





U.S. ARMY RESERVE READINESS AT A TIME OF DECREASING RESOURCES

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MASTER OF DEFENCE STUDIES – MAÎTRISE EN ÉTUDES DE LA DÉFENSE

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ABSTRACT

Following nearly a decade and a half of war, the United States Army is facing resource cuts that threaten the readiness of the force. This phenomenon is not new and has historical precedent following every major conflict in the country's history. However, previous post-war periods in the eighteenth, nineteenth, and twentieth centuries did not reflect the rate of change punctuating today's volatile, uncertain, complex, and ambiguous global environment.

As such, the Army Reserve is faced with the formidable challenge to preserve its current readiness and capabilities so it may be able to respond to global threats and quickly augment the Regular Army as needed. To do so, it must implement measured reductions in personnel, equipment on-hand, and training while accepting risk with lower equipment operational readiness rates. To do so, the Army Reserve must bifurcate its efforts to preserve the operational force while changing the perceptions of strategic leaders controlling its resources.

The Army Reserve is well positioned to accept cuts to resources while also growing its capability and readiness. However, this cannot be done with across-the-board cuts mandated by the Budget Control Act of 2011 and by focusing on shifting forces from the Regular Army to the Army Reserve. This paper examines each of the readiness categories in the Army Force Generation model, the potential effects of budget cuts, and proposes actions for improvement and areas for future study.

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LIST OF ABBREVIATIONS

AR – Army Regulation

ARFORGEN – Army Force Generation

CEF – Contingency Expeditionary Force

CSTX – Combat Support Training Exercise

DEF – Deployment Expeditionary Force

DMOSQ – Duty Military Occupational Speciality Qualified

DoD – Department of Defense

FMC – Fully Mission Capable

FY - Fiscal Year

IED – Improvised Explosive Device

LTG – Lieutenant General

MET – Mission Essential Tasks

METL - Mission Essential Task List

MOSQ - Military Occupational Speciality Qualified

MRAP – Mine Resistant, Ambush-Protection

MTOE – Modified Table of Organization and Equipment

O&M – Operations and Maintenance

PME – Professional Military Education

RA – Regular Army

TPE – Theater Provided Equipment

T/R – Train/Ready

WAREX - Warrior Exercise

CHAPTER 1 Introduction

The future will require an Army Reserve that can enable our Army to Prevent, Shape, and Win across a full range of missions. Maintaining an Army Reserve with operational flexibility and strategic depth will be essential.

- Lieutenant General Jeffrey W. Talley, Aim Point 32

The United States Army maintains a robust reserve force to address force structure requirements of the Regular Army (RA) and ensure force structures can adjust in response to shifting operational requirements. To do so, the U.S. Army Reserve (herein referred to as the "Army Reserve") maintains a stated mission of "[providing] trained, equipped and ready Soldiers, Leaders, and Units to meet America's requirements at home and abroad." As the United States continues to supply military forces for operations across the globe, the U.S. must leverage a deliberate process to maintain an adequate supply of ready reserve forces to respond to changing force requirements. This paper will examine the competing requirements for forces against existing and projected resources to determine their feasibility for the future of the Army Reserve.

Fiscal Uncertainty and Current Views

As U.S. military operations conclude in the Middle East, political pressure will grow to shift resources from the Department of Defense, which enjoyed 14 years as the priority for resourcing, to domestic programs that may have been neglected in previous years. However, cutting defence resources will entail making difficult choices pertaining

¹ United States Army Reserve, "The Army Reserve," last accessed May 31, 2015, http://www.usar.army.mil/ourstory/Pages/default.aspx.

to force structure, future priorities, and thresholds (otherwise known as "Red Lines") the country will tolerate before engaging in future military action. The resource shifts will affect the entirety of the Department of Defense (DoD), including the Army Reserve.

During the years the United States pursued the Global War on Terrorism, the Army Reserve shifted its operating paradigm from a strategic "emergency" force to an operational posture, thus earning the moniker of "Operational Reserve." However, this political nickname generates a plethora of implied requirements. These include a larger force structure, increased requirements for training funding, additional requirements for professional military education courses, and infrastructure that was not a part of the original base budgets for the Department of Defense.

