This product is part of the RAND Corporation corporate publication series. Corporate publications describe or promote RAND divisions and programs, summarize research results, or announce upcoming events.
Finding solutions to global security challenges
Contents

Director's Message. ................................................................. 1
Overview. .............................................................................. 3

Selected Contributions
International Security and Defense Policy
Global Defense Assets and Partnerships ......................... 8
Overseas Basing ................................................................. 10
Democratization in the Arab World ............................... 12

Acquisition and Technology Policy
Honing the U.S. Edge in Technology ................................. 14
Speeding the Acquisition of Navy Computer Defense Systems ............................... 16
Facility Life-Cycle Cost-Effectiveness ............................... 18

Forces and Resources Policy
People, Resources, and Military Well-Being .................... 20
Is This a Good Time to Slow the Growth of Military Pay? .... 22
Compensating Losses to U.S. Service Members ................ 24

Intelligence Policy
Agility in Intelligence ............................................................. 26
Decreasing U.S. Reliance on Critical Materials Controlled by China ....................... 28
Who Is Influencing the Conflict in Syria? ......................... 30

Homeland Security and Defense
Uncertainty and the Nature of Threats ............................... 32
Anticipating the Terrorists ...................................................... 34
NSRD Research Sponsors (2012–2013) ......................... 36
Publications (2012–2013) ...................................................... 38
RAND National Defense Research Institute Advisory Board ....................... 40
RAND Board of Trustees ...................................................... 41
A great deal of attention has been paid, and justifiably so, to the severe budgetary constraints the Department of Defense (DoD) now faces in this era of deficit reduction and sequestration. At the same time, DoD and the Intelligence Community face a sea change in missions and responsibilities that would challenge national security policymakers and planners even in the absence of budgetary pressures.

For the past decade or more, the chief mission for the U.S. armed forces and intelligence collection and analysis agencies has been the defeat of al Qaeda and other terrorist organizations threatening U.S. interests and operating chiefly out of the Muslim world. The centerpiece of the U.S. effort have been the protracted conflicts, overlapping with stabilization campaigns, in Iraq and Afghanistan. With U.S. military involvement now finished in Iraq and winding down in Afghanistan, and an increased strategic focus on the Asia-Pacific region, more attention will have to be paid to issues that fall under the broad rubric of sustaining and renewing the force.

For example, in the post-Afghanistan era, how many people will DoD and the Intelligence Community need? And how should they be apportioned between the uniformed services and the civilian workforce? Between government and contractors? How should people who are not needed be separated? Among those who will separate sooner or later or who may have done so already, there will be many with injuries—some physical and some psychological—who will need support over the long term. What are the most cost-effective ways of providing that support, and how much should be set aside to compensate service members and their families for losses?

In the Asia-Pacific region, U.S. forces will be exposed to risks that differ from those that prevailed in Iraq and Afghanistan. Adversaries and potential adversaries will likely threaten U.S. carriers and surface combatants, as well as aircraft. The latter could be at risk while on the ground and may have to fly over enemy or contested territory; it is possible that U.S. suppression of air defenses may not be as successful as it was in the Middle East. What basing and deployment options can mitigate these risks while allowing U.S. forces to deter aggression? Is there a role for new platform concepts?
Can the risks associated with maintaining regional security be more effectively shared with regional partners? How can DoD better build its own capabilities and those of its partners to ensure that these efforts are complementary and successful?

It is the mission of the RAND National Security Research Division (NSRD) to address these types of difficult questions, and variations of the above examples are being or have recently been researched at RAND. I have largely isolated these issues from cost considerations to make a point, but, of course, budgetary concerns will play a big role in their resolution, and RAND has been helping DoD save money for years. Efficiencies in system and technology acquisition have been the topic of considerable RAND research, and we have on various occasions identified ways in which a high-quality force can be less expensively sustained. RAND researchers have also examined paths to achieve more efficient organizations within DoD and the Intelligence Community, as well as plans to more cost-effectively acquire facilities and infrastructure. And we attend as well to vexing challenges that persist through geostrategic shifts and budgetary cycles—notably, terrorism, including attacks on the homeland.

This annual report illustrates the scope of the RAND NSRD research agenda through summaries of selected projects completed or under way in 2012 and 2013. For most projects, links are provided to the original reports, any of which may be downloaded for free from www.rand.org. I welcome your feedback about this work and hope that it continues to stimulate policy discussion and inform decisionmaking in the years to come.

Jack Riley
Vice President, RAND Corporation
Director, National Security Research Division
Director, National Defense Research Institute
Overview

The RAND Corporation is a nonprofit institution that helps improve policy and decisionmaking through research and analysis. Since its founding in 1948, RAND has sought solutions to the most pressing problems of the day, posed by policymakers in diverse domains—national defense and homeland security, health care, labor, education, justice, infrastructure, and the environment.

RAND projects bring together experts from multiple disciplines—economists, social and behavioral scientists, engineers, and others—to address topics within one policy domain or, often, issues that span or fall between them. RAND provides valued analytic support to decisionmakers by

- Developing innovative solutions to complex problems
- Providing practical guidance and clear policy choices while also addressing barriers to effective implementation
- Using advanced empirical methods and rigorous peer review to meet the highest research standards
- Maintaining independence and objectivity by scrupulously avoiding partisanship and vested interests
- Ensuring transparency and serving the public interest by widely disseminating research publications and encouraging staff to participate in public forums (when work is not classified or otherwise restricted).
Three of RAND’s research divisions perform work related to national security. Project AIR FORCE and Arroyo Center, RAND’s Army research division, conduct research and analysis under the sponsorship of those two military services. The RAND National Security Research Division works under the sponsorship of the Office of the Secretary of Defense (OSD), other elements of the national security community, and allied governments and security organizations.

Sponsors of the RAND National Security Research Division: the Office of the Secretary of Defense, the Joint Staff, the unified combatant commands, the defense agencies, the Intelligence Community, the Department of the Navy, the departments of State and Homeland Security, foundations, and allied governments and security organizations. (For a detailed list, see pp. 38–39.)

Through its National Security Research Division, RAND conducts research on complex national security problems and defense management issues with an emphasis on the difficult strategy and policy concerns of high-level policymakers and their staffs. Policy domains include

- International security and defense policy
- Acquisition and technology policy
- Forces and resources policy
- Intelligence policy
- Homeland security and defense

Examples of research in each of these areas are shown beginning on p. 7.
Most of the National Security Research Division’s work, including all of it sponsored by DoD, is performed through a federally funded research and development center—the National Defense Research Institute (NDRI). The long-term relationship between NDRI and OSD, now in its 29th year, coupled with NDRI’s broad sponsorship and its sponsors’ appreciation of its objectivity and independence, has allowed NDRI to

- Conduct a continuous, integrated research and analytic program with a particular emphasis on enduring issues that cut across organizational boundaries
- Acquire an in-depth understanding of DoD and its needs
- Look to the future, maintaining a mid- to long-range focus together with a quick-response capability.

