd Armored Brigade Combat Team, 1st Armored
Division

Lieutenant Colonel Raphael Heflin, Commander, 142nd
Combat Service Support Battalion, 1st Sustainment Brigade,
1st Armored Division

Major Romas Zimlicki, S-3, 1-325th Infantry Regiment, 82nd
Airborne Division

Chief Warrant Officer 3 John Millsap, Cyber Protection
Brigade, 7th Signal Command

Chief Warrant Officer 3 Gregory Olivo, Network Operations
Security Cell, BMC

Chief Warrant Officer 2 Marcaus Hamby, Network Operations
Security Cell, BMC

Colonel Greg Brady, Chief of Staff, 32nd Army Air & Missile
Defense Command

Colonel Shana Peck, G-3, 32nd Army Air & Missile Defense
Command

Command Sergeant Major Gerardo Dominguez, Command
Sergeant Major, 32nd Army Air & Missile Defense Command

Lieutenant Colonel Chris Woody, Deputy Commander, 5th
Armor Brigade, First Army

Lieutenant Colonel Craig Macina, Exercise Planner, 5th Armor
Brigade, First Army

Lieutenant Colonel Santiago A. Archuleta, Chief of Plans, 5th
Armor Brigade, First Army

Lieutenant Colonel Kurt Kobernik, Commander, 3-116th
Infantry Regiment

Command Sergeant Major Alvin Martin, Command Sergeant
Major, 3-116th Infantry Regiment

First Lieutenant Luis Feliciano, Commander, 544th Military
Police Company

Master Sergeant Carlos Baezhernandes, First Sergeant, 544th
Military Police Company

Captain Rafael A. Rivera, Commander, 1010th Engineer
Construction Company

First Sergeant Edwin Soto, First Sergeant, 1010th Engineer
Construction Company

Captain David E. Dodson, Commander, 155th Engineer
Company (Vertical)

First Sergeant Jan A. Spaans, First Sergeant, 155th Engineer
Company (Vertical)

INTERACTION WITH INDUSTRY ASSOCIATIONS, NATIONAL CAPITAL REGION, OCTOBER 6

Mr. Ben Collins, Director for Policy, Business Executive for
National Security

Mr. Will Goodman, Vice President for Policy, National
Defense Industry Association

NATIONAL CAPITAL REGION MEETINGS, OCTOBER 15-16

Dr. David Chu, President, Institute for Defense Analyses (IDA)
Brigadier General (retired) Edward Donnelly, Institute for
Defense Analyses (IDA)

Dr. Kathleen Conley, Institute for Defense Analyses (IDA)

Mr. Thomas Wallace, Institute for Defense Analyses (IDA)

Mr. David A. Ochmanek, RAND Corporation

APPENDIX F: TESTIMONIES AND COMMENTS

Mr. David R. Johnson, RAND Corporation
Mr. Tucker Hughes, Branch Chief, Center for Army Analysis
Institute for Defense Analyses (CAA)

AVIATION SUBCOMMITTEE MEETING, OCTOBER 21

Major General John Ferrari, Director, Program Analysis &
Evaluation, HQDA G-8
Major General Michael Lundy, Commanding General, U.S.
Army Aviation Center of Excellence
Mr. Josh Klimas, Policy Researcher, RAND Corporation

NATIONAL CAPITAL REGION MEETINGS, OCTOBER 22

Mr. Thomas H. Harvey, Deputy Assistant Secretary of Defense
for Strategy, Plans & Capabilities
Mr. Chris Daugherty, Office Assistant Secretary of Defense for
Strategy, Plans & Capabilities
General Frank Grass, Chief, National Guard Bureau
Lieutenant General John M. Murray, Deputy Chief of Staff
G-8, HQDA
Major General Paul A. Ostrowski, Deputy, Acquisition &
Systems Management, Office of the Assistant Secretary of the
Army (ALT)
Dr. Daniel Goure, Vice President, Lexington Institute

OPERATIONAL SUBCOMMITTEE MEETING, OCTOBER 23

The Honorable Robert Scher, Assistant Secretary of Defense for
Strategy, Plans & Capabilities
Ms. Mara Karlin, Deputy Assistant Secretary of Defense,
Strategy and Force Development

NATIONAL CAPITAL REGION MEETING, OCTOBER 30

Lieutenant General (retired) Richard G. Trefry, former Military
Assistant to the President of the United States & past Inspector
General of the Army

CHIEF OF STAFF OF THE ARMY MEETING, NOVEMBER 16

General Mark Milley, 39th Chief of Staff of the Army
General Daniel Allyn, 35th Vice Chief of Staff of the Army
Major General John Ferrari, Director, Program Analysis &
Evaluation, HQDA G-8
Brigadier General Frank Muth, Director, Army Quadrennial
Defense Review Office, HQDA G-8

NATIONAL CAPITAL REGION MEETING, NOVEMBER 18

Dr. Kathleen Conley, Institute for Defense Analyses (IDA)
Brigadier General (retired) Edward Donnelly, Institute for
Defense Analyses (IDA)

WEBSITE COMMENTS

Tammy Thurman, [National Commission on the Future of the
Army June 10th Fayetteville NC](#), June 29, 2015
Bienvenido Banchs, [Request to Testify before the
Commission](#), July 9, 2015
J. Scott Schissler, [Sikorsky Letters to 26 Governors and TAG's](#),
July 13, 2015
Arnold Estok, [Future of the Army](#), July 14, 2015
Captain David Chace, [Comments on the Future of the Army](#),
July 18, 2015
Kirk Sanders, [Keep the Force](#), July 23, 2015
Ashley Craven, [Downsizing](#), July 23, 2015
Lieutenant Colonel Greg Parker, [18 August Public Comment
Session](#), August 11, 2015
James Billings, (OCAR), [Comments from Army Reserve
Ambassador Candy Martin](#), August 11, 2015
Colonel (retired) Alfred Diaz, [NCFA Events in Southern
California](#), August 12, 2015
Sergeant Bob Brown, [NCFA Bios](#), August 13, 2015
Leo Schnack, [Support of AGR Force](#), August 24, 2015
Andrea Peterson, (NGAUS) [Materials for Hearing on Aug 18,
2015](#), August 24, 2015
Lieutenant Colonel Paul Boyd, [Army's 2014 Aviation
Restructuring Initiative](#), August 28, 2015
Frederick Scheffler, [Fort Knox Should be the Home of Armor](#),
September 14, 2015

The Honorable Mike Coffman, (Congressman, 6th District of Colorado), Letter to the Commissioners (Letter of Record), September 16, 2015

Lieutenant Colonel Shane Crofts, Merge the National Guard and Reserves, October 1, 2015

The Honorable Steven M. Palazzo (Congressman, 4th District of Mississippi), Statement of Record, October 13, 2015

The Honorable William Greenberg (Judge, United States Court of Appeals), Call, October 16, 2015

Major Robert Wilson, Force Structure and Posture, October 22, 2015

Lieutenant Colonel Brad Striegel, Enhancing Joint Force and Total Army Training, November 5, 2015

Chief Warrant Officer 5 Joseph Quinn, NCEA, November 19, 2015

Lieutenant Colonel (retired) Jose Olmos, The future of 15k US Soldiers in Puerto Rico is not included in discussion, November 30, 2015

Colonel (retired) Todd Megill, Congratulations and an Observation, December 10, 2015

APPENDIX F: TESTIMONIES AND COMMENTS

TESTIMONIES AND ENGAGEMENTS: ALPHABETICAL

Captain Kyle Aagard, G-3 Protection, Command Operations & Information Center, I Corps

The Honorable Greg Abbott, Governor of Texas

General Robert B. Abrams, Commanding General, U.S. Army Forces Command

Brigadier General Benjamin F. Adams III, Director, Joint Staff, Joint Force Headquarters-Kentucky

Chief Warrant Officer 4 Richard Adams, UH-60 Standardization Instructor Pilot, Eastern Army National Guard Aviation Training Site

Colonel Richard P. Adams, State Aviation Officer, Texas Army National Guard

Captain Kofi Adih, Plans Officer, 518th Sustainment Brigade

Mr. Edward Agee, Chief Materiel Integration, U.S. Army Material Command

Mr. Salman Ahmed, Special Assistant to the President, Counselor to the National Security Advisor

First Sergeant Sabrina Aja, 75th Training Command

Command Sergeant Major Patrick Akuna, Jr., Command Sergeant Major, First Army Division West

First Sergeant Sergio Alcantara, First Sergeant, 32nd Civil Support Team

Captain Gerrelaine Alcordo, Public Affairs Officer, 174th Infantry Brigade

Master Sergeant James Alexander, NCOIC/Chief Instructor, Regional Training Site-Maintenance, 139th Regiment

Senior Airmen Gunnar Algott, Crew Chief, 62nd Aircraft Maintenance Squadron

General Daniel Allyn, 35th Vice Chief of Staff of the Army
Chief Warrant Officer 2 Luis Alvarado, 63rd Ordnance Company

Mr. Lourdes E. 'Alfie' Alvarado-Ramos, Director, Washington State Department of Veterans Affairs

The Honorable Don Anderson, Mayor of Lakewood, Washington

Lieutenant General Joe Anderson, Deputy Chief of Staff G-3/5/7, HQDA

Major General (retired) Rodney Anderson

Lieutenant Colonel Santiago A. Archuleta, Chief of Plans, 5th Armor Brigade, First Army

Chief Warrant Officer 2 Michael Argus, UH-60 Instructor Pilot (TPU) and ASF Employee (MILTECH)

Captain Manuel Arino, California Army National Guard
Command Sergeant Major Gabriel Arnold, Command Sergeant Major, U.S. Army Cadet Command

First Lieutenant Michael Ashburn, Commander, 1006th Quartermaster Company

Major General Robbie Asher, The Adjutant General of Oklahoma

Lieutenant Colonel Nigel Atkins, Commander, 147th Air Support Operating Squadron, Texas Air National Guard

Private Vaughn Austin, Minnesota CBRNE Enhanced Response Force Package (CERF-P)

Colonel Rodney Babb, Commander, 138th Regiment-Indiana National Guard Regional Training Institute

Master Sergeant Carlos Baezhernandes, First Sergeant, 544th Military Police Company

Mr. Steve Bailey, Defense Intelligence Directorate for Defense Technology & Long-Range Analysis Office, Defense Intelligence Agency

Major Royce Baker, Fire Support Officer, 4th Infantry Division Fire Support Element

Brigadier General Tommy H. Baker, Assistant Adjutant General of Tennessee

Major General David Baldwin, The Adjutant General of California

Lieutenant Colonel Jason Ball, Deputy Commander, Army Reserve Element, U.S. Pacific Command Joint Intelligence Operations Center

Colonel (retired) John L. Ballantyne, Chief Operating Officer, Military Child Education Coalition

Mr. Ben Banchs, Business Manager, Laborers International Union of North America, National Guard Council 1776

Major General Jeffery Bannister, Commanding General, 10th Mountain Division

Captain Eric Barger, 10th Special Forces Group (Airborne)

Command Sergeant Major Tracy E. Barlogio, Command Sergeant Major, Fort Hunter-Liggett, California

Ms. Kim Barnes, Deputy State Director for U.S. Senator Thom Tillis, North Carolina

Lieutenant General (retired) David Barno, Center for Strategic & International Studies

Colonel Greg Barrow, G-3 Training, Plans & Operations, Texas Army National Guard

Command Sergeant Major James R. Basham, Command Sergeant Major, 1-502nd Infantry Battalion, 101st Airborne Division

Colonel Brian Bassett, Chief of Staff, U.S. Army Recruiting Command

Mr. Jim Baumgart, Policy Advisor for Governor of Washington

Lieutenant Colonel Kevin Beagle, Commander, 1-1st Cavalry Regiment, 2nd Armored Brigade Combat Team, 1st Armored Division

Colonel Todd S. Beatulis, Commander, 405th Army Field Support Brigade

Colonel Christopher Beaudoin, Commander, Fort Hood Mobilization Brigade

Sergeant Major Cari Beetham, Operations Sergeant Major, 49th Military Police Brigade

Chief Warrant Officer 5 Dave Behm, Commander, Tactical Unmanned Aircraft System Operations Facility

Lieutenant Colonel James Bekurs, Executive Officer, 10th Special Forces Group (Airborne)

Command Sergeant Major Chris Belford, West Virginia Army National Guard

Ms. Jody Bennett, Professional Staff Member, U.S. Senate Armed Services Committee

Colonel Mark Bennett, Assistant Chief of Staff, G-6, I Corps

Dr. Nora Bensahel, Center for Strategic & International Studies

The Honorable Robert Bentley, Governor of Alabama

Colonel Mark Berglund, Chief, Force Management, National Guard Bureau

Staff Sergeant Jacob Bermudez, Pennsylvania Army National Guard

Sergeant Jeremiah Berry, Surgeon Cell, Command Operations & Information Center, I Corps

The Honorable Steven Beshear, Governor of Kentucky

Major General Michael A. Bills, Commanding General, 1st Cavalry Division

Major General Gregory C. Bilton (Australian Army), Deputy Commanding General-Operations, U.S. Army Pacific

First Lieutenant Christian Bionat, 75th Training Command

Colonel James D. Bischoff, Commander, Army Reserve Element, U.S. Pacific Command Joint Intelligence Operations Center

Lieutenant Colonel Joseph Bishop, Commander, 1-130th Attack Reconnaissance Battalion

Mr. Freddie Blakely, Deputy Director, Personnel Information Systems, Human Resource Command

Colonel James Bledsoe, Army Aviation Officer, Colorado Army National Guard

Command Sergeant Major Ronald Bloker, 3rd Squadron, 116th ABCT

Major General Daryl Bohac, The Adjutant General of Nebraska

Lieutenant Colonel Jilian Bond, Commander, 224th Sustainment Brigade

Mr. Timothy Bonds, Vice President, RAND Army Research Division & Director, RAND Arroyo Center

Ms. Bari Bookout, Executive for Non-Containerized Business & Commercial Strategy, Port of Tacoma

Brigadier General Gregory Bowen, Deputy Commanding General-Operations, U.S. Army Space & Missile Defense Command, Army Forces Strategic Command

Mr. John Bower, Joint Operations Watch Duty Specialist, Washington Army National Guard

Specialist Richard Shaffer, Joint Operations Watch Duty Specialist, Washington Army National Guard

Mr. Earnest Boyd, Branch Chief, Force Provider Division, U.S. Army Forces Command

Major Brad Bradford, National Guard Bureau

Colonel Greg Brady, Chief of Staff, 32nd Army Air & Missile Defense Command

Lieutenant Colonel James Brady, U.S. Army Europe

Command Sergeant Major John A. Brady, Command Sergeant Major, 502nd Infantry Regiment, 101st Airborne Division

Mr. Michael Brandstetter, Councilmember, Lakewood City Council, Lakewood, Washington

The Honorable Terry Branstad, Governor of Iowa & Co-Chair of the Council of Governors

Staff Sergeant Son Joi Brantley, Battalion S-1 NCOIC, 6-108th Military Intelligence Battalion (USAR)

General Philip Breedlove, Commander, U.S. European Command (USEUCOM) and NATO Supreme Allied Commander Europe

Mr. Jamie Bresett, Staff Operations & Training Specialist, 479th Engineer Battalion

Brigadier General Allen Brewer, Joint Staff Director, Joint Force Headquarters-Mississippi

Lieutenant Colonel Daniel Brewer, S-3, 66th Theater Aviation Command

APPENDIX F: TESTIMONIES AND COMMENTS

Chief Warrant Officer 3 Elmer Brewer, 75th Training Command

Brigadier General Jeffery Broadwater, Deputy Commanding General-Support, 1st Armored Division

Major General Lawrence Brock III, Commanding General, 311th Signal Command

Ms. Jeanne Brooks, Director, Technology & Business Architecture Integration, HQDA G-1

General Vincent K. Brooks, Commanding General, U.S. Army Pacific

Chief Warrant Officer 3 Jerry Brown, S-8, 10th Special Forces Group (Airborne)

The Honorable Kate Brown, Governor of Oregon

Major Melvin Brown, Executive Officer, Army Reserve Element, U.S. Pacific Command Joint Intelligence Operations Center

Lieutenant General Robert Brown, Commanding General, Combined Arms Center, U.S. Army Training & Doctrine Command

Mr. Bill Brugge, Operations Chief, Regional Logistic Readiness Center, Joint Base Lewis-McChord

Staff Sergeant Chatchai Brunosky, U.S. Army Civil Affairs Psychological Operations Command

The Honorable Phil Bryant, Governor of Mississippi

The Honorable Steve Bullock, Governor of Montana

Brigadier General Thomas Bump, Land Component Commander-New Mexico Army National Guard

Command Sergeant Major James Bunch, Commandant, Warrior Leader Course, 168th Regiment-Colorado Army National Guard Regional Training Institute

Sergeant First Class Matthew Burdick, Platoon Sergeant, 2-77th Field Artillery Battalion

Master Sergeant Kevin Burford, 10th Special Forces Group (Airborne)

Colonel Edward Burke, G-4, U.S. Army Europe

Staff Sergeant Ryan Burke, Squad Leader, 52nd Brigade Engineer Battalion

Colonel Luke Burnett, Commander, 130th Maneuver Enhancement Brigade

Major General Jefferson Burton, The Adjutant General of Utah

Lieutenant Colonel Rick Burt, Commander, Centennial Training Site, 168th Regiment-Colorado Army National Guard Regional Training Institute

Colonel Dave Burwell, Defense Coordinating Officer, Federal Emergency Management Agency Region 8

Colonel Horst Busch, Military Attaché, Embassy of Federal Republic of Germany

Mr. Mike Bush, Acting Division Chief, Force Accounting & Documentation, HQDA G-3/5/7 Force Management

Mr. Bruce Busler, Director, Joint Distribution Process Analysis Center & U.S. Army Transportation Engineering Agency, U.S. Transportation Command (USTRANSCOM)

Brigadier General Pete Byrne, Commander, Joint Task Force-Centennial

Senior Airmen Corbyn Campbell, Loadmaster, 8th Airlift Squadron

Sergeant Jamason Campbell, Motor Transport Operator, 1006th Quartermaster Company

Major James G. Campbell, Assistant G-3 Air, 1st Cavalry Division

Lieutenant General (retired) Jim Campbell, Senior Advisor to the Chief of Staff of the Army

Colonel (retired) Mark Campsey

Colonel Cameron Cantlon, Commander, 3rd Cavalry Regiment

Sergeant Allen Capps, Unmanned Aircraft Systems Operator Instructor, TUASOF

Lieutenant Colonel Shawn Carden, G-6, 4th Infantry Division

Lieutenant General Edward Cardon, Commander, U.S. Army Cyber Command (ARCYBER)

Sergeant Shamari Carmen, Automated Logistical Specialist, 1006th Quartermaster Company

Dr. Thomas F. Carney, Vice Director for Force Structure, Resources & Assessment, Joint Staff J-8

Major General Courtney Carr, The Adjutant General of Indiana

The Honorable Brad Carson, Acting Under Secretary for Personnel & Readiness

Mr. Chris Carter, Deputy Chief Of Staff for U.S. Representative Richard Hudson, 8th Congressional District, North Carolina

Colonel Sean Casey, Director, Joint Staff, Joint Force Headquarters-Maryland

Mr. Westin Castenberg, Modeling Analyst, TRADOC Analysis Center, U.S. Army Training & Doctrine Command

Major Marisol Chalas, S-3, 1-158th Attack Reconnaissance Battalion

Major Matthew Chaney, S-3, 10th Special Forces Group (Airborne)

Lieutenant Colonel Patrick Chard, Director of Staff, West Virginia Air National Guard

Colonel George Charfauros, Guam Army National Guard

Staff Sergeant Anthony Chavez, Centennial Training Site Housing Manager, 168th Regiment-Colorado Army National Guard Regional Training Institute

Command Sergeant Major Henry Chin, 116th Cavalry Brigade Combat Team

Major Seangthip “Sean” Chittaphong, G-4, Command Operations & Information Center, I Corps

Major Luke Chivers, S-3, 12th Combat Aviation Brigade

Lieutenant Colonel Steven Cho, G-3, 4th Infantry Division

Mr. John Christensen, Reserve Component Training Coordinator, 10th Mountain Division

Dr. David Chu, President, Institute for Defense Analyses (IDA)

Major General Phillip Churn, Commanding General, 200th Military Police Command

Command Sergeant Major Greg Clancy, Command Sergeant Major, 2-135th Aviation Regiment

Major General H. Stacy Clardy III, USMC, Deputy Director, Force Management, Application & Support, Joint Staff J-8

Mr. David J. Clark, Foreign Intelligence Technical Advisor, HQDA G-2

Lieutenant Colonel Gregg Clark, Commander, Eastern Army National Guard Aviation Training Site

Chief Warrant Officer 4 Onedia S. Clark, Senior Mobility Warrant Officer, HQDA G-4

