A MODERN ARMY RESERVE FOR A MULTI-DOMAIN WORLD: STRUCTURAL REALITIES AND UNTAPPED POTENTIAL

Lewis G. Irwin
The United States Army War College

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PREFACE

Casual readers of this monograph may interpret it as a somewhat fatalistic description of all of the things the Army Reserve cannot be or do, but, in fact, the intent is the opposite. If this invaluable American national security institution is to realize its full potential in an increasingly complex and rapidly changing world, we must first make a clear-eyed and honest assessment of the institution’s inherent limitations as well as its untapped potential. The first steps in attacking any problem are to acknowledge it and then define it before proposing ways to solve it. These are the goals of this monograph.
ABOUT THE AUTHOR

Major General Lew Irwin currently serves as the 34th Commandant of the Joint Forces Staff College and Director of the Joint Force Development and Design Center. Prior to this assignment, he was the Deputy Chief of the Army Reserve. Before that, he commanded the 416th Theater Engineer Command, an Army Reserve formation of more than 12 thousand soldiers assigned to 175 units across 26 Western states. Irwin has also commanded at the company, battalion, group, and brigade levels in Regular Army, multi-component, and Army Reserve units. In his civilian career, he is a professor of American government and public policy at Duquesne University in Pittsburgh. A graduate of West Point, he holds a PhD in political science from Yale University and a master’s degree in strategic studies from the US Army War College. Irwin has served on the faculty of the Department of Social Sciences at West Point and represented the Army Reserve on the Reserve Forces Policy Board. His most recent book is Disjointed Ways, Disunified Means: Learning from America’s Struggle to Build an Afghan Nation (Strategic Studies Institute, 2012).
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INTRODUCTION

Throughout history, successful armies anticipated the future, adapted, and capitalized upon opportunities. Today, the Army faces a rapidly changing security environment that requires . . . difficult decisions in order to remain an effective instrument of the Nation’s military power.

General Mark A. Milley, Chief of Staff of the US Army (CSA), in testimony before the Senate Armed Services Committee, April 7, 2016.¹

The US Army Reserve has been a remarkably malleable and adaptable institution over its history, and it is time for it to adapt again. Since its inception as an organized medical reserve corps in 1908, the Army Reserve has made important, diverse, and cost-effective contributions to the Army, the Joint Force, and the nation, each tailored to the specific needs of the moment. Now, at the center of the Army’s new operating concept—first expressed in 2014 in Win in a Complex World and refined in an update focused on multi-domain operations in 2018—is the idea of emerging, complex national security threats, some of which are unknown, others of which are unknowable.² In its essence, the operating concept asks Army leaders to prepare for a rapidly changing and increasingly unstable world in which we do not fully understand

what capabilities we might need or when we might need them.

This challenging and uncertain threat environment is exacerbated by the emergence of peer or near-peer adversaries carrying out asymmetric and multi-domain operations within a context of failing or failed states, a wavering international system, rapidly proliferating advanced technologies, and other destabilizing global developments. The emerging threat environment is even more problematic when juxtaposed with the modern realities of mounting Army personnel costs, a persistently high demand for forces, unsustainable federal budget deficits, and uncertain defense budgets for the foreseeable future.

Further complicating these challenges are concerning trends in American society, among them a declining eligibility of young Americans to serve in the military, a declining propensity to serve, and an increasing concentration of that propensity among certain families and in particular states. Not only do these troubling trends present mounting obstacles to Army recruiters, but they also raise the specter of a military at risk of becoming increasingly detached from the civil society it serves.

When considered together, these challenges make it clear that the Army cannot afford to waste any resource or leave any potential contribution untapped. Fortunately, the Army Reserve has proven over its history that it can adapt as needed to provide diverse and cost-effective, complementary and supplementary capabilities to the Army, the Joint Force, and our interagency partners. An examination of the Army Reserve’s history also makes it clear that these past organizational adaptations have been anything but incremental in nature. Moreover, at critical junctures
in our history, the Army Reserve’s contributions to the nation have extended well-beyond the achievement of traditional US national security objectives, stretching to encompass contributions in the realm of economic security in times of economic privation, among other impacts. These nontraditional contributions have often been enabled by Army Reserve soldiers’ civilian-acquired skills.

Presently, however, many of these valuable capabilities, whether they are conventional or nontraditional, are largely unready, underdeveloped, untapped, or inaccessible altogether. Specifically, access is inhibited by a series of structural realities, institutional limitations, current personnel policies, and basic inefficiencies. Each of these structural and institutional limitations must be overcome before the Army Reserve’s invaluable capabilities can be made ready for mobilization, deployment, and utilization in support of US national security objectives and the protection of other vital national interests.

In light of these challenges, there are three primary goals that drive the reform proposals that follow. The first goal, which is focused on the near term, is to optimize the application of scarce resources to achieve the best possible levels of mission readiness among the Army Reserve’s current mix of capabilities. We then turn our attention to a set of more profound reforms intended to enable the Army Reserve to build strategic readiness now and in the future—changes that will require correspondingly heavier institutional and legislative lifts to bring about. Lastly, we take aim at the unknown and unknowable challenges of the emerging security environment, challenges that are described in the Army’s current operating concept; in the more recent thinking on multi-domain operations; in the
National Defense Strategy (NDS) of 2018; and in other recent, national strategic guidance. This third set of reforms seeks to realize nontraditional forms of Army Reserve contributions that can support multi-domain operations across the spectrum of conflict and within a context of reemerging great-power competition and mounting uncertainty.

To achieve these goals, the monograph begins with an honest and direct assessment of the modern Army Reserve’s structural realities, institutional limitations, and untapped potential placed within the context of the challenges of the emerging strategic environment. The monograph then proposes a corresponding series of reforms that will enable the Army Reserve to take full advantage of this invaluable national security resource. They are divided into three categories, including

- **quick wins**—a set of reforms aimed at maximizing Army Reserve readiness in the near term by optimizing the application of current resources and authorities, with a specific focus on enhancing Army Reserve mission command;
- **heavy lifts**—more substantial adaptations of Army Reserve structures, systems, and processes to align the institution with emerging modern realities and which are aimed at achieving enduring strategic readiness; and
- **deep reforms**—significant enhancements of the Army Reserve as an institution aimed at providing the Army and our nation with much-needed strategic and operational flexibility as we confront the challenges of an increasingly daunting, uncertain, and risk-laden future.
PART I:  
THE HISTORICAL  
AND  
STRATEGIC CONTEXT
1. AN ADAPTABLE, MALLEABLE, AND SCALABLE INSTITUTION

The purpose of each reserve component is to provide trained units and qualified persons available for active duty in the armed forces, in time of war or national emergency, and at such other times as the national security may require.

10 U.S.C. 10102

Over its distinguished history, the Army Reserve has made significant and diverse contributions to the nation both inside and outside of the realm of national security. With unofficial roots in the requirement for the on-campus military training of citizen-soldiers specified by the Morill Act of 1862 as well as the US government’s creation of a Veteran Reserve Corps during the Civil War, the Army Reserve was formally created by Congress on April 23, 1908, as the US Army’s Medical Reserve Corps. In this first configuration, which consisted of a small contingent of medical professionals, the Army Reserve was intended to provide a cost-effective means of bridging the significant gap in the Army’s medical capabilities that had been exposed during the Spanish-American War.

This new reserve force offered the federal government a variety of substantial advantages when compared with its Regular Army and National Guard counterparts. For example, as a part-time force comprised of volunteers to be mobilized solely on an as-needed basis, this reserve force was highly cost-effective since each mobilization of required medical capabilities could be tailored to the specific needs

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of each military operation. Likewise, the citizen-soldiers’ required medical training would take place almost entirely within the civilian workplace, meaning that the civilian medical sector would absorb the bulk of the costs of the soldiers’ medical training. The military would also benefit from having its reserve doctors positioned in the civilian sector where they would have access to cutting-edge advances in medicine, again at no cost to the government. And unlike the state militias, this reserve force would fall fully under the federal government’s control. These special characteristics have been part of the Army Reserve’s DNA from the beginning, and they remain key features of the institution’s organizational culture today.

Anticipating the possibility of armed conflict in Europe prior to US involvement in World War I, Congress included provisions in the National Defense Act of 1916 that created an Officer’s Reserve Corps, an Enlisted Reserve Corps, and the Reserve Officer’s Training Corps, each under federal control. Once the nation entered World War I, the Army Reserve demonstrated its scalability by producing almost 90,000 Reserve officers who served during the conflict, with about one-third of them being Army doctors. The Army Reserve also provided more than 80,000 enlisted soldiers, with about 15,000 of them serving in medical fields. In the interwar period after World War I, the Army Reserve demonstrated its adaptability as the Army planned for a Reserve force of 33 maneuver divisions. Some of these divisions merely existed on paper, while others had actual cadre assigned to

them, but each had value as a means of facilitating the rapid expansion of the Army should it be needed.\(^5\)

Demonstrating its inherent adaptability, the Army Reserve’s contributions to the nation were multifaceted in the 1930s and 1940s. After the United States plunged into the Great Depression during 1929, and upon Franklin Roosevelt’s election as president in 1932, the Army Reserve provided the 30,000 officers who led the Civilian Conservation Corps (CCC) from 1933 to 1942. These Army Reserve officers supervised 2,700 camps as well as trained and led about 3 million personnel over the nine-year history of the CCC. The CCC counted among its achievements the planting of 3 billion trees, the creation of 800 parks, and the construction of countless public roadways and service buildings. This work continued under the direction of the Army Reserve until the CCC was disbanded in 1942 as the nation undertook full wartime mobilization and the US economy recovered.\(^6\)

In addition to contributing to Army war planning in the interwar years, the Army began recalling Army Reserve officers in June 1940 for premobilization preparation. Ultimately, the Army Reserve contributed 26 Reserve-designated infantry divisions and another 6 Army Reserve cavalry divisions, each of which saw combat during World War II. Over that period, the Army Reserve provided over 100,000 Reserve Officer’s Training Corps graduates, or about a quarter of all Army officers, as well as more than 200,000 Army Reserve soldiers who served in support of the war effort.\(^7\)

\(^7\) USAR History, *Concise History*, 6.
The Army Reserve’s contributions to conflicts since World War II have been equally significant. Other major commitments of Army Reserve soldiers have included 240,000 soldiers who served during the Korean War, 68,000 troops mobilized during the Berlin Crisis, 6,000 troops who served in Vietnam, and 80,000 troops who served in Operation Desert Storm. Other significant troop contributions have included mobilizations of about 16,000 troops in support of operations in Bosnia as well as other smaller mobilizations in support of missions in Somalia, Haiti, and the Sinai Desert. Since September 11, 2001, the Army Reserve has provided about 300,000 soldier-years of support to operations in Afghanistan, Iraq, and Guantanamo Bay, in addition to supporting other stateside security requirements.

In terms of reliability, the Army Reserve has always answered the call of duty, including not missing one late arrival date during more than a decade of mobilizations in support of Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and other concurrent missions. Recent analysis completed by the Institute for Defense Analyses and commissioned by the Reserve Forces Policy Board (RFPB) for the Office of the Secretary of Defense demonstrated that there were no statistically significant differences between active component and reserve component performance in OIF once the forces had been deployed. In its findings, the Institute for Defense Analyses characterized the

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operational relationship between components as one of “shared burden” and “shared risk.”

Although they applied both quantitative and qualitative methodologies in their analysis, the Institute for Defense Analyses analysts were not able to capture the magnitude of the other-than-kinetic support to OEF and OIF in any systematic or quantitative fashion. But they acknowledged the disproportionate and important contributions of the reserve components in terms of the key tasks required to open, set, and sustain the two operational theaters. At the same time, the researchers also noted that the repeated mobilizations of these formations had necessitated major cross-leveling of personnel and equipment among most units as well as a major infusion of postmobilization resources to build deployable units, at least in the cases of the Army National Guard and the Army Reserve. A separate Institute for Defense Analyses analysis also demonstrated these reserve component mobilizations are cost-effective when the fully burdened life cycle costs of the various components are captured and considered. That said, it is important to note that the post-mobilization training timelines for these formations were not insignificant, especially for


10. RFPB, Improving the Total Force Using the National Guard and Reserves: A Report for the Transition to the New Administration by the Reserve Forces Policy Board, RFPB Report 17-01 (Falls Church, VA: RFPB, November 1, 2016), 20-23.
the combat and combat support formations in the land force elements that were mobilized.

Other recent analysis describes other less obvious but still significant contributions from reserve components. For example, successive base realignment and closure commissions have consolidated active Army units at fewer installations. By concentrating a smaller active Army in a handful of large posts across the country, the base realignment and closure commissions have inadvertently lessened the frequency of routine contact between the active Army and the American public. The Army Reserve, on the other hand, remains a decentralized and geographically dispersed federal force with more than 1,000 facilities spread throughout the nation. Army Reserve soldiers live and work in all 50 states and in other territories where they help to bridge the gap between those serving and the public they serve. As a result, Army Reserve soldiers have routine and frequent contact with civic leaders and the population from which we all recruit, and they live within the society that we defend. Likewise, the seven reserve components—of which the Army Reserve comprises 24 percent of the total—serve in approximately 3,000 communities across the United States.\(^{11}\) The Army Reserve is connected to the American public in 6,605 facilities located in 1,061 Army Reserve centers spread across the nation.\(^{12}\)

Like the other reserve components, the Army Reserve also makes a variety of other significant contributions to the nation. These contributions include providing the capacity to surge forces in the event of protracted operations, thus affording the nation a hedge against operational and strategic risk. The Army

\(^{11}\) Improving the Total Force, 20, 24.

\(^{12}\) Improving the Total Force, 66, 68.
Reserve also provides the Army an opportunity to simultaneously retain active personnel through a continuum of service and deliver specialized or complementary capabilities when needed to meet recurring or emergent requirements. In sum, since its inception in 1908, the Army Reserve has served the nation well as an adaptable, tailorable, scalable, and cost-effective federal force in the face of new threats and changing circumstances. That said, the emerging strategic and operational environment suggests it is time for the Army Reserve to adapt again.

2. EMERGING, COMPLEX THREATS AND ACCELERATING CHANGE

We are facing increased global disorder . . . creating a security environment more complex and volatile than any we have experienced . . . This increasingly complex security environment is defined by rapid technological change, challenges from adversaries in every operating domain.


The US defense establishment’s preoccupation with protracted conflicts in Afghanistan and Iraq after 9/11 brought with it a series of unintended and adverse consequences. The first category of adverse impacts came in the form of necessary but unproductive resource consumption. For more than a decade, debt-fueled wartime spending purchased impermanent, niche capabilities, such as mine-resistant ambush protected vehicles, rather than investing in genuine force development and modernization. At the same time, the intensive manpower demands of extended counterinsurgencies and simultaneous stability operations in two active theaters translated into rapidly expanding personnel costs. Among these war-connected costs were major recruiting and retention incentives, increased pay and benefits, escalating health care obligations, and other expenditures required for growing and maintaining a much larger ground force in time of war.

Just as troubling, a second category of adverse impacts came in the form of a collective distraction from significant transformations among our potential adversaries. As the US military strained to meet the demands of operations in two manpower-intensive theaters and as we surged resources first to Iraq and then Afghanistan, we were effectively distracted from major gains in capability and capacity among global competitors. During more than a decade of decisive US engagement elsewhere, near-peer competitors adapted and improved their own capabilities, most often with the specific goal of countering US strengths. This period of US distraction enabled both Russia and China to grasp the import and potential of multi-domain and gray-zone operations more quickly than the United States, placing us in the uncomfortable position of having to play catch-up with foreign powers.

At the same time, the world itself was changing in profound ways. Rapid developments in technology, the proliferation of social media, emerging weakness in the global order, and other concurrent changes in the human condition were simultaneously bringing about game-changing differences in the modern operational environment. These social, economic, political, demographic, climatic, and technological developments were combining to reshape the world and alter the threat environment in a variety of fundamental ways, all laden with significant risk. Taken together, the adverse impacts of the protracted wars in Afghanistan and Iraq diverted scarce defense resources toward near-term requirements to support counterinsurgency, reconstruction, and stability operations and came with steep opportunity costs.
In the early 2010s, as the wars in Afghanistan and Iraq began to consume less of the senior defense leadership’s focused attention, national security professionals began to focus on present and future changes to the operational environment. As a significant step in this direction, in 2014, the Army published *Win in a Complex World*, its updated operating concept. In its essence, *Win in a Complex World* envisions a next generation of warfare in which the Army’s goal is to simultaneously provide leadership with multiple options across multiple domains and team with multiple partners, all in order to confront potential adversaries with multiple, simultaneous dilemmas. In its description of Army core competencies, the operating concept adds “set the theater” and “shape security environments” to the list of Army missions, tasks that feature significant Army Reserve roles under the current organization of capabilities among Army components.\footnote{TRADOC Pamphlet 525-3-1 (2014), iv.}

In its description of the emerging operational environment, the operating concept offers a wide-ranging inventory of rising and evolving threats. Among them are transnational terrorist organizations, transnational criminal organizations, proliferating weapons of mass destruction, and progressively more dangerous and accessible cyberspace and counter-space capabilities. Complicating matters further, these threats are set against a backdrop of an increased velocity of human interaction, destabilizing demographic changes, a widespread rise in urban populations, and the increasingly common failure of governments to provide basic services or secure borders during conflict.\footnote{TRADOC Pamphlet 525-3-1 (2014), 11-14.} The
operating concept also identifies technological or strategic surprise as a further area of major potential risk.\textsuperscript{17}

The operating concept goes on to identify an expansive list of Army Warfighting Challenges (AWFCs) that must be solved in these developing circumstances. As a fully engaged, total force partner, the Army Reserve will undoubtedly contribute to the efforts to solve many, if not most, of the “first-order problems” represented across the full list of AWFCs. But there are multiple challenges on the list of AWFCs for which the civilian-acquired, other-than-military competencies of Army Reserve soldiers might prove especially helpful. Among others, the Army Reserve could potentially make valuable, nontraditional contributions to the following AWFCs:

- develop situational understanding (AWFC #1)
- shape the security environment (AWFC #2 and #3)
- adapt the institutional Army and innovate (AWFC #4)
- conduct homeland operations (AWFC #6)
- conduct space and cyber electromagnetic operations and maintain communications (AWFC #7)
- improve soldier, leader, and team performance (AWFC #9)
- develop agile and adaptive leaders (AWFC #10)
- conduct wide area security (AWFC #13)
- ensure interoperability and operate in a joint, interorganizational, and multinational environment (AWFC #14)\textsuperscript{18}

\textsuperscript{17} TRADOC Pamphlet 525-3-1 (2014), annex D.
\textsuperscript{18} Training and Doctrine Command, “Army Warfighting Challenges” (Fort Eustis, VA: Department of the Army, January 31, 2017).
Given its primary focus of addressing the emerging challenges of unified land operations in a decisive action environment, the Army operating concept says little about the recurring challenges of building partner capacity. But history shows that the United States has intervened in the affairs of other nations regularly when it has suited our national interests. Therefore, while there is little in the operating concept regarding the particular challenges of reconstruction and stability operations, the United States can expect to engage in these types of operations again in the future, especially given the wavering international order and the prevalence of failed and failing states. The Army Reserve is already well-positioned to assist with host-nation military and police force development. But the institution can also be adapted relatively easily to be a solid fit with tasks connected to the development of the rule of law, governance, host-nation economies, infrastructure enhancement, and other nonkinetic lines of effort (LOEs) often required to be performed in nonpermissive security environments.