NDRI’s research agenda emerges from sponsor relationships marked by close cooperation. NDRI helps identify and evaluate new policies, programs, and technologies; frames alternative ways to implement current ones; and provides further analytic and technical assistance as required. Decisionmakers draw on NDRI’s analyses to develop strategic, tactical, and technological responses to evolving threats, as well as to sustain a robust all-volunteer force, reform intelligence collection and analysis, improve defense business practices, and set other policy directions serving U.S. security interests.

At the same time, NDRI acts to sustain and improve the breadth and depth of RAND’s technical expertise and its core investigative, theoretical, and methodological capabilities—the resources and tools that will enable it to address critical national security concerns for years to come.
RAND is an international pace setter in defense research and analysis. Government officials, academics, and business leaders in the United States, Europe, Asia, Australia, and the Middle East rely on RAND’s advice. They turn to RAND for assistance with the complex problems they must confront. They know they can count on RAND to independently and objectively analyze a problem, place it in the appropriate context, and identify options to help them make the best-informed decisions.
Selected Contributions

International Security and Defense Policy ............... 8
Acquisition and Technology Policy .......................... 14
Forces and Resources Policy ...................................... 20
Intelligence Policy .................................................... 26
Homeland Security and Defense ............................. 32
Global Defense Assets and Partnerships

The planned strategic pivot to Asia requires planners to undertake a substantive reevaluation of how U.S. defense assets are and will be allocated around the globe.

Events in Syria, Iran, and the Arab Spring countries suggest that the Middle East will continue to be a focus for U.S. defense planners.

RAND assesses the implications of strategic challenges to U.S. and international security and helps develop ways for the United States to meet those challenges with the aid of allies and partners.

Selected Contributions
FY12–13

NATO and the Challenges of Austerity
In the coming years, America’s partners in the North Atlantic Treaty Organization will face declining defense budgets—by a quarter in Germany and possibly more in other countries. These reductions will greatly constrain their capacity to project power. They will be able to undertake only one moderate-sized operation at a time and will be hard-pressed to meet the rotation requirements of a protracted, small-scale irregular-warfare mission—at the same time that U.S. attention is turning toward the Asia-Pacific region. To cope with these reductions, European allies should share resources, particularly through bilateral partnerships. They should also consider even deeper reductions in force structure today so they can invest in new capabilities to take advantage of technological evolution and meet emerging threats.

rand.org/t/MG1196
Coping with Further U.S. Defense Budget Cuts

Ongoing pressure to reduce the federal budget deficit, including the arrival of the first round of sequestration, is already mandating cuts beyond the $487 billion announced by the Secretary of Defense in January 2012. Further cuts should be made by choosing a clear strategic direction and focusing the reductions accordingly, rather than “across the board.” Examples of alternative strategies include preparing for persistent violent extremism and related insurgencies, ceding more responsibility for regional security to allies and partners, and preserving the shift of geostrategic focus to the Western Pacific while accepting cuts elsewhere. Any budget reductions will carry risk, but this approach would make the risk explicit to DoD leadership.

Building Partner Capacity: What Works Best?

The United States has a long history of furthering U.S. and regional security interests by helping other, friendly nations develop and improve their military forces. However, ongoing reductions in defense spending will affect the funding available for such initiatives. To help ensure the efficiency and effectiveness of efforts to build partner capacity, RAND researchers reviewed 20 years of data from such efforts in 29 countries to identify what contributes to success. They found that the most important factors are a match between U.S. and partner interests and sufficient partner baseline capacity to absorb and retain the materiel and training provided. They also found that consistent funding, delivery, support, and sustainment of the aid, as well as a healthy economy and governance in the partner country, are important contributors to success.

Using Local Defense Forces in Counter-insurgency Campaigns

Local defense forces have played a key role in counter-insurgencies over the past century—most recently in the U.S.-led intervention in Afghanistan. To help inform such efforts, RAND researchers drew lessons from eight cases of local defense forces in counter-insurgencies. They found that these forces’ greatest value is in their ability to gather intelligence rather than in the manpower they offer for combat. However, local forces’ effectiveness may be limited by local populations’ skepticism if the behavior of such units was negative in the past, as well as by friction with intervening forces. Indeed, the trilateral relationship among intervening forces, the host-nation government, and local defense forces can be a major challenge. For that reason, the U.S. military’s efforts to build local defense forces can benefit from U.S. civil-sector involvement.

Recent Publications

Allocating Marine Expeditionary Unit Equipment and Personnel to Minimize Shortfalls, www.rand.org/t/TR1253
Locals Rule: Historical Lessons for Creating Local Defense Forces for Afghanistan and Beyond, www.rand.org/t/MG1232

Non-Traditional Threats and Maritime Domain Awareness in the Tri-Border Area of Southeast Asia: The Coast Watch System of the Philippines, www.rand.org/t/OP372
Overcoming Obstacles to Peace: Local Factors in Nation-Building www.rand.org/t/RR167
Understanding and Influencing Public Support for Insurgency and Terrorism, www.rand.org/t/MG1122
Overseas Basing

The end of the Iraq War, the drawing down of operations in Afghanistan, increased emphasis on the Pacific, and fiscal constraints all bear on U.S. defense planning, as outlined in the 2012 Defense Strategic Guidance. This has significant implications for U.S. overseas military posture, prompting Congress to direct DoD to commission an independent assessment of the overseas basing presence of U.S. forces. DoD chose NDRI to carry out the assessment.
Findings
Overseas bases and forces contribute to contingency responsiveness, deterrence, assurance of allies, and security cooperation with partners, but the benefits are tempered by vulnerability to attack, uncertainty of access, and other risks. The researchers nonetheless concluded that several posture elements are vital to supporting the strategic guidance and formal U.S. commitments. In places with the highest threat levels, forces and bases must be retained for deterrence and the initial fight. A robust en-route infrastructure must remain in place to enable quick access by reinforcements and execution of globally distributed missions. Overseas air and missile defenses are also critical, as is a global naval presence.

Other elements of the overseas posture can provide substantial value, but defense planners should consider their benefits against their costs, given strategic priorities and budgetary constraints.

For example, if defense planners prioritized deterring major contingencies or increasing security cooperation in East Asia or the Middle East, force rotations in those regions might increase, along with supporting infrastructure, but at a potentially considerable expense.

Similarly, if global responsiveness were to become a higher priority, broadly distributed rotations could be added, but this would likely entail some net increase in costs, even after offsets from some reductions in permanent presence.