Command Sergeant Major William Clark Jr, Senior Enlisted Advisor to the Adjutant General of California

Colonel Anthony Clavenna, Commander, 62nd Maintenance Group

Colonel Laura Clellan, Land Component Commander-Colorado Army National Guard

Command Sergeant Major Willie C. Clemmons, Command Sergeant Major, U.S. Army Recruiting Command

Lieutenant Colonel Marc Cloutier, Commander, 1-187th Infantry Battalion, 101st Airborne Division

Lieutenant Colonel John Cochran, Aviation Force Development, HQDA G-8

Colonel Matt Cody, Commander, 2nd Infantry Brigade Combat Team, 4th Infantry Division

General (retired) Richard Cody, 31st Vice Chief of Staff of the Army & former commander 101st Airborne Division

Mr. William “Chip” Colbert, Director, Defense Policy & Strategy, National Security Council

Chief Master Sergeant Angie Coleman, 130th Force Support Squadron, West Virginia Air National Guard

Command Sergeant Major Kirk Coley, Command Sergeant Major, 16th Combat Aviation Brigade

Major General Augustus Collins, The Adjutant General of Mississippi

Mr. Ben Collins, Director for Policy, Business Executive for National Security

Major General Jeffrey N. Colt, Commanding General, First Army Division West

Major General Peggy C. Combs, Commanding General, U.S. Army Cadet Command

Chief Warrant Officer 5 Rick Comer, North Carolina Army National Guard

Major Nathaniel Conkey, G-33 Battle Major, Command Operations & Information Center, I Corps

Dr. Kathleen Conley, Institute for Defense Analyses (IDA)

Colonel BJ Constantine, Chief of Staff, Human Resource Command

Staff Sergeant Bradley D. Convrey, 821st Engineer Company

Mr. Louis Cooper, Senior Director, Security & Labor Relations, Port of Tacoma

Brigadier General Norvell V. Coots, MD, Commander, U.S. Army Regional Health Command Europe & Command Surgeon, U.S. Army Europe

Colonel Jeffrey Copeland, Commander, 449th Theater Aviation Brigade

Command Sergeant Major Ted Copeland, Command Sergeant Major, 79th Theater Sustainment Command

First Sergeant Shamika Copenhagen, First Sergeant, Headquarters & Headquarters Company, 79th Theater Sustainment Command

Captain Jesse Cornett, Staff Judge Advocate, Command Operations & Information Center, I Corps

Mr. Scott Cospers, Mayor of the City of Killeen and Vice Chairman of the Killeen Temple Metropolitan Planning Organization (KTMPO)

Lieutenant Colonel Richard Cottage, Counter Drug Coordinator, Pennsylvania Army National Guard

Lieutenant Colonel Cora Courage, Commander, 1972nd Combat Operational Stress Control Detachment

APPENDIX F: TESTIMONIES AND COMMENTS

Sergeant Sean D. Courtney, Human Resources NCO, West Virginia Army National Guard

Staff Sergeant Bradley Cox, Instructor (MOS 35L), 6-108th Military Intelligence Battalion (USAR)

Sergeant Jeffrey Cox, UH-60 Flight Instructor (TPU), Alpha Company, 1-169th Aviation Regiment

Sergeant Major Alex Coy, Operations Sergeant Major, Special Operations Detachment-Europe, West Virginia Army National Guard

Dr. John Craft, Superintendent of Schools for Killeen Independent School District

First Lieutenant Lamar Cravens, Platoon Leader, 52nd Brigade Engineer Battalion

Colonel (retired) Kenneth J. Crawford

Major Matthew Crawford, S-2, 10th Special Forces Group (Airborne)

Brigadier General David Creagh, Defense Attaché, Embassy of Australia

Colonel Robert Crisistomo, Chief of Joint Staff, Guam Army National Guard

Mr. Jimmy Crisp, Security Specialist, 79th Theater Sustainment Command

Colonel Christopher Croft, Director, Center for Army Leadership, Combined Arms Center

Command Sergeant Major Michael Crosby, Command Sergeant Major, 4th Infantry Division & Fort Carson

Mr. Ron Crosby, Systems & Scheduling Chief, Camp Ripley Training Center, Minnesota

Colonel Peter Cross, Commander, 49th Military Police Brigade

Lieutenant General Anthony Crutchfield, Deputy Commander, U.S. Pacific Command (USPACOM)

Colonel Charles Cumiskey, Executive Officer, 396th Combat Support Hospital

Chief Warrant Officer 4 Kurt Cunningham, Battalion Master Gunner, 1-130th Attack Reconnaissance Battalion

Lieutenant Colonel Paul Cunningham, National Training Center

Sergeant Robert T. Cunningham, West Virginia Army National Guard

Major General Glenn Curtis, The Adjutant General of Louisiana & President, Adjutant Generals Association of the United States

Lieutenant Colonel James Cutchin, G-9, Colorado Army National Guard

The Honorable Jack Dalrymple, Governor of North Dakota

Dr. Don Daniels, MD, Metroplex Health System

Mr. Ed Dankbar, Hazmat Officer, Canadian Pacific Rail Emergency Response

Colonel Darrell Darnbush, Commander, 278th Armored Cavalry Regiment

Colonel Kimberly J. Daub, Commander, 101st Sustainment Brigade

The Honorable Dennis Daugaard, Governor of South Dakota

Major General Bret D. Daugherty, The Adjutant General of Washington

Mr. Chris Daugherty, Office Assistant Secretary of Defense for Strategy, Plans & Capabilities

Brigadier General Timothy J. Daugherty, Deputy Commanding General, 4th Infantry Division

Colonel Ross Davidson, Assistant Chief of Staff, G-3, I Corps

Captain Clint Davis, Assistant Operations Officer, 5th Battalion, 19th Special Forces Group

Master Sergeant Joshua Davis, 807th Medical Command (Deployment Support)

Major Kerry Davis, G-3 Operations, Colorado Army National Guard

Mr. Mark Davis, Deputy Assistant Secretary of the Army-Manpower & Reserve Affairs & Director, Army Marketing & Research Group

Colonel J. Ray Davis, National Guard Bureau (NGB) Aviation Directorate

Mr. Tad Davis, private citizen

Colonel Matt Dawson, Director, Center for Strategic Leadership & Development, U.S. Army War College

Lieutenant Colonel Josh Day, State Aviation Officer, Colorado Army National Guard

The Honorable Mark Dayton, Governor of Minnesota & Member of the Council of Governors

Lieutenant Colonel Brian Dean, Commander, 3-116th Cavalry Regiment

Brigadier General Arian Deblieck, Commanding General, 7th Civil Support Command

First Sergeant Luis DeJesus, First Sergeant, 4th Battalion, 160th Special Operations Aviation Regiment

Chief Warrant Officer 4 Melvin DeJesus, 1-158th Attack Reconnaissance Battalion

Lieutenant Colonel Cory Delger, Deputy Fires Support Coordinator, 4th Infantry Division

Colonel Daniel Dent, Commander, 96th Troop Command
Staff Sergeant Nicole Dial, Battalion S-3 ATRRS NCO,
6-108th Military Intelligence Battalion (USAR)

Colonel (retired) Alfred Diaz, Reserve Officer Association of
the United States

Colonel John DiGiambattista, Commander, 1st Armored
Brigade Combat Team, 1st Cavalry Division

Brigadier General Michael Dillard, Commanding General,
310th Expeditionary Sustainment Command

Colonel Robert Dinenna, G-3, 200th Military Police
Command

Lieutenant General Joseph DiSalvo, Deputy Commander, U.S.
Southern Command (USSOUTHCOM)

Colonel Rob Dixon, U.S. Army Europe

Captain David E. Dodson, Commander, 155th Engineer
Company (Vertical)

Command Sergeant Major Gerardo Dominguez, Command
Sergeant Major, 32nd Army Air & Missile Defense Command

Mr. Mike Dominguez, Director, Strategy, Forces & Resources
Division, Institute for Defense Analyses (IDA)

Brigadier General (retired) Edward Donnelly, Institute for
Defense Analyses (IDA)

Chief Warrant Officer 2 Holly Donica, 1-158th Attack
Reconnaissance Battalion

Mr. Chris Donohoe, Marine Cargo Specialist, SS Cape Intrepid
(AKR-11)

Chief Warrant Officer 5 Matt Dorram, Former State
Command Chief Warrant Officer, Colorado Army National
Guard

Major Jonathon Dotterer, Commander, Minnesota CBRNE
Enhanced Response Force Package (CERF-P)

Mr. Colin Doyle, Institute for Defense Analyses (IDA)

Master Sergeant Denise Drummond, G-3 NCO, Colorado
Army National Guard

The Honorable Doug Ducey, Governor of Arizona

Sergeant First Class Floyd Dugan, Fire Direction Center
NCOIC, 2-77th Field Artillery Battalion

Colonel George Dukes, Office, Chief of the Army Reserve

Major General Donald P. Dunbar, The Adjutant General of
Wisconsin

Command Sergeant Major Sean M. Dunn, Command
Sergeant Major, 1st Air Cavalry Brigade

Mr. Sean Eagan, Director, Governmental Affairs, Port of
Tacoma

Second Lieutenant Esponinisa Eatmon, Platoon Leader,
1006th Quartermaster Company

Command Sergeant Major William “Tom” Edmunds,
Command Sergeant Major, Joint Interagency Training &
Education Center, West Virginia Army National Guard

Major General H. Michael Edwards, The Adjutant General of
Colorado

Colonel Larry Edwards, Commander, Medical Command,
Washington Army National Guard

Mr. Gary Elliott, Under Sheriff for Solano County, California

Mr. Andre Elmaleh, Military Liaison, Port of Tacoma

Major Henry Empeno, Commander, Headquarters &
Headquarters Company, 79th Theater Sustainment Command

Colonel Gregg Engler, Staff Judge Advocate, 4th Infantry
Division

DAC Kevin Erickson, ASF Supervisor (MILTECH), Alpha
Company, 1-169th Aviation Regiment

Lieutenant Colonel Christine Enriquez, G-1, 4th Infantry
Division

Lieutenant Colonel Shannon Espinoza, Senior Army Advisor,
Colorado Army National Guard

Specialist First Class John Evers, Food Service Specialist,
1006th Quartermaster Company

Chief Warrant Officer 4 Ryan Eyre, Instructor Pilot, 1-211th
Attack Reconnaissance Battalion

Command Sergeant Major Carl Fagan, Command Sergeant
Major, 101st Division Artillery

The Honorable Mary Fallin, Governor of Oklahoma

Staff Sergeant Kelby Faulk, G-2, Command Operations &
Information Center, I Corps

Mr. Daniel Feehan, Deputy Assistant Secretary of Defense
(Readiness)

Captain Darrell Fejarang, Aide-de-Camp, Guam Army
National Guard

First Lieutenant Luis Feliciano, Commander, 544th Military
Police Company

Mrs. Alexis Felix, Unit Administrator, 479th Engineer
Battalion

Major General John Ferrari, Director, Program Analysis &
Evaluation, HQDA G-8

Lieutenant Colonel James Fidler, Commander, Army Aviation
Support Facility, South Carolina Army National Guard

Major Alexia Fields, U.S. Army Civil Affairs Psychological
Operations Command

APPENDIX F: TESTIMONIES AND COMMENTS

Mr. Gerry Fiola, Chief of Security, Port of Tacoma
Sergeant Stephen Fleming, Warrior Leader Course Operations
NCO, 168th Regiment-Colorado Army National Guard
Regional Training Institute

Brigadier General (retired) Dr. Stan Flemming, MD
Colonel Eric Folkestad, Office, Chief of the Army Reserve
Command Sergeant Major James Forbes II, Command
Sergeant Major, 138th Regiment-Indiana National Guard
Regional Training Institute

Brigadier General Walter Fountain, Special Assistant to the
Director, Army National Guard

Mr. John Frame, G-5, U.S. Army Africa

Colonel Anthony Francia, G-3, 79th Theater Sustainment
Command

Chief Master Sergeant John Frazier, 62nd Maintenance Group
Captain Jason Freeman, Operations Officer, National Guard
Bureau

Chief Warrant Officer 2 Orlando Freeman, 84th Training
Command

Mr. Nate Freier, Professor of National Security Studies, U.S.
Army War College

Sergeant First Class Robert Frey, Unmanned Aircraft Systems
Facility NCOIC, TUASOF

Major General Kurt Fuller, Deputy Commanding General, I
Corps

Mr. Mike Fuller, Senior Readiness Officer, I Corps

Lieutenant General (retired) Paul Funk

Colonel (retired) Daniel Furtado, California Army Reserve
Ambassador

Chief Warrant Officer 2 Kevin Gabrielson, Maintenance
Warrant Officer, 479th Engineer Battalion

Command Sergeant Major (retired) Joe Gainey

Colonel Sean A. Gainey, Deputy Commanding Officer, U.S.
Army Cadet Command

Major General Duane Gamble, Commanding General, 21st
Theater Sustainment Command

Sergeant First Class Jose Garcia, 40th Infantry Division

Brigadier General Marianne Garcia, Deputy Commanding
General, 200th Military Police Command

Major General Michael Garrett, Chief of Staff, U.S. Central
Command (USCENTCOM)

Lieutenant General William Garrett, Deputy Commander,
U.S. European Command (USEUCOM)

Colonel Clay Garrison, Commander, 144th Fighter Wing,
California Air National Guard

Colonel Michael Garshak, Chief of Staff, Idaho Army National
Guard

Major Stewart Gast, Executive Officer, 52nd Brigade Engineer
Battalion

Major General William Gayler, Deputy Commanding General,
U.S. Army Europe

Dr. Gian Gentile, Center for Strategic & International Studies

Major General Anthony German, Assistant Adjutant General
of New York

Mr. Dennis Gibson, S3 Inc.

Major George Giles, Maintenance Officer, Army Aviation
Support Facility- Fort Indiantown Gap, Pennsylvania

Brigadier General Steve Gilland, Deputy Commanding
General-Operations, 101st Airborne Division

Major Christina Gilroy, Commander, Regional Training Site-
Maintenance, 139th Regiment

Major General Ryan Gonsalves, Commanding General, 4th
Infantry Division & Fort Carson

Private First Class Michael Gonzales, 63rd Ordnance Company

Mr. Juan Gonzalez, Maintenance Supervisor, Army Reserve
Aviation Support Facility-Conroe, Texas

Chief Warrant Officer 5 Chris Good, Instructor Pilot, 40th
Combat Aviation Brigade

Brigadier General John Goodale, Assistant TAG, Idaho
National Guard

Mr. Will Goodman, Vice President for Policy, National
Defense Industry Association

Captain Joseph Gorgacz, Engineer Officer, 518th Sustainment
Brigade

Admiral William E. Gortney, USN, Commander, U.S.
Northern Command (USNORTHCOM)

Dr. Daniel Goure, Vice President, Lexington Institute

Mr. David Graham, Institute for Defense Analyses (IDA)

Major General (retired) Mark A. Graham, former Deputy
Chief of Staff, G-3/5/7 (Readiness), U.S. Army Forces
Command

Lieutenant Colonel Greg Grant, Deputy Commander, Joint
Interagency Training & Education Center, West Virginia Army
National Guard

Major General (retired) Robert Grant

Sergeant Taniqua Grant, Training NCO, 1-158th Attack
Reconnaissance Battalion

General Frank Grass, Chief, National Guard Bureau
 Colonel Bryan Grenon, Commander, 81st Armored Brigade
 Combat Team
 Senior Airmen Naomi Griego, 62nd Airlift Wing Public Affairs
 Colonel Ethan Griffin, Vice Commander, 62nd Airlift Wing
 Major General John Gronski, Commanding General, 28th
 Infantry Division
 Colonel Didier Gros, Military Attaché, Embassy of France
 Mr. Dean Grose, City Council Member, City of Los Alamitos,
 California
 Colonel Ephraim Grubbs, Commander, 60th Troop Command
 Mr. Robert Grundy, Logistics Management Specialist, HQDA
 G-4
 Lieutenant Colonel Nikolaus Guran, Commander, 101st
 Headquarters & Headquarters Battalion
 Brigadier General Leon Guerrero, The Adjutant General of
 Guam
 Command Sergeant Major Mike Gundrum, Senior State
 Enlisted Leader, Pennsylvania Army National Guard
 Brigadier General Darrell Guthrie, Commanding General,
 104th Training Division
 First Lieutenant Nathaniel Guthrie, Commander, Alpha
 Company, 1-158th Attack Reconnaissance Battalion
 Sergeant First Class Carlos Gutierrez, 75th Training Command
 Mr. Nico Guzman, private citizen
 Lieutenant Colonel Brent Haas, Office of the Chief of Army
 Reserve
 Brigadier General Wendul Hagler, Special Assistant to the
 Director, Army National Guard
 Brigadier General Jack Haley, Commanding General, 593rd
 Expeditionary Sustainment Command
 Colonel Jimmie Hall, Commander, 5th Signal Command
 Lieutenant Colonel Joseph Halloran, Commander, 2-320th
 Field Artillery Regiment, 101st Airborne Division
 Chief Warrant Officer 2 Marcaus Hamby, Network Operations
 Security Cell, Brigade Modernization Command
 Sergeant First Class Clinton Hamilton, G-33 Fires, Command
 Operations & Information Center, I Corps
 Command Sergeant Major Gary Hamm, Command Sergeant
 Major, 449th Theater Aviation Brigade
 Colonel George Hanhauser, G-3/5/7, U.S. Army Civil Affairs
 & Psychological Operations Command
 Master Sergeant Richard Hannah, G-6, Command Operations
 & Information Center, I Corps

Chief Warrant Officer 5 Michael Hanten, Command Chief
 Warrant Officer, 79th Theater Sustainment Command
 Major General Gary M. Hara, Deputy Commanding General-
 Army National Guard, U.S. Army Pacific
 Colonel Ken Hara, Deputy Adjutant General, Hawaii Army
 National Guard
 Brigadier General Kurt Hardin, Deputy Commanding General,
 79th Sustainment Support Command
 Major General (retired) Gus Hargett, President, National
 Guard Association of the United States
 Lieutenant Colonel Patrick Harkins, Commander, 3-187th
 Infantry Battalion, 101st Airborne Division
 Colonel Michael Harlan, Director, Department of Logistics &
 Resource Operations, Combined Arms Center
 Major General Brian Harris, Commander, Task Force 51, U.S.
 Army North
 Admiral Harry B. Harris, Jr, USN, Commander, U.S. Pacific
 Command (USPACOM)
 Chief Master Sergeant (retired) John Harris, President, Enlisted
 Association of the National Guard of the United States
 Colonel John Harrison, Chief of Staff, Colorado Army
 National Guard
 Major Derrick Hart, Executive Officer, 1-158th Attack
 Reconnaissance Battalion
 Colonel Michael Harvey, Assistant Chief of Staff, G-3 Aviation,
 I Corps
 Mr. Thomas H. Harvey, Deputy Assistant Secretary of Defense
 for Strategy, Plans & Capabilities
 Major General Lawrence Haskins, Commanding General, 40th
 Infantry Division
 The Honorable Maggie Hassan, Governor of New Hampshire
 Major Walter J. Hatfield, J-33 Current Operations Officer,
 Joint Force Headquarters-West Virginia
 Colonel Ken Hawley, Chief, Aviation Division, U.S. Army
 Forces Command
 Colonel Randall L. Haws, Deputy Chief of Staff-Operations,
 Human Resource Command
 Mr. Paulus Hay, Logistics Management Specialist, HQDA G-4
 Brigadier General Richard Hayes, The Adjutant General of
 Illinois
 Lieutenant Colonel James Haynie, Commander, 1-185th
 Attack Reconnaissance Battalion

APPENDIX F: TESTIMONIES AND COMMENTS

Lieutenant Colonel Raphael Heflin, Commander, 142nd Combat Service Support Battalion, 1st Sustainment Brigade, 1st Armored Division

Major Elizabeth Helland, 1st Space Brigade

Lieutenant Colonel Robert Hepner, Garrison Commander, Fort Indiantown Gap, Pennsylvania

The Honorable Richard Herbert, Governor of Utah

Chief Warrant Officer 5 James Herring, Command Chief Warrant Officer, North Carolina Army National Guard

The Honorable John Hickenlooper, Governor of Colorado

Mr. Jim Hickey, Professional Staff Member, U.S. Senate Armed Services Committee

Mr. Chip Hickman, Mobilization Officer, G-3, First Army Division West

Mr. Asher Hildebrand, Chief of Staff for U.S. Representative David Price, 4th Congressional District, North Carolina

Dr. Andrew Hill, Professor of Organization Studies, U.S. Army War College

Sergeant First Class Ryan Hill, 1st Squadron, 14th Cavalry Regiment

Major General William Hill, Assistant Adjutant General (Air) of Mississippi

Chief Warrant Officer 2 Joan Hills, G-1, Command Operations & Information Center, I Corps