Building upon this emerging body of thinking, in 2016 the Joint Chiefs of Staff published its own assessment of the emerging threat environment. Formally entitled *Joint Operating Environment 2035: The Joint Force in a Contested and Disordered World*, the JOE offers a daunting view of the future. It predicts persistent disorder, contested norms (or a changing of norms and rules by state and nonstate actors), new poles of economic power, rebalanced energy security, a growth in state-sponsored cyberforces, and an erosion of the standing institutions of international order. The JOE also identifies other major security challenges in the form of the “connected consequences of fragile and failing states,” an accelerating diffusion of power,
globalized criminal and terrorist networks, disruptive manufacturing technologies, and the weaponization of commercial technologies. As a primarily defense-focused work, the JOE does not emphasize the looming impacts of demographic, climatic, and environmental changes, or the fundamental changes to the nature of work and the global economy that are already well-underway, such as globalization, automation, and other factors. Taken together, however, the JOE portrays the future as one of profound and accelerating changes that cannot help but be destabilizing.

In the run-up to the 2016 election, former Secretary of State George Shultz assembled a group of experienced thought leaders to offer their own national security assessments, among them then-retired Marine General James Mattis. Mattis and his coauthors excoriated what they viewed as a reactive foreign policy suffering from the absence of a strategic center as well as America’s slow grasp of dangerous changes in our potential adversaries and the world. The leaders’ broad critique expressed concerns over a rising China and revanchist Russia, and they cited the declining health of the international order as another major source of risk. The authors also noted the increasing weakness within America’s diplomatic instrument of national power coupled with a loss of “focus on warfighting” 40 years into the all-volunteer force as another major cause for concern. Mattis and his coauthors issued a call for a whole-of-government approach to national security, noting that the

21. Shultz, Blueprint, 141-142.
American government had become too focused on the use of the military instrument at the clear expense of civilian agencies and departments.

Senior leaders within the US Army and Department of Defense (DoD) were also working to understand these emergent national security challenges and to chart a course for dealing with them. In October 2016, as Shultz’s edited volume was published, the Army leadership was rolling out its own analysis of the emerging threats and the shape of the future force required to meet them. CSA Mark Milley used his keynote speech at the annual meeting of the Association of the US Army to issue a call to combine emerging technologies as quickly as possible to defeat strong adversaries. Expressing his own concerns about revisionist states, including a revanchist Russia, Milley described an extremely lethal battlefield of the near future, one characterized by the proliferation of surveillance, a concurrent proliferation of precision munitions, and widespread access to most capabilities made possible by the emergence of the Internet of Things and other emerging technologies. Noting that what can be seen can be hit, Milley described a need for smaller formations that would need to conceal, cover, and move frequently for their survival as well as a force that must be designed, manned, trained, equipped, and led to meet the demands of increasingly lethal combat against near-peer competitors.

At the same 2016 conference, General David Perkins of US Army Training and Doctrine Command (TRADOC) framed the future force requirements

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Milley outlined in terms of “multi-domain battle.” Describing fires and effects across the five domains of land, air, sea, space, and cyber as the new joint force paradigm, Perkins emphasized newly required capabilities as well as a need to prepare to fight in cities. Of note, Perkins also highlighted the growing difficulty of staying ahead of the talent, research, and development curves of civilian industry and technology as a looming challenge for the Army and DoD.

Other uniformed Army leaders have offered their own assessments and prescriptions more recently. In addition to the publication of a joint US Army–Marine Corps white paper on multi-domain battle early in 2017, General Robert Abrams, then of US Army Forces Command, reinforced the need to focus on decisive action and combined arms maneuver against a near-peer, hybrid threat. In October 2017, the Army updated Field Manual 3-0, *Operations*, which provides an overview of the changes in the operating environment and represents the next step forward in the Army’s adaptation to emerging and evolving threats and a changing world.

In a companion piece published in *Military Review* in late 2017, Lieutenant General Michael Lundy of the Combined Arms Center noted a need for wholesale changes in Army culture in the aftermath of the protracted conflicts in Afghanistan and Iraq. He called for refocusing on decisive action operations rather than counterinsurgency and for rebuilding “our Army’s readiness to prevail in large-scale ground combat

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against opponents with peer capabilities,” among other needed changes.  

Late in 2017, Acting Secretary of the Army (SecArmy) Ryan McCarthy outlined six major modernization priorities, among them long-range precision fires, an improved Army network, and next-generation ground and air combat vehicles. McCarthy also noted the lack of agility in Army and DoD procurement and equipment fielding processes as well as an inability to keep up with the pace of change in the private sector and the world. Shortly thereafter, then-SecArmy Mark Esper reinforced those messages in his own call for heightened operational readiness to deal with emerging, near-peer threats and for cross-functional teams of operators needed to truncate the time required to get needed capabilities into the hands of soldiers in the field.

In the same vein, General Joseph Dunford, chairman of the Joint Chiefs of Staff, sees the emerging strategic and operational environments and the accelerating pace of change as an imperative for transformation across the Joint Force. In his call for holistic and innovative approaches to solving complex national security problems that are trans-regional, multi-domain, and multifunctional in nature,


he calls for enhanced strategic thinking and innovative security options.

Perhaps most significantly, however, Secretary of Defense James Mattis brought together the threads of this thinking on emerging threats and future force requirements when he issued a new NDS in February 2018. In his strategic guidance, Mattis emphasized the “reemergence of long-term, strategic competition” by “revisionist powers” as the proximate threat to the United States against a backdrop of the threats and changes to the operational environment identified within the national security community.\(^\text{28}\) In December 2018, the Army expanded this line of thinking with a revision of the Army operating concept that focuses specifically on the challenges of multidomain operations.\(^\text{29}\)

For all of this attention on emerging threats and changes in the world order, however, it is possible, if not likely, that we may be underestimating the scope and magnitude of the changes to come. Viewed from this perspective, the Army’s operating concept is actually fairly conventional in the sense that while it broadly describes major technological and societal change and it issues a call for cross-domain operations, it does not really account for the fact that entirely new ways of waging war are likely to emerge in the not-too-distant future. Put another way, we are all products of our own formative experiences, including our senior leaders’ grounding in twentieth-century technologies and perspectives, and are


\(^{29}\) TRADOC Pamphlet 525-3-1 (2018).
therefore unlikely to anticipate the full magnitude of
the dramatic changes to come.30

Researchers at the cutting edge of developing tech-
nologies describe a near-future world fraught with
despite these more dramatic threats and opportunities. In his
2017 book *Future War*, retired Air Force Major General
Robert Latiff describes astounding emergent technolo-
gies that have the clear potential to alter war in incon-
ceivable ways. Among these developing technologies are artificial intelligence, synthetic biology, “enhanced
humans,” swarming robots, “dense electronic war-
fare,” and the targeting of individual humans based
upon their “unique electronic and behavioral signa-
tures.”31 Other game-changing, emergent technolo-
gies include high-energy lasers, high-power radio
frequency weapons, function-enhancing drugs, auto-
mated identification software, radio-frequency iden-
tification tags, hypersonic vehicles and munitions,
neural networking, and neural transmitting.32 Moreover, as these technologies are developed and then
adapted for warfare, our potential adversaries’ access
to them through increasingly sophisticated, three-
dimensional printing capabilities will represent even
more risk for national security planners and war-
fighters alike.

In sum, the United States is facing a variety of
different, complex threats, including those known,
unknown, and unknowable. The accelerating pace of

30. This important point was suggested to me by John Fer-
rari, MG (USA). Ferrari further suggested that the solutions to
these emerging challenges will not come from our generation,
but, rather, from those who have come of age in our highly con-
ected and technologically advancing world of today.
21-37.
technological and sociological change adds further uncertainty and risk into the national security equation, just as this uncertain situation is exacerbated by the likelihood of future tight budgets, the continued rise of revisionist and revanchist powers, and new threats from increasingly viable nonstate actors. In this unforgiving environment, we cannot afford to waste any resources or leave any potential capabilities untapped, and the US Army Reserve can help solve many of these rising challenges in a cost-effective manner. But before defining and realizing those important potential contributions, it is important to make an honest and clear-eyed assessment of the institution as it stands today.
PART II:
A NEW STUDY
IN
UNPREPAREDNESS
3. THE ARMY RESERVE’S FIVE “STRUCTURAL” REALITIES

It was generally agreed that the North Koreans, when they found out who they were fighting, would turn around and go back. The young soldiers of Task Force Smith were quite confident; at this point, none of them felt fear.

T.R. Fehrenbach, *This Kind of War: A Study in Unpreparedness*, 1963

Over the past few decades, defense planners have been driven by the necessity to employ most of the US military’s seven reserve components as operational reserve forces rather than as the strategic reserves they were originally intended to be. Army planners continue to lean heavily upon the Army National Guard and the Army Reserve to bridge the gap between the ever-increasing requests for land forces and the existing inventory of active component structure. Given this shift in reserve component missions and capabilities, it is important to make an honest and clear-eyed assessment of the Army Reserve as it exists today. This need is particularly acute given the new and complex threats of the twenty-first century as well as the Army’s goal of realizing multi-domain capabilities across the spectrum of conflict.

Since 9/11, the Army’s reserve component utilization has run the gamut from combat arms to combat sustainment, ranging from systematic employment of the Army National Guard’s brigade combat teams to similarly expansive use of the Army Reserve’s combat support formations and other elements needed to

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open, set, or sustain operational theaters. The Army Corps of Engineers serves as a representative example of this increasing reliance on the reserve components. Almost all of the active component’s engineers are contained in the brigade engineer battalions of the brigade combat teams, which by structure and doctrine only provide about 25 percent of the engineer assets and capabilities required for decisive action operations. Put another way, about 75 percent of the Army’s combat effects engineering units, and nearly 100 percent of the construction effects units needed to set and maintain an operational theater, will come from the Army National Guard and the Army Reserve.

The Army Reserve’s contribution to the Total Army in other branches and capabilities is equally significant. While the Army Reserve represents just 20 percent of the overall end strength of the Total Army, at a cost of only 6 percent of the overall Army budget, the Army cannot be truly expeditionary or sustain unified land operations for any real duration without a trained, ready, and resilient Reserve.34 For example, the Army Reserve contains 83 percent of all military information support operations structure, 82 percent of the Army’s total civil affairs capability, 65 percent of the Army’s quartermaster field services, 50 percent of all medical capability, and similarly disproportionate percentages of many other critical support and sustainment enablers.35 The Army Reserve also holds other specialized operational and functional capabilities that are unique to the component, including a wide variety of legal, military intelligence, supply, transportation, engineering, chemical, and military police structures. The Army Reserve also contains a

34. OCAR, “America’s Army Reserve,” 6.
35. OCAR, “America’s Army Reserve,” 9.
host of specialized and unique mission command and theater-enabling capabilities, among them deployable theater engineering, military police, aviation, and other support and sustainment headquarters. Taken together, the Army Reserve contains about half of the Army’s maneuver support structure as well as a quarter of the Army’s force-generating capability.\(^\text{36}\)

In many respects, the binning of these capabilities in the Army Reserve over the last few decades has represented a smart risk decision, given the circumstances of their employment over that same period. Likewise, the predictability and years-long lead times inherent in the “patch chart” rotational requirements in support of sustained operations in Iraq and Afghanistan since 9/11 have represented a near-perfect scenario for the use of Reserve component land forces. Equally important is the fact that these operations have involved counterinsurgency operations, reconstruction and stability operations, and detainee operations or security force requirements, rather than high-end, kinetic operations. Put another way, the specific OEF and OIF mission sets made the extensive reliance upon reserve component land forces more feasible and justifiable from a risk perspective, whether viewed in terms of risk to mission or risk to force. But we now face the prospect of the reserve components being called upon to support combined arms maneuver in unified land operations against high-end, peer or near-peer adversaries; this shift in potential utilization alters the calculus for reserve use significantly and brings with it some genuine cause for concern.

By way of analogy, in the early 1990s, most economists described the United States as suffering from a “structural deficit.” In coining this term, the

\(^{36}\) OCAR, “America’s Army Reserve,” 6.
economists meant that an entrenched and irresponsible combination of inadequate tax revenues, elevated military spending, and uncapped social welfare entitlements would prevent the federal budget from achieving fiscal balance for the foreseeable future. This adverse situation could not be resolved without fundamental reforms. Unfortunately, the United States finds itself in this fiscal situation again. And in a sense, the Army Reserve is in a similar predicament. That is, the Army Reserve is now in a state of structural unpreparedness—or an enduring and persistent readiness deficit—when the fundamental realities of the organization are juxtaposed against the emerging demands of the twenty-first century threat environment and the emerging needs of the Army described in TRADOC Pamphlet 525-3-1 and FM 3-0.

Indeed, the five structural realities below must be understood separately and in combination if we are to assess the organization’s potential to meet these emerging requirements honestly and realistically.

**Structural Reality #1: Army Reserve soldiers are required by statute to perform 39 days of training per year, as advertised.**

Army Reserve soldiers are required to perform 39 days of training annually, contrasted with the 365 training days that are theoretically available to active soldiers. Complicating this limiting factor further, while the Army Reserve can shift resources internally to increase an individual soldier’s training days when needed, the statutory training requirement remains the baseline of 39 days, and the soldiers were recruited into the Army Reserve with the central advertising
message of “one weekend a month, plus two weeks per year.”

Despite this oft-repeated narrative of the 39-day-per-year commitment, the practical reality is markedly different. Data compiled by the RFPB in 2014 from the Defense Manpower Data Center showed that over the period from 2000 to 2013, Army Reserve officers served an average of 73 days per year in a compensated duty status; however, Army Reserve enlisted soldiers spent an average of 50 days in a compensated status, for an overall average of 54 days per service member.\textsuperscript{37} Army Reserve soldiers serving in leadership positions, regardless of rank (sergeant and above), served an average of 74 days in a compensated duty status per year. Of course, these measures of compensated duty performance do not reflect the daily, uncompensated requirements of service in a leadership position. The RFPB report did not break out the leaders’ uncompensated requirements separately, but these uncompensated requirements averaged 17.3 extra hours per month for all Army Reserve officers, with enlisted Army Reserve soldiers averaging 11 hours per month in uncompensated service themselves.\textsuperscript{38}


\textsuperscript{38} RFPB, 2014 Reserve Forces.
Structural Reality #2: The overwhelming majority of Army Reserve soldiers needs full-time civilian employment to be able to serve.

For traditional, part-time Army Reserve soldiers, who comprise about 94 percent of the Army Reserve’s overall structure in our deployable operational units, it is the soldier’s civilian occupation that “puts the food on the table.” Put another way, the Army counts on civilian employers to subsidize our Army Reserve soldiers’ service, so it is incumbent upon us to help them to maintain their employment so they can continue to serve. The increase in operational reserve peacetime readiness requirements in the face of emerging, high-end threats over the last few years has begun to strain the force. When combined with the strong economy, this strain has manifested itself in the form of challenges in achieving and maintaining Army Reserve end strength objectives and retaining our soldiers up to or beyond their first enlistment.

This second Army Reserve reality has adverse qualitative impacts for the soldiers who do remain in the force. Specifically, the need for viable civilian employment results in a self-selection bias that often makes it difficult to get the most talented junior officers and noncommissioned officers (NCOs) to commit to taking on the Army’s most challenging leadership assignments, especially in the operational units, where the demands on leaders’ time are the greatest.\(^\text{39}\) And given the typical timelines for company command for officers and squad and platoon leadership for NCOs,

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it is too often the case that our junior leaders are trying to establish themselves with young families and civilian careers at the very same time that they reach the point when the Army needs them to take on leadership roles in uniform.