If defense planners opt to emphasize cost reduction, DoD could save up to $3 billion a year, while still meeting the intent of the strategic guidance, by withdrawing most Army units and half of Air Force units from Europe, together with some smaller cuts in the Pacific region. However, these savings could result in significant reductions in security cooperation activities and assurance of allies.

Conclusion
These types of posture options represent policy choices, and there is no single empirically “right” answer. Instead, decisions will reflect judgments based on the values assigned to the competing goals and the degree to which overseas posture is perceived to advance those goals.
Democratization in the Arab World

Demands for political freedom and economic opportunity fueled the Arab Spring of 2011. But can democracy take root in Egypt, Tunisia, and other countries? What long-term challenges might they face? What kinds of policy and support promote lasting success? RAND researchers addressed these questions through a RAND-supported study designed to inform U.S. and international policymakers.
There is reason for the international community to be cautiously optimistic about and supportive of democratic transitions in Arab countries.

—Laurel E. Miller
project leader

The team melded analyses of countries affected by the Arab Spring, as viewed by regional experts, with a search for trends in and correlates of successes and setbacks in democratization around the world in the past four decades.

Findings

The experiences of democratizing nations since 1973 suggest five challenges that might lie ahead for transitioning Arab countries. Democratization will test how well Islamic and secular parties can share political space. Arab Spring countries might struggle to subordinate their militaries to civilian control. In Egypt, especially, the new government must deal with a military that is strongly interested in maintaining its lucrative enterprises. Many institutions will need to be reformed or newly created, whether a country is transitioning from a highly personalistic or an institutionalized authoritarian system. New governments will need to manage state and social cohesion problems—sectarian and ethnic divisions, threats to territorial integrity, and insurgencies. Economic problems may complicate transition. In Tunisia, for example, ineffective democratic governance could lead citizens to renew the old bargain that exchanged political rights for economic benefits.

Past experiences in diverse conditions around the world show that these challenges can be overcome. Economic deterioration did not derail democratization in Mongolia or Argentina, and Portugal’s democratic transition was marked by dramatic political turbulence. Leaders and activists in Arab countries undergoing democratization may increase their chances of success if they encourage broad participation in the political process and if they take a gradual approach to asserting civilian control of the military and seeking justice for the abuses committed by former regime leaders. They should also attend closely to the process of writing a constitution, and particularly to the political ground rules that it mandates.

Recommendations

The international community can help by adopting these policies:

■ Plan to provide assistance and advice consistently and over the long term, particularly in countries that face serious state-building challenges, such as Libya and Yemen.

■ Emphasize foreign aid directed specifically at building democratic institutions and processes. This can be more effective in promoting democratization than other types of aid.

■ Support the establishment of civilian control of security institutions (e.g., through assistance in professionalizing militaries and internal security institutions) and help in developing parliamentary and other oversight structures.

■ Encourage the creation of mutually reinforcing and supporting regional structures that promote governmental and civil-society connections. For some Arab countries, Western assistance may be more palatable if channeled through a regional organization.

rand.org/t/MG1192
Characterizing the Potential of Unmanned Maritime Surface Vehicles

Unmanned vehicles have become increasingly important for military operations, but unmanned surface vehicles (USVs) have received less attention than unmanned vehicles in other domains. The U.S. Navy asked RAND to assess how and to what extent USVs could support Navy missions and functions. RAND researchers documented the current and emerging marketplaces for USVs, as well as the particular strengths of USVs relative to other platforms. They also identified critical technological advances and programmatic requirements to effectively integrate USVs into Navy operations. The RAND team developed concepts of employment for USVs across a wide range of missions and functions. The researchers then analyzed these concepts to determine the suitability of USVs for those missions and functions.
Harnessing Government Venture Capital to Counter IEDs

Government Strategic Investment initiatives, including the use of venture capital approaches, are designed to connect U.S. government agencies with innovative private companies, often in their developmental stages, by reducing the administrative and operational burdens associated with traditional acquisition statutes and regulations. RAND researchers have been assessing the feasibility and merit of using government-sponsored venture capital approaches to accelerate the identification or development of new breakthrough technologies to counter improvised explosive devices (IEDs). The research team has also examined the legal and operational ramifications of these methods and has conducted case studies of initiatives that have successfully or unsuccessfully used a venture capital approach to develop government capabilities.

Moving Aegis Combat System Software to an Open Architecture

Aegis is an integrated U.S. Navy combat system with anti-air warfare, ballistic missile defense, surface, subsurface, and strike roles that is operating on 84 ships. To reduce system maintenance costs, and to take advantage of rapidly evolving commercial computing technology, the Navy is moving Aegis from proprietary software running on military-specification hardware toward open-architecture software and commercial, off-the-shelf processors. RAND researchers examined the potential benefits of the new business model for Aegis upgrades and the challenges associated with transition to it. They reviewed the pace of upgrades and their propagation throughout the fleet. They proposed a schedule that puts software and hardware upgrades on a four-year staggered schedule to maximize the Navy’s benefit from commercial industry’s technology-replacement cycle while allowing new software to run on tested and proven hardware.

Recent Publications

Assessing the Impact of Requiring Justification and Approval Review for Sole Source 8(a) Native American Contracts in Excess of $20 Million, www.rand.org/t/TR1011

CANES Contracting Strategies for Full Deployment, www.rand.org/t/TR993


Methodologies in Analyzing the Root Causes of Nunn-McCurdy Breaches, www.rand.org/t/TR1248

Naval Aviation Budgeting: Cost Adjustment Sheets and the Flying Hour Program, www.rand.org/t/TR1282

The U.S. Navy needs an agile, adaptable acquisition process to update its computer network defenses in short, responsive time frames. This is a pressing issue, because damaging malware can mutate within hours or days. Unfortunately, the Navy’s traditional acquisition process can take three years from concept approval to initial operational capability. For computer network defense, the Navy anticipates the need to acquire and field software security products in six to 12 months and software patches in response to vulnerabilities in days or weeks. The Navy asked NDRI to recommend acquisition process changes that would allow it to meet those requirements.
To develop a more streamlined process, RAND researchers explored the acquisition literature, interviewed Navy personnel, and examined instances of successfully accelerated cyber acquisition programs. They assessed the time required for all parts of the traditional acquisition process and identified critical paths and best practices.

**Recommendations**

- Focus streamlining efforts on the certification and accreditation (testing) portion of the acquisition process. Certification and accreditation account for too much of the total time required to execute an information technology program. The appropriate Navy elements should change the current business rules and create a new testing tempo for computer network defense.