Chief Warrant Officer 3 Andrew Hilton, Operations Warrant Officer, 5th Battalion, 19th Special Forces Group

Brigadier General Timothy Hilty, Assistant Adjutant General of Pennsylvania

Colonel Mark Himes, G-3, 10th Mountain Division

Major General William Hix, Director, Strategy, Plans & Policy, HQDA G-3/5/7

Colonel Shaun Hodge, J-3, Joint Force Headquarters-Washington

Lieutenant General Fredrick Hodges, Commanding General, U.S. Army Europe

Lieutenant Colonel George Hodges, G-3 Plans, First Army Division West

Lieutenant Colonel Ray Hoeflein, Chief of Operations, 40th Infantry Division

Mr. Frank Hoffman, Center for Strategic & International Studies

Lieutenant Colonel Robert L. Hohman, Office, Chief of the Army Reserve

Major General Daniel R. Hokanson, The Adjutant General of Oregon

Private First Class Alyssa Holden, Washington Army National Guard

Colonel Kenneth G. Holley, Operations Officer, U.S. Army Cadet Command /104th Training Command

Major General Jeffrey Holmes, Deputy Adjutant General of Tennessee

Mr. Eric Hopkins, IT Specialist, 75th Training Command

Major General Thomas A. Horlander, Deputy Assistant Secretary of the Army for Budget

Chief Warrant Officer 4 William Horne, OIC/Director/Senior Instructor, Regional Training Site-Maintenance, 139th Regiment

Mr. Stanley A. Horowitz, Cost Analysis & Research Division, Institute for Defense Analyses (IDA)

Brigadier General John Hort, G-3, U.S. Army Europe

Lieutenant Colonel (retired) Dr. Milton D. Houghton

Mr. Christopher Howard, Liaison, U.S. Forces Korea

Brigadier General Michael Howard, Deputy Commanding General-Operations, 10th Mountain Division

Colonel Jon Howerton, Staff, U.S. Army Pacific

Major General James Hoyer, The Adjutant General of West Virginia

Lieutenant Colonel Derrek Hryhorchuk, Commander, Houston Army Aviation Support Facility, Texas Army National Guard

Sergeant Samuel Hubbard, Company Standardization Instructor and ASF Employee (MILTECH), Alpha Company, 1-169th Aviation Regiment

The Honorable Richard Hudson, United States House of Representatives, North Carolina 8th District

Colonel (retired) Thomas Hueg, USAF, President, Department of Virginia, Reserve Officers Association

Mrs. Nancy Huff, Institute for Defense Analyses (IDA)

Mr. Tucker Hughes, Branch Chief, Center for Army Analysis Institute for Defense Analyses (CAA)

The Honorable Graham Hunt, State Representative, 2nd Legislative District, Washington

Colonel Edward J. Hunter, Assistant Chief of Staff, G-6, I Corps

Colonel Daniel Hurlbut, Commander, 120th Infantry Brigade, First Army Division West

The Honorable Asa Hutchinson, Governor of Arkansas
 The Honorable David Y. Ige, Governor of Hawaii
 Brigadier General James Illingworth, Military Attaché,
 Embassy of the United Kingdom
 Chief Warrant Officer 5 Steve Imeraj, State Command Chief
 Warrant Officer, Colorado Army National Guard
 The Honorable Jay Inslee, Governor of Washington
 Staff Sergeant Kevin Irving, Supply Sergeant, 479th Engineer
 Battalion
 Staff Sergeant Katherine Jackson, 62nd Airlift Wing Public
 Affairs
 Rear Admiral Lawrence Jackson, USN, Reserve Deputy
 Director, Warfare Integration Division, U.S. Navy
 Sergeant First Class Pamela Jackson, 104th Training Command
 Command Sergeant Major Dennis Jacques, Command
 Sergeant Major, 479th Engineer Battalion
 Colonel Jack James, Commander, 42nd Combat Aviation
 Brigade
 Colonel Manley James, Commander, 139th Regiment-North
 Carolina National Guard Regional Training Institute
 Major General Tom James, Commanding General, 7th
 Infantry Division
 Captain Justin Jarrell, Standardization & Evaluations Pilot,
 62nd Operations Group
 Lieutenant Colonel Robert T. Jarrett Jr, Executive Officer, 36th
 Combat Aviation Brigade
 Mr. Kenneth Jenkins, Unit Administrative Technician, 479th
 Engineer Battalion
 Command Sergeant Major Daniel Jennings, Command
 Sergeant Major, 278th Armored Cavalry Regiment
 Command Sergeant Major Thomas Jennings, Command
 Sergeant Major, 84th Training Command
 First Lieutenant Daniel Jester, 1st Squadron, 14th Cavalry
 Regiment
 Mr. Miguel Jimenez, Director, Surface Deployment &
 Distribution Command, Seattle, Washington
 Mr. David R. Johnson, RAND Corporation
 Lieutenant Colonel Donald Johnson, S-3, 2nd Medical Brigade
 Brigadier General John “Pete” Johnson, Director of Training,
 HQDA G-3/5/7
 Command Sergeant Major John Johnson, Command Sergeant
 Major, 52nd Brigade Engineer Battalion
 Major Louis Johnson, Assistant Division Engineer, 4th Infantry
 Division

Lieutenant Colonel Richard Johnson, Plans & Policy, HQDA
 G-35
 Colonel Russell Johnson, Commander, 116th Cavalry Brigade
 Combat Team
 Ms. Virginia Johnson, Director of Federal Relations, Office of
 the Governor, State of North Carolina
 Brigadier General Charles Jones, Deputy Adjutant General of
 Kentucky
 Lieutenant Colonel Craig Jones, G-4, Colorado Army National
 Guard
 Brigadier General Kenneth D. Jones, Commanding General,
 4th Expeditionary Sustainment Command
 Chief Warrant Officer 5 Kenneth Jones, Instructor Pilot,
 1-211th Attack Reconnaissance Battalion
 Colonel Stanley Jones, Commander, Ellington Field Joint
 Readiness Base & 147th Reconnaissance Wing, Texas Air
 National Guard
 Colonel Todd Jones, Director, Total Force, I Corps
 Major General James Joseph, The Adjutant General of
 Pennsylvania
 General (retired) George Joulwan, Former Supreme Allied
 Commander Europe
 Lieutenant General Timothy J. Kadavy, Director, Army
 National Guard
 Ms. Susan Kamas, Executive Director of Workforce Solutions
 of Central Texas
 Ms. Mara Karlin, Deputy Assistant Secretary of Defense,
 Strategy and Force Development
 Ms. Sheridan Kearnan, Minister-Counselor (Defense Policy),
 Embassy of Australia
 Colonel Valery C. Keaveny, Jr., Chief of Staff, 101st Airborne
 Division
 Mr. Jimmy Keefe, Commissioner, Cumberland County, North
 Carolina
 Colonel Alan Kellogg, Assistant Chief of Staff, G-1, I Corps
 General John Kelly, Commander, U.S. Southern Command
 (USSOUTHCOM)
 The Honorable Trent Kelly, U.S. Representative, 1st
 Congressional District, Mississippi
 Captain Charles Kelsey, Intelligence Officer, Army Reserve
 Element, U.S. Pacific Command Joint Intelligence Operations
 Center
 Major General (retired) Dennis Kenneally, Council Member,
 Governor of California’s Military Council

APPENDIX F: TESTIMONIES AND COMMENTS

Colonel James “Bo” Kenyon, Commander, 36th Combat Aviation Brigade
Lieutenant Colonel Donald Kettering, 6-108th Military Intelligence Battalion
Colonel Kevin Kick, Special Projects, Colorado Army National Guard
First Lieutenant Christine Kim, Administrative Assistant, 145th Multi-Functional Medical Battalion
Major Robert Kincaid Jr., Commander, Headquarters & Headquarters Company, 111th Engineer Brigade
Sergeant First Class Scott King, First Sergeant, Alpha Company, 1-169th Aviation Regiment
Dr. Christopher Kirchhoff, Director for Strategic Planning, National Security Council
Colonel Kajari Klettenberg, Defense Attaché, Embassy of Estonia
Mr. Josh Klimas, Policy Researcher, RAND Corporation
Mr. Dan Klippstein, Deputy Director, Strategy, Plans & Policy, HQDA G-3/5/7
Lieutenant Colonel Damon Knarr, Division Engineer, 4th Infantry Division
Captain Jason Kneib, G-33 Orders Chief, Command Operations & Information Center, I Corps
Major Charles Knoll, Executive Officer, 4th Infantry Division Artillery
Lieutenant Colonel Kurt Kobernik, Commander, 3-116th Infantry Regiment
Colonel Charles Kohler, Public Affairs Officer, Joint Force Headquarters-Maryland
Brigadier General Troy D. Kok, Deputy Commanding General-Support, U.S. Army Recruiting Command
Sergeant First Class Eric Kolar, 1972nd Combat Operational Stress Control Detachment
Brigadier General Kenneth Koon, Assistant TAG, Wisconsin National Guard, and Deputy Commander, Division West, 1st Army
Airmen First Class Jeremy Kosick, Loadmaster, 8th Airlift Squadron
Mr. Nicholas Kosteletzky, Installation Transportation Officer, Joint Base Lewis-McChord, Washington
Mr. Edward Koucheravy, Director, Land Forces Division, Cost Assessment & Program Evaluation Office, Office of Secretary of Defense Legislative Affairs
Mr. Jeff Kramer, Training Officer, G-3, First Army Division West

Lieutenant Colonel Erik Krivda, G-5, I Corps
Lieutenant Colonel Max Krupp, Commander, 1-143rd Infantry Regiment (Airborne)
Lieutenant Colonel Blake Lackey, G-33 Chief, Command Operations & Information Center, I Corps
Lieutenant Colonel Stephen Ladd, Commander, 2-214th Aviation Regiment
Command Sergeant Major Shane Lake, Senior Enlisted Advisor, Oregon Army National Guard
Colonel Adam Lange, G-3 Air, III Corps
Specialist Stephanie Lanham, Human Resources Specialist, 1006th Quartermaster Company
Dr. Michael Lankowski, First Secretary (Defense Strategic Policy), Embassy of Australia
Lieutenant General Stephen Lanza, Commanding General, I Corps
Major Kevin Larrabee, Deployment & Enablers Division, Center for Army Analysis, HQDA G-8
Colonel Bryan Laske, Garrison Commander, Fort Drum, New York
Lieutenant General James B. Laster, USMC, Director, U.S. Marine Corps Staff
Brigadier General John Lathrop, Deputy Commanding General, 40th Infantry Division
Brigadier General Markus Laubenthal (German Army), Chief of Staff, U.S. Army Europe
Brigadier General Donald Laucirica, Assistant Adjutant General of Colorado
Major Ian Lauer, National Training Center
Major Stephanie Lawrence, Staff Officer, First Army Division East
Mr. Bruce Leach, Director, Military Sealift Command, Seattle
Mr. Jon Lee, Deputy, Management & Support, 9th Mission Support Command
Mr. Lee, 351st Civil Affairs Command (CACOM)
Mrs. Maren Leed, Senior Advisor, Defense Policy Studies & International Security Program, Center for Strategic & International Studies
Colonel Michael Leeney, Chief of Staff, 40th Infantry Division
Colonel John Leffers, Chief of Staff, First Army Division West
Lieutenant General Mary Legere, Deputy Chief of Staff G-2, HQDA
Lieutenant General Joseph Lengyel, Vice Chief, National Guard Bureau

Brigadier General Roderick R. Leon Guerrero, The Adjutant General of Guam

Colonel Robert Lesher, G1, Hawaii Army National Guard

Colonel David Lesperance, Chief, Operations Group, National Training Center

Command Sergeant Major Rodney Lewis, Command Sergeant Major, 10th Mountain Division

Mr. Lars Liden, G-3 Force Modernization, I Corps

Sergeant First Class Jacob Lindholm, 10th Special Forces Group (Airborne)

Colonel John J. Lindsay, HQDA G-3/5/7 Aviation Directorate

Staff Sergeant Marshall Lindsay, E Detachment NCOIC (TPU), Alpha Company, 1-169th Aviation Regiment

Major Samuel Linn, S-3, 4th Infantry Division Artillery

Colonel Bruce Linton, Commander, 66th Theater Aviation Command

Colonel Ernest Litynski, 76th Operational Response Command

Major General Robert Livingston Jr., The Adjutant General of South Carolina

Brigadier General Arthur J. Logan, The Adjutant General of Hawaii

Colonel Stephen F. Logan, Commander, 29th Infantry Brigade Combat Team

Captain Andrew Lohrenz, S-4, 2-77th Field Artillery Battalion

Major General Neal Loidolt, Commanding General, 34th Infantry Division

Mr. Michael Lombard, Unit Administrator, Army Reserve Element, U.S. Pacific Command Joint Intelligence Operations Center

Mrs. Bonnie Longie, 62nd Airlift Wing Protocol Office

Sergeant Jesus Lopez, Headquarters & Headquarters Company, 79th Theater Sustainment Command

Lieutenant Colonel Bryan Love, G-2, 4th Infantry Division

Colonel Adam Loveless, Chief of Staff, 7th Army Joint Multinational Training Command

The Honorable Alan Lowenthal, U.S. Representative, 47th Congressional District, California

Lieutenant Colonel Chris Lowman, Deputy J-3, Joint Force Headquarters-Colorado

Major Michael Lueckeman, S-3, 10th Special Forces Group (Airborne)

Major General Michael Lundy, Commanding General, U.S. Army Aviation Center of Excellence

Major General Gregory Lusk, The Adjutant General of North Carolina

Mr. Dana Luton, Army Campaign Plan Integrator, U.S. Army Forces Command

Mr. James Lynch, Facility Supervisor, Army Reserve Aviation Support Facility-Conroe, Texas

Command Sergeant Major Sheryl Lyon, Command Sergeant Major, U.S. Army Europe

Staff Sergeant Christopher Lytle, Instructor (MOS 35L), 6-108th Military Intelligence Battalion (USAR)

Lieutenant General Sean MacFarland, Commanding General, III Corps & Fort Hood, Texas

Dr. Douglas MacGregor, Burke-MacGregor, LLC

Sergeant Natasha MacKenzie, Vulture Team Operations SGT, NTC Urban Warfare Media Center

Command Sergeant Major Eric Macher, Command Sergeant Major, 2-77th Field Artillery Battalion

Command Sergeant Major Ed Macias, Command Sergeant Major, 169th Field Artillery Brigade

Lieutenant Colonel Craig Macina, Exercise Planner, 5th Armor Brigade, First Army

Mr. Rodney Maddox, Chief Deputy Secretary, North Carolina Secretary of State

Chief Warrant Officer 4 Ronald Magaro, Supervisor, Unit Training Equipment Site-Fort Indiantown Gap, Pennsylvania

Major Joycelyn Magday, Scribe, 79th Theater Sustainment Command

Brigadier General Mark Malanka, Deputy Commanding General, 40th Infantry Division

The Honorable Dan Malloy, Governor of Connecticut

Colonel Shawn Manke, Commander, 34th Combat Aviation Brigade

Mr. Steve Mannell, Chairman, Chamber of Commerce Military Affairs, Fayetteville, North Carolina

The Honorable Jack Markell, Governor of Delaware

Colonel James C. Markert, Chief of Staff, III Corps & Fort Hood

Colonel Kyle J. Marsh, Commander, 101st Division Artillery

Command Sergeant Major Alvin Martin, Command Sergeant Major, 3-116th Infantry Regiment

Major Brett Martin, Executive Officer, Theatre Special Operations Detachment, Colorado Army National Guard

Ms. Candis Martin, Army Reserve Ambassador

APPENDIX F: TESTIMONIES AND COMMENTS

Colonel Donna W. Martin, Deputy Commanding General-Operations, U.S. Army Recruiting Command

Command Sergeant Major Jerry Martin, Command Sergeant Major, 139th Regiment

Major General Joseph Martin, Commanding General, National Training Center and Fort Irwin

Major General Theodore Martin, Commanding General, 2nd ID

Lieutenant Colonel Isaac Martinez, Commander, 193rd Military Police Battalion

Mr. David Martino, Officer Personnel Management Director, Human Resource Command

Command Sergeant Major Brandon Marx, Command Sergeant Major, Centennial Training Site, 168th Regiment-Colorado Army National Guard Regional Training Institute

Colonel Charles Masaracchia, Commander, 2nd Armored Brigade Combat Team, 1st Armored Division

Brigadier General James Mason, Deputy Commanding General, 807th Medical Command (Deployment Support)

Specialist Ryan Mason, 1st Squadron, 14th Cavalry Regiment

Lieutenant Colonel Christine Massey, G-4, 4th Infantry Division

Mr. Kyosuke Matsumoto, Counselor, Embassy of the Japan

Captain Tyler Mayes, G-33 Battle Captain, Command Operations & Information Center, I Corps

Lieutenant Colonel Phil Mazingo, Commander, 4-3rd Aviation Regiment

Brigadier General Abdelraham Al Mazmi, Defense Attaché, Embassy of the United Arab Emirates

Staff Sergeant Ronald McAndrew, Flight Standards Instructor, Eastern Army National Guard Aviation Training Site

Specialist Sera McArthur, Washington Army National Guard

The Honorable Terry McAuliffe, Governor of Virginia

Chief Warrant Officer 4 Thomas McAuliffe, Brigade Standardization Pilot

Major General Todd B. McCaffrey, Chief of Staff, U.S. Army Pacific

Major General (retired) Mark McCarley

Lieutenant General (retired) Dennis McCarthy, former Chairman, National Commission on the Structure of the Air Force

Lieutenant Colonel Robert McCaskell, Office, Chief of the Army Reserve

Major General Jonathon McColum, Commanding General, 103rd Expeditionary Sustainment Command

Mr. Dan McCormack, G-3 Staff, U.S. Army Europe

Colonel James G. McCormack, Operations Officer, 166th Regiment-Pennsylvania Army National Guard Regional Training Institute

First Lieutenant Vanessa McCormick, Course Manager, 6-108th Military Intelligence Battalion (USAR)

The Honorable Pat McCrory, Governor of North Carolina

Colonel Michael McCurry, Commander, 10th Combat Aviation Brigade

Major John McElveen, Commander, 1-151st Attack Reconnaissance Battalion

Second Lieutenant Jawana McFadden, 40th Infantry Division

Lieutenant Colonel Andreas McGhee, 84th Training Command

Lieutenant Colonel Drake McGraw, Commander, 32nd Civil Support Team

Master Sergeant Douglas McGregor, 62nd Operations Support Squadron

Major General Michael McGuire, The Adjutant General of Arizona

The Honorable John McHugh, 21st Secretary of the Army

Brigadier General Terrence McKenrick, Commander, Brigade Modernization Command

Lieutenant General James McLaughlin, Deputy Commander, U.S. Cyber Command (USCC)

Major Cara McLean, S-1, 89th Troop Command

First Sergeant Matthew McLeod, acting Command Sergeant Major, 4/3 Assault Helicopter Battalion

Lieutenant General H.R. McMaster, Deputy Commanding General, Futures & Director, Army Capabilities Integration Center, U.S. Army Training & Doctrine Command

Mr. Jim McMillian, G-5, U.S. Army Africa

Brigadier General Chris McPadden, Deputy Director, Strategy & Policy, Joint Staff J-5

The Honorable Matthew Mead, Governor of Wyoming

Mrs. Robin Mealer, Director, U.S. Army Manpower Analysis Agency

Captain Norian Medina, Student, U.S. Army Civil Affairs Psychological Operations Command

Major Will Medlicott, Director of Staff, 62nd Airlift Wing

First Lieutenant Elyse Ping Medvigg, Fire Direction Officer, 2-77th Field Artillery Battalion

Staff Sergeant Angel Melendez, S-3 NCOIC, 1-158th Attack Reconnaissance Battalion

Specialist Joseph Mena, 63rd Ordnance Company

Command Sergeant Major Harry Mercado, Command Sergeant Major, 5th Signal Command

Lieutenant Colonel Jeff Merricks, Executive Officer, 34th Combat Aviation Brigade

Sergeant First Class Shawn Merrill, Enlisted Flight Platoon Sergeant, Eastern Army National Guard Aviation Training Site

Lieutenant General (retired) Thomas Metz, former III Corps Commander

Mr. Robert Meyer, Senior Manager, Port Operations, Port of Tacoma

Colonel Carl Michaud, National Training Center

Colonel Greg Michel, Garrison Commander, Camp Shelby, Mississippi

Lieutenant Colonel Richard Mifsud, Commander, 1-160th Infantry Regiment

First Lieutenant Nolan Miles, Platoon Leader, 52nd Brigade Engineer Battalion

Command Sergeant Major Dale Miller, Command Sergeant Major, Eastern Army National Guard Aviation Training Site