When you combine each of these elements, the major factors that most often inhibit Army Reserve soldiers from performing extra duty are not usually tied to a lack of Army resources. Instead, it is more often the case that our soldiers lack available time to perform the extra duty, or that they are unwilling to commit extra time to the Army in light of the opportunity costs of that service. From the soldiers’ perspective, these opportunity costs can come in the form of time away from their families or as unwanted and unnecessary complications with their civilian employment. This situation also leads to another self-selection bias, in the sense that the soldiers who are most willing to sign up for extra duty are too often those with lesser prospects on the civilian side of the citizen-soldier equation. In that situation, the Army Reserve becomes something of a jobs program, rather than the application of scarce top-drawer talent against specific requirements.

Structural Reality #3: Army Reserve human resources are distributed geographically and structurally across the United States.

In the active component of the US Army, human resources are managed centrally by Department of the Army G-1, its subordinate Human Resources Command, and other staff elements. The active Army accesses new soldiers centrally, and those soldiers are fungible—that is, they are relatively easily assigned
against requirements wherever those requirements are located. Active soldiers can be moved to those duty locations on a generally routine schedule, and they understand that the needs of the Army will ultimately drive their duty assignments.

The reality of the Army Reserve’s human capital management is quite different. In advance of mobilization, the Army Reserve has a structural distribution of its human resources. This reality is tied to the fact that our soldiers are literally volunteers three times over. That is, they first volunteer to serve in the Army Reserve, after which they sign up for a military occupational specialty (MOS). Each soldier then joins a particular unit anchored in a specific geographic location. For most soldiers, the choice of unit—almost always connected to family and civilian employment considerations—is often the most important of the three acts of volunteering to the soldier, and the one with the most emotion connected to it.

The Army Reserve’s lack of a centralized G-1, or at least a G-1 with any significant ability to redirect human resources for unit requirements prior to soldier mobilization, represents a major human resources challenge. The implications of this structural distribution of human capital, which are explored in more detail in the chapter that follows, are substantial. Given that Army Reserve installations are essentially fixed, in the sense that real property acquisition and divestiture transactions and the corresponding unit relocations are both expensive and politically charged actions, the Army Reserve is essentially beholden to particular locations for recruiting and retaining the soldiers that comprise our units.

The fact that the economic circumstances of particular regions change over time adds another
complication to the goal of building trained and ready units of action. For example, as recruiting markets swell or fade, the Army Reserve too often experiences a wide variation in unit end strength tied to the ability to recruit in particular geographic locations. On the one hand, some units will be persistently over their required strength, while others—often derided as being “broken units”—become habitually understrength. Both cases are problematic in their own ways, but those that fail to grow become candidates for the challenging and emotionally charged act of restationing.

**Structural Reality #4: By default, the Army Reserve lags the active Army in equipment supply, readiness, modernization, and access.**

As another aspect of the binning of risk by component, the Army Reserve’s equipment posture lags behind that of the active component, whether measured in terms of supply, modernization, readiness, or access. In one sense, the same factors that frame the structural and geographic distribution of human capital in the Army Reserve apply to the Army Reserve’s distribution of equipment. However, these persistent equipment challenges are also partly by design, as the Army seeks to maximize the benefit to the Total Army in its application of scarce funding for equipment acquisition; this is known as a cascading equipping strategy.

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As part of this deliberate approach, the Army often intentionally purchases reserve component materiel at a slower pace than it does materiel for the active Army. The Army also hands down older equipment to the reserve components after procuring new versions for the active force. As a result, the Army Reserve does not keep pace with the active Army in terms of fill rates or modernization. In addition, the realities of the defense budget are such that these equipment challenges are structural in nature, or persistent and enduring, at least in the pre-mobilization phase of Army Reserve training and readiness activities.

As a result of this equipping strategy, most Army Reserve units do not have a full complement of equipment required by the modification table of organization and equipment or the most modern versions of many critical items. As a key example, this situation is particularly acute in the area of mission command systems. Even those units that have the required communication and computing equipment usually lag in terms of system patches, updates, and required credentialing. In public remarks in 2015, the Chief of the Army Reserve estimated that 75 percent of all Army Reserve mission command systems, including both hardware and software, were incompatible with their active Army counterparts.\(^\text{41}\) Examples include Blue Force Tracker, the Movement Tracking System, and Joint Capabilities Release, among other mission command information systems. This equipment story is the same in many other areas.

By definition, then, the Army Reserve is not interoperable with the active component during routine pre-mobilization training. Army Reserve readiness is inhibited further by the disaggregation of unit equipment sets and the dispersal of equipment storage sites around the country. Units also face difficulties in gaining access to equipment for training and maintenance activities. When taken together, these equipment realities combine to impose a limit on what is realistically feasible in terms of generating pre-mobilization readiness.

**Structural Reality #5: Every mobilizing unit requires pre-mobilization cross-leveling and post-mobilization training.**

The Army Reserve’s fifth structural reality logically flows from the previous four. Regardless of whether unit mobilization is preplanned in accordance with the Sustainable Readiness Model (SRM), or instead emerges as the result of a no-notice contingency, Army Reserve formations will require a cross-leveling of personnel upon the notification of sourcing. Given the Army’s cascading equipping strategy, mobilizing units are also likely to require a cross-leveling or outright issuance of equipment, whether to fill shortages or to provide modernized or updated versions of mission-critical equipment. Invariably, mobilizing units will also require some level of post-mobilization training, including training on various individual, leader, and collective tasks. This fifth structural reality is a simple fact of life in the Army Reserve.

To substantiate this assertion, each mobilization in support of OEF, OIF, Guantanamo Bay, and other missions in the post-9/11 period has required personnel
cross-leveling and post-mobilization training. Most involved equipment cross-leveling and the fulfillment of operational needs statements as well. In fact, while the Army Reserve is justifiably proud of never having missed a late arrival date during the many years of extensive mobilizations and deployments, the truth is that it took a major cross-leveling of personnel and equipment, extensive post-mobilization training, and a concurrent infusion of many other resources to sustain that record. Furthermore, the vast majority of mobilizations in support of OEF, OIF, and other missions during this period were of the preplanned, patch chart variety, meaning that they were typically projected well in advance of need.

Carrying this theme further, the Army Force Generation (ARFORGEN) model was largely an artificial construct for the Army Reserve over those years, as few units—if any—ever actually progressed systematically through the five-year cycle. Instead, commanders and planners typically scrambled during the last few years of a unit’s ARFORGEN sequence to man and equip the formations at the levels required to report to the mobilization platform for post-mobilization training. The four- or five-year SRM and ARFORGEN models run up against a variety of reserve realities that make them impractical in the first place. Among these inhibitors are two-to-three-year command tenures, high rates of personnel turnover in units from year to year, professional military education (PME) schedules that are out of sync with the cyclical models, and even requirements for senior-grade leaders to transfer to new units to be promoted. These and other factors render the models unrealistic at best.

When these five structural realities are considered in the context of the emerging threats and
requirements of the twenty-first century, it becomes clear that the Army Reserve’s status quo would present significant risk to mission and force in the event of a major, short-notice, kinetic conflict. These factors are only part of the story, however, as our assessment of the challenges that confront today’s Army Reserve is not yet complete.
4. IMPLICATIONS OF THE REALITIES AND OTHER CHALLENGES

M-day. The term used to designate the unnamed day on which full mobilization commences or is due to commence.

C-day. The unnamed day on which a deployment operation commences or is to commence.

Joint Publication 5-03.1: Joint Operation Planning and Execution System

The contemporary need for an “operational” reserve coupled with the emergence of potential, high-end, kinetic threats has resulted in the imposition of increased peacetime readiness requirements across each of the DoD’s seven reserve components. Defense planners have also leaned upon the reserve components to shorten their mobilization and deployment timelines, with the goal of making reserve capabilities available quickly and routinely to meet ever-expanding global force requirements. In the case of the Army Reserve, these heightened peacetime readiness requirements run squarely up against the institution’s five structural realities. However, these structural realities only represent part of the challenge that confronts Army Reserve leaders in their efforts to transform the organization into a rapidly responsive and mission-ready operational component of the US military.

42. Joint Chiefs of Staff, Joint Publication 5-03.1: Joint Operation Planning and Execution System (Washington, DC: The Pentagon, August 4, 1993), GL-47.
Implications and Challenges: M Cannot Equal C

In its essence, the act of bringing together the personnel, equipment, training, and effective leaders needed to realize the successful mobilization and deployment of a reserve unit is a physics problem. That is, each of these elements must be brought together in space and time and in a particular sequence to meet Army and Joint Force requirements, which change frequently. This challenge is exacerbated by the disaggregated and dynamic nature of the Army Reserve personnel and equipment that have to be brought together to form a deployable and mission-ready unit. Just as Army Reserve units are widely and unevenly distributed across the United States by type and capability, Army Reserve personnel are unevenly distributed by rank and occupational specialty; the Army Reserve’s equipment is spread across the United States as well. These geographic distributions happen for a variety of reasons, such as the need to be able to respond to Defense Support to Civil Authorities requests, the realities of evolving recruitment markets, and even congressional political calculations.

Training proficiency varies for similar reasons. Like the ARFORGEN model that came before it, the SRM is a largely artificial exercise for Army Reserve formations, given persistent shortages of low-density soldiers, the juxtaposition of SRM’s four-year sequence with two- or three-year command tenures, and rates of turnover in the junior ranks that often run around 20–25 percent of each unit per year. As such, SRM’s four-year cycle might see a unit turn over nearly 100 percent of its junior personnel in one cycle, with a corresponding requirement for new duty MOS qualification training seats every year. It is also usually the case
that the leadership that begins the four-year cycle will not still be in place when the SRM cycle culminates. In a real sense, the predictability and repetitiveness of OEF and OIF missions were tailor-made to overcome these realities. But the hard truth is that M-day—the date on which Army Reserve forces are mobilized—cannot equal C-day—the date on which operations commence—without the forces accepting major operational risks.

Implications and Challenges: Manning the Force

In addition to the structural aspects noted previously, a variety of other factors present major and persistent obstacles to the task of filling the Army Reserve’s ranks and retaining soldiers once they join. One central challenge comes from the fact that the best recruiting markets change over time, often without warning, while unit locations are essentially fixed, given the real property, workforce, and political inhibitors connected to the process of relocating units. A glance at the Army Reserve’s personnel data reveals a massive turnover of junior enlisted personnel each year as well as a persistent difficulty in filling the ranks with the numbers of mid-career leaders needed to lead the organization effectively. The Army Reserve compensates for these persistent shortfalls by simultaneously bringing in as many new soldiers as possible each year and promoting nearly every officer or NCO who meets the basic educational and training qualifications required for the junior and mid-career ranks. Unsurprisingly, this approach has resulted in a variety of adverse consequences, whether viewed quantitatively or qualitatively.
The most prominent of these adverse consequences is a persistent distribution of human resources in the shape of a skinny pyramid, or a hollowing of the officer and NCO ranks in the mid-career grades, with a concurrent major overstrength in the junior ranks and a wholesale shortage of warrant officers of all grades. In fiscal year (FY) 2018, the Army Reserve had only 87 percent of the captains, 71 percent of the majors, and 67 percent of the lieutenant colonels it is required to have by structure. The Army Reserve also had only 70 percent of the staff sergeants it needs as well as 61 percent of the sergeants first class and 83 percent of the first sergeants required by structure. Overall, the FY 2018 Army Reserve had only 80 percent of the warrant officers required, a particularly concerning shortfall given the highly technical capabilities that reside primarily or wholly in the component.

On the other hand, the Army Reserve has about 200 percent of the lieutenants it needs, 107 percent of the privates required, 128 percent of the specialists needed, and 111 percent of the sergeants required by structure. Furthermore, this skinny pyramid has been persistent, as a glance at the strength report from a year earlier in January 2017 shows equally significant shortages, including shortfalls of 607 staff sergeants (73 percent of required fill), 6,643 sergeants first class (67 percent), 1,109 master sergeants and first sergeants (82 percent), 1,899 captains (84 percent), 4,613 majors (57 percent), and 1,744 lieutenant colonels (69 percent). The force was also short by 707 warrant officer 1’s and chief warrant officer 2’s (CW2s) (71 percent

43. Chief of the Army Reserve, “Weekly Chief of the Army Reserve’s Cards,” March 2, 2018. The numbers were comparable six months prior to this data pull as well.
44. Chief of the Army Reserve.
of required fill), 219 CW3s (80 percent), 47 CW4s (90 percent), and 21 CW5s (75 percent).\footnote{Chief of the Army Reserve.}

These mismatches between inventory and requirements bring with them all of the adverse implications one would expect. For example, the Army Reserve’s readiness posture is adversely affected by the fact that a majority of the lieutenants—53 percent of the total population—are actually serving in slots that call for a captain. Likewise, 52 percent of the Army Reserve’s captains are serving in majors’ slots, while 73 percent of majors are serving in positions that actually require a lieutenant colonel.\footnote{Chief of the Army Reserve.}

Complicating things further, Army Reserve soldiers are not fungible like their active component counterparts, in that soldiers who are in excess to a need in one geographic location cannot be easily reassigned to other units where a need for their rank and MOS exists prior to a unit being mobilized. In the enlisted ranks, this skewed distribution results in leader-to-led ratios closer to one-to-eight in many units, rather than the one-to-three or one-to-four called for by Army doctrine. Junior soldiers fail to get the leadership or coaching they need, especially when they are new to the service, and they subsequently vote with their feet by quitting altogether or fail to meet the standards for remaining in the service.

Other factors present serious challenges as well. The Army Reserve’s particular mix of units and specialized capabilities, such as medical units, means that unlike Components 1 and 2, the Army Reserve actually requires more captains than it does lieutenants across the force. Accordingly, lateral entry into the Army Reserve from the active component is a vital source of officers and NCOs and, when the economy
is strong or if the active component is growing in size, the Army Reserve usually has difficulty achieving its mission. Likewise, nearly all promotions are contingent upon the completion of PME, and it is often too difficult for Army Reserve officers and NCOs to juggle PME requirements on top of civilian employment, family obligations, and their ongoing military responsibilities in their units. Perversely, it is often the officers and NCOs with the most successful civilian careers—the exact talent we would like to retain in the force—who find it too hard to complete their PME.

As an example of this challenge, a lieutenant colonel’s promotion board in recent years had 96 combat engineer majors eligible for promotion consideration. Thirty-two of the 96 majors were selected for promotion, while the other 64 were not. All 32 selectees had completed the required PME, while none of the 64 non-selectees were educationally qualified. Simply put, we know that, within that group, there were selectees who should not have been selected for promotion, along with non-selectees who should have been selected. Regardless, the low numbers of selectees do not begin to fill the numerous mid-grade vacancies across the Army Reserve’s formations. Since the Army Reserve has no transient, training, hospital, and school accounts, and since opportunities for temporary duty and return are extremely limited, this problem will not solve itself.

As a major contributing factor to many Army Reserve leaders’ inability or unwillingness to complete required leader development training, local

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47. Eli Candelaria, CPT (USA), “Lieutenant Colonel’s Promotion Board Results” (speech, Engineer Senior Leader Conference, Fort Leonard Wood, MO, April 2015).
commanders too often require their subordinates to attend a unit’s collective training exercise instead of their PME, or they merely allow the leaders to do so when asked. These shortsighted decisions based on rationalizations for the sake of unit-level readiness “eat the Army’s seed corn” and contribute directly to a “hollow force” in the mid-career ranks. Across the Army Reserve, 58 percent of majors do not meet the military education qualifications for promotion, along with 30 percent of captains, in populations already badly understrength.\(^{49}\) A related challenge to PME completion and mid-career retention comes in the form of limited oversight of soldier physical training, as Army Reserve leaders generally only see their soldiers a few days per month. In some cases, soldiers attempt to mask physical fitness shortfalls by avoiding attendance at institutional training such as PME, where physical fitness tests are routinely required as a condition of enrollment.

Similar personnel challenges are evident within the Active Guard and Reserve (AGR) program as well. As one causal factor, the Army Reserve often struggles to meet AGR accession targets, and overall quality suffers accordingly, as the recruiting aperture is opened as widely as it can be. While systematic empirical evidence of AGR qualitative performance is not available, this selection bias reveals itself to commanders in a much higher degree of variance in performance across the AGR ranks than I have found to be the case in the active component. To be clear, we have truly excellent AGR soldiers who compare favorably with—or exceed—the performance of their active component counterparts. Unit commanders rely heavily upon

\(^{49}\) Tia Young, COL (USA), *Army Reserve G-1* (information paper, October 27, 2016), 1-2.
these highly talented individuals as the backbone of their units and staffs. But it is too often the case that other AGRs fail to perform to the minimum standards expected of their grades or specialties, a situation that results in major detrimental effects for their units, given the pivotal role that AGRs play in realizing peacetime training and readiness.

In fairness to the AGRs, the Army Reserve generally gives short shrift to their professional development. Little is offered in the way of intentional or formal, professional development for the AGRs as a group, as only the functions of “administer, train, organize, maintain, and mobilize” are authorized.\(^{50}\) The administer, train, organize, maintain, and mobilize law therefore limits the Army Reserve’s ability to develop AGRs as leaders by preventing AGRs from being placed into traditional leader development assignments such as company and battalion commands, except in units tied to those specific functions, such as recruiting units. At the same time, the Army Reserve is highly dependent upon its AGRs to serve in important roles that shape the organization at the component and Army Reserve command levels, given the reality of an inverted full-time support (FTS) pyramid. That is, there are major requirements for component-level expertise at the Army staff level as well as major requirements for command-level staff expertise in the headquarters that reports directly to US Army Forces Command. But there is little or no formal training for the AGRs who are assigned to these critically important roles.