- Establish at least two distinct acquisition processes that allow different processing speeds for certification and accreditation. Simply revising the current process would not be enough to create the highly responsive cyber procurement timeline that the Navy needs now. DoD acquisition processes are too lengthy and complicated. They can be streamlined, but only to a certain extent, and the current procedures in place for urgent procurement are limited.

- Create a distinct process and budget for emerging needs. Current processes are not sufficient to keep ahead of the cyber threat. As formally defined, the Navy’s computer network defense program does not provide for response to an immediate threat, such as a new network virus. A new acquisition process needs to be institutionalized.

- Provide new authorities at the program management and engineering levels to address the validation, funding, and fielding of urgent requests by system operators. A cyber program might be executed incrementally and iteratively in six months, but someone would have to approve testing and fielding requests on a preliminary basis. As for funding, a reimbursable mechanism could handle uncertain but urgent cyber needs (as opposed to relying on a fixed budget calculated several years in advance).

- Pursue initial “future-proof” designs to the greatest extent possible. These designs should enable system changes through the use of software upgrade patches.

  rand.org/t/TR1294

---

Testing is essential but if not streamlined it can delay the fielding of cyber defenses until it’s too late.

—Isaac R. Porche III  
project leader
Facility Life-Cycle Cost-Effectiveness

DoD facilities are maintained for decades, so choices that promote cost-effectiveness over the life cycle can save real money.

—Constantine Samaras project leader

From barracks to hangars, DoD’s facilities portfolio is the nation’s largest. For this fiscal year, $10 billion has been budgeted for the construction of new facilities, and about another $10 billion has been allotted to operate and maintain those already built.

DoD’s military construction program is required by law to provide facilities that are estimated to be cost-effective over their life cycle (often 30 years or more). NDRI researchers were asked to assist OSD by identifying potential barriers to meeting that requirement.
**Approach**

Drawing from analyses of pertinent data and interviews with DoD and private-sector construction and facilities experts, the RAND team constructed a picture of the impediments to cost-effectiveness and identified options to reduce life-cycle costs.

**Findings**

The local, regional, and national actors or agencies involved differ with the stage of a facility’s life cycle, as do the barriers to securing cost-effective solutions. Among the barriers are incentives that are not aligned with the goal of life-cycle cost-effectiveness. One of the primary drivers for misaligned incentives is that there are three separate sources of funding for DoD facilities—one account for construction, another for maintenance, and a third for operating expenses.

For example, a DoD construction agent, the installation commander, and the installation’s public works department must complete a DoD form to request construction funds from Congress. This form contains information on the facility type, need, and size, as well as an economic analysis, but not an estimate of how much the facility will cost over its life cycle. The team found that those responsible for completing the form face different incentives to obtain the most cost-effective life-cycle solution. In this case, the installation’s public works department has an incentive to prefer buildings that are cost-effective over their life cycle because that department will ultimately be responsible for maintenance, and good decisionmaking will help stretch operations-and-maintenance (O&M) funding later. However, public works departments and construction agents typically do not have the resources to conduct multiple comparative cost analyses. Further, the commander may have an incentive to focus on the cost of the initial construction only, as he or she is concerned with satisfying an immediate need and likely to move to a different post before the bulk of facility O&M costs are realized.

**Recommendations**

- Compare data across DoD facilities and develop benchmarks to help evaluate performance, which may help identify performance trends, maintenance expense “hot spots,” and best design and construction practices.
- Offer incentives for life-cycle cost savings to different actors involved in the process.
- Enhance design guidelines to emphasize life-cycle cost-effectiveness.

rand.org/t/RR169
People, Resources, and Military Well-Being

DoD needs enough people, but also the right people—those with the skills necessary to meet increasingly specialized demands along the mission spectrum.

Having recruited them, DoD also needs to take care of its people—their health, their economic prospects, and those of their families.

RAND has four decades of experience with personnel supply research and years more on health and quality of life—for service members (active and reserve), their families, and DoD civilian workers.

Selected Contributions FY12–13

Restrictions on Military Service by Women
To support a congressionally mandated review of gender-based assignment restrictions in the U.S. military, RAND researchers described and quantified the positions that were closed to women in each of the services in FY11. They found that one-third of authorized positions in the Army and the Marine Corps were closed to women, but only 12 percent in the Navy and 1 percent in the Air Force were. The report includes detailed information on the units and occupations affected by Defense Secretary Leon Panetta’s January 2013 decision to remove the restrictions on women serving in combat.

rand.org/t/MG1175
Leadership Stability in Army Reserve Units

Personnel stability is highly valued by military forces, especially in units preparing for deployment, but it can be elusive. RAND researchers found that 50 percent of officers and 40 percent of noncommissioned officers had been with their reserve units for less than 12 months at the time of mobilization. These turbulence rates, persistent over time and mirrored in the entire unit membership, create a large influx of personnel into the unit, potentially slowing deployment preparation and causing units to schedule much of their training just before mobilization. The researchers examined the causes of turbulence, estimated the time required to prepare units, and recommended steps to mitigate the potential risks.

Health Benefits for an Operational Reserve

To support the Quadrennial Review of Military Compensation, RAND was asked to analyze health care coverage provided to reservists. Although they are eligible to participate in the TRICARE Reserve Select (TRS) program, it has not significantly reduced the proportion of reservists without insurance (30 percent). Health care reform may increase TRS participation by this group because TRS premiums will be similar to the penalty for being uninsured. Increased TRS uptake by reservists could help ensure that they have access to the same level of care as active-duty service members. The project team also found that reservists who have been deployed since 2001 are only half as likely as active-duty personnel to be referred for treatment of post-traumatic stress disorder, even though other research has shown that PTSD prevalence is about equal in the two groups.

Integrating the DoD Supply Chain

RAND researchers have built a case that opportunities remain for further DoD supply chain improvement through improved end-to-end supply chain integration—spanning all DoD elements and suppliers. To help DoD seize and continually identify such opportunities, they created a framework for an integrated supply chain, policy recommendations (largely adopted), and a companion management framework that will drive the department to take actions aligned with this integrated approach. They also identified specific integration-focused initiatives to improve DoD supply chain efficiency. Examples include a total cost approach for inventory positioning—encompassing purchasing, warehousing, transportation, and inventory costs—and joint consideration of inventory and material costs—and joint consideration of inventory and material costs in purchasing and supply management.
Driven by budgetary pressures to reduce the federal deficit, DoD has proposed a lower-than-usual basic pay increase for military personnel in FY14. This raises the question of whether doing so would jeopardize the nation’s ability to sustain a high-quality all-volunteer force.

Conditions are favorable for slowing the growth in military pay, enabling savings in personnel costs while achieving force management goals.