First Lieutenant Daniel Miller, Aide-de-Camp, U.S. Army Regional Health Command Europe

Major General Harry Miller, Commanding General, 42nd Infantry Division

Master Sergeant Jason Miller, Operations NCO, U.S. Army Reserve Command

General Mark Milley, 39th Chief of Staff of the Army

Chief Warrant Officer 3 John Millsap, Cyber Protection Brigade, 7th Signal Command

Major Matthew R. Minear, Operations Officer, 1st Air Cavalry Brigade

Chief Warrant Officer 3 Richmond Minton, 1st Squadron, 14th Cavalry Regiment

Colonel Scott Mitchell, Commander, 196th Infantry Brigade

Mr. Jim Mitre, Foreign Affairs Specialist, Office of the Under Secretary of Defense for Policy

Major General (retired) Paul Mock, National Chair for Employer Support for the Guard & Reserve

Specialist Charles Moerke, 1st Squadron, 14th Cavalry Regiment

Specialist Joseph Monaco, 1st Squadron, 14th Cavalry Regiment

Captain Benjamin Monson, 10th Special Forces Group (Airborne)

Staff Sergeant Montgomery – Public Affairs NCO, Fort Meade, Maryland

Colonel Matthew Moore, National Training Center

Mr. Mike Moose, North Carolina Chapter, Reserve Officers' Association

Sergeant Jesus Morales, 145th Multi-Functional Medical Battalion

Colonel Jesse Morehouse, Commander, 168th Regiment-Colorado Army National Guard Regional Training Institute

Lieutenant Colonel Michael Moreni, Commander, 1st Squadron, 163rd Cavalry Regiment

Mr. Darrell Morgeson, Institute for Defense Analyses (IDA)

Dr. Jamie Morin, Director, Cost Assessment & Program Evaluation Office, Office of the Secretary of Defense (CAPE)

Mr. Joseph Morosco, Principal Deputy National Intelligence Officer/Manager for Military Issues, National Intelligence Council

Mr. Glenn Morrison, Killeen City Manager

Mr. Jim Motties, G-7, U.S. Army Africa

Sergeant First Class Pablo Munoz, 63rd Ordnance Company

Mrs. Najla Munshower-Neumann, Military spouse

Lieutenant Colonel Mercedes Murillo, Assistant G-3, 79th Theater Sustainment Command

Major Bryan Murphy, Executive Officer, Centennial Training Site, 168th Regiment-Colorado Army National Guard Regional Training Institute

Major General Patrick Murphy, The Adjutant General of New York

Lieutenant General John M. Murray, Deputy Chief of Staff G-8, HQDA

Colonel Terrence Murrill, Commandant, Recruiting/Retention School, U.S. Army Recruiting Command

Colonel Michael Musiol, Commander, 82nd Combat Aviation Brigade

Mr. Ted Musselman, U.S. Government Stevedoring Contractor

Brigadier General Frank Muth, Director, Army Quadrennial Defense Review Office, HQDA G-8

Colonel Paul Nanamori, Deputy Chief of Staff for Logistics, Hawaii Army National Guard

APPENDIX F: TESTIMONIES AND COMMENTS

Sergeant First Class Johnny Napier, Warrior Leader Course
Chief Instructor, 168th Regiment-Colorado Army National
Guard Regional Training Institute

Major General Richard Nash, The Adjutant General of
Minnesota

Lieutenant Colonel Edmund Naughton, Commander, 1-158th
Attack Reconnaissance Battalion

Lieutenant Colonel Scott Nauman, National Training Center
Senior Brigade Trainer

Staff Sergeant Jeffrey Nelan, California Army National Guard

Staff Sergeant Kathryn S. Nesselrodt, Human Resource NCO,
West Virginia Army National Guard

Colonel Tim Newsome, Chief of Staff, First Army Division
East

Major Scott P. Nicholas, Commander, 1-149th Attack
Reconnaissance Battalion

Mr. David Nichols, Director, Cost Analysis & Research
Division, Institute for Defense Analyses (IDA)

Major General John Nichols, The Adjutant General of Texas

Sergeant First Class Ben Nievera, 132nd Engineer Company
(Multi-Role Bridge)

Dr. Marc Nigliazzo, President Texas AM

The Honorable Jeremiah Nixon, Governor of Missouri

Command Sergeant Major James Norman, Command Sergeant
Major, I Corps

Chief Warrant Officer 4 Austin Norris, Battalion Master
Gunner and Standardization Pilot

Command Sergeant Major Derwood Norris, Command
Sergeant Major, 1-130th Attack Reconnaissance Battalion

Colonel Jan C. Norris, Garrison Commander, Fort Hunter-
Liggett, California

Mr. Dave Norton, Exercise Director, Exportable Combat
Training Center

Command Sergeant Major Gregory F. Nowak, Command
Sergeant Major, 101st Airborne Division

Sergeant Ana Nunez, Imagery NCO, Army Reserve Element,
U.S. Pacific Command Joint Intelligence Operations Center

Command Sergeant Major David Nunn, Command Sergeant
Major, 66th Theater Aviation Command

Colonel Mark O'Donnell, Chief of Staff, 10th Mountain
Division

Dr. Michael E. O'Hanlon, Director of Research for Foreign
Policy, Brookings Institution

Command Sergeant Major William O'Neal, Command
Sergeant Major, U.S. Army Regional Health Command Europe

Mr. David A. Ochmanek, RAND Corporation

General Raymond Odierno, 38th Chief of Staff of the Army

Colonel Michael Oeschger, Commander, 4th Infantry Division
Artillery

Chief Warrant Officer 5 James O'Gorman, 120th Infantry
Brigade, First Army Division West

Chief Warrant Officer 3 Gregory Olivo, Network Operations
Security Cell, Brigade Modernization Command

Colonel Kevin Olson, Public Affairs Officer, Joint Force
Headquarters-Minnesota

Staff Sergeant Timothy Oremus, 1st Squadron, 14th Cavalry
Regiment

Staff Sergeant Oswaldo Ramos Ortiz, Instructor (MOS 35M),
6-108th Military Intelligence Battalion (USAR)

Major General (retired) Rudolph Ostovich III, former
Commander, U.S. Army Aviation Center

Major General Paul A. Ostrowski, Deputy, Acquisition &
Systems Management, Office of the Assistant Secretary of the
Army (ALT)

Ms. Stephanie Otto, U.S. Army Europe

Command Sergeant Major Craig Owens, Command Sergeant
Major, 200th Military Police Command

Major General (retired) Darren Owens

Mr. Bryan Paarmann, Deputy Assistant Director, Counter
Terrorism Division & National Counter Terrorism Center,
Federal Bureau of Investigation (FBI)

Lieutenant General (retired) Dave Palmer

Chief Robert Paoletti, Chief of Police, Redding, California

Mr. Mike Pappas, Senior Advisor, Intelligence Capabilities &
Requirements, HQDA G-2

Mr. Bill Pardue, Deputy Director, Aviation Force
Development, HQDA G-8

Colonel Amos Parker, Commander, 154th Regiment-
Mississippi National Guard Regional Training Institute

Colonel Tim Parker, Assistant Chief of Staff, G-2, I Corps

Mr. Jack Parkhurst, Deputy Chief, Aviation Division, U.S.
Army Forces Command

Mr. Bill Parry, the City Manager of the City of Gatesville, Texas

Command Sergeant Major Thomas Parsley, Command
Sergeant Major, 4th Infantry Division Artillery

Mr. David Paschal, Deputy Director Operations, G-3/5/7,
U.S. Army Training & Doctrine Command

Major General James Pasquarette, Commander, U.S. Forces Japan

Command Sergeant Major Lou Pauka, Command Sergeant Major, 10th Special Forces Group (Airborne)

Lieutenant Colonel Douglas Paul, G-3, Special Operations Detachment-Korea, Colorado Army National Guard

Captain Abe Payne, Commander, 1st Squadron, 14th Cavalry Regiment

Colonel Shana Peck, G-3, 32nd Army Air & Missile Defense Command

Colonel Isaac Peltier, Commander, 10th Special Forces Group (Airborne)

Colonel David Pendall, Commander, 66th Military Intelligence Brigade

Colonel William Pendergast, Commander, 41st Infantry Brigade Combat Team

Mr. John H. Pendleton, Director, Force Structure & Readiness Issues, Government Accountability Office

Colonel (retired) George Penrod, Chief Executive Officer, 75th Training Command

Captain Rafael Perez, Supervisory Staff Administrator, 75th Training Command

General David G. Perkins, Commanding General, U.S. Army Training & Doctrine Command

Mr. Wayne Perry, Military spouse

Airmen First Class Benjamin Person, Loadmaster, 8th Airlift Squadron

Major Phillip Peters, Commander, Aviation Training Battalion-Utility, Eastern Army National Guard Aviation Training Site

Ms. Andrea Peterson, Legislative Affairs Manager, National Guard Association of the United States

Master Sergeant Ryan Peterson, Senior NCO Imagery Analyst, Army Reserve Element, U.S. Pacific Command Joint Intelligence Operations Center

Mr. Lynn Petrie, Facilities Support Technician, Operational Readiness Training Center-Fort Drum, New York

Sergeant First Class Katherine Phelps, Senior Human Resource NCO, Army Reserve Element, U.S. Pacific Command Joint Intelligence Operations Center

Sergeant Russel Philips IV, 1972nd Combat Operational Stress Control Detachment

Colonel Bryan Phillips, 2nd Medical Brigade

Lieutenant Colonel David L. Phillips, Deputy Director, Plans, Training, Mobilization, & Security, Fort Hunter-Liggett, California

Major General Jeffrey E. Phillips, Executive Director, Reserve Officers Association

Mr. Tom Pierson, President & CEO, Tacoma-Pierce County Chamber

Chief Warrant Officer 4 John Piland, Battalion Aviation Maintenance Officer, 1-130th Attack Reconnaissance Battalion

Lieutenant Colonel Oscar Pintado, Deputy Chief of Staff G-3, First Army Division West

Mr. Bradley Pippin, Director, TRAC-FLVN, TRADOC Analysis Center, U.S. Army Training & Doctrine Command

Command Sergeant Major Rodney Plamondon, Command Sergeant Major, 1-184th Infantry Regiment

Brigadier General Todd Plimpton, Land Component Commander, Oregon Army National Guard

Sergeant First Class Terrance Pollard, Senior Human Resources Sergeant, 479th Engineer Battalion

Command Sergeant Major Sergio Porras, Command Sergeant Major, 1-160th Infantry Regiment

First Sergeant Robert Porter, First Sergeant, 1st Squadron, 14th Cavalry Regiment

Mr. Mike Pott, Task Force 1, South Metro Twin Cities, Minnesota Fire Department

Colonel Laura Potter, G-2, U.S. Army Europe

Colonel Dane Powell, Aviation Safety Officer, Joint Staff, Joint Force Headquarters-Mississippi

Master Sergeant Benjamin Prebble, Senior Imagery Analyst, Army Reserve Element, U.S. Pacific Command Joint Intelligence Operations Center

The Honorable David Price, United States House of Representatives, North Carolina 4th District

Lieutenant Colonel Robert Price, Division Surgeon, 4th Infantry Division

Chief Warrant Officer 2 George Protzman, Company A Standardization Pilot, 1-151st Attack Reconnaissance Battalion

Colonel Roger Pukahi, Commander of the 103rd Troop Command, Hawaii Army National Guard

Major General (retired) Arnold Punaro, USMCR

Lieutenant Colonel Rolland Quidachay, 100th Missile Defense Brigade

Corporal Henry Quinones-Ayala, 104th Training Command

Lieutenant Colonel Ralph Radka, Commander, 52nd Brigade Engineer Battalion

The Honorable Gina Raimondo, Governor of Rhode Island

APPENDIX F: TESTIMONIES AND COMMENTS

Chief Warrant Officer 5 Manuel Ramos, Senior All-Source Analyst, Army Reserve Element, U.S. Pacific Command Joint Intelligence Operations Center

Lieutenant Colonel Kevin S. Ray, Deputy A-5, 130th Air Wing, West Virginia Air National Guard

Captain Joe Raymond, U.S. Coast Guard Sector Commander, Puget Sound, Washington

Mr. Chris Reddish, Chief, Strategy, Policy & Transformation Division, U.S. Army Forces Command

Warrant Officer 1 Robert Reed, Unmanned Aircraft Systems Operator, 556th Military Intelligence Company, 56th Stryker Brigade Combat Team

Colonel Shawn Reger, National Guard Bureau

Major General Timothy Reisch, The Adjutant General of South Dakota

Command Sergeant Major Rodney Rhoades, Command Sergeant Major, 21st Theater Sustainment Command

Captain Devin Richter, Commander, 63rd Ordnance Company

Mr. Mark Riddle, UH-60 Staff Synchronization Officer, Aviation Force Development, HQDA G-8

Master Sergeant Dennis Riggs, Operations NCO, Special Operations Detachment-Europe, West Virginia Army National Guard

Sergeant Major Brian Rikstad, 81st Armored Brigade Combat Team

Chief Warrant Officer 3 Daniel Rittler, Company Standardization Pilot (AGR), Alpha Company, 1-169th Aviation Regiment

Lieutenant Colonel Thomas Rivenbark, National Guard Bureau

Captain Rafael A. Rivera, Commander, 1010th Engineer Construction Company

Major Adam Rix, Operations Officer, 40th Infantry Division

Colonel Brandon Robins, Commander, 177th Armor Brigade, First Army

Brigadier General Jessie Robinson, Assistant Adjutant General (Army) of Mississippi

Colonel Lori Robinson, Commander, 4th Combat Aviation Brigade

Captain Michael Rochford, G-33 Battle Captain, Command Operations & Information Center, I Corps

Lieutenant Colonel William Rockefeller III, Commander, 2-12th Cavalry Regiment

General David Rodriguez, Commander, U.S. Africa Command (USAFRICOM)

Sergeant First Class David Rodriguez, Training NCO, Echo Company, 1-158th Attack Reconnaissance Battalion

Master Sergeant Luis Luna Rodriguez, J-3 NCO, Joint Force Headquarters-Colorado

Lieutenant Colonel Bren Rogers, J-57, Joint Force Headquarters-Colorado

Captain Kyle Rogers, Fox Company, 227th Aviation Regiment
Brigadier General Andrew Rohling, Acting Senior Commander, 10th Mountain Division

Sergeant Gavin Ros, 1st Squadron, 14th Cavalry Regiment

Lieutenant Colonel Jason Rosenstrauch, G-5, 4th Infantry Division

Colonel John Rosnow, Commander, 644th Regional Support Group & Minnesota Emergency Preparedness Liaison Officer

Lieutenant Colonel Bryan Ross, National Guard Bureau

Mr. Jack Rostetter, Chief Executive Officer, Chamber of Commerce, Fayetteville, North Carolina

Colonel Michael Rowells, Deputy Commander, 76th Operational Response Command

Colonel Walter Rugen, Director, Aviation Force Development, HQDA G-8

Chief Warrant Officer 4 Stephen Rugg, Instructor Pilot, 1-211th Attack Reconnaissance Battalion

Specialist Heather Rusaw, 1972nd Combat Operational Stress Control Detachment

Colonel Bill Ryan, Commander, 16th Combat Aviation Brigade

Major Douglas Ryle, Deputy G-5, 807th Medical Command (Deployment Support)

Colonel Jeffrey Sabatine, Chief Of Staff, Washington Army National Guard

Mr. Robert Salesses, Deputy Assistant Secretary of Defense for Homeland Defense, Integration & Defense Support of Civil Authorities

Command Sergeant Major Noe Salinas, National Training Center

Colonel James R. Salome, Garrison Commander, Fort Campbell, Kentucky

Major General Gary Saylor, The Adjutant General, Idaho National Guard

General Curtis M. Scaparrotti, Commander, U.S. Forces Korea

Dr. Nadia Schadlow, Center for Strategic & International Studies

Brigadier General Miyako Schanley, Deputy Commanding General-Operations, 412th Theater Engineer Command

The Honorable Robert Scher, Assistant Secretary of Defense for Strategy, Plans & Capabilities

Mr. Clem Schimikowski, Hazmat Officer, Canadian Pacific Rail Emergency Response

Colonel Mark Schindler, Chief of Staff, Joint Force Headquarters-Pennsylvania

Major General (retired) Jeffrey Schloesser, former Director of Army Aviation, HQDA & past commander 101st Airborne Division

Lieutenant Colonel Kevin Schooler, Chief-Minneapolis Detachment, Army Reserve Element, U.S. Pacific Command Joint Intelligence Operations Center

General (retired) Robert Shoemaker

Lieutenant Colonel Jennifer L. Schulke, Executive Officer, 10th Army Air & Missile Defense Command

Lieutenant Colonel Steven Schultz, Commander, Field Support Battalion, 405th Army Field Support Brigade

Mr. Uli Seal, Task Force 1 Commander, Bloomington, Minnesota Fire Department

Captain Morgan Seitz, Director of Plans & Integration, Camp Atterbury, Indiana

Lieutenant Colonel Matthew Sheiffer, G-7, 4th Infantry Division

Major James Sheldon, Executive Officer for The Adjutant General of Virginia

Lieutenant Colonel Scott Sherman, J-3, Joint Force Headquarters-Colorado

Brigadier General Raymond Shields, Director, Joint Force Headquarters-New York

Mr. Russell Shim, Modeling Analyst, TRADOC Analysis Center, U.S. Army Training & Doctrine Command

Major General Kyoung Soo Shin, Defense Attaché, Embassy of the Republic of Korea

Colonel Michael Shrout, Operations Officer, First Army Division East

Sergeant Major Gregory Silva, 746th Combat Sustainment Support Battalion

Mr. Raymond Silva, Chief of Readiness, U.S. Army Civil Affairs Psychological Operations Command

Colonel Adam Silvers, Commander, Special Operations Detachment-Korea, Colorado Army National Guard

Warrant Officer 1 David Silvia, UH-60 Pilot (TPU), Alpha Company, 1-169th Aviation Regiment

Colonel Curt Simonson, Commander 56th Information Operations Brigade

Colonel Katherine Simonson, Commander, 396th Combat Support Hospital

Major General Lester Simpson, Commanding General, 36th Infantry Division

Colonel Douglas Sims, Chief of Staff, 4th Infantry Division & Fort Carson

Brigadier General (retired) E.J. Sinclair, President, Army Aviation Association of America

Major General Linda Singh, The Adjutant General of Maryland

Mr. Greg Singleton, Liaison Officer, U.S. Army Material Command

Mr. James G. Singleton, Liaison Officer, U.S. Army Material Command

Lieutenant Colonel Robert Sketch, Commander, Headquarters & Headquarters Battalion, 4th Infantry Division

Colonel Jeffrey Smiley, J-3, Joint Force Headquarters-California

Lieutenant Colonel Brian Smith, Deputy Commander, 62nd Operations Group

Colonel (retired) Cindy Smith

Command Sergeant Major Charles E. Smith, Command Sergeant Major, Human Resource Command

Mr. Imam Eronomy Mohammed Smith, private citizen

Major Kenneth Smith, Supervisory Instructor Pilot/Operations Officer, Army Aviation Support Facility-Fort Indiantown Gap, Pennsylvania

Lieutenant Colonel Kurt Smith, Commander, 2-506th Infantry Battalion, 101st Airborne Division

Captain Nathan Smith, Enlisted Training Company Commander, Eastern Army National Guard Aviation Training Site

Lieutenant Colonel Sean Smith, Chief of Operations G-3, First Army Division West

Colonel Sydney Smith, Commander, 404th Army Field Support Brigade

Warrant Officer 1 Tyler Smith, Unmanned Aircraft Systems Operator, 556th Military Intelligence Company, 56th Stryker Brigade Combat Team

Chief Warrant Officer 5 Wendell Smith, AH-64D Standardization Instructor Pilot, Army Aviation Support Facility-Fort Indiantown Gap, Pennsylvania

APPENDIX F: TESTIMONIES AND COMMENTS

Major General William Smith, Deputy Adjutant General of Texas

Major General Jeffrey Snow, Commanding General, U.S. Army Recruiting Command

Lieutenant Colonel Neil Snyder, Commander, 2-77th Field Artillery Battalion

Lieutenant Colonel David Sonnek, Inspector General, 79th Theater Sustainment Command

First Sergeant Edwin Soto, First Sergeant, 1010th Engineer Construction Company

First Sergeant Jan A. Spaans, First Sergeant, 155th Engineer Company (Vertical)

Command Sergeant Major Sammy Sparger, Command Sergeant Major, 2nd Infantry Brigade Combat Team, 4th Infantry Division

Ms. Tiffany Speir, Program Manager, South Sound Military & Communities Partnership

Colonel Kelly Spillane, Deputy Commander for Support, U.S. Army Space & Missile Defense Command, Army Forces Strategic Command