Expanding upon this theme, the Army Reserve’s operational units are comprised of about 94 percent part-time personnel on average, while the senior-level staffs are nearly 100 percent full-time, between AGRs and Department of the Army civilians. The variance in AGR performance—coupled with a mismatch between requirements and the skills represented in the inventory of senior AGRs and made worse by generally poor AGR talent management—means that below-the-line performers or others without requisite experience or expertise are sometimes placed into key roles at a very senior level. It is also too often the case that the AGRs assigned to these roles have little recent experience with the realities on the ground in the Army Reserve’s operational units. Since readiness building actually happens at the unit level, any lack of awareness of the conditions on the ground impedes senior staff from making optimal policy and resourcing recommendations for a largely part-time force.

As a separate but related manning issue, it is appropriate to mention the Individual Ready Reserve (IRR) at this point. The IRR is not part of the Selected Reserve managed by the Army Reserve; rather, it is overseen by the Army’s Human Resources Command. However, the IRR represents a large pool of potential contributors to reserve requirements with diverse talents and a wide variety of skills acquired in the civilian and military workforce. At present, the pool of IRR personnel is largely untapped and unready for mobilization and deployment. This issue was the subject of an RFPB study in 2016 that recommended the implementation of modernized tracking systems, database systems and management tools, and legislative changes aimed at improving IRR accessibility and
accountability.\textsuperscript{51} To place this potential pool of talent and capacity and its current low level of utilization into perspective, the size of the Army IRR was 98,861 as of November 2015 and 109,624 as of October 2016. But although the IRR constitutes approximately 25 percent of the Ready Reserve for all services, as of 2016 it had only accounted for 4 percent of all reserve mobilizations since 2001.\textsuperscript{52}

**Implications and Challenges: Equipping the Force**

As a consequence of the Army’s cascading equipping strategy, the Army Reserve systematically lags the active Army in terms of equipment supply, readiness, modernization, and access. The implications of this lack of comparably lethal, survivable, maneuverable, sustainable, and interoperable equipment are particularly concerning in the Army Reserve’s combat support forces, as it means that the Army Reserve is not in a position to support high-end, kinetic contingencies without substantial new equipment fielding and training after mobilization.

Across the Army Reserve generally, the lack of interoperable mission command equipment regularly limits the efficiency and effectiveness of the component’s collective training events, whether conducted in a combined arms setting or not. Units frequently spend the first several days of any collective training exercise updating systems to reflect the numerous patches, versions, and other routine changes to the information technology environment. For other

\begin{itemize}
\item \textsuperscript{52} RFPB, \textit{Improving the Total Force}, 20-23.
\end{itemize}
systems, there is no equipment to update. The Army Reserve faces similar challenges given that the cascading equipping strategy also does not provide for unit- or installation-connected equipment training sets.

The DoD National Guard and Reserve Equipment Report for Fiscal Year 2019 places these challenges into context. For example, the gap between modernization requirements and actual procurement funding levels for all DoD reserve components has steadily increased since FY 2001, from a gap of about $140 billion in FY 2001 to a shortfall of approximately $250 billion in FY 2018.\(^{53}\) Excluding substitutes, which tend to represent modernization and interoperability shortfalls, the Army Reserve had equipment shortages representing more than $6 billion in requirements and 19 percent of all equipment required across the component in FY 2017.\(^ {54}\) The National Guard and Reserve Equipment Report also notes “difficult resource prioritization decisions” and a “chronically underfunded Army Reserve” that has created “compatibility gaps between critical enabling capabilities required to support maneuver forces,” with “unique capabilities . . . especially at risk.”\(^ {55}\)

**Implications and Challenges: Training the Force**

Billed as “one weekend per month and two weeks per year,” the 39-day training model is the critical limiting factor in the Army Reserve’s ability to achieve training proficiency; however, it is not the

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only limiting factor. For example, the requirements set forth in AR 350-1: Army Training and Leader Development are essentially the same regardless of component, with the exception that a few timelines are extended for the reserve components to complete some tasks. The same is true of the expansive list of congressionally mandated individual requirements that—if completed according to specification—would consume most available training time by themselves. Thus, while commanders theoretically have a 39-day baseline upon which to focus and build their training and readiness-building plans, the reality is something much different.

Army regulations and commanders’ training guidance at echelon, ranging from US Army Forces Command down to the brigade and battalion levels, are similarly additive and largely unrealistic when superimposed on the 39-day model. For all the right reasons, TRADOC takes the stance that “the standard is the standard” for all components, and thus requires commonality across the Total Army. However, this stance also limits reserve commanders’ flexibility to prioritize requirements and renders AR 350-1 essentially infeasible for Components 2 and 3. As the old saw at the US Army War College goes, “It’s only a lot of reading if you actually do it.” Reserve component commanders react similarly to this incongruous ratio of requirements to time available by quietly ignoring


requirements or, in Leonard Wong’s view, by falsely reporting that they have completed tasks, when in fact they have not.\textsuperscript{58}

Another inhibitor to training proficiency is the fact that many reserve component soldiers do not have the opportunity to participate in their unit’s collective training exercises—known as annual training or extended combat training—due to the higher-priority requirement of taking duty MOS-qualifying training or PME. Additionally, mandatory self-development courses and the distributed learning phases of MOS producing and PME schools tax the reserve soldiers’ limited time for military service. While active Army units can carve out time during the duty day for the completion of this training, reserve component commanders have no comparable alternative. Although the Army sets aside funds to compensate reserve soldiers for the completion of some self-study requirements, it is still difficult for reserve soldiers to find the time to complete the training, given their competing family, civilian work, and unit obligations. In the same vein, Army Reserve leaders can only directly observe their soldiers’ physical readiness activities once or twice per month. These limitations correlate closely with the difficulty in getting many soldiers, especially younger ones, to meet the fitness and height-weight standards required for school enrollment and attendance.

From a collective training perspective, other training inhibitors result from the Army’s limits on training resources and the priorities it sets for the use of those

resources. The brigade combat team is the Army’s primary unit of action, so it is not surprising (or inappropriate) that the Army’s collective training base is brigade combat team-centric. The Army Reserve is comprised almost exclusively of combat support and combat service support formations, making it difficult to find venues for any combined arms training, let alone multi-echelon combined arms collective task training—or the “Super Bowl” of training. Compounding this concern for the Total Army is the fact that in some branches, 80 percent or more of combat enablers are located in the reserve components and will therefore be critical parts of the combined arms team in the event of a high-end, kinetic fight. Finally, Army Reserve units that do get these rare opportunities typically get little in the way of formal preparation beforehand, and thus do not maximize the benefits from these invaluable training experiences.

The obstacles to Army Reserve training proficiency extend to materiel limitations as well. The Army’s cascading equipping strategy, coupled with the limited full-timers available to hang parts or update mission command systems, translates into a lack of interoperability with mission command equipment or an inability to keep up with maneuver elements during training. These challenges mean that reserve component units often spend the early days of exercises just getting their communications synchronized with the supported units or signing out equipment from consolidated equipment storage sites and getting that equipment into working order. When training on their own, these units often experience other challenges in the form of direct competition with higher-priority, active component units for access to ranges,
training areas, or other resources, whether in a pre-mobilization or post-mobilization situation.

When all of these limiting factors are combined, it is clear that the forthcoming implementation of Objective-T standards will be a much-needed corrective to inflated self-assessments of training proficiency. This process will also serve as a forcing function for much-needed improvements in Army Reserve training management and execution. At the same time, this implementation should also be bracing, in the sense that we will finally begin to see ourselves more honestly and objectively, even as Objective-T makes it clear that higher readiness ratings for Army Reserve formations in the pre-mobilization period are aspirational at best. For example, a “P” level of training proficiency requires that a minimum of 65 percent of required unit leaders and 75 percent of all authorized soldiers be present; it also requires a 65-percent “go” rate for all performance measures, a “go” on all critical performance measures, and an 80-percent “go” rate for leader performance measures, all while an appropriately challenging and complex operational environment is being replicated.\(^\text{59}\) This combination of variables is simply unattainable prior to mobilization under the current model of Army Reserve personnel, equipping, and training systems and processes.

**Implications and Challenges: Leading the Force**

As a recurring theme, once again the primary limiting factor in achieving effective Army Reserve unit

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leadership is available time. As previously cited, RFPB analysis found that Army Reserve leaders of all ranks (sergeant and above) average about 74 compensated duty days per year, with many daily uncompensated requirements as well. Given that it is the soldiers’ civilian employment that pays the bills, it is not surprising that as we apply more pressure to company-level leader teams, we see more junior leaders vote with their feet by leaving the Army Reserve altogether. These trends are observed among first-line leaders and mid-level leaders, not just in the mid-career ranks. In a related trend, it is increasingly common to see Army Reserve officers and senior NCOs refuse assignments to command positions in operating force units in favor of duty on staffs or in generating force units, as these settings place less stress upon their families, their civilian employers, and themselves. Just as troubling, the soldiers we want to retain the most are those who are most successful in their civilian employment as well as those soldiers who are most motivated to pursue higher education. The more we place pressure upon our company-level leaders and reduce the flexibility that our junior soldiers require to complete their civilian and military educational requirements, the more likely we are to lose our most talented teammates. At the same time, we have essentially disincentivized service in Army Reserve leadership positions since our soldiers see basically the same promotion prospects and compensation regardless of whether they take on the most challenging responsibilities. Not surprisingly, this combination of factors has recently translated into decreasing numbers of lieutenant colonels and colonels seeking battalion and brigade command. Army Reserve leadership has begun
to investigate whether this decline is directly connected to increasing peacetime readiness and training requirements, as the decline in applications for battalion and brigade command have been pronounced over the last few years.\textsuperscript{60} Likewise, recent surveys have confirmed that Reserve soldiers were generally supportive of the increased training and readiness requirements during the prime OIF and OEF years, but that they are far less enthusiastic about the recently increased peacetime readiness requirements that come without the payoff of an actual mobilization and deployment.

As an added layer to this challenge, the geographic distribution of Army Reserve personnel by rank and specialty means that board-selected leadership positions often go unfilled, as there is a geographic component to an individual’s willingness or availability to serve in branch-specific command positions. This rate of unfilled vacancies reached about 15 percent of all lieutenant colonel command opportunities in the most recent selection board.\textsuperscript{61} Further inhibitors to effective Army Reserve unit leadership include the skinny pyramid of comparatively thin mid-career officer and NCO ranks as well as generally poor training management and execution after more than 15 years of outsourcing training to mobilization stations. It is also a simple fact that Army Reserve officers and NCOs are by definition less experienced than their active Army counterparts.

Last but not least, another major inhibitor to effective unit leadership and Army Reserve mission command comes in the major challenges posed by the geographic span of control. It is common even at the

\textsuperscript{60} Govekar, “Army Reserve Simply.”
\textsuperscript{61} Govekar, “Army Reserve Simply.”
battalion level for command teams to have to exercise mission command across multiple states and multiple Army specialties. Distributions of units and locations are highly variable, given that the composition of battalions, brigades, and division-level commands is driven by the needs of the Army framed by the Total Army analysis process, rather than by normal unit associations and aggregations. For many types of Army units, the Army’s Component 3 requirements may be primarily for company- or detachment-level Army capabilities, rather than the battalion- or brigade-level units that would ordinarily oversee those company-level formations. This mismatch then results in gaps in the Army Reserve’s task organization in terms of training, readiness, and oversight, with bottom-heavy and geographically dispersed battalions, brigades, and major subordinate commands.

To place this major challenge into perspective, as one example, the 416th Theater Engineer Command that I commanded is comprised of approximately 12,500 soldiers spread across 26 Western states in 175 modular units assigned in 112 Army Reserve Centers. The 3 brigades averaged about 3,500 soldiers, spread among the 416th’s 13 battalions, 80 companies, and more than 90 small detachments. This distribution works out to an average of 5.3 companies and 7.1 detachments per widely dispersed battalion, each stretched across multiple state boundaries. Added to this mix is the fact that the various engineering capabilities represented in the command range from combat arms (sappers) to combat support (e.g., mobility augmentation companies and clearance companies) to combat service support (e.g., construction companies and technical engineering elements). The command also includes other units, such as military
police companies and a chemical battalion with associated chemical companies.

Achieving unit proficiency and personnel fills in a geographically dispersed command in these circumstances is a difficult task, especially given the tyranny of distance and the limits on duty days and other resources. These leader tasks are made even more challenging when modular headquarters elements are “unplugged” from their training, readiness, and oversight responsibilities due to their own mobilization and deployment, resulting in short-term, ad hoc task reorganizations. These ad hoc arrangements invariably result in outright gaps in training, readiness, and oversight or overburdened and overwhelmed stay-behind elements, with all of the associated, adverse, second-order effects that one would expect.

Implications and Challenges: Posturing the Force

In an Army Reserve context, posturing the force includes a wide variety of essential tasks associated with the force’s component-level and institutional functions and activities. For example, as a separate component of the US military, the Army Reserve is responsible for managing real property and other infrastructure, including the maintenance, security, connectivity, and sustainment of more than 1,000 facilities.62 The Army Reserve leadership also manages a separate budget, and the component and command staffs are responsible for enabling access to training resources and support systems. The Army Reserve manages the distribution, redistribution, and

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62. The author acknowledges Tim Lynch, COL (USA), Vic Sundquist, COL (USA), and the rest of the Army Reserve Campaign Plan working group for framing these definitions.
maintenance of all unit equipment, while also stationing units to optimize recruiting, retention, readiness, and other factors.

Stationing units is both an art and a science. One major goal is to place units in the recruitment markets that are most vibrant economically—areas where people are attracted to the civilian employment opportunities required to support and subsidize service in the Army Reserve and where people have a stronger propensity to serve in the military. Of course, the economy varies nationally and locally over time, with corresponding effects on the Army Reserve’s ability to recruit and retain the quantity and quality of personnel needed to man the force adequately. Furthermore, these market-connected factors tend to change over time; thus, the posturing of Army Reserve formations is something of a multivariate calculus problem, with an element of economic forecasting.

While the Army Reserve is a wholly federal force, with no dual status or state-level command constraints, the stationing of Army Reserve units is still affected by state and federal political considerations. The need to be responsive for purposes of Defense Support to Civil Authorities is a consideration, as is the need to distribute units by type (and equipment) to make it feasible to recruit soldiers with wide-ranging interests. All three components of the Army and the other armed services compete simultaneously for the same prospective service members, which adds another wrinkle. The bottom line is that the Army Reserve has had mixed results with its stationing models, with more than one leader lamenting that it too often seems to “shoot behind the duck.” Another major inhibitor to the agile restationing of Army Reserve units is the simple fact of real property ownership, as relocating
incurs transportation costs and costs connected with the procurement and divestiture of those properties.

Just as the models used to analyze relocation options tend to be backward-looking rather than forward-looking, Army Reserve information systems and processes tend to be out-of-date and unwieldy. These systems run the gamut, including personnel, supply, equipping, maintenance, training (including individual, leader development, collective, and institutional mandatory types), building and installation management, mobilization, health readiness, and a host of others. On a positive note, the Army has worked very closely with the reserve components in the development of the Integrated Personnel and Pay System–Army (IPPS-A); the hope is that this system and other advances in enterprise-level software and systems will help to mitigate or eliminate some of these major inhibitors to efficiency and effectiveness.

In sum, the Army Reserve’s bid to be an operational reserve force is hamstrung by a combination of factors, among them a structural and geographic distribution of human resources, equipping limitations, and training inhibitors posed by the 39-day model. When these realities are combined with a Cold War-era structure of authorities and similarly antiquated mechanisms for mobilization, it is difficult to gain rapid access to trained and mission-ready forces in timelines that represent an operational rather than strategic reserve force. These challenges are not intractable, but to ignore them is to accept major risk to mission and force.
5. COMPOUNDING EFFECTS FROM THE SOCIAL AND FISCAL CONTEXT

The young men of Task Force Smith . . . were a new breed of American . . . who, not liking the service, had insisted, with public support, that the Army be made as much like civilian life and home as possible . . . They had grown fat.


Reforming the Army Reserve to account for its inherent structural realities is only part of the challenge today, as America itself is changing in ways that are combining to make the prospects for viable reform even more daunting. These troubling trends in America’s broader social and fiscal context present major obstacles to recruiters for all components of the US military as they seek to recruit, train, retain, and sustain the all-volunteer force that is required to meet America’s national security needs. These trends are discussed in the following paragraphs.