As the Army Reserve shifts from a war time posture back to garrison footing, soldiers will find themselves saddled with additional garrison training requirements that compete for the limited monthly and annual training time available to reserve units.

Complicating this, knee-jerk solutions to behavioural scandals² receiving national media attention resulted in the formation of mandatory training and other administrative requirements that take away from training time as well. As officials developed numerous action plans, mandatory training requirements, and other administrative metrics to combat the perceived problem, these same lawmakers levied the new requirements without increasing resources or decrementing other administrative requirements. Thus, as the U.S. continues to move away from military operations, the diminishing availability of resources coupled with increasing administrative and readiness requirements will strain

² Recent scandals include the alarming rates of sexual harassment and sexual assault in the military, dishonesty within the ranks, and moral turpitude violations (such as adultery – illegal under the United States Military Uniformed Code of Military Justice) committed by senior and flag officers.

the ability of the Army Reserve to maintain an operational force capable of meeting current ARFORGEN Aim Points. As the U.S. faces fiscal pressures to reduce overall force structure, the U.S. Department of Defense should consider trading regular forces (limited to the Army for the scope of the project) while either preserving or increasing the number of reserve forces to ensure the U.S. remains able to respond to future threats.

Department of Defense officials recognize the significant fiscal uncertainty and pressures facing the organization and continue to consider force structure cuts that will impact the ability of the Army Reserve to serve in an operational role. In the DoD Fiscal Year (FY) 2016 budget request, policy makers acknowledged the need to reduce force structure as participation in overseas operations declined. Recognizing the inherent risk and unknown amount of cuts required, the report stated, "rapid end strength reductions to 980,000 Soldiers by FY 2018 represent a cumulative reduction of almost 130,000 Soldiers between FY 2012 and FY 2018 and present risks in training and health of the force until force structure reductions are complete."

Continuing budget pressures from an extended economic recovery and shifting political priorities toward domestic concerns will create friction between the individual service components, each seeking to maintain its resource allocation as close as possible to full mobilization levels. Compounding the friction is a 3.6% reduction in the DoD base budget between FY 2014 and FY 2015 – a total decrement of US\$21M year over year in the Overseas Contingency Operations budget.⁴ Despite the decreases remaining focused

³ Office of the Undersecretary of Defense (Comptroller), *United States Department of Defense Fiscal Year 2016 Budget Request Overview*, (Washington, DC: Office of the Secretary of Defense, 2015), pp. 3-5.

⁴ Ibid, pp. 1-2.

on the overseas operating funds, service components continued to jockey for position to preserve their structures at the expense of others.

Future decreases in funding levels directly threaten the ability of the Army Reserve to field a capable and ready force able to quickly address strategic threats. Funding reductions will create secondary and tertiary effects that will jeopardize readiness and potentially erode the present readiness of the force through shortfalls in training, personnel, equipment, and maintenance. Under FY 2015 proposals, the Army Reserve could face five percent cuts year-over-year if sequestration measures remain in effect. Such cuts, while politically attractive, would be disastrous on Army Reserve readiness across each measured category.

Unfortunately, the United States faced similar pressures following the end of the Cold War. In the period following the 1990s drawdown of American forces, some pundits argued, "[Reserve] units were so under-trained they couldn't get up to speed in time for anything but a prolonged conflict." Readiness concerns, with Reserve forces unable to quickly join their Regular Army counterparts, came to head when the U.S. commenced the Iraq War while engaged in Afghanistan. However, after 14 years of fighting next to their Regular Army counterparts, Army Reserve forces demonstrated their value both in terms of cost and capability that strategic decision makers should fight to preserve, if only to avoid the additional costs of retraining in the event of a future major conflict.

⁵ Office of the Secretary of Defense, "Secretary of Defense Speech, February 24, 2014," *U.S. Department of Defense Website*, February 24, 2014, http://www.defense.gov/Speeches/Speech.aspx? SpeechID=1831.

⁶ Sydney J. Freedberg Jr., "Active vs. Guard: An Avoidable Pentagon War," *Breaking Defense Online*, June 28, 2013, http://breakingdefense.com/2013/06/active-vs-guard-an-avoidable-pentagon-war.