Staff Sergeant (retired) Emmett Spraktes

Major General David A. Sprynczynatyk, The Adjutant General of North Dakota

Mr. James St. Amour, AH-64 Staff Synchronization Officer, Aviation Force Development, HQDA G-8

Captain Jason Stanley, Company Commander, Alpha Company, 1-169th Aviation Regiment

Mrs. Scheyda Stasik, Family Programs Director, 75th Training Command

Colonel Scott A. St. Sauver, Garrison Commander, Camp Ripley Training Center, Minnesota

Brigadier General Michael Stencil, Chief of Staff, Oregon Army National Guard

Ms. Murnike Stevenson, SHARP Program Manager, 79th Theater Sustainment Command

Sergeant Major Gary Stockdale, Army Reserve Element, U.S. Pacific Command Joint Intelligence Operations Center

Staff Sergeant Michael Stoddard, 104th Training Command

Dr. Steve Stoddard, Technical Director, Center for Army Analysis Institute for Defense Analyses (CAA)

Staff Sergeant Jon Stone, Squad Leader, 52nd Brigade Engineer Battalion

Brigadier General Jarosław Stróżyk, Defense Attaché, Embassy of Poland

Master Sergeant Samantha Stryker, G-7, Command Operations & Information Center, I Corps

Major Jason Stuchlik, J-35, Joint Force Headquarters-COLORADO General (retired) Gordon R. Sullivan, President, Association of the United States Army

Command Sergeant Major Roy Sullivan, Command Sergeant Major, 59th Aviation Troop Command

Staff Sergeant Tyra Supranovich, Instructor (MOS 35M), 6-108th Military Intelligence Battalion (USAR)

Mr. Bill Suver, Special Projects Deputy, West Virginia Army National Guard

Command Sergeant Major John Swart, Command Senior Enlisted Leader, North Carolina Army National Guard

Brigadier General Michael Swezey, Commanding General, 53rd Troop Command

Colonel Brett G. Sylvia, Commander, 502nd Infantry Regiment, 101st Airborne Division

Sergeant First Class Lowell Tack, 1-158th Attack Reconnaissance Battalion

Major General Lee Tapanelli, The Adjutant General of Kansas Chief Warrant Officer 3 Timothy Taite, 75th Training Command

Lieutenant General Jeffrey Talley, Chief, Army Reserve

Brigadier General Keith Y. Tamashiro, Director of Joint Staff, Hawaii Army National Guard

Sergeant Philip Tarvin, UH-60 Crewchief (TPU), Alpha Company, 1-169th Aviation Regiment

Staff Sergeant Ian Tashima, 40th Infantry Division

Major General Megan Tatu, Commanding General, 79th Theater Sustainment Command

Lieutenant General (retired) Pete Taylor

Captain Renee Taylor, Aide-de-Camp, 75th Training Command

Chief Warrant Officer 5 Kirk Teaney, Command Chief Warrant Officer, 10th Special Forces Group (Airborne)

Mr. Paul Terry, Professional Staff Member, Appropriations Defense Committee, U.S. House of Representatives

Staff Sergeant Daniel Thomas, U.S. Army Civil Affairs Psychological Operations Command

Major General Gary Thomas, Deputy Director, Force Management, Application & Support, Joint Staff J-8

Mr. Jim Thomason, Institute for Defense Analyses (IDA)

Colonel Jeffery Thompson, Commander, 1st Air Cavalry Brigade

Mr. Charles Thornton, 627th Security Forces Squadron
The Honorable Thom Tillis, United States Senator, North Carolina
Captain Mark Timmons, Director, Company Grade Committee (Army), National Guard Association of the United States
Master Sergeant Maleatasi Togafau, G-33 Operations NCO, Command Operations & Information Center, I Corps
Colonel Tomasa, Hawaii Army National Guard
The Honorable Earl Ray Tomblin, Governor of West Virginia
Major General Edward W. Tonini, The Adjutant General of Kentucky, & former President, Adjutant Generals Association of the United States
Major General Omer “Clif” Tooley, Jr, Commander, Atterbury-Muscatatuck Center for Complex Operations
Master Sergeant Emily Toomey, 224th Sustainment Brigade
Colonel Vincent Torza, Commanding Generals’ Executive Officer, U.S. Army Europe
Lieutenant General (retired) Richard G. Trefry, former Military Assistant to the President of the United States & past Inspector General of the Army
Specialist Brittany Trevarthen, 1972nd Combat Operational Stress Control Detachment
Mr. Anthony Triola, aide for REP John Carter
Master Sergeant Joshua Troche, G-1, 79th Theater Sustainment Command
Master Sergeant Richard Trujillo, U.S. Army Civil Affairs Psychological Operations Command
Lieutenant General Michael Tucker, Commanding General, First Army
Lieutenant Colonel Tucker, Hawaii Army National Guard
Ms. Jennifer Turner, Group Chief, Directorate of Intelligence, Federal Bureau of Investigation (FBI)
Brigadier General Wally Turner, Assistant Adjutant General of Washington
Colonel Arthur Turnier, Comptroller, 79th Theater Sustainment Command
Lieutenant Colonel Jess Ulrick, Secretary to the General Staff, Minnesota Army National Guard
Brigadier General Robert J. Ulses, Assistant Chief of Staff-Operations G-3, U.S. Army Pacific
Senior Airmen Dustin Unnerstall, Loadmaster, 8th Airlift Squadron

Colonel Bradley Upton, Deputy Commander, 91st Training Division
Mr. Scott Vadnais, Task Force 1, Edna, Minnesota Fire Department
Master Sergeant Roberto Valencia G-9, Command Operations & Information Center, I Corps
Specialist Michael Valladares, 1-158th Attack Reconnaissance Battalion
Colonel Jeffrey P. Van, Commander, 155th Armored Brigade Combat Team
Mr. Roel van der Lugt, Military Affairs Director/Senior Policy Advisor for U.S. Representative Denny Heck, 10th Congressional District, Washington
Major General Scott A. Vander Hamm, USAF, Assistant Deputy Chief of Staff Operations, U.S. Air Force
Mrs. Cathy Vandermaarel, U.S. Army Europe
Colonel Mark Van Dyke, Commander, 1106th Theater Aviation Sustainment Maintenance Group (TASM-G), California Army National Guard (CAARNG)
Captain Jeremy Vantress, Battalion S-1, 6-108th Military Intelligence Battalion (USAR)
Major Mark Vanveldhuizen, Battalion Operations Officer, 1-130th Attack Reconnaissance Battalion
Colonel Matthew VanWagener, Commander, 3rd Armored Brigade Combat Team, 1st Cavalry Division
Colonel Courtney Varfes-Lum, Commander, Recruiting & Retention Battalion, Hawaii Army National Guard
General Dennis L. Via, Commanding General, U.S. Army Materiel Command
Captain Robert Villa, Unit Administrator, U.S. Army Civil Affairs Psychological Operations Command
Chief Warrant Officer 3 James Villareal, 1-158th Attack Reconnaissance Battalion
Major Tyson Voelkel, 75th Training Command
Mr. Ron Vogt, Contractor, Operational Readiness Training Center-Fort Drum, New York
Major General Gary Volesky, Commanding General, 101st Airborne Division
First Lieutenant Bryant Volling, 1st Squadron, 14th Cavalry Regiment
Mr. Ted Vorhees, City Manager, Fayetteville, North Carolina
General Joseph L. Votel III, Commander, U.S. Special Operations Command

APPENDIX F: TESTIMONIES AND COMMENTS

Colonel J.B. Vowell, Commander, 187th Infantry Regiment, 101st Airborne Division

The Honorable Debra S. Wada, Assistant Secretary of the Army for Manpower & Reserve Affairs

Major General William D. Waff, Chairman, Army Reserve Forces Policy Committee

Mr. Eric Wagenaar, Director of Plans, Training, Mobilization & Security, Fort Drum, New York

Master Sergeant Jeff Wales, Project Manager, Ridge Runner Irregular Warfare Training Program, West Virginia Army National Guard

The Honorable Bill Walker, Governor of Alaska

Mr. Thomas Wallace, Institute for Defense Analyses (IDA)

Brigadier General Aaron T. Walter, Deputy Commanding General, 84th Training Command

Lieutenant Colonel Charles Ward, Commander, 13th Combat Sustainment Support Battalion

Sergeant James Warren, Supply Sergeant, 492nd Signal Company

Specialist Marcus Waters, 145th Multi-Functional Medical Battalion

Sergeant Jonathan Watkins, Student, U.S. Army Civil Affairs Psychological Operations Command

Colonel Joseph D. Wawro, Chief of Staff, I Corps

Colonel Gaylene Weber, Emergency Preparedness Liaison Officer, Region 8

Major Robert Weeks, Operations Officer, 168th Regiment-Colorado Army National Guard Regional Training Institute

Lieutenant Colonel Stephen Weidenbeck, Commander, 5th Battalion, 19th Special Forces Group

Colonel Mark Weinerth, Assistant Chief of Staff, G-4, I Corps

Staff Sergeant Amanda Wenk, Instructor (MOS 35F), 6-108th Military Intelligence Battalion (USAR)

Colonel Ronald Westfall, Director, Joint Staff, Joint Force Headquarters-Indiana

Chief Warrant Officer 3 Christopher Whalen, G-3 Aviation, Command Operations & Information Center, I Corps

Colonel (retired) John White

Master Sergeant Patricia White, 75th Training Command

Chief Warrant Officer 5 Stephen P. White, Battalion Maintenance Officer, 1-149th Attack Reconnaissance Battalion

Colonel Randall Wickman, Commander, 189th Infantry Brigade, First Army Division West

Lieutenant General Perry Wiggins, Commander, U.S. Army North

Mr. Andrew Wiktorowicz, Chairman, California Employer Support for the Guard & Reserve

Sergeant Valerie Wilhoite, 75th Training Command

Major William Wilkerson, Assistant Director of Operations, 8th Airlift Squadron

Master Sergeant Christine Wilkins, Warrior Leader Course Manager, 168th Regiment-Colorado Army National Guard Regional Training Institute

Master Sergeant Brent Williams, Public Affairs Officer, 4th Infantry Division

Staff Sergeant Daron Williams, Command Operations & Information Center, I Corps

Major General Darryl Williams, Commanding General, U.S. Army Africa

Staff Sergeant Derek Williams, Instructor (MOS 35M), 6-108th Military Intelligence Battalion (USAR)

Mr. Eric Williams, Staff Member for U.S. Representative Derek Kilmer, 6th Congressional District, Washington

Chief Warrant Officer 4 Robert Williams, Instructor Pilot, 1-211th Attack Reconnaissance Battalion

Major General Timothy Williams, The Adjutant General of Virginia

Colonel Willburn Williams, Deputy Chief of Staff, U.S. Army Europe

Staff Sergeant Breann Williamson, Signal Support Specialist, 492nd Signal Company

Colonel Bernard Williford, Commander, 113th Sustainment Brigade

Colonel Mike Willis, Commander, 169th Field Artillery Brigade

Colonel Alvin "Donnie" Wilson, Assistant Chief of Staff G-3, 263rd Army Air & Missile Defense Command, National Capital Region Integrated Air Defense

Chief Warrant Officer 4 Christopher Wilson, Battalion Standardization Pilot, 1-130th Attack Reconnaissance Battalion

Major General (retired) Cornell Wilson Jr, North Carolina Military Affairs Advisor

Colonel Deborah Wilson, Reserve Affairs Officer, U.S. Army Space & Missile Defense Command, Army Forces Strategic Command

Command Sergeant Major Rodney Wionowsky, Command Sergeant Major, 2nd Medical Brigade

Major Gabriel Wolfe, Executive Officer, 4th Battalion, 160th
Special Operations Aviation Regiment

Major General David C. Wood, Commanding General, 38th
Infantry Division

Colonel David Wood, Chief of Staff, 28th Infantry Division

Command Sergeant Major Bill Woods, State Senior Enlisted
Leader, Colorado Army National Guard

Lieutenant Colonel Chris Woody, Deputy Commander, 5th
Armor Brigade, First Army

The Honorable Robert Work, 32nd Deputy Secretary of
Defense

Lieutenant Colonel Garvey Wright, G-8, 4th Infantry Division

Captain Herman Wu, U.S. Army Europe

Colonel Masashi Yamamoto, Military Attaché, Embassy of the
Japan

Colonel Bobby Yandell, G-3, Oklahoma Army National Guard

Colonel Laura Yeager, Chief of Staff, Joint Force Headquarters-
California

Command Sergeant Major William Yeargan Jr., Command
Sergeant Major, 82nd Combat Aviation Brigade

Major General Daniel York, Commanding General, 76th
Operational Response Command

Major General James Young Jr., Commanding General, 75th
Training Command

Sergeant Major Seth Yount, Operations Sergeant Major, 89th
Troop Command

Specialist Brendan Zachery, 224th Sustainment Brigade

Mr. Jack Zeedo, Center for Army Analysis Institute for Defense
Analyses (CAA)

Mr. Jack Zeto, Deployment & Enablers Division, Center for
Army Analysis, HQDA G-8

Major Romas Zimlicki, S-3, 1-325th Infantry Regiment, 82nd
Airborne Division

COMMISSIONERS AND STAFF

GENERAL CARTER F. HAM, U.S. ARMY RETIRED
CHAIRMAN

Appointed by the Chairman of the House Armed Services Committee and unanimously selected by the other commissioners to be the Chairman.



General Carter F. Ham served as the Commander, U.S. Africa Command from March 2011 until his retirement in June 2013. His previous assignment was Commanding General, U.S. Army Europe.

General Ham began his service as an enlisted infantryman in the 82nd Airborne Division before attending John Carroll University in Cleveland, Ohio. He was commissioned in the infantry as a Distinguished Military Graduate in 1976. He is a graduate of the Naval College of Command and Staff and the Air War College.

In addition to numerous stateside assignments, he served in Italy, Germany, Kuwait, Macedonia, Saudi Arabia, Qatar, and Iraq. His duties with USAFRICOM took him to 42 of Africa's 54 nations. His General Officer assignments included Commander, Multinational Brigade Northwest, Mosul, Iraq; Deputy Director for Regional Operations, J-33, The Joint Staff; Commander, 1st Infantry Division; and Director for Operations, J-3, The Joint Staff.

Since retiring from the Army, General Ham has worked as a consultant with SBD Advisors in Washington D.C. He serves on the Board of Directors for John Carroll University and on the Africa Board of Advisors for Jefferson Waterman International.

THE HONORABLE THOMAS R. LAMONT
VICE CHAIRMAN

Appointed by the President of the United States and unanimously selected by the other commissioners to be the Vice Chairman.



Thomas R. Lamont served as the Assistant Secretary of the Army for Manpower and Reserve Affairs from June 2009 to September 2013. In that capacity, he was the Army's point person for policy and performance oversight of human resources, training, readiness, mobilization, military health affairs,

force structure, manpower management, and equal employment opportunity. He is currently a principal at LAMONT Consulting Services in Washington, D.C.

Prior to his appointment as Assistant Secretary of the Army, Mr. Lamont was the chairman of the University of Illinois Board of Trustees and a longtime Springfield, Illinois, attorney concentrating in government law and legislative affairs. He is admitted to practice before the U.S. Supreme Court, the U.S. Court of Appeals for the Armed Forces, U.S. district courts, and Illinois state courts. He served as a judge advocate general in the Illinois Army National Guard, culminating his 25-year military career as the Illinois staff judge advocate and retiring as a colonel in 2007.

Mr. Lamont received his bachelor's degree from Illinois State University in 1969 and earned his law degree from the University of Illinois College of Law in 1972.

SERGEANT MAJOR OF THE ARMY
RAYMOND F. CHANDLER III,
U.S. ARMY RETIRED

**Appointed by the Ranking Member of the
Senate Armed Services Committee.**



Sergeant Major of the Army Raymond F. Chandler III was the 14th Sergeant Major of the Army from March 2011 until his retirement in January 2015, serving as the Army Chief of Staff's personal adviser on all enlisted-related matters, particularly in areas affecting soldier training and

quality of life. He traveled throughout the Army observing training and talking to soldiers and their families. He sits on several councils and boards that make decisions affecting enlisted soldiers and their families.

Sergeant Major of the Army Chandler entered the Army in Brockton, Massachusetts, in 1981 and graduated as a 19E armor crewman from One Station Unit Training at Fort Knox. He has served in all tank crewman positions and has had multiple tours as a troop, squadron, and regimental master gunner. He was the Command Sergeant Major in 1/7 Cavalry, 1st Cavalry Division (OIF II 2004–2005), U.S. Army Garrison Fort Leavenworth, the U.S. Army Armor School, and the U.S. Army Sergeants Major Academy. In 2009, he became the first enlisted Commandant in USASMA history.

He has a bachelor of science in public administration from Upper Iowa University.

GENERAL LARRY R. ELLIS, U.S. ARMY RETIRED

Appointed by the President of the United States.



General Larry R. Ellis served as Commander, U.S. Army Forces Command, from November 2001 until his retirement in 2004. His prior assignment was Deputy Chief of Staff, G-3 Headquarters, Department of the Army. Since 2013 General Ellis has been President and CEO of VetConnexx,

LLC, a company that provides career opportunities for veterans.

General Ellis earned his commission through ROTC at Morgan State University and held a number of command positions over more than 35 years, starting with company commander in the 82d Airborne Division at Fort Bragg and the 101st Airborne Division in Vietnam. He served as Commander of Multinational Division (North) in Bosnia and Herzegovina, and 1st Armored Division in Germany. His staff assignments included Deputy Director for Strategic Planning and Policy, U.S. Pacific Command, and Deputy Director, Military Personnel Management, Office of the Deputy Chief of Staff for Personnel. He also served on the faculty at the U. S. Military Academy, West Point.

General Ellis earned a bachelor of science in public health from Morgan State University and a master of science in public health from Indiana University.

APPENDIX G: COMMISSIONER AND STAFF

THE HONORABLE ROBERT F. HALE

Appointed by the Ranking Member of the House Armed Services Committee.



Robert F. Hale was the Under Secretary of Defense (Comptroller) from 2009 to 2014, serving as the principal advisor to the Secretary of Defense on all budgetary and fiscal matters. As the Department of Defense chief financial officer, Mr. Hale also oversaw the department's financial policy and financial

management systems. Prior to serving as defense comptroller, Mr. Hale was Executive Director of the American Society of Military Comptrollers. Mr. Hale currently is a Fellow at Booz Allen Hamilton, serving as an advisor to corporate leadership.

Early in his career Mr. Hale spent about three years as an active duty officer in the U.S. Navy and another five years in the Naval Reserve. He also spent several years as a staff analyst and study director at the Center for Naval Analyses. He then joined the Congressional Budget Office, where he headed the National Security Division for 12 years. From 1994 to 2001, Mr. Hale served as the Assistant Secretary of the Air Force (Financial Management and Comptroller).

Mr. Hale graduated with honors from Stanford University with a bachelor of science in statistics. He also holds a master's degree in operations research from Stanford and a master of business administration from George Washington University.

THE HONORABLE KATHLEEN H. HICKS

Appointed by the President of the United States.



Dr. Kathleen Hicks served as Principal Deputy Undersecretary of Defense for Policy, from 2012 to 2013, responsible for advising the Secretary of Defense on global and regional defense policy and strategy. Prior to that she served as Deputy Under Secretary of Defense for Strategy, Plans, and Forces, leading

the development of the 2012 Defense Strategic Guidance and the 2010 Quadrennial Defense Review. From 1993 to 2006 she was a career civil servant in the Office of the Secretary of Defense, rising from presidential management intern to the Senior Executive Service.

She currently is senior vice president, Henry A. Kissinger Chair, and director of the International Security Program at the Center for Strategic and International Studies (CSIS), where she previously worked as a senior fellow from 2006 through early 2009. She also is an adjunct with the RAND Corporation and a member of the Council on Foreign Relations.

Dr. Hicks received her doctorate in political science from the Massachusetts Institute of Technology, a master's from the University of Maryland's School of Public Affairs, and a bachelor of arts magna cum laude and Phi Beta Kappa from Mount Holyoke College.

LIEUTENANT GENERAL JACK C. STULTZ,
U.S. ARMY RETIRED

Appointed by the President of the United States.



Lieutenant General Jack C. Stultz served as Chief, Army Reserve, and Commanding General, United States Army Reserve Command, from May 2006 until his retirement in 2012. Upon assuming command of the Army Reserve, he retired from Procter and Gamble as an operations manager with 28 years

of service. He currently serves on the Board of Directors of VSE Corporation in Alexandria, Virginia.

He received his commission through ROTC at Davidson College in 1974 and eventually served as Commander, Company B, 20th Engineer Battalion. He transitioned to the Army Reserve in 1979 and served with the 108th Division (Infantry OSUT), the 32d Transportation Group (Composite), and 143d Transportation Command, becoming commander in 2004.