Declining Eligibility to Serve

Not only have American fertility rates fallen to replacement levels—with immigration today serving as the primary driver of America’s actual population growth—but a variety of other factors are contributing to a major decline in the eligibility of young Americans to serve in the military.64 To place this declining eligibility into perspective, during the World War II years,

63. Fehrenbach, *This Kind of War*, 100.
50 percent of young Americans were eligible to serve in uniform, but that figure has dropped to 23 percent today.⁶⁵ The three-quarters of young Americans who are disqualified for military service today are ineligible due to a combination of factors, among them obesity, other health problems, criminal offenses, and a lack of required education.⁶⁶ A study recently commissioned by Mission: Readiness, an organization of over 700 retired, senior, US military leaders, found that, while 29 percent of young Americans have a high school diploma, no criminal record, and no chronic health issues, only 17 percent would actually qualify for military duty. Worse yet, only 13 percent of them would qualify, be available, and meet the basic, entry-level, test score requirements for serving.⁶⁷

Rising Obesity Rates and Other Health Issues

US Army Recruiting Command reports that the most common reason that disqualifies Americans from serving in the Army today is obesity, which accounts for 31 percent of all disqualifying conditions.⁶⁸ The average level of physical fitness among young people in the United States is steadily declining, but especially within the 10 Southern states that produce a disproportionate percentage of Army recruits. Likewise, adult obesity rates are 35 percent or higher in 5 of these 10 high-producing states. Not surprisingly,

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the recruits from these states also experience 28 percent more injuries on average than do recruits from the fittest states.\textsuperscript{69} On top of these physical challenges, these studies also indicate clear evidence of declining work skills throughout the US population, making these demographic trends a special concern as the US military becomes increasingly technologically sophisticated.\textsuperscript{70}

Unfortunately, the news does not get better when one examines the health and welfare of those currently serving in uniform. A 2018 RAND study of 18,000 service members from across all branches of service found that almost 66 percent of all members are considered to be overweight or obese when measured against body mass index standards. Among the services, the Army had the largest percentage of overweight troops at 69.4 percent of all members. The Army also reported the highest rate of sleep concerns, with 59.4 percent of all respondents reporting that they got less sleep than needed and 10.6 percent routinely using some form of sleep-assisting medication.\textsuperscript{71}

**Declining and Concentrated Propensity to Serve**

The picture is even grimmer when young Americans’ propensity to serve is factored into the equation, as the US Army Human Resources Command’s analysis shows that of 33 million young Americans

\textsuperscript{69} Michaels, “Fitness Falters.”


of recruiting age, only 136,000—or less than half of 1 percent—meet the basic standards, reach the quality goals, and have an interest in serving.\(^{72}\) In a similar recent study, Mission: Readiness found that, while only 13 percent of 16- to 24-year-olds expressed any interest in serving in the military in 2016, that number had fallen to 11 percent just a year later in 2017.\(^{73}\)

It is also troubling that as the number of young Americans who are interested in serving in the US military is in decline, those young people with the propensity to serve are increasingly concentrated in the same families and states. Between 77 and 86 percent of new military recruits today have a family member who has served in the military, with approximately one-third of them having a parent who has served.\(^{74}\) Part of the issue is a decreasing exposure to the military, as the percentage of eligible young people with a military veteran for a parent was 40 percent in 1990 but fell to 16 percent by 2014.\(^{75}\) The new recruits also come disproportionately from the same states or regions of the country. Ten southern states provided 44 percent of all military recruits in 2013, although the region only has about 34 percent of America’s 18- to 24-year-olds overall.\(^{76}\)

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Once again, the news does not improve when we examine those who are currently in uniform, as the inclination to stick with the military after joining it has also decreased in recent years. Specifically, the average rate of first-term attrition for all components of the US Army is between 25 to 30 percent.\textsuperscript{77} The rate of first-term attrition is even higher in the Army Reserve, as approximately 50 percent of all Army Reserve enlistees do not make it to the end of their first enlistment, whether it is due to their being removed for a failure to meet standards or simply for their failure to continue to show up for unit training activities, a category labelled as “non-participation.” In light of these trends, some observers have called into question the long-term viability of the all-volunteer force.

\textbf{Uncertain and Uneven Defense Budgets and Mounting Debt}

The US military has enjoyed a temporary spike in funding as well as a brief reprieve from the major and adverse effects of sequestration, but these temporary fiscal improvements seem unlikely to continue much longer. The Congressional Budget Office projects that federal budget deficits will exceed $1 trillion each year beginning in FY 2022 and for the next decade, adding $11.4 trillion in new debt to an already-burgeoning US national debt.\textsuperscript{78} The federal government’s current fiscal policy is simply unsustainable. As Chairman of the Joint Chiefs of Staff, Admiral Michael Mullen asserted

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\textsuperscript{77.} Carter et al., \textit{AVF 4.0}.
\textsuperscript{78.} “CBO’s Updated Projections Show Deficits Continuing to Climb despite Growing Economy,” Peter G. Peterson Foundation, May 2, 2019, \url{https://www.pgpf.org/blog/2019/05/cbos-updated-projections-show-deficits-continuing-to-climb-despite-growing-economy}.
\end{flushright}
that America’s rapidly increasing national debt was the single greatest threat to US national security in the long term. He and other senior defense policy professionals maintain that same stance today.\textsuperscript{79} To place the explosive growth of the federal deficit and debt into perspective, the United States’ total national debt was only about $1.4 trillion in real terms in 1980.\textsuperscript{80} That sum represented all of the deficit spending needed to deal with the major national crises of American history, including the Civil War, the Great Depression, World War II, and others stretching all the way back to the American Revolution. The modern status quo, with its toxic mix of major social welfare spending, large defense outlays, and inadequate tax receipts to pay for it all, is clearly unsustainable. Future defense budgets will have to shrink at some point out of sheer fiscal necessity.

**Escalating Personnel Costs**

As is true in most businesses or similar enterprises, personnel costs are the most significant expense, and the DoD is no exception. The Economist recently observed that many members of the US military now “see their service primarily as a way to make a living, as the soaring cost of recruiting and retaining them indicates,” likewise noting that personnel costs have increased by more than 50 percent in real terms since 2001.\textsuperscript{81} The adverse trends in health and fitness come


\textsuperscript{80} Perdue, “Senator: Rising Debt.”

\textsuperscript{81} “Semper Fidelis,” Economist, 32.
with their own associated costs as well. As another indicator of the increased cost of the Army’s increasingly unfit and overweight soldiers, an Army research group determined that obese soldiers averaged 13 visits to health care providers in a year, while normal-weight soldiers averaged 7 visits.\textsuperscript{82} As the nation seeks to tailor the future force to bring national security costs into alignment with budgetary realities, it should be noted that the average fully burdened (life cycle) per-capita cost of an active component member of the US military in FY 2015 was $370,639, while the average fully burdened cost of a member of a reserve component was $118,359.\textsuperscript{83}

A Growing Disconnection from Civil Society

A host of factors has combined to create a growing disconnection between the US military and the society it serves. As one key reason for this growing divide, fewer Americans now have a relative who has served in uniform than in the past. One recent study found that only one-third of young Americans aged 18 to 29 have a close family member who served in the military, down from nearly 60 percent for citizens aged 30 to 49.\textsuperscript{84} This disconnection is also a result of the simple fact of physical separation, as post-9/11 security measures and the consolidation of active duty installations due to base realignment and closure have led to a geographic concentration of active forces in fewer posts, coupled with the physical separation resulting from force protection measures and other security concerns. The previously noted trends of the US military

\textsuperscript{82} Tara Copp, “Study: Obese Soldiers May Be Too Expensive to Keep,” \textit{The Army Times}, October 29, 2018, 10.
\textsuperscript{83} RFPB, \textit{Improving the Total Force}, 77.
\textsuperscript{84} Carter et al., \textit{AVF 4.0}. 
becoming a family business and a regionalized one also contribute to this divide.

The rise of social media has had mixed impacts for the perception of the military among the public as well. One adverse aspect of this emerging social phenomenon is that bad news travels fast, whether that news happens to be true or not. Social media and the 24/7 news cycle frequently combine to highlight bad news connected with the US military, while much good news gets lost in the persistent background noise of daily life in a connected world. In an Army of more than one million individuals, there will inevitably be a handful of bad actors. Too often today, however, the actions of those bad actors “go viral,” giving them the power to taint the institution, which in turn tamps down the propensity to serve. Conversely, recruiting messages must now penetrate increasingly dense background noise, and we know that, although the public currently holds the US military in high esteem, history shows that these positive public perceptions are contingent upon events as they unfold and are never guaranteed.

One more cause for concern comes in the American public’s increasing willingness to use the military as an instrument of national power, even as the willingness of most Americans to serve in the military is in significant decline. This troubling combination has the potential to increase risk to mission and force while providing more evidence of a growing divide between the served and serving. As an indicator of this trend, there is a growing imbalance today between the percentage of young people who support the use of military force and the much smaller percentage of those same young people who are willing to serve in
the military themselves. In short, it becomes much easier to call for the use of force when one has “no skin in the game.”

Reforming the Army Reserve to deal with its inherent structural realities and other weaknesses is a tough enough prospect in its own right. At the same time, these troubling social and fiscal trends add additional layers of difficulty to the challenges that prospective reformers must overcome. Having defined this complex problem set in detail, we now turn our attention to identifying potential solutions.

85. Carter et al., AVF 4.0.
PART III:
REFORMS TO REALIZE THE
ARMY RESERVE’S FULL
POTENTIAL
6. “QUICK WINS”: NEAR-TERM REFORMS TO BUILD READINESS

None of them were equipped, trained, or mentally prepared for combat. For the first time in recent history, American ground units had been committed during the initial days of a war; there had been no allies to hold the line while America prepared.

T.R. Fehrenbach, *This Kind of War: A Study in Unpreparedness*, 1963.\textsuperscript{86}

The US Army Reserve is counted upon to provide trained, ready, resilient, and well-led soldiers and units to meet Army and Joint Force requirements, whether those requirements are cyclical and recurring or contingent and emergent. While some of these requirements are captured by the Army’s annual readiness objectives, which specify required readiness levels by capability and capacity per component, others are tied to combatant command contingency plans that require the delivery of various capabilities on designated timelines. Regardless of the various planners’ mandates and expectations, however, the truth is that the bulk of the Army Reserve’s important supplementary and complementary capabilities is currently unready.

Fortunately, there is a set of quick-win reforms that the Army Reserve can undertake through the application of existing resources and authorities that can significantly improve the operational readiness of the component’s soldiers and units. These readiness-building reforms will be especially important for the units that will be employed in direct support of decisive action in unified land operations and for others

\textsuperscript{86} Fehrenbach, *This Kind of War*, 148.
that must be ready to mobilize and deploy on short timelines due to the limited availability of those capabilities in active or Guard force structure. While these reforms will not solve the Army Reserve’s structural realities and other related challenges, they certainly can mitigate their effects.

In essence, these measures will help the component to achieve its best possible pre-mobilization footing and set the conditions for achieving more rapid post-mobilization mission readiness. Specifically, these quick-win reforms seek to minimize the number of post-mobilization organizational and training days required to deliver critical capabilities to the combatant commands that need them. To realize this challenging end, the central organizing principle of these quick wins is a focused effort to realize coherent, consistent, efficient, and effective mission command across the whole of the Army Reserve.

The Army Reserve’s Current Contributions, in Context

The Army Reserve’s contributions to the Total Army are broad and diverse, and they are especially deep within some of the Army’s branches and specialties. Some contributions are supplemental, in the sense that the Army Reserve provides additional capacity when active component units of the same type are fully utilized or earmarked for other contingencies. Other Army Reserve contributions are complementary, meaning that they are unique to Component 3 and must be sourced from the Army Reserve whenever a need for that particular capability arises. The Army Reserve’s contributions generally fall into four categories. These include: (1) supplemental combat
support and combat sustainment support; (2) complementary theater-setting and theater sustainment support; (3) institutional support and force-generation capacity; and (4) individual augmentation, whether “above the line” for elements such as the Department of the Army staff or “below the line” for active component operational and force-generating units.

In the event of high-end, decisive action operations or other extended operations across the spectrum of conflict, the Army will undoubtedly require significant augmentation from the Army Reserve. But there is also a steady-state demand for Army Reserve capabilities and capacity. Recurring and recent, rotational Army Reserve mobilizations have included whole units; tailored, smaller units, such as theater-level, deployable command posts; “plug-and-play” staff sections; specific capabilities needed to augment task-organized units; and numerous individual augmentees required to fill particular rank and MOS requirements in deploying units or staffs.

The key point here is that this diversity of missions and the varied security environments in which they happen dictate equally varied strategies for pre-mobilization and post-mobilization equipping and training. For example, units mobilized for decisive action, or operations requiring lethal, survivable, maneuverable, sustainable, and interoperable forces, will obviously require the most modern equipment and a much higher level of pre-mobilization and post-mobilization equipping and training than units slated for humanitarian assistance or disaster relief. The Army Reserve’s current approach to pre-mobilization preparation has largely been one of one size fits all; however, one size does not—and should not—fit all.
Goals of the Near-Term Reforms – The Ends

The central goal of these quick-win reform proposals is to simultaneously maximize the pre-mobilization readiness of the Army Reserve’s soldiers, leaders, and units and reduce the amount of time required for post-mobilization administration, equipping, manning, and training. Viewed through this lens, the most important measure of a unit’s pre-mobilization readiness becomes the number of days required for post-mobilization activities placed within the context of available resources and a unit’s potential utilization, rather than the current emphasis on snapshots of the pre-mobilization “C” ratings in unit status reports. To achieve this end, the Army Reserve must focus on eliminating wasted time and effort among its soldiers, leaders, and units by getting everyone to pull together coherently in a clearly articulated, understood, and prioritized direction.

Since the Army Reserve’s structural realities will prevent all but a few units from ever achieving full deployment readiness prior to mobilization, a second objective will be to acknowledge and define these inherent limits. At the same time, these reforms aim to enable Army Reserve leaders to render honest and accurate, real-time readiness assessments that clearly define the “deltas” that drive their units’ inevitable readiness shortfalls. These honest and accurate status reports, when coupled with tangible, feasible, and realistic “fix-it” timelines and resourcing requirements, will help senior defense leaders and planners to make informed risk assessments. These refined post-mobilization wellness plans must also be articulated separately for permissive or nonpermissive theaters of
employment to give planners the fullest sense of the availability of a particular unit or capability.

**Guiding Principles — The Ways**

To realize these challenging ends, the central organizing principle of Army Reserve reforms in the near term will be to focus upon enabling coherent, effective, and efficient mission command. Achieving this goal across the Army Reserve will only come about through three related, enterprise-wide efforts. First, the Army Reserve must design and implement a focused, prioritized, and pre-packaged approach to leader development designed to improve our leaders’ grasp of the “art of command.” Just as importantly, the Army Reserve must also enhance its “science of control” through the development of streamlined yet robust mission command systems and products that will simplify the leader task at echelon to optimize leader time and effort. The third related effort will be to draft and articulate crystal-clear mission guidance while setting the conditions for holding leaders accountable for the results that they achieve. Though daunting in scope, these vital reforms can certainly be realized within the limits of current resources and authorities.

It is not overstating the case to assert that these reforms will require wholesale changes in organizational culture aimed at achieving unity of effort across the institution. Put directly, this effort will require getting all Army Reserve personnel to work together from a common playbook, whether at the highest echelons of the organization or the lowest. This initiative will also require building a common language, developing a common sight picture, and incentivizing common priorities across the command, as well
as holding leaders accountable for tangible and measurable results in the units they lead. Ultimately, by establishing clearly articulated and well-understood priorities within a framework of robust and efficient mission command systems, we will create a culture of teamwork and accountability that will allow most problems to be solved at the unit level. Commanders who have a clear sense of task and purpose, and who have the freedom of decentralized but disciplined initiative, are exercising genuine mission command.

To achieve this end state, the near-term reforms aimed at enhancing the effectiveness of mission command across the Army Reserve should

- define the problem for Army Reserve leaders at all levels through prioritized mission command products and systems;
- reduce pre-mobilization requirements to their essence and minimum, including simplifying the commander’s training guidance to prioritize the nonnegotiable tasks directly tied to mobilization and deployment readiness;
- enforce leader development and training requirements ruthlessly and enable leaders to meet those requirements;
- create and adopt universal mission command systems and training and readiness guidance, and then ensure that the same systems and guidance are taught at each school and used in each unit;
- minimize the inventing that Army Reserve leaders must do by standardizing everything that can be standardized, thus enabling command teams and staff leaders to focus on the substance and execution of those commonly understood requirements;
• emphasize training management and execution practices in the self-development and institutional training domains and as a key element of all unit-level leader development programs and place special emphasis on teaching officers and NCOs how to plan and execute training events;
• structure all mission command systems and products, as well as the guidance and templates for the preparation of counseling and evaluations, with an eye to modelling and incentivizing the desired leader behaviors in the organization;
• give NCOs ownership of the readiness enterprise at the unit level and systematically enforce accountability for the results they achieve through the shaping of guidance for the preparation of counseling and evaluations and the conduct of promotion boards;
• hold all officers accountable for their achievement of clear, tangible, measurable, feasible, and collective results within the unit or staff areas of responsibility that they lead;
• automate everything that it is possible to automate to reduce demands on staff and leader time;
• evolve collective and individual training to embrace the NDS, including deemphasizing counterterrorism and counterinsurgency, and focus instead on preparing for globally integrated and multi-domain operations in the pursuit of great-power competition and the potential for decisive action in support of unified land operations;
• acknowledge that one size does not fit all in terms of pre-mobilization and post-mobilization preparation by unit type;
• open lines of communication between geographically proximate, combined arms units of all components to enable training and coaching relationships and partnerships as well as combined arms training opportunities with Components 1 and 2;
• redefine the Army’s approach to the unit status report as a measure of Army Reserve readiness by deemphasizing the “C” rating and, instead, emphasizing the identification of specific unit shortfalls in personnel, supplies, readiness, and training and the corresponding, specific fix-it plans tied to scenarios for use;
• enable units to define their readiness gaps in personnel, equipment, and training resources and identify potential bridging solutions while facilitating the articulation of those gaps and plans to planners and decision-makers up the chain of command (this process should be automated wherever possible);
• achieve gains in pre-mobilization predictability, efficiency, and effectiveness within the limits of resourcing and existing authorities;
• emphasize the retention of all personnel by enticing more Americans to serve while increasing the satisfaction of those serving and enabling them to meet the service standards;
• tailor soldier and unit pre-mobilization training and readiness-building activities to the Army’s mission requirements while treating the Army Reserve leader task as the time management and prioritization problem that it truly is;
• acknowledge that full-time employment subsidizes Army Reserve service and enable civilian employment by focusing soldiers on the essential requirements for maintaining a balance between Army Reserve service and civilian employment and family obligations; and
• acknowledge that the quality of soldiers’ experience while in uniform directly affects their decision to stay or leave and make the improvement of the quality of their experience a high-priority institutional goal.