Facing the fiscal pressures head on, the Chief of the Army Reserve, Lieutenant General Jeffrey W. Talley, presents the Army Reserve as an investment developed over the past 14 years of war as a case for preservation. In *The United States Army Reserve* 2014 Posture Statement, LTG Talley made his case for preservation by stating:

Fiscally efficient, the Army Reserve provides nearly 20 percent of the Army's total force for less than six percent of the Total Army budget. We also accomplish our mission with only 13 percent of our component serving as full time support - six percent less than the average across all Services' reserve components.⁷

The presented statistics paint a picture in favour of growing Army Reserve forces while decreasing the regular force to accommodate reductions in defense funding. However, senior policy makers must seriously consider the implications of choosing a 10 percent cut in force structure or increasing the size of the Army Reserve while measuring the cost required to maintain either force through the ARFORGEN cycle.

The Army Force Generation Model

Understanding how the U.S. Army resources forces against operational requirements requires a discussion of the Army's Force Generation Model. The Army Reserve adopted the Army Force Generation Model to build and maintain available force pools to respond to global contingency operations. The Army Force Generation Model is defined in U.S. Army Regulation (AR) 525-29, *Army Force Generation*, as:

5

⁷ Office of the Chief of the Army Reserve, *The United States Army Reserve 2014 Posture Statement*, (Washington, DC: Department of the Army, 2014), 3.

The structured progression of unit readiness over time to produce trained, ready, and cohesive units prepared for operational deployment in support of the combatant commander and other Army requirements. The ARFORGEN process is the...core process for force generation, executed with supporting-to-supported relationships, that cycles units through three force pools: RESET, Train/Ready, and Available. Each of the three force pools contains a balanced force capability to provide a sustained flow of forces for current commitments and to hedge against unexpected contingencies.⁸

Essentially, the Regular Army and Army Reserve utilize six and 12 month training windows, respectively, during the RESET and Train/Ready force pools to prepare for 12 months of availability as either a Deployment Expeditionary Force (DEF) or a Contingency Expeditionary Force (CEF). These timelines enable the Army to maintain a ratio of two years in garrison for each Available year and a one to four ratio for the Army Reserve, for a total of a three-year or five-year cycle respectively. The one to four ratio is important for reservists due to the significant disruptions on their lives and families, but critical for civilian employers as they are faced with the difficult choice between supporting the military while minimizing disruptions to their businesses. Figure 1 provides a graphical depiction of the ARFORGEN model.

To effectively analyze the ARFORGEN model, it is important to know the constructs formulating readiness for the Army, particularly the Army Reserve. From this point forward, discussion will be limited to the Army Reserve to scope the analysis to a manageable level.

⁸ United States Army, *Army Regulation 525-29, Army Force Generation*, (Washington, DC: Department of the Army, 2011), 1.

ARFORGEN Model

The structured progression of readiness over time, to produce trained, ready, and cohesive units prepared for operational deployment in support of combatant commander and other Army requirements.

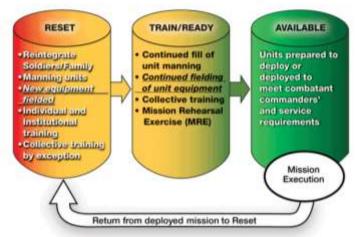


Figure 1 – ARFORGEN Model⁹

The first of the three force pools in the ARFORGEN model, the RESET pool, "begins with the establishment of a unit's return date or the transition from the Available Force Pool." A multitude of tasks occur during this 12-month phase of the Army Reserve ARFORGEN cycle. These often include:

Soldier-family reintegration; block leave; unit reconstitution; changes of command; behavioural health, medical, and dental readiness reintegration; professional military education (PME); limited individual, team, and/or crew training tasks; receipt of new personnel and equipment; and other reconstitution related tasks, as directed.¹¹

This phase is marked with the highest personnel turn-over a unit will typically experience as reserve soldiers will transfer to training-base assignments to serve as combat-experienced instructors or will augment other units preparing to enter their Available year. As a result, metrics used to track readiness thresholds, or Aim Points, for units in RESET years are the lowest in the five-year cycle for Army Reserve formations.