He deployed to the Gulf for Operation Desert Shield/Desert Storm in 1990, to the Balkans for Operation Joint Endeavor/Joint Guard in 1997, and to Kuwait in October 2002 as Commander, 143rd TRANSCOM (Forward), moving into Iraq with the initial ground offensive and establishing a forward logistics hub at Tallil and rail operations at Garma. In 2003, he was assigned as director of movements, distribution, and transportation, Combined Forces Land Component Command Kuwait.

GENERAL JAMES D. THURMAN,
U.S. ARMY RETIRED

**Appointed by the Chairman of the Senate
Armed Services Committee.**



General James D. Thurman served as Commander of United Nations Command, Republic of Korea-U.S. Combined Forces Command, and U.S. Forces Korea from July 2011 until his retirement in October 2013. Prior to that he served as Commanding General, U.S. Army Forces Command, and was Deputy

Chief of Staff, G-3/5/7. He is currently the president of JD Thurman Enterprises, LLC in Salado, Texas.

He earned his commission through ROTC at East Central Oklahoma University in 1975. His combat assignments include battalion executive officer in the 1st Cavalry Division during Desert Shield/Desert Storm; the Chief of the Plans and Policy Division for Allied Forces Southern Europe in Kosovo from 1999-2000; the Chief of Operations for the Coalition Forces Land Component Command during the invasion of Iraq; and the Multinational Division Commander responsible for all coalition operations in Baghdad in 2006. He also served as Commanding General of the National Training Center, the 4th Infantry Division at Fort Hood, Texas, and V Corps in Germany.

He holds a bachelor of arts in history from East Central Oklahoma University and a master of arts in management from Webster University.

APPENDIX G: COMMISSIONER AND STAFF

MR. DON TISON *DESIGNATED FEDERAL OFFICER*

Mr. Don Tison is the Assistant Deputy Chief of Staff, G-8, responsible for Army programs, force development, the Quadrennial Defense Review, Army Studies Management, and the Center for Army Analysis. He is the principal advisor to the G-8 on such key issues as formulating plans and programs, acquiring resources, developing communication networks, executing operations, and evaluating results. Additionally, Mr. Tison served as the Department of the Army Deputy Chief Management Officer in 2009 responsible for establishing the Office of Business Transformation; chairman of the Headquarters and Support Activities Joint Cross Service Group, Base Realignment and Closure 2005; and executive director of the Army's Business Initiative Council from January 2003 through April 2004.

Mr. Tison served in the Navy Supply Corps, rising to the rank of captain. From 1997-2001 he served as the director, Force and Infrastructure Cost Analysis Division for OSD, Program Analysis and Evaluation and then became deputy director, Program Analysis and Evaluation Directorate from 2001-2003.

Mr. Tison received his bachelor of science in business administration from The Citadel and his master of business administration from the Wharton School, University of Pennsylvania.

MAJOR GENERAL RAYMOND W. CARPENTER, U.S. ARMY RETIRED *EXECUTIVE DIRECTOR*

Major General Raymond W. Carpenter was Acting Director, Army National Guard, National Guard Bureau, from 2009 to his retirement from the Army National Guard in 2011. Since his retirement, he has served as a Senior Fellow for the Association of the United States Army, was a member and President of the Rapid City Regional Airport Board, and is currently the President of the Board for South Dakota Coalition of Military Families.

He enlisted in the South Dakota Army National Guard in 1967 and later joined the U.S. Navy, attending the Defense Language Institute to learn Vietnamese and serve in South Vietnam. He returned to the South Dakota Army National Guard, was commissioned in 1974, and served as a commander and staff officer at the company, battalion, and group levels followed by a half dozen assignments in the Joint Force Headquarters for the South Dakota Army National Guard. From 2004-2006 he was dual hatted as the deputy commanding general, Maneuver Support Center, Fort Leonard Wood, Missouri.

Major General Carpenter has a bachelor's degree from Black Hills State University and a master of business administration from the University of South Dakota.

MR. RICKEY E. SMITH
STAFF DIRECTOR

Mr. Rickey Smith, a member of the Senior Executive Service for the U.S. Army, was appointed as the Deputy Chief of Staff, G-9, for Army Training and Doctrine Command (TRADOC) in October 2014. Representing TRADOC, he engages with the Army Staff, the Joint Staff, Office of the Secretary of Defense, Congress, and academic, interagency, and multinational entities to identify, develop, and synchronize capabilities for the current and future Army.

He was an Army field artillery officer from 1978 to 2006. Duties included brigade command, representing the United States within the international arms control community, and Department of Defense coordinating officer for disaster relief and homeland security operations in California, Arizona, and Nevada. With TRADOC, he was Chief of Staff for the Army's Modularity Focus Area, which led to the most extensive reorganization of Army combat forces since World War II, and Chief of Staff for the Army's modernization realignment task force.

Mr. Smith has a bachelor of business administration from Middle Tennessee State University, a master of business administration from Tennessee Technological University, and a master of science in national security strategy from the National Defense University.

COMMISSION STAFF

Lieutenant Colonel John A. Adams, Executive Officer to the Designated Federal Officer, Headquarters Department of the Army G-8

Sergeant First Class Cherry A. Andrews, Administration Manager to the Designated Federal Officer, Headquarters Department of the Army G-8

Mr. Sankar Bhattacharjee, Senior Analyst, Assistant Secretary of the Army for Acquisition, Logistics and Technology, Program Executive Office for Enterprise Information Systems

The Reverend Christopher D. Bisett, Executive Assistant, Knowledge Advantage Inc.

Mr. Jim Boatner, Director of Operations, Headquarters Department of the Army, G-8 Army Quadrennial Defense Review Office

Mr. Anthony Boyda, Cost Analyst, Assistant Secretary of the Army, Financial Management and Comptroller

Colonel Kristen E. Dixon, Public Affairs Officer, Office of the Secretary of Defense, Manpower and Reserve Affairs

Mrs. Amy Grace P. Donohue, Assistant Editor, RAND Corporation

Ms. Cherie Emerson, Global Force Management, Force Generation Subcommittee Lead, Headquarters Department of the Army G-3/5

Mr. Joseph Eule, Director, Communications, Direct Hire

Mr. Andrew Feickert, Specialist in Military Ground Forces, Foreign Affairs, Defense and Trade Division, Congressional Research Service

Major Benjamin J. Fernandes, Chief of Plans, Training and Doctrine Command G-9

Mrs. Deborah S. Gantt, Alternate Designated Federal Officer, Headquarters Department of the Army G-8

Ms. Jamie Hammon, Budget Analyst, Direct Hire

Mr. Bert K. Haggert, Security Advisor to the Designated Federal Officer, Headquarters Department of the Army G-2

Lieutenant Colonel Gregory B. Hartvigsen, Aviation Subcommittee Co-Lead, Utah Army National Guard

Captain Edward A. Hudson, Knowledge Manager to the Designated Federal Officer, Headquarters Department of the Army G-8

APPENDIX G: COMMISSIONER AND STAFF

Colonel Linda C. Jantzen, Knowledge Manager to the Designated Federal Officer, Headquarters Department of the Army, Chief Information Officer G-6

Mr. Gregory L. Johnson, Homeland Defense/Defense Support to Civil Authorities Analyst, Army North

Mr. Keith W. Kaspersen, Analyst, Office of the Secretary of Defense, Cost Assessment and Program Evaluation

Colonel Michael A. Lockwood, Alternate Designated Federal Officer, Headquarters Department of the Army G-8

Mr. Eric D. Magnell, Legal Analyst, Direct Hire

Mr. Kevin Mickie, Management Analyst, Direct Hire

Mr. Bradley E. Miller, IT Support Program Manager, Washington Headquarters Services, Joint Service Provider

Colonel Richard G. Miller, Government Relations, Utah Army National Guard

Mr. Eric Minton, Editor, Direct Hire

Captain Sarah B. Moore, Operations Officer, National Guard Bureau, Aviation

Ms. Laurel Prucha Moran, Graphic Designer, Direct Hire

Mr. Peter Morgan, Acquisitions and Security Program Manager, Direct Hire

Major Vinson B. Morris, Alternate Designated Federal Officer, Assistant Secretary of the Army for Acquisition, Logistics and Technology

Mrs. Beth K. Neuhart, Executive Assistant to the Designated Federal Officer, Headquarters Department of the Army G-8

Lieutenant Colonel Timothy J. Palmer, Cost Analyst, Army National Guard G-5

Colonel Kelly K. Peters, Global Force Management, Forces Command G-3/5/7 Plans

Lieutenant Colonel Steven M. Pierce, Aviation Subcommittee Co-Lead, Headquarters Department of the Army, G-3/5/7 Aviation

Mr. Mark S. Pizzuto, Operations Officer and Alternate Designated Federal Officer, Headquarters Department of the Army G-4

Mr. Francis A Rago Jr, Financial Advisor to the Designated Federal Officer, Assistant Secretary of the Army, Financial Management and Comptroller

Lieutenant Colonel Edwin (Brian) Rice, Force Management Analyst, Army National Guard G-5

Mr. Kerry J. Schindler, Senior Force Management Analyst and Operational Subcommittee Staff Lead, Headquarters Department of the Army, G-3/7 Force Management and Office of the Chief, Army Reserve G 3/5/7 Force Management

Mr. Scott C. Sharp, Personnel Analyst, Army National Guard Program Analysis and Evaluation Division, National Guard Bureau

Major Cory S. Simpson, Legal Advisor to the Designated Federal Officer, Headquarters Department of the Army, Office of The Judge Advocate General

Mr. Jason A. Southerland, Operations Research Analyst, Center for Army Analysis

Lieutenant Colonel Sean A. Spence, Personnel Analyst, Headquarters Department of the Army G-1

Lieutenant Colonel Brian D. Stevenson, Force Management Analyst, Office of the Chief, Army Reserve Force Management

Colonel Wm Shane Story, Writer/Historian, Assistant Secretary of the Army for Manpower and Reserve Affairs

Mr. Johnny F. Thomas Jr., Institutional Subcommittee Staff Lead, Deputy Division Chief, Manpower and Force Programs Analysis Division, Headquarters Department of the Army G-8, Program Assessment and Evaluation

Mr. Jaz Thompson, Human Capital Program Manager, Direct Hire

Mr. John A. Thurman, Senior Analyst, Joint Staff J-8

Lieutenant Colonel Barry K. Vincent, Homeland Defense/Defense Support to Civil Authorities Analyst, Oklahoma Army National Guard

Mr. Mark R. Von Heeringen, Deputy Designated Federal Officer, Deputy Under Secretary of the Army

Colonel Kurt H.L. Weinand, Total Force Policy Analyst-Director of Operations / Office of Chief, Army Reserve G-3/5

Major Doroneth W. White, Operations Officer, Office of the Chief, Army Reserve

Dr. Samuel F. Wilson II, Records Manager, Direct Hire

APPENDIX H:

SUBCOMMITTEES

OPERATIONAL SUBCOMMITTEE

Members:

The Honorable Kathleen H. Hicks, Chairperson

**Sergeant Major of the Army Raymond F. Chandler III,
U.S. Army Retired**

General Carter F. Ham, U.S. Army Retired

Lieutenant General Jack C. Stultz, U.S. Army Retired

*Terms of Reference for the Operational Subcommittee,
National Commission on the Future of the Army*

These terms of reference establish the Secretary of Defense objectives for an independent subcommittee review of the structure of the Army operational forces. Subcommittee members are appointed according to Department of Defense policy and procedures by the Secretary of Defense or the Deputy Secretary of Defense for a term of service not to exceed May 1, 2016. Membership balance and consideration of points of views is achieved using the same expertise and points of views required for the National Commission on the Future of the Army (“the Army Commission”).

Mission Statement: Accomplish an independent assessment of the current security environment and conduct a study of the structure of the Army operational forces (combat and service forces for prompt and sustained combat incident to operations on land) and policy assumptions related to the size and force mixture of the Army to support the mission of the Army Commission.

Objectives and Scope: The Operational Subcommittee (“the Subcommittee”) will:

- Assess the size, force mixture, and component mixture of the active component of the Army and the reserve components of the Army.
- Make proposals on the modifications, if any, of the structure and policies of the Army related to 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.

Methodology: The Subcommittee will:

1. Conduct the assessment in compliance with the Federal Advisory Committee Act of 1972 (5 U.S.C. Appendix, as amended) and other relevant statutes
2. Focus on the statutes, strategy, policies, procedures and processes currently in place used to determine Army force structure.
3. Make proposals on the modifications, if any, of the structure of the Army and policies for determining that structure related to 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
4. Access, consistent with law, documents or people from any Federal department or agency which the Operational Subcommittee deems necessary to complete its task.
5. Review, as appropriate, the results of past and recent examinations and studies of force structure composition and mix, to include investigative reports and reference materials provided by any organization.
6. Conduct interviews or seek input from other sources with pertinent knowledge or experience, as appropriate.

Deliverable: It is estimated that the Subcommittee will complete its work and provide final proposals to the Army Commission no later than October 31, 2015, but the Subcommittee will provide periodic updates to the Army Commissions on its work, as appropriate.

Support: The staff of the Army Commission will provide support to the Subcommittee, in consultation with Washington Headquarters Services and other Federal organizations as required.

INSTITUTIONAL SUBCOMMITTEE

Members:

**Lieutenant General Jack C. Stultz, U.S. Army Retired,
Chairperson**

**Sergeant Major of the Army Raymond F. Chandler III,
U.S. Army Retired**

General Carter F. Ham, U.S. Army Retired

Terms of Reference for the Institutional Subcommittee, National Commission on the Future of the Army

These terms of reference establish the Secretary of Defense objectives for an independent subcommittee review of the Institutional elements of the Army. Subcommittee members are appointed according to Department of Defense policy and procedures by the Secretary of Defense or the Deputy Secretary of Defense for a term of service not to exceed May 1, 2016. Membership balance and consideration of points of views is achieved using the same expertise and points of views required for the National Commission on the Future of the Army (“the Army Commission”).

Mission Statement: Accomplish an independent assessment of the current and projected security environment, and conduct a study of the Institutional elements of the Army and policy assumptions related to the size, force mix, and component mix of the Army to support the mission of the Army Commission.

Objectives and Scope: The Institutional Subcommittee (“the Subcommittee”) will address the following specific objectives:

- Assess the impact on the institutional elements of the Army for various size, force mix, and component mix of the Regular Army, Army National Guard, and Army Reserve.
- Make proposals on the modifications, if any, of the structure of the Army related to 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.
- Develop conclusions and proposals on the above matters and any other matters the Subcommittee deems pertinent in conducting its study of the Institutional elements of the Army related to the following statutory responsibilities:
 - 1) Recruiting.
 - 2) Organizing.
 - 3) Supplying.
 - 4) Equipping (including research and development).

- 5) Training.
- 6) Servicing.
- 7) Mobilizing.
- 8) Demobilizing.
- 9) Administering (including the morale and welfare of personnel).
- 10) Maintaining.
- 11) The construction, outfitting, and repair of military equipment.
- 12) The construction, maintenance, and repair of buildings, structures, and utilities and the acquisition of real property and interests in real property necessary to carry out the responsibilities specified in this section.

Methodology: The Subcommittee will:

1. Conduct its assessment in compliance with the Federal Advisory Committee Act of 1972 (5 U.S.C. Appendix, as amended) and other relevant statutes.
2. Focus on the statutes, strategy, policies, procedures and processes currently in place used to determine Army force structure.
3. Make proposals on the modifications, if any, on institutional structure and policies of the Army related to 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.
4. Access, consistent with law, documents or people from any Federal department or agency which the Subcommittee deems necessary to complete its task.
5. Review the results of past and recent examinations and studies of Army force structure composition and mix, to include investigative reports and reference materials provided by any organization.
6. Conduct interviews or seek input from other sources with pertinent knowledge or experience, as appropriate

Deliverable: It is estimated that the Subcommittee will complete its work and provide final proposals to the Army Commission no later than October 31, 2015, but the Subcommittee will provide periodic updates to the Army Commissions on its work, as appropriate.

Support: The staff of the Army Commission will provide support to the subcommittee, in consultation with Washington Headquarters Services and other Federal organizations as required.

FORCE GENERATION SUBCOMMITTEE

*Members:***General Larry R. Ellis, U.S. Army Retired, Chairperson****The Honorable Robert F. Hale****The Honorable Thomas R. Lamont****General James D. Thurman, U.S. Army Retired***Terms of Reference for the Force Generation Subcommittee, National Commission on the Future of the Army*

These terms of reference establish Secretary of Defense objectives for an independent subcommittee review of the transfer of Army National Guard AH-64 Apache aircraft from the Army National Guard to the Regular Army. Subcommittee members are appointed according to Department of Defense policy and procedures by the Secretary of Defense or the Deputy Secretary of Defense for a term of service not to exceed May 1, 2016. Membership balance and consideration of points of views is achieved using the same expertise and points of views required for the National Commission on the Future of the Army (“the Army Commission”).

Mission Statement: Accomplish an independent assessment of the transfer of Army National Guard AH-64 Apache aircraft from the Army National Guard to the Regular Army to support the mission of the Army Commission.

Objectives and Scope: The Aviation Subcommittee (“the Subcommittee”) shall conduct a study on the transfer of Army National Guard AH-64 Apache aircraft from the Army National Guard to the regular Army. The study will consider:

- Depth and scalability, cost-efficiency between the components;
- Strengths, limitations, and capabilities of each component;
- “Peacetime rotation” force to avoid exceeding operational tempo goals of 1:2 for Regular Army and 1:5 for members of the Army National Guard and Army Reserves;
- Minimizing risk within and across readiness, efficiency, effectiveness, capability, and affordability;
- Adjusting policies affecting readiness; training; equipment; personnel; and maintenance of the reserve components as an operational reserve.

Methodology: The Subcommittee will:

1. conduct its assessment in compliance with the Federal Advisory Committee Act of 1972 (5 U.S.C. Appendix, as amended) and other relevant statutes;
2. focus its assessment on the statutes, strategy, policies, procedures, and processes currently in place to determine Army aviation force structure;
3. propose, as appropriate, modifications to the Army aviation structure for AH-64 aircraft related to current and anticipated Army mission requirements at acceptable levels of national risk and in a manner consistent with available resources and anticipated future resources;
4. access, consistent with law, documents or people from any Federal department or agency which the Subcommittee deems necessary to complete its task;
5. review, as appropriate, the results of past and recent examinations and studies of Army aviation force structure composition and mix, to include investigative reports and reference materials provided by any organization; and
6. conduct interviews or seek input from other sources with pertinent knowledge or experience, as appropriate.

Deliverable: It is estimated that the subcommittee will complete its work and provide final proposals to the Army Commission no later than October 31, 2015, but the Subcommittee will provide periodic updates to the Army Commissions on its work, as appropriate.

Support: The staff of the Army Commission will provide support to the Subcommittee, in consultation with Washington Headquarters Services and other Federal organizations as required.

AVIATION SUBCOMMITTEE

Members:

The Honorable Robert F. Hale, Chairperson

General Larry R. Ellis, U.S. Army Retired

The Honorable Thomas R. Lamont

General James D. Thurman, U.S. Army Retired

Terms of Reference for the Aviation Subcommittee, National Commission on the Future of the Army

These terms of reference establish Secretary of Defense objectives for an independent subcommittee review of the transfer of Army National Guard AH-64 Apache aircraft from the Army National Guard to the Regular Army. Subcommittee members are appointed according to Department of Defense policy and procedures by the Secretary of Defense or the Deputy Secretary of Defense for a term of service not to exceed May 1, 2016. Membership balance and consideration of points of views is achieved using the same expertise and points of views required for the National Commission on the Future of the Army (“the Army Commission”).

Mission Statement: Accomplish an independent assessment of the transfer of Army National Guard AH-64 Apache aircraft from the Army National Guard to the Regular Army to support the mission of the Army Commission.

Objectives and Scope: The Aviation Subcommittee (“the Subcommittee”) shall conduct a study on the transfer of Army National Guard AH-64 Apache aircraft from the Army National Guard to the regular Army. The study will consider:

- Depth and scalability, cost-efficiency between the components;
- Strengths, limitations, and capabilities of each component;
- “Peacetime rotation” force to avoid exceeding operational tempo goals of 1:2 for Regular
- Army and 1:5 for members of the Army National Guard and Army Reserves;
- Minimizing risk within and across readiness, efficiency, effectiveness, capability, and
- affordability;
- Adjusting policies affecting readiness; training; equipment; personnel; and maintenance of the reserve components as an operational reserve.

Methodology: The Subcommittee will:

1. conduct its assessment in compliance with the Federal Advisory Committee Act of 1972 (5 U.S.C. Appendix, as amended) and other relevant statutes;
2. focus its assessment on the statutes, strategy, policies, procedures, and processes currently in place to determine Army aviation force structure;
3. propose, as appropriate, modifications to the Army aviation structure for AH-64 aircraft related to current and anticipated Army mission requirements at acceptable levels of national risk and in a manner consistent with available resources and anticipated future resources;
4. access, consistent with law, documents or people from any Federal department or agency which the Subcommittee deems necessary to complete its task;
5. review, as appropriate, the results of past and recent examinations and studies of Army aviation force structure composition and mix, to include investigative reports and reference materials provided by any organization; and
6. conduct interviews or seek input from other sources with pertinent knowledge or experience, as appropriate.