The Near-Term Reform Recommendations—The Means

Though the following list is not intended to be exhaustive, it contains illustrative examples of key, quick-win reforms that can help the Army Reserve improve its leaders’ exercise of mission command. These quick wins can be realized within the current limits of peacetime authorities and resources and inside the framework of guiding principles set forth above.

Leader Development and the Art of Command

• Mandate leader development program training across the Army Reserve for unit status reports; troop-leading procedures; training management; the resourcing and preparation of training; training execution; Objective-T standards; the use of training and evaluation outlines; and Army Reserve mission command products, systems, and priorities. Synchronize these topics in the schoolhouse and at the unit level.
• Perform honest, accurate, and substantive leader evaluations tied directly to the critical tasks of identifying, developing, and promoting competent and effective leaders at all echelons through the implementation of a first-line leader/mid-level leader engagement plan. This policy will specify command special interest items that must be addressed directly in periodic counseling and in the content of all evaluations. Once implemented, the first-line leader/mid-level leader engagement plan will help to model desired behaviors for junior and mid-career leaders, identify readiness requirements common to all organizations, and hold leaders at all echelons accountable for tangible and measurable results. The first-line leader/mid-level leader policy should establish common requirements for counseling, set standards for preparing evaluations, require monthly contact between battle assemblies, and define command special interest items tied to specific training and readiness tasks. The required tasks should include individual and crew-served weapons qualifications; health and dental readiness; physical readiness and height/weight compliance; duty MOS qualification; the completion of officer and NCO PME and leader development programs; and other critical training, readiness, and leadership requirements common to the force.

• Create and disseminate pre-printed, fill-in-the-blank counseling templates with requirements and standards as the basis for the accountability of all soldiers at all echelons. Again, the goals are to simplify and clarify the leader tasks and
model the desired leader behaviors across all formations.

- Establish an Army Reserve–wide “Commander’s Top 10,” or a set of generally enduring priorities and institutional objectives that combine to express an unmistakable commander’s intent, applicable at all echelons of the organization. Use this Commander’s Top 10 as the foundation for all training- and readiness-connected activities and as a means of defining Army Reserve priorities and creating leader accountability.

Mission Command Systems and the Science of Control

- Create a standardized Army Reserve playbook that tracks the status of training, readiness, resilience, and leadership in all units at echelon to create a common operating picture for all formations, from detachment to major subordinate command. In addition to making it as fully automated as possible, this common operating picture playbook should be available as a monthly product that draws directly from the various databases of record and reveal 6-month and 12-month readiness trends to provide unit and staff leaders with a clear understanding of where they stand with respect to the commander’s highest-priority measures of performance and measures of effectiveness. In essence, the common operating picture playbook should correspond to the four primary LOEs at the unit level, including: (1) the execution of assigned mobilization missions and high-priority, collective training events; (2) the status of the assignment, development, assessment, and
promotion of leaders throughout the organic units; (3) aggregated measures of individual soldier training, readiness, and resilience; and (4) the status of the planning, resourcing, execution, and assessment of collective training. In essence, this mission command system will operationalize the Army Reserve’s priorities for these critical unit activities at the tactical level to establish common priorities and get all teammates to pull together in a common direction. This system will also serve as a checklist of requirements to inform and focus leaders and establish a direct means of leader accountability. Once implemented, leaders at all levels can then go anywhere in the Army Reserve; ask the same questions about the same priorities; speak the same language; and assess the same performance standards to discuss leader and unit performance objectively, candidly, and substantively.

• Create an automated staff battle book with the goals of tracking, teaching, and enabling accountability in staff areas of responsibility. Consistent with recent SecArmy and CSA guidance to stop asking down-echelon commands to provide information that is available via databases of record and other reporting mechanisms, a universal staff battle book that automatically creates detailed, unit-by-unit statuses and yields corresponding analysis of a unit’s high-priority shortfalls will focus and empower staff leaders and enable mission command.

• Create automated task organization books that include the names and assignments of all assigned unit personnel with corresponding,
bulletized lists of the key roles and responsibilities for each element within like types of units. These leadership and training aids, which should include the key functions, products, and tasks of each section of the unit, will serve as a teaching and coaching tool as well as an aid to facilitating smooth transitions and turnover. Given the high rates of turnover in almost every Army Reserve unit, the soldiers in most formations do not fully understand how teams fit together as a whole or, in some cases, what their own roles are on their teams. This issue is often even more challenging at echelons above the company level.

- Create mobilization and deployment checklists with versions that correspond to permissive and nonpermissive security environments to teach leaders what the priorities are for all aspects of unit readiness generation. Tie these checklists to unit status report assessments, including pre-mobilization support requirements such as mobilization platforms, facilities, validation, and other aspects of force projection and deployability.

- Establish similar templates for the preparation of individual or small-section mobilization augmentees; cross-leveling requirements; rear detachment operations; and other recurring, pre- and post-mobilization requirements.

- Standardize expectations and deliverables for Army Reserve liaisons to our supported Army Service Component Commands and other partners and stakeholders.
Mission Guidance and Accountability Mechanisms

- Standardize yearly training briefings, mission essential task lists, and other mission and training guidance by capability and unit type. Again, the goal is to use these standardized mission essential task lists coupled with a standardized framework for yearly training briefings, including a staff assistance visit template and a framework for readiness reviews, to streamline leader tasks and focus them on the substance of unit training and readiness plans, rather than having leaders find their own way on the first-order questions.

- Streamline and shorten the US Army Reserve Command’s command training guidance and focus it on the essence of pre-mobilization and leader development requirements and the prioritization of those requirements. Most senior-level command training guidances cover all of the bases and, in doing so, never get read by unit-level leaders. The command training guidance should be treated as an Execution Order, with directives for executing prioritized red, amber, and green training and readiness events, consistent with AR 350-1. Key topics in the revised command training guidance should include
  - a short list of key references;
  - the purpose—trained, ready, resilient, and well-led soldiers, leaders, and units;
  - green, amber, and red events by required participation levels and rescheduled training category;
  - definition of the LOEs in prioritized order;
defined annual training, extended combat training, and PME priorities by order of merit list, from duty MOS qualification to PME, then unit annual training/extended combat training, along with a waiver process for exceptions and approval authorities; 
- specified Army war tasks and battle drills; 
- civilian and military technician training; 
- the specifications and limits for adventure training, or a soldier satisfaction initiative aimed at retaining our personnel; and 
- coordinating instructions, including any other DoD- or Army-specified, command-wide, priority requirements.

- Preapprove yearly training briefing and annual readiness huddle workshop packages within prescribed cost and procedural limits to enable these critically important readiness-building activities to happen routinely and save the staffs and leadership from the bandwidth-consuming requirement to construct packets for each activity for senior-level review. Consider a similar approach to facilitating monthly or quarterly senior leader forums for the same reasons and purpose.
- Specify the minimum slate of Army war tasks and battle drills to be drilled and validated each year by unit type to enhance soldier and unit lethality and survivability.
- Identify donor unit relationships for all units’ required personnel and equipment cross-levels and align mission command and task organization in support of this wherever feasible.
- Arrange for unit training partnerships between identified donor units so that teams train
together in the pre-mobilization period wherever and whenever possible.

- Fill faster response units to 125 percent so that they are ready for rapid mobilization and require very limited post-mobilization training and personnel fills. These units will also receive priority for equipment fills; Combat Training Center (CTC) rotations; or other comparable, “Super Bowl-type” training opportunities as appropriate to the particular type of unit capability.
7. “HEAVY LIFTS”: ALIGNING INSTITUTION AND MODERN REALITIES

Army Strategic Readiness focuses on the readiness of the Army as an institution to provide sufficient, capable units to support the National Military Strategy . . . Army senior leaders can mitigate or eliminate Army strategic shortfalls by changes in policy, strategy adjustments, or other actions.

*AR 525-20: Army Strategic Readiness, June 3, 2014.*

We now turn our attention to framing the “heavy lifts,” or more far-reaching changes to the Army Reserve as an institution aimed at setting the conditions for achieving strategic readiness—or enhanced future readiness—in the years to come. While the single-minded focus of the quick-win reforms is to maximize the Army Reserve’s operational readiness in the near term, defined by Army regulation as the next two years, these more profound reforms aim at future readiness, defined as the period two to six years from now.*88* The guiding principles that framed the quick wins still apply here, as the heavy lifts represent a follow-on phase of major reforms that build upon the efforts in the near term. In their essence, these reforms aim to adapt the Army Reserve to emerging societal and fiscal trends while simultaneously accounting for the institution’s known structural realities, the implications of those realities, and the other challenges described in preceding chapters.

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88. *AR 525-30.*
Army Strategic Readiness through an Army Reserve Lens

Adopted as Army policy in 2014, the Army Strategic Readiness program is designed to provide a common framework for understanding and cohering Total Army efforts to build readiness across all elements of the Army enterprise in direct support of the National Military Strategy. The Army Strategic Readiness framework identifies strategic levers available to Army leaders to mitigate readiness shortfalls, both in the near term and in future years, as well as an array of leading indicators of those shortfalls.\textsuperscript{89} Taken together, the strategic readiness regulation’s tenets, indicators, levers, reporting requirements, and assignments of responsibility establish a decision support framework and a process for bringing together policy choices, strategy adjustments, resource allocations, and other required actions that will enable the institution to build readiness systematically in the near term and in future years.

To organize these elements, Army Strategic Readiness divides the readiness-building efforts into six strategic tenets or bins of activities, including manning, training, capabilities and capacities, equipping, sustaining, and installations.\textsuperscript{90} Without question, the changes in America’s social and fiscal context described above will present major challenges for each of the components of the US military as they seek to build strategic readiness, whether in the near term or the out-years. At the same time, however, the challenges that face the Army Reserve are even more pronounced, as the component must grapple with an

\textsuperscript{89} AR 525-30, 2.
\textsuperscript{90} AR 525-30, 6.
additional set of readiness inhibitors that cut across each of the strategic readiness tenets.

Chief among the Army Reserve’s additional strategic readiness challenges are its structural realities, first detailed in chapter 3. Any efforts to build strategic readiness in the Army Reserve necessarily must account for the realities of being generally funded for 39 days of duty per soldier per year, with corresponding soldier expectations in line with that level of commitment. The limited training days and resulting modest compensation also mean that the great majority of part-time Army Reserve soldiers must obtain and maintain full-time civilian employment in order to be able to serve. Unit-level strategic readiness is also constrained by the Army Reserve’s structural and geographic distribution of human resources, limiting the fungibility of human capital prior to mobilization.

Similarly, the Army’s cascading equipping strategy limits the supply, readiness, and modernization of the Army Reserve’s unit equipment, just as the structural distribution of the equipment on-hand limits access to unit equipment for training and maintenance purposes. These institutional and structural constraints mean that every mobilizing unit will require a pre-mobilization cross-leveling of personnel and equipment as well as post-mobilization training, including individual, leader development, and collective training, and other administrative and logistical support.

Simply put, we cannot spend our way out of these difficulties; instead, we must think our way through them. The profound challenges posed by emerging fiscal and social trends coupled with the underlying realities of the institution will require equally profound changes to the way we do business if we are to achieve the strategic readiness that the nation needs.
Ten Heavy Lifts—Major Institutional Reform Recommendations

The central goal of each of these reforms is to help the Army Reserve to realize strategic readiness, building upon the near-term readiness initiatives outlined in chapter 6. These ambitious reforms are also intended to set the conditions for the Army Reserve to become a self-correcting and learning organization, or one that continually self-assesses and adapts itself to changing circumstances habitually and holistically, rather than one that moves in fits and starts with a lack of consistent or coherent effort. Each of these reforms calls upon the Army Reserve to create or modify Army Reserve structures, systems, processes, guidance, and priorities to adapt the institution in fundamental ways. These reforms represent heavy lifts, in that each will require significant commitments from leaders and staff to the analysis and socialization of alternatives, along with corresponding policy changes and—in many cases—legislative change proposals to bring them about. These aggressive and far-reaching reforms will require the support of Army leadership and Capitol Hill.

1. Create and implement an Army Reserve Strategic Readiness Campaign Plan to achieve prioritization, coherence, and accountability across the Army Reserve enterprise.

From a broader institutional perspective, this heavy lift is the centerpiece of the effort to reshape the Army Reserve’s business practices to build strategic readiness systematically and coherently over time. The campaign plan should logically flow from the Army Reserve’s authorities and responsibilities
outlined in 10 U.S.C. 3038, 10102, and 10171, as well as Headquarters, Department of the Army General Orders 2011-02 and 2017-01. The Army Reserve Campaign Plan should also be nested within the Army Plan, especially the Army Strategic Plan and the Army Campaign Plan. While the campaign plan will focus on enduring requirements tied to statutory requirements, it will also serve as a mechanism for reflecting and realizing the priorities of the CSA and the Chief of the Army Reserve.

As a positive first step, the Office of the Chief, Army Reserve, has recently taken preliminary steps to develop such a plan, with the proposed LOE generally oriented on the six tenets outlined in the Army Strategic Readiness regulation. Given the particular challenges of the Army Reserve’s mission and circumstances, it will also be appropriate to broaden the strategic readiness framework to capture the critical activities of mobilization, communications (internal and external), and mission command when the LOEs that frame the campaign are ultimately selected. Likewise, each LOE will need to include the specific, major objectives that will fall within its purview, most of them enduring in nature, as well as the primary and supporting offices of responsibility and the general officer or senior executive who will oversee them within each LOE.

Given the many dozens of Army-level and Forces Command processes at work within the component and the command, this campaign plan will serve as the framework for capturing and prioritizing competing requirements across the enterprise in an uncertain

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91. Tim Lynch, COL (USA), and Vic Sundquist, COL (USA), served as the action leads for our year-long effort to build and socialize a working model for an Army Reserve Campaign Plan.
fiscal climate. In addition, it will shape the allocation of scarce human resources. Furthermore, it will serve as the mechanism for operationalizing the other major institutional reform initiatives detailed below, as well as the quick wins outlined previously.

2. Review, realign, and develop the Army Reserve’s component and command staffs, with a particular focus on establishing formal staff professional development, clarity of purpose, clean lines of authority, and accountability for results.

In close parallel with the creation of the Army Reserve Strategic Readiness Campaign Plan, the Army Reserve should also undertake a comprehensive review, reallocation, and restructuring of the human resources currently assigned to its component and command staffs. This heavy lift should also encompass a focused effort to develop the members of these two staffs professionally through the creation and implementation of staff development programs tailored to each staff’s particular responsibilities and reporting relationships.

In recent years, the Army Reserve has oscillated between the “one staff, two locations” and “two staffs, two locations” staffing models. Successive Chiefs of the Army Reserve have sought to solve the persistent, twin problems of the integration and synchronization of the component and command staff functions and to provide adequate staff coverage in both the Department of the Army staff and Forces Command settings in a time of repeated management headquarters staff reduction directives. On a positive note, the foundational steps to lay the groundwork for this effort are underway now in the form of an extensive and
thorough manpower study led by the Force Management section of the Office of the Chief, Army Reserve, with input from the component and command staffs.\(^{92}\) The Army Reserve is leveraging this effort as part of its plan to execute the staff reform directive issued by the SecArmy in 2018.

In far too many cases, personnel newly assigned to the two staffs find themselves on their own in terms of figuring out their new responsibilities. Likewise, very few of the newly assigned personnel have any significant Pentagon experience or a basic understanding of Pentagon processes or the networks of relationships that are critical to achieving effective staffing outcomes inside the building. Furthermore, the Office of the Chief, Army Reserve and US Army Reserve Command staff lines of authority and responsibility are not clear in all cases; both staffs have significant gaps in some critical staff functionality, and still other legacy programs are not tied directly to building strategic readiness. The staff development programs should orient the newly assigned personnel to the human and physical terrain and train the new action officers and NCOs on basic staff functions, such as writing effective information papers, navigating the Task Management Tool, and coordinating staff effectively, among many other important skills.

\(^{92}\) Jeff Abel, COL (USA) and Tony Callandrillo, LTC (USA), of OCAR, Force Management, served as the action leads for our ongoing effort to frame the statutory and policy-driven staff requirements and complete the related manpower studies. This effort is named, “Component and Command Functions and Staff Review.”
3. Realize significant improvements in talent management.

A Government Accountability Office report of 2015 found that the Army Reserve and other reserve components suffer from significant shortfalls in the basic areas of assessing and tracking soldier availability, health readiness, deployability, and a variety of other key types of important human resources data.\(^{93}\) Not surprisingly, these systemic shortfalls extend to the Army Reserve’s talent management practices and processes as well. A major contributor to this disjointedness comes in the form of fragmented legacy human resources and feeder data management systems, as by one count in 2013 there were 96 separate systems requiring some type of input.\(^{94}\) Worse yet, most of these systems require input from the most junior civilian employees at the unit level—positions that generally offer a low income and suffer from high rates of turnover.

Some of these infrastructure issues have been addressed over the last few years, and others should be resolved through the implementation of IPPS-A, which is underway now. But the category of talent management is a broad one, and major challenges remain across the Army Reserve’s human capital enterprise. Significant examples of challenged areas include the lack of incentives to encourage Army Reserve officers and NCOs to take on operational

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94. This inventory of information technology systems was taken by Tim Williams, BG (USA Retired), in 2013 while he commanded the 302nd Maneuver Enhancement Brigade, 412th Theater Engineer Command.
command assignments, the fact that most Army Reserve director-level hiring is not nominative, and the basic inability to tap into civilian-acquired talent to refine or overhaul outdated human resources management systems and practices, among others.