⁹ Ibid, 5.

¹⁰ Ibid. 3.

¹¹ Ibid.

The largest force pool for the Army Reserve is the Train/Ready pool containing three years worth of Army Reserve forces training toward their Available year. Unlike the Regular Army's 18-month training timeline to prepare for an Available year, the Army Reserve utilizes three years to accomplish Train/Ready (T/R) tasks. This construct allows for units to plan ARFORGEN cycle tasks by year and provide soldiers predictability when determining assignments, professional development moves, career choices, and family decisions. As "the Army Reserve is required to provide 24,000 Soldiers annually in support of Army Force Generation (ARFORGEN) planning requirements," at any given time there are approximately 72,000 personnel in this force generation pool.

Ostensibly, as forces train toward their wartime missions in the T/R pool, depending on their year (designated as T/R1, T/R2, and T/R3 respectively), the Army Reserve will apportion increased training resources and funding as units move through the readiness pipeline. Increased training time and funding for professional development or combat skills schools positions forces to attain greater numbers of qualified soldiers, thus enabling them to maintain higher readiness to satisfy Aim Point requirements, which will be discussed later in the introduction. It is during the T/R2 and T/R3 years that units will conduct Collective Training Exercises to enable units to accomplish training objectives and prepare for their wartime missions. Additionally, units may be assigned a Deployment Expeditionary Force mission to provide for additional forces in a combat theater.

¹² Department of Defense, *National Guard and Reserve Equipment Report for Fiscal Year 2015*, (Washington, DC: Department of Defense, 2014), pp. 2-25.

Finally, upon completing the T/R3 year and receiving readiness certification through the attainment of required Aim Points and completion of collective training exercises, units will enter their Available year. "Units in the Available Force Pool are at the highest state of training and readiness capability and the first to be considered for sourcing operational requirements." Units with a DEF mission will deploy to their assigned theaters of operation while the remaining forces are designated as Contingency Expeditionary Forces and train to the operational plan they anticipate to support. Once units complete their Available year, Army Reserve forces return to the RESET pool and begin the cycle anew.

Aim Points

To track forces as they progress through ARFORGEN force pools, the U.S. Army created metrics to prioritize resources and training in support of readiness. AR 525-29 defines these metrics as Aim Points, or "a means to track units at a prescribed state of readiness as they move through the ARFORGEN Force Pools and progressively increase readiness." As forces move through the ARFORGEN force pools to their Available year, commanders are required to grow units in capability toward levels specified at each Aim Point, with each ostensibly measuring and marking the level of training and resources expended to train toward collective task proficiency. However, understanding Aim Point metrics and their importance requires a short discussion on the definition of the ratings used to define the standards across ARFORGEN years.

¹³ U.S. Army, Army Regulation 525-29..., 4.

¹⁴ Ibid.

Aim Points are tied to a numbered system, from one to four, signifying the highest state of readiness to the lowest. Commanders make an assessment of their unit readiness based on four separate ratings for personnel (P-level), equipment on hand (S-level), equipment readiness (R-level), and training (T-level). Each of the ratings creates resourcing demands to grow a unit's readiness through training from the RESET year until Available year. The most important of the four is the T-level, as this indicates the commander's subjective assessment of a unit's training level on its wartime mission. Additionally, a key factor impacting overall readiness ratings is that these ratings will be selected based on the lowest level determined for an area of measured readiness. According to AR 220-1, if a unit is lagging in a particular category of readiness, its overall rating cannot be higher or subjectively elevated by a commander to reflect anything higher than the lowest rating. Ultimately, commanders seek to accomplish the goal of attaining a training level of "2," with the mark defined as, "the unit possess[ing] the required resources and is trained to accomplish or provide most of the core functions and fundamental capabilities for which it was designed or to undertake most of the mission it is currently assigned."15

This paper will look at each of the readiness rating categories and explore the implications of the potential 10 percent cuts on readiness. An examination of the personnel readiness metric will focus on the ability of the Army Reserve to satisfy ARFORGEN requirements in its current construct and if the force suffers a 10 percent cut in personnel. Reviewing the effects of cuts on the S-rating will focus on the ability of the force to field and repair equipment, to include the use of cross-levelled equipment to