Deliverable: It is estimated that the subcommittee will complete its work and provide final proposals to the Army Commission no later than October 31, 2015, but the Subcommittee will provide periodic updates to the Army Commissions on its work, as appropriate.

Support: The staff of the Army Commission will provide support to the Subcommittee, in consultation with Washington Headquarters Services and other Federal organizations as required.

DRAFTING SUBCOMMITTEE

Members:

General Carter F. Ham, U.S. Army Retired, Chairperson

The Honorable Thomas R. Lamont

The Honorable Kathleen H. Hicks

Lieutenant General Jack C. Stultz, U.S. Army Retired

Terms of Reference for the Drafting Subcommittee, National Commission on the Future of the Army

These terms of reference establish the Secretary of Defense objectives for an independent subcommittee responsible for consolidating input for, and drafting, the report of the National Commission on the Future of the Army. Subcommittee members are appointed according to Department of Defense policy and procedures by the Secretary of Defense or the Deputy Secretary of Defense for a term of service not to exceed May 1, 2016. Membership balance and consideration of points of views is achieved using the same expertise and points of views required for the National Commission on the Future of the Army (“the Army Commission”).

Mission Statement: Prepare a draft report for the National Commission on the Future of the Army as required by Section 1703(c) of the National Defense Authorization Act for Fiscal Year 2015 (FY 2015 NDAA) (Public Law 113-291).

Objectives and Scope: The Drafting Subcommittee (“the Subcommittee”) will address the following specific objectives:

- consolidate and consider all information and input provided to the Army Commission, including information presented by other subcommittees of the Army Commission;
- articulate the future threats and mission demands in a manner consistent with the Commissioners’ input and opinions; and
- synthesize Commissioner statements and recommendations made during meetings into a coherent draft written product addressing the Army Commission’s key tasks to allow a comprehensive discussion of substantive issues in the full committee.

The Subcommittee shall develop conclusions and proposals on the above matters and any other matters the Subcommittee deems pertinent in conducting its work.

Methodology: The Subcommittee will:

1. Conduct its assessment in compliance with the Federal Advisory Committee Act of 1972 (5 U.S.C. Appendix, as amended) and other relevant statutes.
2. Focus on integrating Commissioner statements into a coherent written product. The Subcommittee will use information provided to the Commission in public or closed meetings, or by the Commission staff. In preparing the draft report, the Subcommittee will address the considerations specified in Section 1703 of the FY 2015 NDAA.
3. Incorporate into its draft the recommendations or the modifications, if any, of the structure of the Army related to 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 resource.
4. Access, consistent with law, documents or people from any Federal department or agency which the Subcommittee deems necessary to complete its task. As background, the Subcommittee may review the results of past and recent examinations and studies of Army force structure composition and mix, to include investigative reports and reference materials provided by any organization.
5. Conduct interviews or seek input from other sources with pertinent knowledge or experience, as appropriate.

Deliverable: It is estimated that the subcommittee will complete its work and provide final proposals to the Army Commission no later than November 19, 2015, but the Subcommittee will provide periodic updates to the Army Commissions on its work, as appropriate.

Support: The staff of the Army Commission will provide support to the Subcommittee, in consultation with Washington Headquarters Services and other Federal organizations as required.

APPENDIX I:

SOURCES CONSULTED

This list of source materials is not exhaustive, but represents the type and scope of sources the National Commission on the Future of the Army consulted. The Commission considered input provided during engagements, site visits, open and closed meetings, received by mail and email, and in response to formal Requests for Information (RFI) submitted to Department of the Army and other Department of Defense agencies. These sources include information contained in:

- 89 responses to Commission RFIs
- 31 letters and statements from more than 80 Members of Congress
- 24 letters and statements from Governors
- 18 letters and statements from State Adjutants General
- 77 briefings and presentations from Services, Joint Staff, and Office of the Secretary of Defense
- 47 classified briefings and papers

ADDITIONAL ITEMS

American Enterprise Institute. (2015). *To Rebuild America's Military*.

Bailer Jr., M. J. J. (2007, June 15). *Army Business Transformation: The Utility of Using Corporate Business Models Within the Institutional Army*. Army Command and General Staff College, Fort Leavenworth, Kansas.

Baiocchi, D. (2013). *Measuring Army Deployments to Iraq and Afghanistan*. RAND Corporation.

Bennett, B. W., & Lind, J. (2011). "The Collapse of North Korea." *International Security*

Bonds, T. (2015). *Limiting Regret - Building the Army We Will Need*. RAND Office of External Affairs.

Booz Allen Hamilton. (9 October 15). *Independent Review of the Army's Accessions Policy and Recruiting Strategy for the Director of the Army Staff - Win Talent in a Complex World*.

Brinkerhoff, J. R. (2002). *The Institutional Army, FY1975-FY2002* (Final No. Document D-2695). Alexandria, VA 22311: Institute For Defense Analyses.

Brinkerhoff, J. R. *Case Studies In Reserve Component Volunteerism, No. D-1665*.

Brzezinski, I. J. *Prepared Testimony of Ian J. Brzezinski*, United States Senate Committee on the Armed Forces (2014).

Buchalter, A. R. (2007). *Historical Attempts to Reorganize the Reserve Components* (Commission on the National Guard and Reserves). Library of Congress.

Buchalter, A. R., & Elan, S. (2007). "Historical Attempts to Reorganize the Reserve Components." Federal Research Division, The Library of Congress

Bukowski, R., Childress, J., Colarusso, M. J., Lyle, D. S., Army War College (U.S.), Strategic Studies Institute, ... Press. (2014). *Creating an effective regional alignment strategy for the U.S. Army*. Retrieved from <http://purl.fdlp.gov/GPO/gpo57649>

Camm, F., Cooke, C. R., Masi, R., & Wong, A. (n.d.). *What the Army Needs to Know to Align Its Operational and Institutional Activities*. The RAND Corporation.

Carter, A. (2015, November). *Building the First Link to the Force of the Future*. Retrieved from <http://www.defense.gov/News/Speeches/Speech-View/Article/630415/remarks-on-building-the-first-link-to-the-force-of-the-future-george-washington>

Chairman, J. C. of S. (2015). *The National Military Strategy*.

Chiarelli, P., & Hontoon, D. (2015). *Win Talent in a Complex World* (Studies and Analysis No. TO 2E06) (p. 60).

Colarusso, M. J., Lyle, D. S., Army War College (U.S.), Strategic Studies Institute, Army War College (U.S.), & Press. (2014). *Senior officer talent management: fostering institutional adaptability*. Retrieved from <http://purl.fdlp.gov/GPO/gpo47668>

Combatant Commands. (Various). *Operational Plans* (Classified).

Comptroller General. (1979). *DOD "Total Force Management" — Fact or Rhetoric?* (Report to Congress No. FPCD 78-82).

Congress. (2015, May 1). HR 1735: *FY 16 NDAA Rules: Subtitle C: Consolidation of Authorities to Order Member of Reserve Components to Perform Duty*.

- Cooke, J. A. (2003, July 4). *Manpower Requirements Determination in the Institutional Army*. U.S Army War College.
- DAPE-TB. (2015, May 11). *Integrated Personnel and Pay System (IPPS-A) Program Update for the National Commission on the Future of the Army*.
- Davis, T. (2015, September). "The Incredible Shrinking US Defense Industry." National Defense Magazine
- Defense Business Board. (FY12-04). *Public-Private Collaboration in the Department of Defense*. Defense Business Board.
- Defense Business Board. (2010). *Assessing the Defense Industrial Base*. Defense Business Board.
- Defense Reform Consensus. (2015, May). *Defense Reform Consensus Open Letter*.
- Department of Defense. (2 December 14). *AC/RC Tiger Team on Aviation Restructure Initiative Council of Governors VTC*.
- Department of the Army. (2013). *Army Force Structure* (Section 1066 of Public Law No 112-239).
- Department of the Army. (2015, Summer). *United States Army Reserve*. OCAR.
- Department of the Army. (2015, October). *Combat Vehicle Modernization Strategy*. TRADOC, ARCIC.
- Dewar, J. A. (Ed.). (2000). *Expandability of the 21st century Army*. Santa Monica, CA: RAND Corporation.
- Doyle, C. M., Horowitz, S. A., Pechatek, J., & Tate, D. (23 November 15). *Institute for Defense Analyses "Memorandum Addressing Methodological Issues in the CAA FTS Analysis."*
- Doyle, C. M., Huff, N. M., Wahedi, L., Bracken, J., Brinkerhoff, J. R., Graham, D. R., ... McGee, S. (2015). *The Stochastic Active-Reserve Assessment (SARA) Model: Force Planning Under Uncertainty*. Institute for Defense Analysis.
- Eaglan, M. (15 September 15). *American Enterprise Institute "US Army at a Crossroads: A Conversation with the Secretary of the Army John McHugh After Six Years Of Service."*
- Eaglan, M. (2015). *US Military Force Sizing For Both War and Peace*. American Enterprise Institute.
- Evans, J. (n.d.). *Getting It Right: Optimal Active Army End Strength*. Retrieved December 30, 2015, from <http://www.brookings.edu/research/papers/2015/06/01-getting-active-army-end-strength-right-evans>
- Feickert, A. (28 February 14). *Army Drawdown and Restructuring: Background and Issues for Congress*. Congressional Research Service.
- Feickert, A. (2014, December 5). *Army Active Component (AC)/Reserve (RC) Force Mix: Considerations and Options for Congress*. Congressional Research Service.
- Feickert, A., & Daggett, S. (31 January 12). - *A Historical Perspective on Hollow Forces*. Congressional Research Service
- Feickert, A., & Kapp, L. (5 December 14). "Army Active Component (AC)/Reserve Component (RC) Force Mix: Considerations for Congress." Congressional Research Service
- FORSCOM AV. (16 July 15). *Aviation Operational Demand (Classified)*.
- Fox, C. (2013, March 15). *Comments on the Final Reserve Forces Policy Board*.
- Gentile, G., Klimas, J., Gventer, C. W., Young, S., Thomas, R. W., Linick, M. E., ... Steinborn, Z. J. (23 October 15). *The Army's 2013 Aviation Restructure Initiative, Summary of Research for the NCEA*. RAND Corporation.
- Gentile, G., & Mann, S. (2015). *Understanding the Origins of the "Abrams Doctrine."* RAND Corporation.
- Gerson, M. S. (2009). "Conventional Deterrence in the Second Nuclear Age." Parameters
- Gordon, J., Matsumura, J., Adler, A., Boston, S., Boyer, M. E., Lander, N., (2015). *Comparing U.S. Army systems with foreign counterparts: identifying possible capability gaps and insights from other armies. ... Arroyo Center*.
- Grass, F. (2013, May 31). *Authorities and Assumptions Related to the Rotational Use of the National Guard. Memorandum to the Chief of Staff of the Army*.
- Hale, R., & Beyer, D. (2 September 15). *Budgetary Turmoil at the Department of Defense*. The Brookings Institution.
- Hansen, M. L., & National Defense Research Institute (Eds.). (2011). *Reshaping the Army's active and reserve components*. Santa Monica, Calif.: RAND Corporation.
- Hix, W. M., Polich, J. M., & Lippiatt, T. F. (2003). *Army stationing and rotation policy*. Santa Monica, Calif: RAND Corporation.
- Hoffman, F. (2015, December). *No Wake for Ares*. Proceedings, 141(1,354). Retrieved from <http://www.usni.org/magazines/proceedings/2015-12/no-wake-ares>

APPENDIX I: SOURCES CONSULTED.

- Hooker, R. D. (2015). AUSA Institute of Land Warfare *"American Landpower and the Two-War Construct,"* (NO. 106). HQDA G-3/5/7 AV. (17 June 15). *ARNG AH-64D Pilot Training Quotas FY12-19.*
- HQDA G-3/5/7 AV. (17 June 15). *Pilot Gains from COMPO I.*
- HQDA G-3/5/7 AV, & NGB-AVS. (17 June 15). *ARI and NGB Proposal.*
- HQDA G-3/5/7 AV, & NGB-AVS. (17 September 15). *Army Fixed Wing Multi-Component Initiatives.*
- HQDA G-8 FDV. (17 August 15). *Aviation Portfolio Update.*
- Johnson, D. (24 March 15). *"Competent, Concealed, Congested: The Challenges of Future Warfare."* RAND Corporation.
- Johnson, D. (2012, August). *The Challenges of the "Now" and What they Mean for America's Land Forces.* Presented at the Rand Arroyo Center.
- Johnson, D. (2015, Spring). *Fighting the "Islamic State" The Case for US Ground Forces. Parameters, 45(1).*
- Johnson, D. (2015, March). *Competent, Concealed, Congested: The Challenges of Future Warfare.* Rand Arroyo Center.
- Johnson, R. A. (2014). *"Reconsidering Future War - Predicting Future War."* Parameters
- Joint Chiefs of Staff. (10 September 12). *Joint Chiefs of Staff "Capstone Concept for Joint Operations: Joint Force 2020."*
- Joint Chiefs of Staff. (25 November 10). *Joint Chiefs of Staff "CJCS Guide to the Chairman's Readiness System" CJCS Guide 3401D.*
- Joint Planning. (n.d.). *Defense Planning Guidance.* Retrieved from http://archive.defense.gov/news/Defense_Strategic_Guidance.pdf
- Kapp, L., & Salazar Torreon, B. (2014, June 13). *Reserve Component Personnel Issues: Questions and Answers.*
- Kelly, T. K., Gordon IV, J., Johnson, M., Klimas, J., Darilek, R. E., Markel, M. W., & Matsumura, J. (2013). *"The Army You Need."* RAND Corporation.
- Klimas, J., Darilek, R. E., Baxter, C., Dryden, J., Lippiatt, T. F., McDonald, L. L., ... Watts, S. (2014). *Assessing the Army's Active-Reserve Component Force Mix.* RAND Corporation.
- Klimas, J., Darilek, R. E., Dryden, J., Dunigan, M., Lippiatt, T. F., McDonald, L. L., ... Sollinger, J. M. (2014). *Aviation Structure Across Army Components.* RAND Corporation.
- Klimas, J., Lippiatt, T. F., McDonald, L. L., & Sollinger, J. M. (2015). *"Paid Duty Days for Army Guardsmen and Reservists, 2000-2013."* RAND Corporation.
- Klimas, Joshua. (2015). *Regular Army AH-64 Pilots: Continuation of Service in the Reserve Components, 2002-2012* (No. PR-1870-A). RAND Corporation.
- Lakhani, H., & Tartak-Abod, E. (1997). *United States Army Research Institute for the Behavioral and Social Sciences "Economic Life Course Analysis of Peacekeeping Deployment in the Sinai."*
- Lippiatt, T. F., & Polich, J. M. (2010). *Reserve component unit stability: effects on deployability and training.* Santa Monica, Calif.: RAND National Defense Research Institute.
- Lippiatt, T. F., & Polich, J. M. (2013). *Leadership stability in Army Reserve component units.*
- Macgregor, D. (2015, September 7). *Competitive Performance Analysis of U.S. Army Brigade-Based Force and Alternative Force Design, Reconnaissance Strike Group (RSG) in Baltic Warfighting Scenario.* Retrieved from [http://www.ncfa.ncr.gov/sites/default/files/COL%20\(R\)%20Douglas%20Macgregor—September%203,%202015.pdf](http://www.ncfa.ncr.gov/sites/default/files/COL%20(R)%20Douglas%20Macgregor—September%203,%202015.pdf)
- Malloy, D. P., & Branstad, T. E. (2015, March 12). Council of Governors recent meeting.
- Markel, M. W., Camm, F. A., Hall-Partyka, P., Leonard, H. A., Leuschner, K. A., & Panis, C. (2013). *Estimating Institutional Army Manpower Requirements to Support Army Strategic Planning.* RAND Corporation.
- Marquis, M. S., & Kirby, S. N. (1989). *Reserve accessions among individuals with prior military service: supply and skill match.* Santa Monica, Calif: RAND Corporation.
- McNicol, D. L. (2014). *Cost Growth, Acquisition Policy, and Budget Climate* (No. NS D-5180). IDA.
- Nataraj, S., Hanser, L. M., Camm, F. A., & Yeats, J. (2014). *The Future of the Army's Civilian Workforce.* RAND Corporation.
- National Defense Industrial Association. (2014). National Defense Industrial Association *"Top Issues 2014."*
- NGB. (2015, January 24). *Adjutants' General Strategic Message: Future of the Army National Guard.*
- NGB-AVS. (17 September 15). *NGB ARI Execution Plan.*
- North Atlantic Treaty Organization. (22 June 15). *NATO Defense Expenditure Data for 2014 and Estimates for 2015.*

- O'Connell, C., Wenger, J. W., & Hansen, M. L. (2014). *Measuring and Retaining the US Army's Deployment Experience*. RAND Corporation.
- Office of the Vice Chairman of the Joint Chiefs and Office of Assistant Secretary of Defense for Reserve Affairs. (5 April 11). *Comprehensive Review of the Future Role of the Reserve Component Vol I Executive Summary and Main Report*.
- O'Hanlon, M. E. (2015). *The Future of Land Warfare*. Washington, D.C.: Brookings Institution Press.
- OSD-CAPE. (12 November 14). *AC/RC Aviation Tiger Team, Preliminary Findings*.
- OSD-CAPE. (17 June 15). *AH-64 Capacity Analysis (Classified)*.
- OUSD Comptroller, Chief Financial Officer. (2015, February). *United States Department of Defense Fiscal Year 2016 Budget Request Overview*.
- Pechatek, J., & Wang, A. (23 November 15). *Institute for Defense Analysis "Summary of Preliminary Results - Assessing the Impact of Full-Time Support on ARNG Readiness."*
- Phelps, R. (1995). *MFO Sinai Composite on Research and Assessment* (US Army Research Institute).
- Pint, E. M., Lewis, M. W., Lippiatt, T. F., Hall-Partyka, P., Wong, J. P., Puharic, T., *Active component responsibility in reserve component pre- and postmobilization training*. RAND Arroyo Center. (2015).
- Pippin, B., Pace, R., Cunningham, S., Schemm, R., & Castleberg, W. (2014). *Army End Strength Analysis*. TRADOC Analysis Center.
- RAND. (2015). *RAND Surveys of ARNG and USAR Personnel and their Employers*.
- Reimer, D. J., Schultz, R. C., & Helmly, J. R. (2010, November 2). *Independent Panel Review of Reserve Component Employment in an Era of Persistent Conflict*. HQDA. Retrieved from [https://whsportal.osd.mil/NCFA/Shared%20Documents/Studies,%20reports,%20regs/REIMER%20Study/Reimer_Panel_Report_2_NOV_10_\(FINAL_GEN_Reimer_approved_on_4_Nov_10\).pdf](https://whsportal.osd.mil/NCFA/Shared%20Documents/Studies,%20reports,%20regs/REIMER%20Study/Reimer_Panel_Report_2_NOV_10_(FINAL_GEN_Reimer_approved_on_4_Nov_10).pdf)
- Rostker, B. (2013). *"Right-Sizing the Force - Lessons for the Current Drawdown of American Military Personnel."* Center for a New American Security.
- Rostker, B. (n.d.). *Right-Sizing the Force*. Center for a New American Security.
- Scales, B. (2015, June 25). *Scales on War*.
- Sharp, T. (2014). *"Gambling with Ground Forces - The 2015 Defense Budget and the 2014 Quadrennial Defense Review."* Center for a New American Security.
- Sharp, T. (2014, March). *Gambling with Ground Forces: Center for a New American Security*.
- Smith, R. (2014, May 14). *Dynamic Security in an Age of New Technologies*. TRADOC G9.
- Sortor, R. E. (1995). *Army active reserve mix: force planning for major regional contingencies*. Santa Monica, Calif: RAND Corporation.
- Spraktes, W., & Newman, V. M. (2008). *Selfish Prayer*.
- Starry. (1982, June 10). *To Change and Army*.
- Stratfor. (2015, February 23). *Decade Forecast: 2015-2025*. Retrieved December 31, 2015, from <https://www.stratfor.com/forecast/decade-forecast-2015-2025>
- Sutton, T., & Lohaus, P. (2015). *Pursuing Strategic Advantage: The Utility of Armed Forces in Peace, War, and Everything in Between*. American Enterprise Institute.
- Szayna, T. S., Dreyer, P., Eaton, D., & Saum-Manning, L. (2015). *Army Global Basing Posture: An Analytic Framework for Maximizing Responsiveness and Effectiveness* (No. RR158). Retrieved from http://www.rand.org/pubs/research_reports/RR158.html
- Talley, J. W. (2015). *Posture Statement for the United States Army Reserve*. Retrieved from <http://www.usar.army.mil/Portals/98/Documents/2015%20Army%20Reserve%20Posture%20Statement%20FINAL.pdf>
- Talley, J. W. (2015, February). *Rally Point 32.1*. Retrieved from <http://www.usar.army.mil/Featured/RallyPoint321.aspx>
- Thie, H. J., & National Defense Research Institute (Eds.). (2007). *Factors to consider in blending active and reserve manpower within military units*. Santa Monica, Calif.: RAND Corporation.
- Thompson, G. L. (2002). *Army Downsizing Following World War I, World II, Vietnam, and a Comparison to Recent Army Downsizing*.
- TRADOC. (n.d.). *US Army Doctrine Comprehensive Guide*.
- TRADOC Analysis Center. (17 June 15). *ARI and NGB Proposal Sufficiency Analysis (Classified)*.
- TRADOC Analysis Center. (17 August 15). *Aviation Sufficiency Analysis*.

