



“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 within “acceptable levels of national risk.” In the course of its work, the Commission encountered divergent levels of risk tolerance, both inside and outside the U.S. government. 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 27). 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 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 the size of the generating force, which

Photo on page 47

U.S. Special Operations Command's concept for the Tactical Assault Light Operator Suit combines superior protection with enhanced human performance and surgical lethality. The Army provides about half the special operations personnel within DoD.

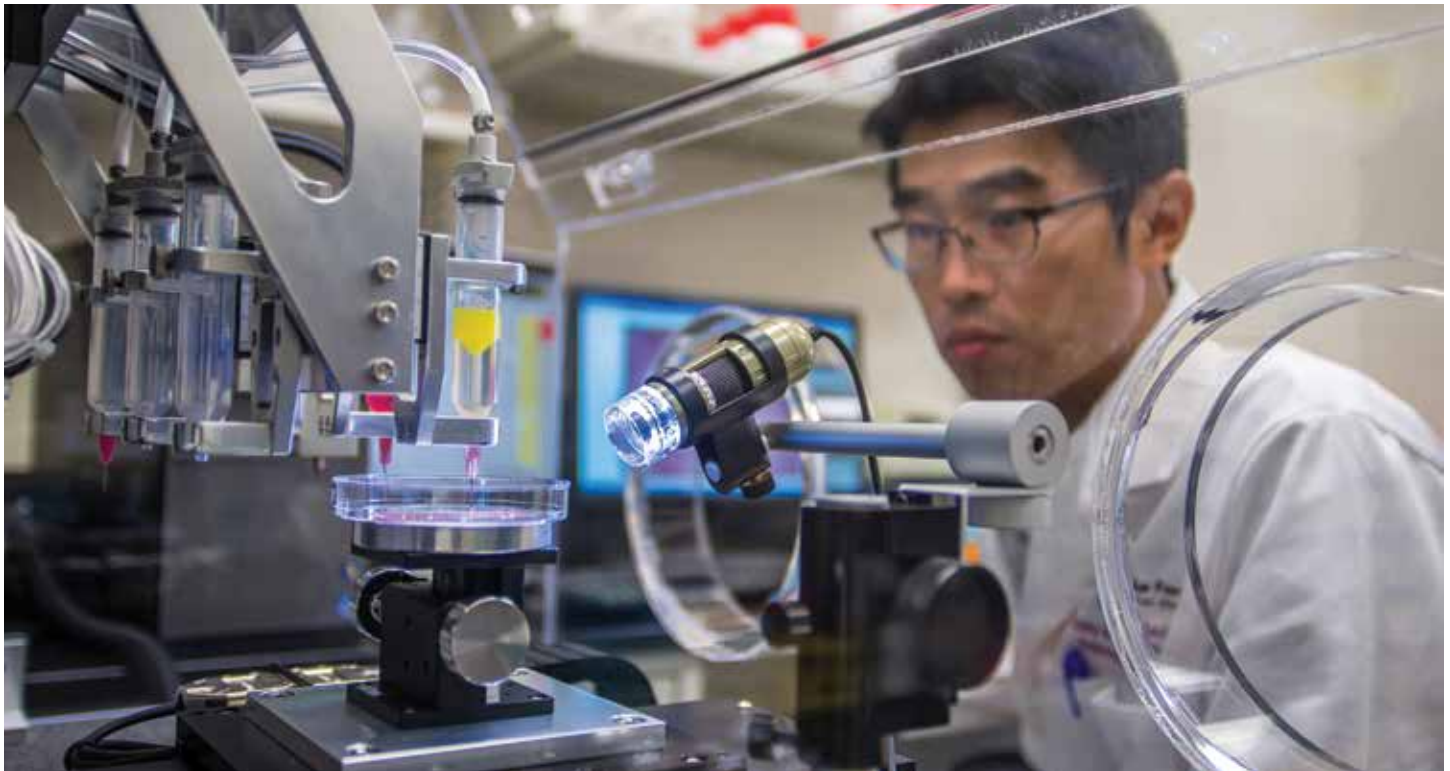


Photo by Wake Forest Baptist Health

Research fellow Dr. Young Joon Seol works on a project to use 3-D bioprinting to print experimental muscle tissue that could be used in reconstructive surgery for injured soldiers.

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. 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. But how those communities react may not necessarily be monolithic, but the nation’s support is necessary for the Joint Force to be able to effectively and rapidly counter threats to the nation.

builds and sustains operational 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 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 7: 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 8: 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 for the homeland, in Europe, and on the Korean peninsula. More detail can be found in the NCFA Classified Annex.

Recommendation 9: 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 significant.

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

Recommendation 11: 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

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 and supported, and working with a 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 101st Division Special Troop Battalion conduct an air assault mission in the Parwan Province of Afghanistan.

Photo by Spc. Scott Davis

might persist for several years, increasing 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.

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 the President and DoD 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 12: 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 13: 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 structure, readiness, and modernization plans 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 Army National Guard and Army Reserve (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 14: The Army should forward station an Armored Brigade Combat Team in Europe.



Bradley Fighting Vehicles with the 2nd Armored Brigade Combat Team, 1st Cavalry Division go on patrol during the BCT's rotation in the Republic of Korea.

U.S. Army photo by SSG John Healy

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.

Recommendation 15: The Army should convert the U.S. Army Europe 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 demanding environment and ensure interoperability with our allies and partners for “fight-tonight” readiness.

Recommendation 16: 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 94) 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)



Army vehicles are loaded onto Army Reserve Logistics Support Vessel-8 *Major General Robert Smalls* at Kuwait Naval Base, using a 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.

Retaining an eleventh Combat Aviation Brigade (CAB) would improve wartime capability and provide strategic peacetime aviation capability, especially in Korea. The chapter in this report on Apache Transfers and Related Issues (see page 94) discusses the pros and cons of this recommendation and its costs. The NCFA Classified Annex provides further details on the wartime effects of retaining eleven CABs.

Recommendation 17: The Army should retain eleven Combat Aviation Brigades in the Regular Army.

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 18: The Army should increase Armored Brigade Combat Team (ABCT) capacity based on the current and projected threat environment. Risk may be acceptable without additional ABCT structure if the Army stations an ABCT in Europe, per recommendation 14.

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 19: 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 NCFA Classified Annex.

Recommendation 20: 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 and capacity 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 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 and port opening capabilities 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 Army National Guard and Army Reserve 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 Army National Guard and Army Reserve 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 them 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 Army National Guard and Army Reserve. 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 65-66.)

REDUCING RISK BY ADJUSTING COMPONENT SOURCING

Several unit types reside solely in a single Army component. 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) interceptor and fire control capabilities, 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 21: The Army should assess the mission effectiveness of the current sourcing solution for the Ground-based Midcourse Defense (GMD) mission. The assessment should consider implications for recruiting, training, career progression, doctrine development, and GMD modernization strategy.

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. 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 22: 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.

Recommendation 23: 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.

U.S. Army photo by 1st Lt. Benjamin Moreau



Crew members with 197th Field Artillery Regiment fire an M142 High Mobility Artillery Rocket System during a live-fire exercise at Camp Buehring, Kuwait.

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. However, added funding will eventually be needed if major shortfalls are to be eliminated.

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 43 for further discussion).

Recommendation 24: 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 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 25: The Army should complete development and fully implement the Generating Force Model to improve requirements determination and better inform generating force manpower decisions.