To get our arms around these and other talent management challenges, it will be appropriate to solicit interest Reserve-wide for participation in the tiger teams needed to undertake this heavy lift. The primary goal will be to bring together the expertise, stakeholders, and authorities needed to guide, improve, and enforce enhanced accession, assignment, evaluation, and board processes. Given the trends of declining eligibility and propensity to serve in American society, it is also time to consider increasing our Army Reserve soldiers’ flexibility by authorizing the lengthening of time-in-grade timelines in certain circumstances and potentially removing the up-or-out system that has been in place since the passage of the Defense Officer Personnel Management Act of 1980. This approach was clearly appropriate in the post-Vietnam War era, but it may no longer fit well with the modern circumstances of declining eligibility and propensity to serve.

4. Review and revamp AGR accessions, leader development, utilization, and program flexibility.

The AGR program is an extremely important element of the Army Reserve human capital enterprise which comes with its own issues, challenges, and circumstances. Accordingly, the AGR program deserves special attention. The primary recommendation here is to undertake a thorough and inclusive review of the program, with special emphasis on several major issues that should be studied carefully and potential
reforms that should be assessed. The Army Reserve generally does a poor job of managing the talent in the AGR ranks, just as it struggles to connect the senior-level population of AGRs to the actual needs of the Army. For example, AGR promotions are not driven by the “needs of the Army Reserve”; rather, they are essentially branch-agnostic, with overall merit as the main criterion. While this approach is certainly fair on its face, it results in persistent mismatches between the inventory of officers and NCOs in particular branches and functional areas and actual mission requirements.

To elaborate, these excess senior officers are often excess to need, resulting in the Army paying for senior leadership that it does not want or need and having to find places to assign the excess officers and the means to fill gaps in other requirements. An alternative approach would be to tie AGR promotions more closely to the Army’s needs by branch and functional area, as is the case with troop program unit (TPU) colonel promotions, which are tied to particular vacancies. The Army Reserve would then make up the inevitable periodic branch or functional area shortfalls by utilizing TPU talent to bridge those gaps with more cost-effective, short (one- to three-year), active-duty tours. From a talent management perspective, this approach would present opportunities to maximize the talent in critical or nominative assignments and create additional broadening experiences for the top performers in the officer and NCO corps.

With respect to the task of establishing the AGR structure throughout the force, current policy allows for the creation of temporary manpower authorizations to assign AGRs against temporary or emergent requirements, often without the requirement to identify any corresponding bill-paying billet. Since the
process of modifying the actual FTS structure is generally lengthy and unwieldy, the temporary manpower authorizations often remain in place for years without any corresponding scrutiny of the validity of the original requirement or effort to balance or prioritize the requirement among competing demands. Taking this idea further, the Army Reserve would benefit from a serious and rigorous analysis of the relative impacts of FTS in different roles as they contribute to the generation of near-term and future-year readiness, in conjunction with a review and restructuring of the overall FTS authorizations and their distribution to optimize those impacts. Ideally, this process would be continual and self-correcting over time.

There are other aspects of the AGR program that should undergo a contemporary review as well. For example, it may be appropriate to take a fresh look at the policy change of 2004 that removed the requirement to selectively continue AGRs beyond 20 years of active service (the “continuation waiver”) and that protects the AGRs’ ability to reach the 20-year threshold of service, as is the case in the current program framework. The goal here would be to ensure that the best-qualified officers and NCOs continue beyond 20 years of service and to tailor those continuations to the actual needs of the force.95 The 2004 policy shift certainly made sense in the circumstances of the ramp-up for operations in Afghanistan and Iraq, but the policy should be revisited and updated as needed to fit today’s circumstances.

In the same way, the Army Reserve should take a hard look at the general lack of coherence in AGR career management and professional development practices, including the limitations on AGR eligibility

95. AR 135-18.
for command and senior enlisted advisor billets. As part of this review, it will be necessary to consider revisions to the administer, train, organize, maintain, and mobilize model and the law that prescribes it in order to permit more robust professional development and the direct allocation of scarce FTS resources against high-priority readiness challenges and requirements. At the same time, the Army Reserve should review the current roles and practices of the Army Reserve Proponent Advisor program as well as the relatively thin oversight of senior AGR assignments that is currently the norm. The Army Reserve should also find ways to leverage its TPU talent more fully by advertising opportunities on the component and command staffs and boarding them, with the goal of ensuring that the best of the best—whether AGR or TPU—fill these critical billets.

5. Update, revamp, and realign the Army Reserve training base to focus on combined arms and decisive action training, and to help those with the propensity to serve be able to stay in uniform.

In many respects, the current Army Reserve training base still reflects the specific needs of the ARFOR-GEN Army of OEF and OIF. The current Combat Support Training program is still geared toward achieving high rotational rates of production at relatively modest levels of combat support proficiency in the expectation that a more robust training regimen for sourced units will be implemented post-mobilization. It is also hard to make the case that these training programs have fully made the jump to decisive action operations from the previous focus on
counterinsurgency when there are no combat-arms forces actually present for any of the training, except in isolated cases.

Just as concerning, the Army Reserve training base currently places no extra emphasis on soldier fitness, wellness, or resilience. Again, the status quo seems to reflect the needs and circumstances of the OEF and OIF rotational force, in which a soldier could be retained (and deployed) regardless of whether he or she met the Army’s height and weight or physical fitness standards, as long as the soldier is physically able to deploy. Given societal trends, including the rising rates of obesity and the declining propensity to serve, the Army Reserve has little margin for error in terms of fully utilizing the human capital it has in the ranks. Fitness, resilience, and healthy living need to be a key part of our training and educational activities to keep as many of our soldiers in the ranks as we possibly can.

With these two ideas in mind, the Army Reserve should undertake a serious and comprehensive review of the goals and structure of its training base in the post-ARFORGEN era. In particular, the Army Reserve should realign capacity to undertake the special, contemporary challenges it faces in the areas of mission command and leader development, combined arms training, and fitness, nutrition, and resilience. The Army Reserve should also examine the coherence of its civilian workforce training and development and perhaps consider taking a center of excellence approach to this critical activity.

Other aspects of this domain merit serious reconsideration as well. For example, the SecArmy and the CSA have issued recent guidance intended to increase the force’s focus on lethality and interoperability,
consistent with the 2018 NDS, while reducing the administrative and mandatory training burdens on unit-level leaders. These promising developments are likely to be insufficient from a reserve component perspective, however, and there may be room to provide reserve component leaders additional authority to accept risk in other mandatory requirements to make room for combat training.

With the goal of setting the conditions to retain every talented and capable soldier we can, the Army Reserve should also explore potential alternatives that are further outside the box. For example, to address the issues of obesity and the general lack of physical fitness and nutritional education and awareness directly, the Army Reserve could consider establishing a health and fitness center at an Army Reserve training installation that would serve as a last-ditch effort to help soldiers meet the standards before giving up on them and separating them from the force. The Army Reserve should also explore creating multiple means of achieving PME requirements, including PME sabbaticals and in-house transient, training, hospital, and school.

The Army Reserve should reconsider the role of soldier compensation within this domain as well. For example, the Army Reserve can consider incentivizing readiness compliance through some form of formal or informal compensation, paying for soldiers’ off-duty work to maintain readiness and recouping that compensation when soldiers fall out of compliance. The Army Reserve should also consider compensating those officers and NCOs who step up to take

on difficult leadership roles, such as the command responsibility pay that was authorized by Congress at one point but never used or funded. Informal compensation for command responsibility could include establishing board guidance that emphasizes successful command of operational (modification table of organization and equipment) units as a major discriminator in promotion decisions and, thus, a form of compensation that does not require funding.

Of course, some of these ideas may prove infeasible or undesirable after careful consideration, and others may require additional authorities or resources. Others may be feasible through the reprogramming or reallocation of existing resources or by applying existing authorities in new ways. In any case, it is time for the Army Reserve to make a serious effort to match its training and educational activities with its emerging missions, the makeup and needs of the current force, and the realities of the society from which we draw our soldiers.

6. Establish an Army Reserve “CTC Lite” to create routine combined arms training opportunities, foster combined arms training relationships, and give average Army Reserve units an opportunity to play in the “Super Bowl.”

As an extension of the heavy lift of a comprehensive review and updating of the Army Reserve training base and as an idea that promises multiple potential benefits, the Army Reserve should work to establish an in-house “CTC Lite,” or a scaled and tailored version of a CTC. With the underutilized or unused training resources of Fort Knox in mind, including the mission command training facility there, this initiative would seek to meet three needs at once
as it would provide a venue for focused mission-command training, could facilitate the development of combined arms training relationships with active Army and National Guard combat-arms formations, and would give Army Reserve soldiers in combat support and “retail” combat sustainment units a much greater chance of experiencing actual combined arms training.

Beyond its primary goal of building readiness for decisive action operations across the force, a training experience such as this one would also yield a variety of secondary benefits. As one example, this venue could serve as a mission rehearsal exercise for the few Army Reserve units lucky enough to be tapped to participate in National Training Center or other CTC rotations. It is well-known that Army Reserve formations are often at a major disadvantage relative to their active component peers at CTCs, as they often arrive poorly equipped and largely unprepared. Other positive benefits of this training capability would be less direct but equally beneficial. For example, an Army Reserve CTC Lite would provide an additional opportunity for sets and reps for active Army and National Guard formations. The preparation for these lower-level training exercises, envisioned at battalion minus or company level and below, would also provide the three components opportunities to establish Total Force training partnerships, which could then extend to staff exercises, table-top exercises, warfighter exercises, and other similar training venues. Another significant added benefit of this approach would be to enhance morale and retention across the Army Reserve by establishing the realistic possibility of a unit “Super Bowl,” or a genuine opportunity to conduct combined arms training, perhaps featuring
some modern equipment from the modification table of organization and equipment.

Expanding upon this idea, the creation of this training capability would have benefits well beyond that of mitigating the major shortfalls in combined arms training that constitute the reality in today’s Army Reserve. This platform could provide the focal point and guiding framework for a targeted buy of modern mission command equipment and equipment from the modification table of organization and equipment, perhaps using National Guard and Reserve Equipment Appropriation funding. This modern equipment could then be used year-round for individual soldier and leader development training to help bridge some of the gaps created by the Army’s cascading equipping strategy.

In a similar way, these opportunities could, in turn, enhance Army Reserve recruiting and retention; this could occur on the front end by highlighting available training opportunities and by giving units the opportunity for a meaningful and challenging, culminating training experience in the SRM cycle. The Army Reserve could even create small mobile training teams, such as those in the National Guard’s Exportable Combat Training Center program, to help units prepare for CTC Lite during their home-station training prior to arriving. This capability could also serve as a primary vehicle through which Army Reserve leaders can begin to understand multi-domain operations and global integration in the context of great-power competition, consistent with the requirements of the 2018 NDS.

7. Revamp the Army Reserve’s task organization and mission command relationships with the goal of realizing
a reasonable and feasible span of control and maintaining branch-focused “communities of practice.”

Command in the Army Reserve at battalion level or above is usually a far-flung endeavor. As an illustrative example, the 926th Engineer Brigade, commanded by a TPU colonel in his or her first brigade-level command, is comprised of more than 5,000 soldiers assigned to more than 50 units in dozens of Army Reserve centers stretching across 8 southeastern states. Some of the brigade’s 38 companies and even some of the small detachments are the sole units in particular geographic locations, with their battalion headquarters located over 100 miles away.

As another example at the major subordinate command level, the 416th Theater Engineer Command is commanded by a major general and is comprised of more than 12,000 soldiers assigned to about 175 units in more than 100 Reserve centers located in 26 states west of the Mississippi and Ohio Rivers. Command under these circumstances in an active duty setting would be enough of a challenge by itself, but of course, the great majority of the Army Reserve’s commanders are TPU or compensated part-time. Like any other command in the Army, however, the daily requirements of these commands are persistent and broad.

The quick-win reforms outlined in chapter 6 will help to mitigate these challenges in some important ways. However, the recommendation here is that the Army Reserve undertake a comprehensive effort to right-size the span of control for mission command of its battalions, brigades, and division-level units. A reasonable first step for this effort would be to strive to limit Army Reserve brigades and groups to about 2,500 soldiers or less and, similarly, to limit battalions
to fewer than 1,000 soldiers. At the same time, the Army Reserve could improve its training posture by conducting a corresponding review and realignment of its like-type units within the SRM cycle, both to enhance its leader development and to improve the quality of training management, execution, and assessment.

Even as the Army Reserve overhauls its internal mission command and task organization to make its commanders’ span of control more feasible and reasonable, it will be important to maintain the communities of practice that currently exist within the various operational and functional commands. That is, engineers should lead and oversee engineers, and so on, to enable the leaders to achieve the most effective oversight of soldier and unit training and readiness. The related issues of stay-behind modularity and the roles of the regional readiness commands in this mix will also need to be resolved and resourced.

8. Update the Army Reserve’s restationing model to make it more forward-looking economically and demographically, with the specific goals of enhancing units’ ability to fill their ranks and improving the quality of the soldier experience.

Unit relocations are costly, emotional, and political events. The stronger the underlying model can be, thus providing an analytical rationale for moving units on the basis of robust, supporting, empirical evidence, the more likely these actions are to happen and to be successful. These careful analyses and rational assessments should be able to be shared broadly to help inform public officials about the Army Reserve’s strengths and challenges in given unit locations.
Given the number of distressed units across the Army Reserve, it is clear that we have much work to do to make this process forward-looking, both economically and demographically, and consequently more efficient and effective. The coherent stationing of the Army Reserve’s equipment and access to required training areas should also be included in this comprehensive analysis.

9. Undertake a holistic review of the Army Reserve recruiting and retention model, with the goals of reaching a broader audience, increasing the public’s propensity to serve, and acknowledging both the requirements and benefits of serving. Include the recruiting community, local commanders, and the operational and component staffs in this holistic review.

The Army and the other services have become highly sophisticated in their understanding of the recruiting marketplace and have adapted their messaging and practices to maximize our recruiters’ prospects for achieving their mission. At the same time, it is also clear that we are collectively swimming upstream in light of societal trends. As broad measures of these current challenges, the Army Reserve has failed to meet its end-strength objectives for the past several years by significant margins. We also know that about 50 percent of first-term enlistees are failing to make it to the end of their initial enlistments, meaning that we are expending great energy and resources in recruiting and training individuals whose prospects for meeting their service obligations come down to a coin flip.

Of course, the Army already makes a comprehensive effort to develop an understanding of its soldiers, including finding out who is willing to serve and what
their primary motivations are. The Army also works hard to develop an understanding of what convinces soldiers to stay in the ranks as well as what causes soldiers to leave. Though focused solely on the active Army, a recent RAND analysis of these questions drew many important conclusions after interviewing 81 active Army soldiers. The study’s authors found that most of the young, active-duty soldiers were generally satisfied with their experiences in the early going of their terms of service; however, the researchers recommended that the Army relook at the central themes of its marketing campaigns. Based upon their interviews with young soldiers, the researchers proposed messages that focus on “emphasizing the social aspects of Army service” and providing “accurate information about Army life” to prevent unrealistic expectations. In the same article, the SecArmy suggested focusing on a call to public service. These approaches are consistent with the Sebastian Junger argument in the book, Tribe, in which he highlights humans’ “strong instinct to belong to small groups defined by clear purpose and understanding.” In this vein, the Army has recently reoriented its primary messaging toward “service” and “warrior” themes, though it remains to be seen what the results will be.

As is often the case, the Army Reserve shares many of the active Army’s challenges, but must also contend with other inhibitors. For example, an Army Reserve Careers Division report of late 2017 found that among 

98. Helmus et al., Life as a Private.
the nearly 6,000 Army Reserve personnel losses up to that point in the fiscal year, the largest single category of loss was the more than 1-in-6 who had simply departed at the end of their terms of service without having engaged in adverse action. For those who stayed, the three most oft-cited reasons for reenlisting were financial: reenlistment bonuses, education benefits, and health benefits. The top motives identified for not reenlisting were especially telling, however, as the top five reasons cited in exit interviews were, in order, civilian employment/job conflicts, family concerns/hardships, unit training issues, unit leadership issues, and flags.

It is concerning that the primary motivations for staying in the ranks in the Army Reserve are financial. It is equally troubling that we seem to be doing a poor job of enabling our soldiers to balance their competing obligations or to even find reasons other than financial ones to want to continue to serve. If we are to penetrate the background noise of an increasingly connected society, with the goal of attracting those most likely to join and commit to meeting the standards of service, it may be appropriate to place some of the scarce recruiting resources under the control of regional or local commanders. In any event, we need to take a holistic, honest, inclusive, and empirical approach to this complex problem set if we are going to find the innovative solutions it will take to solve it.

100. Stacy Babcock, COL (USA), Army Reserve Career Division Loss Report (December 18, 2017).
10. Make a focused, enterprise-wide effort to increase the quality of the Army Reserve experience to inspire those who have the propensity to join to stay in uniform.