APPENDIX I: SOURCES CONSULTED.

US Army Aviation Center of Excellence. (16 July 15). *Army Aviation Update*.

U.S. Army Reserve. (2010). “*Submittal of Options for Creation of a Trainees, Transients, Holdees, and Students Account for the Army National Guard*.” National Guard Bureau.

U.S. Army Reserve. (2014, October 9). *Army Reserve Engagement Cells and Teams (AREC/T)*. USAR AFRC-OPP.

U.S. Army Reserve. (2015, July). *At A Glance*. Retrieved from <http://www.usar.army.mil/Featured/ArmyReserveAtAGlance.aspx>

U.S. Army War College. (21 August 14). *The Myths of Army Expansibility*.

U.S. Army War College. (29 June 12). *US Army Heritage and Education Center “The Question Not Asked: Comparisons of Active and Reserve Component Effectiveness.”*

U.S. Army War College. (2012, June 29). *The Question Not Asked*. United States Army Heritage and Education Center.

U.S. Army War College. (2013). *How the Army Runs - A Senior Leader Reference Handbook*.

U.S. Army War College. (n.d.). *US Army Heritage and Education Center “Maintaining the Force in Periods of Reduced Resources.”*

U.S. Department of Defense. (31 January 08). *Commission on the National Guard and Reserves*.

U.S. Department of Defense. (24 August 15). *Deputy Secretary of Defense Memorandum “Cost Reduction Targets for Major Headquarters.”*

U.S. Department of Defense. (29 October 08). *DoDI 1200.17 “Managing the Reserve Components as an Operational Force.”*

U.S. Department of Defense. (26 November 08 and change 1 dtd 21 September 11). *DoDI 1235.10 “Activation, Mobilization, and Demobilization of the Ready Reserve” incorporating change 1, 21 September 11.*

U.S. Department of Defense. (4 February 10 and change 1 dtd 4 April 12). *DoDI 1235.12 “Accessing the Reserve Component” including change 1 dtd 4 April 12.*

U.S. Department of Defense. (18 October 13). *DoDI 1235.13 Administration and Management of the Individual Ready Reserve (IRR) and the Inactive National Guard (ING)*.

U.S. Department of Defense. (26 July 13). *DoDI 3025.22 “The Use of the National Guard for Defense Support of Civil*

Authorities.” Retrieved from <http://www.dtic.mil/whs/directives/corres/pdf/302522p.pdf>

U.S. Department of Defense. (3 July 13). *DoDI 7041.04 Estimating and Comparing the Full Costs of Civilian and Active Duty Military Manpower and Contract Support*.

U.S. Department of Defense. (1 May 14). *Office of the Assistant Secretary of Defense Memorandum “Guidance on Service Implementation of 10 U.S.C. 12304b Order to active duty for preplanned missions in support of combatant commands.”*

U.S. Department of Defense. (15 March 13). *Office of the Secretary of Defense Memorandum “Comments on the Final Reserve Forces Policy Board Report on Costs of Military Personnel.”*

U.S. Department of Defense. (11 February 14). *Office of the Secretary of Defense Reserve Forces Policy Board Memorandum “Report of the Reserve Forces Policy Board on Reserve Component Use, Balance, Cost and Savings: A Response to Questions from the Secretary of Defense.”*

U.S. Department of Defense. (18 August 14). *Reserve Forces Policy Board “Department of Defense Cyber Approach: Use of the National Guard and Reserve in the Cyber Mission Force.”*

U.S. Department of Defense. (7 January 13). *Reserve Forces Policy Board “Eliminating Major Gaps in DoD Data on the Fully-Burdened and Life-Cycle cost of Military Personnel: Cost Elements Should be Mandated by Policy.”*

U.S. Department of Defense. (6 May 13). *Reserve Forces Policy Board Memorandum “Strategic Choices and the Reserve Components.”*

U.S. Department of Defense. (18 November 15). *Secretary of Defense Memorandum “Force of the Future: Maintaining Our Competitive Edge in Human Capital.”*

U.S. Department of Defense. (14 March 11). *Secretary of Defense Memorandum “Reserve Component Contiguous Training.”*

U.S. Department of Defense. (19 January 07). *Secretary of Defense Memorandum “Utilization of the Total Force.”*

U.S. Department of Defense. (18 April 07). *Under Secretary of Defense Memorandum “Programs to Support Utilization of the Total Force.”*

U.S. Department of Defense. (1 November 13). *Under Secretary of Defense Memorandum “Under Secretary of Defense (Personnel and Readiness) Deployment to Dwell, Mobilization to Dwell Policy Revision.*

U.S. Department of Defense. (20 December 13). *Unit Cost and Readiness of Active and Reserve Components of the Armed Forces.*

U.S. Department of Defense. (2012). *Defense Strategic Guidance "Sustaining US Global Leadership: Priorities for 21st Century Defense."*

U.S. Department of Defense. (2013). *Joint Publication 3-27*. Retrieved from http://www.dtic.mil/doctrine/new_pubs/jp3_27.pdf

U.S. Department of Defense. (2014). *Defense Manpower Requirements Report Fiscal Year 2015*. Washington, D.C: Total Force Planning and Requirements Office of the Assistant Secretary of Defense for Readiness & Force Management.

U.S. Department of Defense. (2014). *Integrated Personnel and Pay System - Army (IPPS-A) Increment II Business Case Final Draft*.

U.S. Department of Defense. (2014). *Quadrennial Defense Review 2014*. Washington, D.C. Retrieved from http://archive.defense.gov/pubs/2014_Quadrennial_Defense_Review.pdf

U.S. Department of Defense. (2015). *Annual Aviation Inventory and Funding Plan Fiscal Years (FY) 2016-2045*.

U.S. Department of Defense. (2015). *Independent Cost Analysis of the Army Aviation Restructure Initiative and the Army National Guard Alternative* (No. 3-DB62698).

U.S. Department of Defense, C. A. and P. E. (20 April 15). *Independent Cost Analysis of the Army Aviation Restructure Initiative and the Army National Guard Alternative - Report to the Congress* (OSD CAPE No. 3-DB62698).

U.S. Department of the Army. (17 May 13). "Quick Look Summary of References for Past Army Multi-Component Unit Initiatives." ARCIC (FWD) Abstract.

U.S. Department of the Army. (9 June 15). *Army Background Paper #17 "Total Force Integration - Past and Present."*

U.S. Department of the Army. (9 June 15). *Army Background Paper #18 "Depth and Scalability."*

U.S. Department of the Army. (5 August 15). *Army Background Paper #19 "Achieving Operational Tempo Goals."*

U.S. Department of the Army. (9 August 15). *Army Background Paper #22 "Training Similarities and Differences Across Army Components."*

U.S. Department of the Army. (10 April 15). *Army Background Paper #32 "Army Support to Other Services."*

U.S. Department of the Army. (9 August 15). *Army Background Paper #34 "Army Operations in the Homeland."*

U.S. Department of the Army. (10 April 15). *Army Background Paper #38 "Aviation Restructure Initiative."*

U.S. Department of the Army. (5 August 15). *Army Background Paper #41 "Contract Support."*

U.S. Department of the Army. (9 August 15). *Army Background Paper #47 - Regeneration.*

U.S. Department of the Army. (15 May 15). *Army Background Paper #48 "Using BRACs to Reduce/Realign Army Force Infrastructure."*

U.S. Department of the Army. (6 May 15). *Army Background Paper #51 "Army Cyberspace Roles and Civilian Skills."*

U.S. Department of the Army. (4 September 12). *Army Directive 2012-08 "Army Total Force Policy."*

U.S. Department of the Army. (15 December 12). *Army Green Pages "Proof of Concept Pilot Report: Using Regulated Market Mechanisms to Manage Officer Talent."*

U.S. Department of the Army. (10 April 15). *Army Information Paper #44 - Recent Experience in Reserve and Guard Readiness, Mobilization, and Operational Employment"*.

U.S. Department of the Army. (23 September 15). *Army Information Paper "AC-RC Duty as a Prerequisite for General Officer Selection."*

U.S. Department of the Army. (14 September 15). *Army Information Paper "Army National Guard (ARNG) Title 10 (T10) Active Guard/Reserve (AGR) Positions in support of First Army."*

U.S. Department of the Army. (30 July 15). *Army Information Paper "Army Rotation Rate Objectives."*

U.S. Department of the Army. (14 August 15). *Army Information Paper "Army Sourcing of Operational Requirements."*

U.S. Department of the Army. (11 September 15). *Army Information Paper "Depicting Army support to Combatant Commands."*

U.S. Department of the Army. (13 July 15). *Army Information Paper "Factors Affecting Mobilization of Reserve and Guard Units."*

U.S. Department of the Army. (21 August 15). *Army Information Paper "Measuring Stress on the Force: Making Sense of the Dwell Ratios."*

U.S. Department of the Army. (25 August 15). *Army Information Paper "Mobilization Force Generation Installations (MFGIs)."*

APPENDIX I: SOURCES CONSULTED.

- U.S. Department of the Army. (9 September 15). *Army Information Paper "Regular Army Individual Augmentees."*
- U.S. Department of the Army. (30 June 15). *Army Information Paper "Reserve Component (RC) Full-Time Support (FTS) and Readiness."*
- U.S. Department of the Army. (10 July 15). *Army Information Paper "Supporting Analysis for DoD Rotation Rates."*
- U.S. Department of the Army. (10 September 15). *Army Information Paper "United States Army Reserve Defense Support of Civil Authorities (DSCA) 1999-2014."*
- U.S. Department of the Army. (16 November 15). *Army Information Paper "Update on 2015 ATLDC tasks."*
- U.S. Department of the Army. (3 November 11). *Army Memorandum "Approval of Army Campaign Plan (ACP) Decision Point 131 (Mobilization Transformation) Lines of Effort (LOEs) 1,2 and 4."*
- U.S. Department of the Army. (2 April 08). *Army Memorandum "Army Reserve (AR) Force Management Accounting Changes: Trainees, Transients, Holders and Students (TTHS) Account and Individual Mobilization Augmentee (IMA)."*
- U.S. Department of the Army. (16 October 14). *Army Memorandum "Army Total Force Policy (ATFP) Implementation Guidance."*
- U.S. Department of the Army. (20 January 15). *Army Memorandum "Army total Force Policy (ATFP) Implementation Guidance and Taskings."*
- U.S. Department of the Army. (10 April 15d). *Army Memorandum "Base Funded Pre-Planned Missions for the Reserve Component (RC) under Title 10 United States Code (USC) 12304b for Fiscal Years 2017-2021 (FY17-21)."*
- U.S. Department of the Army. (10 November 93). *Army Memorandum for Record "AC-RC Leaders' Offsite Agreement as of 29 October 1993."*
- U.S. Department of the Army. (22 February 06). *Army Memorandum "Individual Ready Reserve Transformation."*
- U.S. Department of the Army. (10 August 15). *Army Memorandum : NTC Policy#11 - Containment Area Policy for Rotational Training Units and Augmentation Soldiers."*
- U.S. Department of the Army. (18 August 15). *Army National Guard Information Paper "Employment of the Army National Guard (ARNG) for Pre-Planned Missions using 10 U.S.C. 12304b."*
- U.S. Department of the Army. (8 July 15). *Army National Guard Information Paper "Integrated Personnel and Pay System - Army (IPPS-A)."*
- U.S. Department of the Army. (19 August 15). *Army National Guard Information Paper "Suitable Model for Dwell for the Army National Guard (ARNG)."*
- U.S. Department of the Army. (14 March 11). *Army Regulation 525-29 Army Force Generation.*
- U.S. Department of the Army. (1 May 15). *ARNG Addendum to Army Background Paper #38 "Aviation Restructure Initiative" - Army National Guard (ARNG) Position.*
- U.S. Department of the Army. (21 September 15). *CNGB Framing Paper "The Army National Guard: A Solution for the Total Force in a Fiscally Constrained Environment."*
- U.S. Department of the Army. (various). *Combatant Command OPLANS (classified).*
- U.S. Department of the Army. (8 March 13). *DA PAM 350-58 "Army Leader Development Program."*
- U.S. Department of the Army. (26 April 13). *Decision Point 161 Continental United States Army (CONUS) Replacement Center (CRC) Analysis.*
- U.S. Department of the Army. (8 September 14). *Department of the Army Memorandum "Standard Mission Essential Task List (METL) for Army Guard Brigades."*
- U.S. Department of the Army. (17 June 15). *First Army Decisive Action Training Model.*
- U.S. Department of the Army. (30 October 15). *First Army Information Paper "First Army Additional Input to the National Commission on the Future of the Army."*
- U.S. Department of the Army. (20 October 15). *First Army Information Paper "NCEA Follow up Session with First Army."*
- U.S. Department of the Army. (18 May 15). *First Army Memorandum "First Army Responses to North Carolina and South Carolina Adjutants General (TAG) Luncheon."*
- U.S. Department of the Army. (19 June 15). *First Army Memorandum "National Commission Request for Information (Post-Mobilization Training)."*
- U.S. Department of the Army. (22 November 13). *First Army Policy Memorandum #11 - Mobilization Standards Policy.*
- U.S. Department of the Army. (18 August 15). *First Army Statement by LTG Michael S. Tucker to the National Commission on the Future of the Army.*

- U.S. Department of the Army. (13 August 14). *FORSCOM memorandum "Army Total Force Policy Implementation - Additional Guidance."*
- U.S. Department of the Army. (11 April 14). *FORSCOM Memorandum "Army Total Force Policy Implementation - FORSCOM Additional Guidance."*
- U.S. Department of the Army. (9 May 14). *FORSCOM Memorandum "Army Total Force Policy Implementation - FORSCOM Additional Guidance."*
- U.S. Department of the Army. (30 May 14). *FORSCOM Memorandum "Army Total Force Policy Implementation - FORSCOM Additional Guidance."*
- U.S. Department of the Army. (10 December 13). *FORSCOM Memorandum "Army Total Force Policy Implementation - FORSCOM Interim Guidance."*
- U.S. Department of the Army. (15 June 15). *FORSCOM Total Force Partnership Program Running Estimate.*
- U.S. Department of the Army. (8 July 15). *Integrated Personnel and Pay System - Army (IPPS-A) Overview to the National Commission.*
- U.S. Department of the Army. (16 July 15). *Minutes of the 2015 Army Training Leader and Development Conference.*
- U.S. Department of the Army. (31 May 13). *National Guard Bureau Memorandum "Authorities and Assumptions Related to Rotational Use of the National Guard."*
- U.S. Department of the Army. (3 October 12). *The Army Training Strategy.*
- U.S. Department of the Army. (15 March 13). *TRADOC Army 2020 Investment and Regeneration IPR.*
- U.S. Department of the Army. (4 December 15). *TRADOC NCO 2020 Strategy "NCOs Operating in a Complex World."*
- U.S. Department of the Army. (17 May 10). *TRADOC Pam 525-8-1 "Generating Force Study."*
- U.S. Department of the Army. (16 July 15). *TRADOC Presentation to NCFE "One Army School System Overview."*
- U.S. Department of the Army. (20 October 15). *USAR Memo to the Commission by LTG Talley.*
- U.S. Department of the Army. (12 September 14). *US Army Strategic Initiatives Group - How Fast Can the Army Grow?"*
- U.S. Department of the Army. (1984). *US Army War College "Parameters" - The Army Reserve and Vietnam.*
- U.S. Department of the Army. (2008). *Generating Force Support for Operations (C1, FM 1-01)*. Washington, D.C.: Headquarters, Department of the Army.
- U.S. Department of the Army. (2010). *TRADOC Generating Force Study Innovation and Adaptation in Support to Operations* (No. TRADOC Pamphlet 525-8-1). Washington, D.C.
- U.S. Department of the Army. (2011). *Secretary of the Army Memorandum "Army Deployment Period Policy."*
- U.S. Department of the Army. (2012). *ADP 6-22 "Army Leadership."*
- U.S. Department of the Army. (2012). *The U.S. Army Capstone Concept* (No. TRADOC PAM 525-3-0). U.S. Department of the Army. Retrieved from <https://whsportal.osd.mil/NCFA/Shared%20Documents/Subcommittees/Operational/Literature%20Review/ROMO/Army%20Capstone%20Concept.pdf>
- U.S. Department of the Army. (2012). *United States Army Organic Industrial Base Strategic Plan 2012-2022.*
- U.S. Department of the Army. (2013). *Army Leader Development Strategy 2013.*
- U.S. Department of the Army. (2014). *The U.S. Army Operating Concept: Win in a Complex World* (No. TRADOC Pamphlet 525-3-1). Washington, D.C. Retrieved from <http://www.tradoc.army.mil/tpubs/pams/tp525-3-1.pdf>
- U.S. Department of the Army. (2015). *Army Combined Arms Center "Talent Management Concept of Operations for Force 2025 and Beyond."*
- U.S. Department of the Army. (2015). *Army Equipment Program in support of President's Budget 2016.*
- U.S. Department of the Army. (2015). *Army Posture Statement 2015.*
- U.S. Department of the Army. (2015). *Deputy Chief of Staff, G-4 Logistics Strategic Planning Guidance.*
- U.S. Department of the Army. (2015). *FM 6-22 "Leader Development."*
- U.S. Department of the Army. (2015). *National Guard Association "National Guard Service Perspective 2015; NGAUS Company Grade Committee."*
- U.S. Department of the Army. (2015). *Report to Congress on Army Force Structure.*
- U.S. Department of the Army. (2015). *The Army National Guard FY15 Force Structure Smartbook.*

APPENDIX I: SOURCES CONSULTED.

U.S. Department of the Army. (2015). *The Army Vision: Strategic Advantage in a Complex World 2015-2025*. Retrieved from http://www.army.mil/e2/rv5_downloads/info/references/the_army_vision.pdf

U.S. Department of the Army. (2015, September). *Army "Objective T" brief*.

U.S. Department of the Army. (n.d.). *Force Structure: Army's Analyses of Aviation Alternatives*. Retrieved from <https://whsportal.osd.mil/NCFA/Shared%20Documents/Studies,%20reports,%20regs/GAO%20Info/GAO%20AoA%20Avn%20structure%20brief%2027%20Apr%2015.pdf>

U.S. Department of the Army. (n.d.). *TRADOC Information Paper "Reserve Component (RC) Army National Guard (ARNG) Officer Candidate School (OCS) Accreditation."*

Wallace, R. A., Colarusso, M. J., Hall, A. O., Lyle, D. S., Walker, M. S., Army War College (U.S.), ... Press. (2015). *Paid to perform: aligning total military compensation with talent management*. Retrieved from <http://purl.fdlp.gov/GPO/gpo63682>

Wallace, R. A., Smith, J. Z., Lyle, D. S., Army War College (U.S.), & Strategic Studies Institute. (2013). *A framework for restructuring the military retirement system*. Retrieved from <http://purl.fdlp.gov/GPO/gpo45350>

Wenger, J. W., Orvis, B. R., Stebbins, D. M., Apaydin, E., & Syme, J. (January 15). *RAND Report "Strengthening Prior Service-Civil Life Gains and Continuum of Service Accessions into the Army's Reserve Components."*

Weston, T. C. (2015). *AUSA Institute of Land Warfare "Are US Army Capabilities for Countering Weapons of Mass Destruction at Risk?"*

White House. (2015). *National Security Strategy 2015*. The White House. Retrieved from https://www.whitehouse.gov/sites/default/files/docs/2015_national_security_strategy.pdf

Work, R. (2015, March 27). *Deputy Secretary of Defense Letter to the Honorable John McCain*.

Work, R. (2015, May 8). *Letter To Governor Brandstad (Iowa) and Governor Malloy (Connecticut)*.

Work, R. (2015, August 24). *Cost Reduction Targets for Major Headquarters. Deputy Secretary of Defense Memorandum to Secretaries of the Military Departments*.

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