¹⁵ United States Army, *Army Regulation 220-1, Unit Status Reporting and Force Registration – Consolidated Polices*, (Washington, DC: Department of the Army, 2010), 16.

satisfy shortages. Additionally, an inspection of the equipment readiness rating will look into the ability of the force to maintain readiness through maintenance and refurbishment of equipment if resources are cut 10 percent. Finally, the paper will discuss the impact of funding cuts on training readiness, particularly as the ability to buy training enablers, such as ammunition and fuel, decrease. Any impact on these categories will also affect the ability of the Army Reserve to meet Aim Points through the ARFORGEN cycle.

Aim Points are not steadfast and uniform across all types of Army Reserve units. Each type, whether expeditionary in nature or training base, will have a different set of Aim Point metrics to prioritize resources and training assets appropriately. Aim Point requirements also differ between DEF and CEF units with the latter maintaining lower Aim Points until nominated for a mission. Additionally, the Aim Points may be adjusted by senior Army Reserve leadership at any time provided the impact is understood and the anticipated risk is briefed to Department of Defense leadership.

With the proposed fiscal cuts, total level of capability provided by the Army Reserve, and guidance to maintain an operational reserve all in conflict, senior policy makers must understand the implications of the cuts to prepare mitigation strategies. The points analyzed in this project will paint a picture in favour of growing Army Reserve forces at the expense of the Regular Army due to the significant cost savings that may be actualized upon conversion. However, if policy makers determine that is the favoured course of action, the consequences of reducing the active force and growing the reserve force must be taken into serious consideration.

CHAPTER 2 Literature Review

Following 14 years of conflict, the longest in U.S. history, the country is experiencing war-fatigue that is placing pressure on politicians to focus on domestic priorities. This is nothing new. Throughout its history, the United States has responded to the conclusion of military campaigns by reducing its forces with "drawdowns [being] nearly universal since the conclusion of the American Revolution in 1783." These cyclical drawdowns have a rubber band effect on seemingly competing sectors of government, notably defense and domestic spending. The effects have nearly always resulted in the country unable to respond effectively to rising global crises in the nineteenth and twentieth centuries.

The Army Reserve must make significant budget and force structure cuts that will have a measurable impact on readiness in the future. Former Secretary of Defense Chuck Hagel presented a speech in February 2014, in which where he articulated the expected budget cuts looming for the Department of Defense. Citing the Budget Control Act of 2011, also known as sequestration, Former Secretary Hagel provided the anticipated force structure cuts that would take the Army Reserve from its current authorization of 205,000 to 195,000 troops by 2017. He went further to note that sequestration would require an additional reduction of 10,000 Army Reserve soldiers if the law was not repealed. Former Secretary Hagel's numbers form the aforementioned 10 percent cut to the force structure that would severely impact readiness.

¹⁶ North K. Charles, "A Historical Perspective on U.S. Military Drawdowns," *The Reserve and National Guard Magazine*, April 2015, http://www.ameriforce.net/reserve-national-guard-a-historical-perspective-on-us-military-drawdowns-1504.

¹⁷ Defense, "Secretary of Defense Speech..."

Historically, the United States significantly cut military forces following the conclusion of a major war or conflict. Retired Colonel North K. Charles discussed the historical context of drawdowns of U.S. forces following major military conflicts. He noted how historical drawdowns resulted in forces that were too small to respond to sudden threats, to include how the United States was unable to counter the Whiskey Rebellion and control the Barbary Pirates. ¹⁸ Colonel Charles used other historical examples, such as World Wars I and II, to show the magnitude of force reductions in the past, only to require a long, but significant build up immediately following reengagement in another part of the world. He then notes the relatively low number of cuts the military is taking, albeit during a tumultuous time in the global environment. This is particularly noteworthy as the Army Reserve is taking smaller cuts compared to other components in the Army. While some may see today's cuts as small compared to historical reductions in force structure, the collective sentiment among opponents of cuts is that it is at a volatile and dangerous time in history.