—Beth Asch, James Hosek, and Michael Mattock
project leaders
Rand sought to answer this question by assembling and analyzing the latest data on recruiting and retention and on military pay relative to civilian pay. For recruiting and retention outcomes, the RAND team used official OSD statistics. Researchers analyzed civilian wage data from the 2000–2010 Current Population Surveys and compared those data with changes in military pay that they computed from administrative files on military personnel from the Defense Manpower Data Center.

Findings

Recruiting and retention are in excellent shape. The military services have been meeting their numerical recruiting and retention goals, as well as their recruit quality targets.

Manpower requirements are anticipated to decrease in the coming years. DoD plans to decrease the active-component force by 72,000 soldiers and 20,000 Marines over the coming years, which will lower recruiting and retention targets in those services.

Basic pay for military personnel has grown. Basic pay increased by a nominal 45 percent from 2000 to 2011, which is more than the private-sector Employment Cost Index (ECI, up 33 percent) and the Consumer Price Index (CPI, up 31 percent).

Regular military compensation (RMC) has grown even more. RMC—basic pay, subsistence and housing allowances, and the tax advantage from untaxed allowances—grew an average of 40 percent for enlisted personnel and 25 percent for officers in real terms from 2000 to 2009. Enlisted RMC exceeds the compensation of 75 percent of civilian employees with similar ages and education; for officers, it exceeds 80 percent.

Policy Options

The team offered three options to slow the rate of increase in military pay:

1. a one-time increase in basic pay set at half a percentage point below the ECI’s increase
2. a one-year freeze in basic pay
3. a series of below-ECI increases (e.g., half a percentage point below for four years).

The first option would save about $5 billion over the next decade. The second and third would save about $17 billion over the same period. Choosing among the options requires balancing the savings against the level of concern that Congress, the military, and the public at large might voice over what may be perceived as a devaluing of military service. In this sense, the second and third options are more politically costly than the first.

Of course, the services need to maintain their recruiting effort. Recruiting could slip if the number of recruiters or recruiter effort is allowed to drop. If recruiting or retention issues do arise, they can be managed more cost-effectively with bonuses and special pays than with across-the-board pay actions—as other RAND research has shown (see www.rand.org/t/MG950).
Compensating Losses to U.S. Service Members

After nearly a decade of fighting in Iraq and Afghanistan, the toll on U.S. service members has been high. While nothing can compensate for the tragedy of a lost or seriously wounded loved one, DoD, the Department of Veterans Affairs (VA), and the Social Security Administration (SSA) make benefits available that are intended to compensate for economic losses to the families of casualties. Are these benefits sufficient for their purposes? For the 11th Quadrennial Review of Military Compensation, RAND researchers examined the effects of injuries and fatalities on subsequent household earnings and the extent to which retirement, disability, and military insurance payments compensate for household earnings losses.

On average, the military is fully compensating for earnings losses that result from combat injuries and fatalities.

—Paul Heaton and Amalia Miller
project leaders
The researchers relied on longitudinal, largely administrative data to track labor market earnings, disability compensation, and fatality compensation. They analyzed earnings patterns for active- and reserve-component service members and their spouses in the years following deployment. Because the risk of casualty is likely correlated with characteristics of service members (e.g., pay grade, military occupation) that affect household labor market earnings, the researchers controlled for such characteristics.

Findings

Injuries sustained during deployment were categorized on a severity scale ranging from self-reports of worsening health to very serious combat injuries as reported by DoD. The researchers found that household labor market earnings losses due to combat injuries increased over the first four years following a deployment, with the seriously injured experiencing greater losses than those with less-serious injuries. But they also found that disability compensation usually offset earnings losses due to injury. For those with more-serious injuries, government compensation substantially exceeded earnings losses, on average.

The researchers also found that household labor market earnings decline substantially in the four years following the combat death of a household member. The main driver of the earnings drop is, naturally, the loss of the service member’s own earnings, but declines in spousal earnings are also significant over the first four years. However, the combination of recurring monthly benefits (from such sources as DoD, the VA, and the SSA) and lump-sum survivor benefit payments (e.g., from Servicemembers Group Life Insurance) more than offsets the loss of labor market earnings and is sufficient to fully replace lost earnings for several decades, on average.

Conclusion

There is no way to fully repay the sacrifice of those who have sustained serious injury while serving in theaters of conflict. But in one key area—providing for the economic needs of service members and their families—DoD and the VA are largely getting the job done.

rand.org/t/MG1166, rand.org/t/TR1281

### Earnings Losses and Replacement Rates in the Fourth Year Following Return from Deployment, Active-Component Households

<table>
<thead>
<tr>
<th>Household Outcome</th>
<th>Health Worsened</th>
<th>Non-Serious Injury</th>
<th>Serious Injury</th>
<th>Very Serious Injury</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings loss ($ 2010)</td>
<td>2,693</td>
<td>5,787</td>
<td>11,948</td>
<td>22,555</td>
</tr>
<tr>
<td>Earnings loss as a fraction of total earnings</td>
<td>4%</td>
<td>9%</td>
<td>19%</td>
<td>36%</td>
</tr>
<tr>
<td>Earnings compared with uninjured, after disability payments</td>
<td>99%</td>
<td>105%</td>
<td>122%</td>
<td>154%</td>
</tr>
</tbody>
</table>
The Middle East, East Asia, cyberspace—the realms of challenges and threats faced by the United States are in many ways unprecedented in their diversity.

Senior U.S. policymakers rely on the Intelligence Community to collect and analyze valuable information providing insight, warning, and context for decisionmaking.

RAND has become a place for the Intelligence Community to turn for rigorous methodological approaches to vexing problems and innovative options to address them.

Selected Contributions
FY12–13

Drawing Lessons from Strategic Planning in the Intelligence Community

Strategic planning is critical for organizations, large and small. Successful strategy is built on a clear vision of where the organization is headed, the challenges it will face in the future, and its strategic priorities for getting there. Working from an in-depth theoretical foundation, a team of RAND researchers set out to develop a framework for strategic planning in the U.S. Intelligence Community, then conducted empirical assessments of strategic planning at seven agencies. The team combined the framework and lessons from the case studies, along with some best planning practices, into a document that can function as an operational manual for Intelligence Community professionals who lead strategic planning exercises within their organizations.
Military Intelligence Fusion for Complex Operations

The U.S. military relies on an intelligence analysis approach that characterizes operational environments dichotomously (e.g., supportive or unsupportive), which can categorize them in a way that distorts identity and misleads commanders. In the hostile, complex, and chaotic counterinsurgency environment, the local population can support the government and the insurgency to varying degrees at the same time. A RAND paper proposes a new approach for combining intelligence information for analysis and using it to form a more complete picture of counterinsurgency operations. It also discusses ways to implement this approach—applying it case by case, creating a special class of analysts, or making changes throughout the force—with the understanding that such decisions need to consider the limits of personnel training and available resources.