This final heavy lift is a natural extension of the last one. In the face of changing American demographics and evolving cultural norms, we must make every possible effort to retain all who decide to join. In the typical interpretations of data on the recruits and early-termers and their motivations and impressions of service, it is common to hear senior leaders focus on financial incentives in seeking to attract and retain service members. But while the financial benefits of belonging will always be an important part of this equation, other aspects of the enlistees’ responses are equally important. For example, an RFPB report of 2014 found that while 75 percent of Reserve members were satisfied with the military way of life and felt that their service was viewed favorably by their families and employers, satisfaction had begun to dip from its 2009 peak.¹⁰² Many respondents attributed this dip in satisfaction to the fact that they were experiencing a diminished opportunity to deploy—or to “do stuff”—and were therefore less enthusiastic about continuing to serve. While the use of the reserve components as an operational force in wartime is generally popular with them, the increasing peacetime readiness requirements and associated demands on their time are forcing tough decisions and trade-offs. Too often, this results in our most talented members leaving.

The quick-win reforms aimed at improving Army Reserve mission command should help to improve this situation. However, it is incumbent upon leaders across the Army Reserve enterprise to envision and

¹⁰². RFPB, 2014 Reserve Forces.
realize the fundamental changes needed in our organization to make it a more attractive, meaningful, satisfying, and feasible place for our soldiers to serve our nation. There is no doubt that our newest generation of soldiers has significantly different expectations than our most senior leaders.\(^{103}\) Therefore, it is incumbent upon all of us to understand and accommodate this new reality.

\[^{103}\text{For a detailed treatment of this subject, see Darren K. Ford, }\textit{The Millennial Challenge} \text{(CreateSpace Independent Publishing, April 13, 2014).}\]
8. “GOING DEEP”: UNCONVENTIONAL ROLES FOR A DAUNTING FUTURE

The problem we are focusing on is how to “Win in a Complex World.” “Win” occurs at the strategic level and involves more than just firepower. It involves the application of all elements of national power. “Complex” is defined as an environment that is not only unknown, but unknowable and constantly changing.


The United States faces evolving strategic and operational environments that are increasingly daunting and risk-laden, yet many emerging threats remain unknown, or even unknowable. This profound uncertainty, which makes predicting the nature and scope of America’s next foreign intervention even more difficult than it has been in the past, represents one of the most challenging aspects of national security planning in the twenty-first century. Accordingly, these “deep” reform proposals aim to position the Army Reserve to be able to provide the nation with strategic and operational flexibility in the face of an increasingly complex and uncertain future. Fortunately, these deep reforms do not represent any real change to the Army Reserve’s enduring mission; rather, they represent a modern expansion of its scope. In fact, these goals fit snugly within the Army Reserve’s DNA, given its history of providing versatile, tailored, and cost-effective capabilities to meet emergent needs.

104. TRADOC Pamphlet 525-3-1 (2014), iii.
The Emerging Environment as a Generator of Requirements

Once described optimistically as the “end of history,” the twenty-first century has instead seen the emergence of major challenges to Western, liberal, democratic norms and values; a wavering international order; and the accelerating decline of failed and failing states. At the strategic level, rising and revanchist nation-states have taken advantage of America’s decisive engagements in the Middle East and Asia to develop into near-peer threats, openly seeking to dominate certain regions of the world. This return to great-power competition requires that we apply a global perspective, in contrast to the regional parsing of our national security problems that was feasible in the years after the Cold War.

Adding further complexity, populist movements around the world, coupled with the effects of climate change, the wide availability of disruptive technologies, and the internet-fueled ability of bad actors to organize extremist movements through social media, have destabilized governments and the world order. These developments have also given rise to dangerous, ungoverned spaces around the world, even as cash-strapped Western governments have limited their investments in their security forces. Against this backdrop, the United States must also reckon with its unsustainable budget deficits and a rapidly increasing national debt.

The emerging challenges are no easier at the operational level. Our potential adversaries have developed multi-domain operating capabilities, aiming to achieve peer or near-peer status in particular domains in order to neutralize specific American operational
strengths. While the DoD was once the driver of many developing technologies with defense applications, its research and development budget is now dwarfed in size by the comparable activities going on inside major technology companies in the private sector. Advances in disruptive technologies are emerging at an ever-increasing pace, even as the private and public sectors are still at the very leading edge of their development of artificial intelligence, robotic swarming, neural networking and transmitting, three-dimensional printing, and other destabilizing technologies with future defense applications. The US Army has begun to think its way through these challenges and opportunities, as was expressed most recently in TRADOC Pamphlet 525-3-1: The US Army in Multi-Domain Operations, 2028.

Recognizing these developments, Congress placed a provision in the National Defense Authorization Act of 2017 that required an independent, nonpartisan assessment of the implementation of the NDS. Co-chaired by Ambassador Eric Edelman and Admi-ral Gary Roughead, the NDS Commission reported its unclassified findings late in 2018. In its report, the commission identified critical gaps between the aspirational ends and ways of the defense strategy and the concepts and means currently available to realize them. Asserting that “America’s rivals are mounting comprehensive challenges using military means and consequential economic, diplomatic, political, and informational tools,” the report calls upon the DoD to counter with new operational concepts, including
“equally creative responses” to our rivals’ “unconventional approaches.”

The NDS Commission report points to a wide range of capability and capacity shortfalls across all instruments of national power which will need to be addressed if the NDS is to be operationalized fully. In reality, most of these capabilities cannot be maintained on a full-time basis, and these highly specialized skills are expensive to teach and maintain in-house, especially given the accelerating pace of change in all domains. But many of these specialized requirements could potentially fit into the Army Reserve’s purview.

**Realizing Untapped Potential for Unconventional Roles**

Building upon the thinking expressed in the Army operating concept; the NDS Commission’s study, *TRADOC Pamphlet 525-3-1*; and other recent accounts of capability gaps in America’s national security enterprise, the primary goal of these deep reforms is to set the conditions for the Army Reserve to link the Army, the Joint Force, and our interagency partners to an array of diverse and nontraditional capabilities that might be required to address complex and unexpected needs. The idea of tapping into civilian-acquired skills has been floated before, including as part of former Secretary of Defense Ash Carter’s first tranche of Force

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of the Future proposals in November 2015 and in past RAND studies.\textsuperscript{106}

In this envisioned expansion of the Army Reserve mission, the institution would serve as a clearing house or “temp agency” for specialized talents and capabilities identified by the Army, the Joint Force, and other partner agencies and departments. This approach would take advantage of the Army Reserve’s status as a federal force that can be wholly responsive to periodic and emergent needs and leverage the recruited individuals’ other-than-military placements outside of government to outsource needed capability training, credentialing, and certification. The DoD could also use this vehicle to tap into the rapidly evolving technologies and expertise within various academic, corporate, and other sectors. In this design, the Army Reserve would maintain responsibility for the appropriate levels of recruited personnel military training in advance of mobilization and utilization and all of their administrative, security, and logistical requirements.

While the list that follows is not intended to be exhaustive or exclusive of other possibilities, there is a wide range of skills and expertise for which the Army Reserve could be used to provide nontraditional talent to help bridge various capability gaps. Some of these capabilities could be applied at the strategic level, while others could be employed at the operational level. In some cases, these skills and expertise are already represented among soldiers currently in the Army Reserve, while other talent could be recruited into the organization as future needs are identified.

\textsuperscript{106} Gregory F. Treverton et al., \textit{Attracting “Cutting-Edge” Skills through Reserve Component Participation} (Santa Monica, CA: RAND Corporation, 2003).
As an illustrative sample, potential future contributions might include

- connecting to research or applications related to emerging disruptive technologies;
- forming tiger teams for strategic thinking and analysis tied to particular strategic issues or supporting working groups in defense-related agency or departmental activities;
- achieving an understanding and application of the expanded instruments of national power (diplomacy, information, military, economics, finance, intelligence, and law enforcement) in support of whole-of-government solutions to national security issues;
- providing nontraditional, civilian expertise in support of reconstruction and stability operations or other non-kinetic LOEs;
- contributing to the understanding of highly complex, dense, urban terrain in particular theaters or in support of theater- or nation-specific cultural awareness and understanding;
- augmenting research and development and science and technology efforts inside of DoD activities;
- integrating advances in medical technologies or other organizational or corporate business practices into Army organizations and activities;
- understanding and applying the drivers of changes in the nature of work skills, such as increased longevity in the workforce, the rise of smart machines and systems, the pervasiveness
of sensors and global connectivity, and new communication tools;\textsuperscript{107}

- providing academic or practitioner insights into grand strategy and national strategic direction, currently a major challenge for a national security staff typically consumed by responding to near-term and emergent issues and crises;\textsuperscript{108}

- creating temporary think tanks or working groups for the framing of contemporary foreign policy issues to help foster the deeper and broader strategic thinking sought by former Secretary Mattis and other senior DoD leaders;

- bringing in specific expertise on an as-needed basis or for short, rotational tours to assist with particular regions or issues in support of the National Security Council;

- connecting temporary talent to the Defense Innovative Unit Experimental or other similar, full-time, innovation and research initiatives;

- augmenting combatant command or Joint Task Force staffs with specialized expertise pertaining to particular countries, regions, issues, or adversary capabilities;

- providing the organizing framework for an alignment of technological development with a major public purpose, such as a new Manhattan


\textsuperscript{108} Lew Irwin, MG (USA), \textit{Disjointed Ways, Disunified Means: Learning from America’s Struggle To Build an Afghan Nation} (Carlisle, PA: Strategic Studies Institute, 2012).
Project, as proposed by former Secretary of Defense Ash Carter;\textsuperscript{109}

- organizing teams to study the ethics and implications of the employment of emerging weapons and disruptive technologies, including the formation of policy recommendations to govern their use; and
- augmenting cross-functional teams in Army Futures Command.

\textbf{Going Deep—Five Future Force Reform Recommendations}

Realizing this expansion of the Army Reserve’s mission to help our nation grapple with an increasingly daunting, unpredictable, and risk-laden future will require a series of legislative, structural, and policy changes. Though ambitious in scope, this set of reform proposals builds upon initiatives already underway in the Army, the Army Reserve, and the DoD. Taken together, these deep reforms will set the conditions for the Army Reserve to expand its contributions to the Army, the Joint Force, and our interagency partners in America’s national security enterprise.

1. \textit{Achieve true talent management in the Army Reserve by thoroughly and systematically inventorying and cataloging all relevant, civilian-acquired skills and expertise.}

If you bring up the subject of the reserve components to active-component commanders who served in OEF or OIF, you are likely to hear stories of how

they discovered invaluable skill sets among the ranks of their reserve soldiers. The skills these leaders cite most often are those that proved to be particularly valuable in the support of non-kinetic LOEs, such as efforts at improving governance or the rule of law, the conduct of stability and reconstruction operations, or other similar requirements. Of course, these types of skills are likely to be required again if the Army’s operating concept, the NDS Commission study, and *The Joint Operating Environment 2035*, among other defense publications, are correct. In fact, history tells us that the United States is likely to intervene in the affairs of other countries again in the future since these actions have been routine throughout our history.

Unfortunately, these commanders’ discoveries have no basis in current Army Reserve systems or processes, as there is no real inventory of those skills or attributes that might be helpful in a mission context. This untapped potential could fill real gaps. For example, the United States went into Afghanistan with almost no knowledge of Afghan culture or other relevant expertise, including basic language skills.\(^\text{110}\) As a small sample of the diverse, civilian-acquired skills and experience among the soldiers who have served recently in the Army Reserve, the civilian careers of my teammates have included a senior economist in the Department of Commerce, Department of State analysts, civilian members of the US Army Space and Missile Defense Command, a General Electric top-5-percent manager, an IBM senior executive, a member of Congress, a Pennsylvania state senator, a chief engineer for the City of Tacoma, a professor of civil engineering at Vanderbilt University, superintendents of schools, a professional staff member in the Senate

\(^{110}\) Irwin, *Disjointed Ways*. 
Armed Services Committee, and many others. In any event, the Army Reserve’s current process for identifying its members’ civilian careers using the Civilian Employer Information database is poorly executed and exceedingly general in its categories, and therefore not usable for these purposes.¹¹¹ So the exceptionally rich and diverse, other-than-military competencies that reside in the Army Reserve are currently uncataloged, and therefore remain untapped by the Army and Joint Force, except by occasional happenstance.

Fortunately, the Army is already hard at work creating the information management platform needed for a much more robust inventorying and cataloging of civilian-acquired skills and expertise, a system known as IPPS-A. IPPS-A will include a module that will enable a far more robust skill inventory. The recommendation here is to ensure that the module is comprehensive enough to be useful and to enforce its use and maintenance to create a true professional skills inventory. IPPS-A should include specific and well-constructed civilian skills and experience fields, including language skills, civilian credentials, professional fields, civilian educational attainment, and a variety of others.

2. Rescind the DoD policy prohibiting the mobilization of Reserve component personnel for civilian-acquired skills within prescribed service member-selected limits.

Gaining routine access to the Army Reserve’s diverse, rich, civilian-acquired skills and expertise will

¹¹¹ Jason Hollan, MAJ (USA), and Zach Galaboff, CPT (USA), were very helpful in the process of identifying the Civilian Employer Information database’s limitations as well as some of our soldiers’ exceptional, civilian-acquired skills.
require a change to the current DoD policy that prohib-
hits the mobilization of reserve component service
members for that purpose.112 At the same time, service
members should be given the opportunity to register
their preferences for mobilizations tied to civilian-ac-
quired skills or experience, with a needs-of-the-service
waiver of those preferences tied to particular levels of
mobilization authority.

3. Create a highly qualified expert branch within the
Army Reserve and distribute the experts among US Army
Civil Affairs and Psychological Operations Command,
Army Reserve Innovation Command, and other selected
organizations.

As the Army, the Joint Force, and our partners in
national security identify the specialized requirements
needed to support the NDS and National Military
Strategy, the Army should create a branch of highly
qualified experts inside the Army Reserve. There is
precedent for this designation within the PME sys-
tem’s mentor program as well as the Army Reserve
portion of the Civil Affairs Branch (38-series officers).
The natural places to house these officers, NCOs, and
junior soldiers with specialized skills inside the Army
Reserve would be US Army Civil Affairs and Psycho-
logical Operations Command, Army Reserve Innovation Command, or selected Army Reserve element
billets to be created inside the organizations within
which these personnel would serve.

112. RFPB, Improving the Total Force, 49-53.
4. *Standardize and streamline access to the personnel in the Army Reserve and other reserve components through the adoption of major duty status reform.*

Under current law, the various reserve components have more than 30 different duty statuses that vary greatly by component and legal authority. There is a major effort underway inside the DoD to reform this convoluted, inefficient, and unwieldy system and bring these dozens of statuses into alignment within four categories, including aligning their corresponding benefits and entitlements. These reforms would provide more flexibility and streamlined access and funding to bring soldiers on duty more quickly. The four categories include active duty for operations; active duty for training; federal reserve duty; and remote duty, such as pay or points for distance learning.

5. *Shift the primary responsibility for the management and oversight of human resources in the IRR from US Army Human Resources Command to the Army Reserve.*

The IRR is generally underused and not closely or carefully managed. Likewise, the IRR experiences the same shortfalls in personnel management systems that the rest of the Army’s reserve components do, including limited permeability between components. The recommendation is to incorporate the IRR into the pool of available talent that will be tracked in IPPS-A and to shift the primary responsibility for its administration, management, and oversight to the Army Reserve.

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113. RFPB, *Improving the Total Force*, 42-44.
A variety of recent assessments have demonstrated that the Army and Joint Force are not well-matched in many respects with the evolving, complex challenges and demands of the emerging strategic and operational environments. Adopting these five deep reforms would help to place the Army Reserve into a defensive posture that would help the Army, the Joint Force, and our interagency partners confront unpredictable threats as they emerge. In this sense, the Army Reserve can then become a “Swiss Army knife” of carefully inventoried and cataloged, nontraditional capabilities to be maintained in a pre-mobilization state of availability to meet emergent needs.
CLOSING THOUGHTS: CITIZENSHIP IN A FREE REPUBLIC

It may be laid down as a primary position, and the basis of our system, that every citizen who enjoys the protection of a free government, owes not only a proportion of his property, but even of his personal services to the defense of it.

Quotations of George Washington

As our all-volunteer force becomes more expensive and harder to recruit and maintain, and as the American public becomes more willing to use the military, yet less willing to serve in it themselves, there may come a time in the future when the idea of a national public service obligation becomes more feasible politically and more desirable practically. As the epigraph suggests, our first commander-in-chief would certainly endorse this idea. Phillip Carter and his colleagues from the Center for a New American Security demonstrate persuasively in their careful analysis of today’s all-volunteer force that the time for a serious national reckoning regarding the sustainability of the volunteer force may be closer than we would like to think.

That said, Carter and his colleagues are not the only contemporary thinkers who are contemplating the possibility of more profound changes to American society and American circumstances in the years ahead. As just a few relevant and disparate examples, Richard Haass of the Council on Foreign Relations has written about the coming changes in the nature of

117. Carter et al., AVF 4.0.
work in an age of rising automation and globalization, Sebastian Junger has written of the human need for social connection, and many others have written about the growing social, political, and economic divisions and upheavals in American society today. Graham Allison has written recently of the likelihood of major-power conflict between the United States and China, and the NDS emphasizes the return of great-power competition and a growing uncertainty and unpredictability, even as information has already been weaponized to attack the very norms and institutions of American society.

The point here is that, when viewed from this perspective, the example of the Army Reserve’s role in leading the CCC from 1933 to 1942 during the Great Depression is instructive and relevant. The reforms recommended in this monograph are fairly conservative in the sense that they keep the Army Reserve’s modern mission and structure essentially intact; however, they would also help to position the institution to be able to provide the United States more profound leadership and organizational capabilities should that need arise someday. Whether that need comes in the form of a new CCC, some hybrid national service model, a need to better connect the American people to their military, or something wholly unforeseen, the Army Reserve will be ready.