Promoting Agility at the National Reconnaissance Office

To help the National Reconnaissance Office (NRO) become more flexible and agile in an increasingly uncertain world, RAND sought answers to three questions. First, would the NRO benefit from building modular satellites? The RAND team developed criteria to evaluate whether systems are good candidates for modularity and applied them to systems both inside and outside the NRO. Second, what lessons might be drawn from how chief executive officers, military personnel, and health care professionals (among others) respond to surprise? Here, the researchers identified similarities in how people in a highly diverse set of occupations make decisions under uncertainty. Third, does the private sector offer any lessons in how it structures its R&D processes? To find out, the team examined three case studies of firms seeking to become less “factory-like” and more “lab-like” (i.e., more innovative) and explored the implications of their structure.
Decreasing U.S. Reliance on Critical Materials Controlled by China

The U.S. economy and particularly its manufacturing sector depend on the supply of new and semifinished materials. U.S. manufacturing relies on imports to supply a high percentage of numerous critical materials, and, in some cases, one country holds the dominant share of a material's global production and export. For more than a dozen materials critical to U.S. manufacturing, a RAND research team found at least half the supply was concentrated in one country: China.

The main issue is the control of production and processing by countries that use export restrictions to disrupt or manipulate commodity markets.

—Richard Silberglitt
project leader
The researchers sought to determine the reliability of the sources of imported materials on which U.S. manufacturers depend, the effects when an individual producer commands a majority market share of supply for a critical material, and how these effects can be prevented or counteracted. The team focused on the first part of the supply chain—from a material’s extraction through its preparation for use in manufacturing.

Findings

The researchers paid special attention to the supply of tungsten, a critical material in cemented carbides—composite materials for drilling, cutting, and machining. As a result of China’s control over the tungsten market, its export policies, and its own growing demand, a tight supply is expected in the coming years. Further, a lack of access to tungsten materials by manufacturers outside China creates pressure to move manufacturing to that country.

A two-tier pricing system for other commodities resulting from China’s export restrictions has also hindered the international competitiveness of U.S. manufacturers and provided motivation for moving operations to China. China’s export restrictions have contributed to large price increases for raw and semifinished materials and, in some cases, volatility on the world market. This unfairness has led to two international trade cases brought against China by the United States and the European Union, the latest involving rare earth elements, tungsten, and molybdenum.

Finding alternatives—or otherwise reducing the amount of tungsten in products—is one way that U.S. manufacturers have responded to the threat from China. Another is secondary production from waste and scrap, which has reduced import dependence by about a third. However, it is not clear by how much more secondary production can increase, or the extent to which tungsten can be reduced or substituted without affecting product performance.

Policy Options

The researchers identified two courses of action to diminish the vulnerability of U.S. manufacturers to critical material shortages.

- Benchmark market data for materials with concentrated sources against diversified commodity markets in order to provide early warning of developing problems.
- Diversify sources of production and processing to increase resiliency and help limit the damage from supply disruptions or market distortions.

rand.org/t/RR133

As China’s export restrictions increase, its market share of critical materials also increases.
Who Is Influencing the Conflict in Syria?

In just two years in Syria, a movement that began with youths scrawling anti-regime graffiti in Daraa has given way to a country-wide insurgency pitting regime loyalists against a hodgepodge opposition. As the conflict has grown, external parties have come to support each side in Syria, with the regional balance of power hanging on the outcome. RAND sought to shed light on the dynamics of these external influences in the conflict.
External parties to the conflict include some opposed to the Assad regime, some supporting it, and others trying to remain nonaligned. Members of these groups have varying interests and commitment to those they support. For example, among those supporting the regime opponents, interests vary from limiting Iran’s influence over Syria and the region (Saudi Arabia and the United States) to border stability (Turkey and Jordan) and supporting Sunni coreligionists (Gulf Cooperation Council states).

External parties supporting the Assad regime see the conflict in starker terms than those supporting the regime’s opponents, likely because of the greater stakes they hold. While Assad’s remaining in power does not pose an intolerable threat to nations supporting his opponents, his fall would deprive Iran of its sole ally in the region and threaten the existence of his supporters in Hezbollah as a military force.

Syria’s internal political landscape has grown increasingly complex in the protracted conflict. Regime supporters have sought to portray the Sunni-Arab opposition as a threat to ethnic and sectarian minorities. The loosely coordinated opposition’s members vary considerably as to whether a religious or representative government should replace the regime. Concerns about sectarian violence have led many, including Druze and Christians, to nonalignment.

Way Forward
As the conflict evolves, several developments could change the relative influence of external parties. An increased jihadist presence in Syria could diminish the support of external parties for regime opponents, just as the use of unconventional weapons by the Assad regime could diminish its support from external allies, or even prompt direct Western intervention. Without some such dramatic development or a move by the United States, such as enforcement of a no-fly zone, Syria appears headed for protracted conflict without a clear resolution.

RAND convened 26 experts on Syria and on the external parties to the conflict. The exercise began with a structured discussion of how external parties (see table) view the stakes in Syria and what strategies they are likely to use to advance their interests. Participants then identified key internal parties and their goals. The roundtable concluded with an analysis of the developing relationships between internal and external parties and the effects that those relationships might have on Syria and security in the region.

Alignment of External and Internal Actors

<table>
<thead>
<tr>
<th>Opposition to Assad Regime</th>
<th>Nonaligned</th>
<th>Support for Assad Regime</th>
</tr>
</thead>
<tbody>
<tr>
<td>External Actors</td>
<td>External Actors</td>
<td>External Actors</td>
</tr>
<tr>
<td>Turkey</td>
<td>Israel</td>
<td>Russia</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>Iraq</td>
<td>Iran</td>
</tr>
<tr>
<td>United States</td>
<td>Lebanon</td>
<td>Hezbollah</td>
</tr>
<tr>
<td>GCC States</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jordan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Libya</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal Actors</td>
<td>Internal Actors</td>
<td>Internal Actors</td>
</tr>
<tr>
<td>FSA (Free Syrian Army)</td>
<td>Kurds</td>
<td>Assad regime</td>
</tr>
<tr>
<td>LCCs (local coordination committees)</td>
<td>Christians</td>
<td>Alawi community</td>
</tr>
<tr>
<td>National Coalition</td>
<td>Druze</td>
<td></td>
</tr>
<tr>
<td>Jihadists</td>
<td>Palestinian factions inside Syria</td>
<td></td>
</tr>
</tbody>
</table>
Uncertainty and the Nature of Threats

Domestic security and emergency management missions are fraught with uncertainty about the nature of the threats, and they require strategies that balance competing objectives.

In a fiscally constrained environment, homeland security and defense analyses inform choices about priorities, so they must be transparent and objective.

RAND has a history of providing the kind of high-level systematic, integrative analysis required for the complex and often novel problems in the homeland security and defense domain.

Selected Contributions
FY12–13

Planning for Energy Security
DoD installations rely on the commercial grid for 99 percent of their electricity needs. Extreme events, such as hurricanes and cyber attacks, could disrupt the flow of electricity to these installations at the same time they are needed to support critical military missions or operate as bases for emergency services. A RAND research team helped DoD enhance installation energy security by developing a framework to evaluate energy security strategies across its installation portfolio. The framework enables leaders to assess whether existing or proposed strategies enhance DoD capabilities while incorporating cost-effectiveness into their decisions.

rand.org/t/RR162
Promoting Voices Against Extremism

American Muslims have played an important role in helping to counter violent extremism and support for al Qaeda and are increasingly using the Internet and social media to these ends. RAND researchers interviewed American Muslims experienced in social media to understand key challenges facing Muslim activists against extremism and to identify ways to empower voices online. Their findings suggest that outside influences must be facilitators, not orchestrators. The U.S. government, which is interested in promoting such voices, and private funders will have more success fostering themes of peace and tolerance if they allow Muslim activists to control the message. Such efforts should also reduce the national security focus where possible and address sources of mistrust within the Muslim community.

rand.org/t/RR130
Anticipating the Terrorists

To model terrorism risk to the domestic air transportation system, the Transportation Security Administration (TSA) and the Boeing Company, in consultation with private-sector and government members of a risk management working group, developed the Risk Management Analysis Tool (RMAT). TSA asked RAND to independently evaluate whether RMAT provides results that are valid for the agency’s risk assessment needs.
The Risk Management Analysis Tool is useful for some purposes but needs improvement if it is to be helpful in high-stakes decisionmaking.

—Andrew R. Morral
project leader
NSRD Research Sponsors (2012–2013*)

OFFICE OF THE SECRETARY OF DEFENSE

Under Secretary of Defense for Acquisition, Technology, and Logistics
Deputy Under Secretary of Defense for Installations and Environment

Assistant Secretary of Defense for Acquisition
Deputy Assistant Secretary of Defense for Space and Technology
Deputy Assistant Secretary of Defense for Strategic and Tactical Systems
Defense Acquisition University
Director, Performance Assessments and Root Cause Analyses

Assistant Secretary of Defense for Logistics and Materiel Readiness
Deputy Assistant Secretary of Defense for Materiel Readiness
Deputy Assistant Secretary of Defense for Transportation Policy
Assistant Secretary of Defense for Operational Energy Plans and Programs

Assistant Secretary of Defense for Research and Engineering
Deputy Assistant Secretary of Defense for Systems Engineering
Deputy Assistant Secretary of Defense for Rapid Fielding
Director, Research
Deputy Assistant Secretary of Defense for Manufacturing and Industrial Base Policy
Director, Human Capital Initiatives

Under Secretary of Defense for Intelligence
Deputy Under Secretary of Defense for Intelligence and Security

Under Secretary of Defense for Personnel and Readiness
Assistant Secretary of Defense for Force Management and Readiness
Deputy Assistant Secretary of Defense for Civilian Personnel Policy
Deputy Assistant Secretary of Defense for Military Personnel Policy
Deputy Assistant Secretary of Defense for Readiness
Director, Diversity Management and Equal Opportunity
11th Quadrennial Review of Military Compensation

Assistant Secretary of Defense for Health Affairs
Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury

Assistant Secretary of Defense for Reserve Affairs
National Committee for Employer Support of the Guard and Reserve
Federal Voting Assistance Program

Under Secretary of Defense for Policy
Deputy Under Secretary of Defense for Strategy, Plans, and Force Development
Deputy Assistant Secretary of Defense for Force Development
Deputy Assistant Secretary of Defense for Plans
Deputy Assistant Secretary of Defense for Strategy

Assistant Secretary of Defense for Asian and Pacific Security Affairs
Deputy Assistant Secretary of Defense for Afghanistan, Pakistan, and Central Asia

Assistant Secretary of Defense for Global Strategic Affairs
Deputy Assistant Secretary of Defense for Nuclear and Missile Defense Policy

Assistant Secretary of Defense for Special Operations/Low-Intensity Conflict
Deputy Assistant Secretary of Defense for Counternarcotics and Global Threats

Deputy Assistant Secretary of Defense for Partnership Strategy and Stability Operations
Combating Terrorism Technology Support Office
Director, Cost Assessment and Program Evaluation
Director, Net Assessment

JOINT/COMBINED ORGANIZATIONS

Joint Staff
Vice Director, Logistics (J-4)
Vice Director, Force Structure, Resources, and Assessment (J-8)

International Security Assistance Force
NATO Training Mission–Afghanistan
Director, Afghan Assessment Group
Special Operations Joint Task Force–Afghanistan

Joint IED Defeat Organization
U.S. European Command
Director, Plans and Strategy (J-5)

U.S. Pacific Command
Deputy Director, Intelligence (J-2)

U.S. Special Operations Command
Director, Inter-Agency Task Force
Chief, Global Special Operations Force Operational Planning Team

U.S. Strategic Command
Alternative Futures Division

DEPARTMENT OF THE NAVY

Office of the Secretary of the Navy
Assistant Secretary of the Navy for Research, Development, and Acquisition
Deputy Assistant Secretary of the Navy for Research, Development, Test, and Evaluation
Office of Naval Research
Program Executive Officer for Aircraft Carriers
Program Executive Officer for C4I
Program Executive Officer for Integrated Warfare Systems
Program Executive Officer for Ships
Program Executive Officer for Submarines

U.S. Navy
Deputy Chief of Naval Operations for Fleet Readiness and Logistics (N4)
Deputy Chief of Naval Operations for Integration of Capabilities and Resources (N8)
Director, Assessments (N81)
Naval Postgraduate School
Director, Center for Civil-Military Relations
Director, Center on Contemporary Conflict Affairs

Naval Sea Systems Command

Naval Special Warfare Command
Commander, Naval Special Warfare Group 3

U.S. Marine Corps
Marine Corps Combat Development Command
Intelligence Department
Marine Corps Intelligence Activity
OTHER DEFENSE ORGANIZATIONS
Defense Advanced Research Projects Agency
Information Innovation Office
Defense Logistics Agency
Director, DLA Distribution
Defense Security Cooperation Agency
Programs Deputy for Building Partnership Capacity
Defense Threat Reduction Agency
National Defense University
Center for Joint and Strategic Logistics
Center for Study of Weapons of Mass Destruction
U.S. Air Force Intelligence, Surveillance, and Reconnaissance Agency
National Air and Space Intelligence Center

OTHER INTELLIGENCE ORGANIZATIONS
Office of the Director of National Intelligence
Assistant Director of National Intelligence for Human Capital
Intelligence Advanced Research Projects Activity
National Intelligence Council
Defense Intelligence Agency
Directorate of Intelligence
National Geospatial-Intelligence Agency
Director, InnoVision
National Reconnaissance Organization

OTHER U.S. GOVERNMENT ORGANIZATIONS
U.S. Department of Homeland Security
Science and Technology Directorate
Office of Program Analysis and Evaluation
Transportation Security Administration
U.S. Department of Justice
National Institute of Justice
U.S. Department of State

OTHER U.S. SPONSORS
Analytic Services, Inc.
Homeland Security Studies and Analysis Institute
Battelle Pacific Northwest Laboratories
The Lynde and Harry Bradley Foundation
Carnegie Corporation of New York
Elizabeth Dole Foundation
The Ford Foundation
Bill and Melinda Gates Foundation
MITRE
National Guard Youth Foundation
Ploughshares Fund
SAIC
Smith Richardson Foundation
University of Southern California
Wounded Warrior Project

INTERNATIONAL SPONSORS
Commonwealth of Australia
Department of Defence
Japan
Japan Foundation
Republic of Korea
Army
The Asan Institute for Policy Studies
Korea Institute of Defense Analyses
Ministry of Unification
National Research Council for Economics, Humanities, and Social Sciences
Kurdistan Region of Iraq
State of Qatar
Qatar Foundation
Republic of Singapore
Ministry of Defence
United Arab Emirates
Abu Dhabi
Court of the Crown Prince
United Kingdom
Ministry of Defence

* Through March 2013
Publications (2012-2013*)


Military Caregivers: Cornerstones of Support for Our Nation’s Wounded, Ill, and Injured Veterans, Terri Tanielian, Rajeev Ramchand, Michael P. Fisher, Carra S. Sims, Racine Harris, and Margaret C. Harrell, RR-244-TEDF, 2013, www.rand.org/t/RR244.


Frank Kendall (Chair)
Under Secretary of Defense for Acquisition, Technology and Logistics

James Miller
Under Secretary of Defense for Policy

Christine Fox
Director, Cost Assessment and Program Evaluation, Office of the Secretary of Defense

Arthur “Trip” Barber
Deputy Director, Assessments Division (N81), Office of the Chief of Naval Operations

Reginald Brothers
Deputy Assistant Secretary of Defense for Research, Office of the Under Secretary of Defense for Acquisition, Technology and Logistics

Lisa Disbrow
Vice Director, Force Structure, Resources and Assessment (J-8), Joint Staff

Bonnie Hammersley
Deputy Chief Information Officer, Resources and Analysis, U.S. Department of Defense

Mark Krzysko
Deputy Director, Enterprise Information, Office of the Under Secretary of Defense for Acquisition, Technology and Logistics

Daniel Plafcan
Policy Analyst and Portfolio Manager for Socio-Cultural Analysis, Office of the Under Secretary of Defense for Intelligence

Benjamin Riley
Principal Deputy, Rapid Fielding Directorate, Office of the Assistant Secretary of Defense for Research and Engineering

Philip Rodgers
Principal Deputy Director, Acquisition Resources and Analysis, Office of the Under Secretary of Defense for Acquisition, Technology and Logistics

Nancy Spruill (Executive Agent)
Director, Acquisition Resources and Analysis, Office of the Under Secretary of Defense for Acquisition, Technology and Logistics

Pat Tamburrino, Jr.
Chief of Staff for the Under Secretary of Defense for Personnel and Readiness

(As of May 2013)
RAND Board of Trustees

Karen Elliott House (Chairman)
Former Publisher, The Wall Street Journal; Former Senior Vice President, Dow Jones and Company, Inc.

Richard J. Danzig (Vice Chairman)
Senior Advisor, Center for a New American Security; Former U.S. Secretary of the Navy

Barbara Barrett
President and Chief Executive Officer, Triple Creek Ranch; Former U.S. Ambassador to Finland

Kenneth R. Feinberg
Founder and Managing Partner, Feinberg Rozen, LLP

Francis Fukuyama
Olivier Nomellini Senior Fellow, The Freeman Spogli Institute for International Studies, Center on Democracy, Development, and the Rule of Law, Stanford University

Pedro José Greer, Jr., M.D.
Assistant Dean of Academic Affairs, Florida International University College of Medicine

Bonnie Hill
President, B. Hill Enterprises, LLC

Ann McLaughlin Korologos
Chairman Emeritus, The Aspen Institute; Former U.S. Secretary of Labor

Philip Lader
Chairman, The WPP Group; Senior Advisor, Morgan Stanley International; Partner, Nelson, Mullens, Riley & Scarborough; Former U.S. Ambassador to the Court of St. James’s

Michael E. Leiter
Senior Counselor to the Chief Executive Officer, Palantir Technologies; Former Director, U.S. National Counterterrorism Center

Peter Lowy
Co-Chief Executive Officer, Westfield, LLC

James M. Loy
Admiral, United States Coast Guard, Retired; Senior Counselor, The Cohen Group; Former Deputy Secretary, U.S. Department of Homeland Security

Michael Lynton
Chief Executive Officer, Sony Entertainment, Inc.; Chairman and Chief Executive Officer, Sony Pictures Entertainment

Ronald L. Olson
Partner, Munger, Tolles & Olson LLP

Mary E. Peters
Mary Peters Consulting Group LLC; Former U.S. Secretary of Transportation

Donald B. Rice
Retired President and Chief Executive Officer, Agensys, Inc.; Former U.S. Secretary of the Air Force

Michael D. Rich
President and Chief Executive Officer, RAND Corporation

David K. Richards
Private Investor

Hector Ruiz
Former Chairman, GLOBALFOUNDRIES; Former Chairman and Chief Executive Officer, Advanced Micro Devices, Inc.

Leonard D. Schaeffer
Senior Advisor, TPG Capital; Former Chairman and Chief Executive Officer, WellPoint

Trustees Emeriti

Harold Brown
Counselor, Center for Strategic and International Studies; Former U.S. Secretary of Defense

Frank C. Carlucci
Former Chairman, The Carlyle Group; Former U.S. Secretary of Defense

(As of May 2013)
Ronald Reagan aboard aircraft carrier USS intrusion detection system (IDS) to monitor unclassified network activity in Alpharetta, Georgia, before a benefit concert in their honor on October 2012. Both were severely injured in IED explosions. (AP photo/David Goldman)