Cuts to resourcing and force structure are allowing internal organizational battles to begin within the Army, forcing a hard analysis on how best to preserve capability while absorbing required reductions. Sydney J. Freedberg Jr. explored the looming fiscal battle between the active duty military and their reserve components. He examined the historical context of recent drawdowns, notably the post DESERT STORM drawdown in the 1990s. Freedberg highlighted that the United States Army could cut the Regular Army by 100,000 soldiers while growing the Army Reserve by the same amount and still

¹⁸ Defense, "Secretary of Defense Speech..."

save US\$15.7 billion with no loss to end strength.¹⁹ Freedberg noted such calculations vary depended upon which side of the debate someone fell with pro-Regular Army pundits advocating figures favouring the active force. However, as this is an on-going debate, albeit not new, we cannot know the true depth of the cuts and what they ultimately will be in finality.

Unfortunately, cuts can have a serious and demonstrable effect on readiness and training, which will reverberate throughout the force. Sean Rayment reported on training shortages brought on by resource cuts to the British Army, with a notable effect. In 2005, the British Army, short on funding, had no other choice but to have soldiers shout, 'Bang! Bang!' to simulate firing their weapons when they could not afford blank ammunition.²⁰ The British Army experienced significant cuts to readiness as funding shortages hampered efforts to keep the military supplied, thus pre-empting or canceling training events. Rayment discussed the loss of training effect on the British Army's training due to the cuts and forecasted a potential scenario for the U.S. Army Reserve. While training may not stop, ensuring soldiers receive the most realistic training possible to ensure success in simulated combat conditions will become harder as available resources dwindle.

Finally, as the Army Reserve continually weathered cuts for the last three years, we may be approaching a line where the United States will have to reduce its military response in lockstep with future cuts. Prior to his retirement, General Raymond Odierno, then the 38th Chief of Staff of the Army, provided somber warnings of the potential

¹⁹ Freedberg Jr., "Active vs. Guard..."

²⁰ Sean Rayment, "Soldiers Forced to Shout 'Bang' as the Army Runs Out of Ammunition," *The Telegraph Online*, July 17, 2005, http://www.telegraph.co.uk/news/uknews/1494182/Soldiers-forced-to-shout-bang-as-the-Army-runs-out-of-ammunition.html.

deleterious effects further cuts to the Army's end strength and funding would have on overall readiness. He provided the warning that readiness levels were their "lowest in 20 years," harkening back to the post-Operation DESERT STORM drawdown of the 1990s. His warning was in line with Charles' analysis of historical drawdowns and their negative effects on the United States' ability to respond to threats that suddenly arise overseas. As further cuts are suggested, the United States Government must take a hard look at how it intends to respond to future threats in a volatile, uncertain, complex, and ambiguous global environment.

However, it appears that there are seemingly optimistic voices advocating for the hard look at the capability the Army Reserve provides value to the force that its Active Army brothers cannot. The Chief of the Army Reserve, avoiding the use of a 'doom and gloom' scenario, lobbied for avoiding cuts by discussing the fiscal value proposition reserve forces provide at a significant savings when compared to the Regular Army.²² It is important to note that while on the surface it appears to be an indication the army can do more with less, the statement is simply one of a cacophony of voices attempting to avoid cuts in an attempt to avoid the repeated mistakes of past force structure cuts.

Thus, Hagel et al. demonstrated a common theme among pundits that force structure cuts, in their currently proposed numbers, will have a demonstrable effect on the U.S. Army's readiness, which will be felt regardless of component. While some politicians advocate for the cuts, in contravention to defense advocates, these messages

²¹ United States Army, "Odierno Warns 2016 Sequestration Could Result in 'Hollow' Army," Army.mil, January 28, 2015, http://www.army.mil/article/141812.

²² Chief of the Army Reserve, Army Reserve Posture..., 3.

often come with the historical advocacy for a renewed focus on domestic spending.²³ Taken as a whole, the messaging is consistent that it may be time to take a more measured approach on reshaping force structure, rather than arbitrary cuts in a short amount of time. This would enable the United States to avoid another scenario where discounted advice is later found to be sound, with the most recent example being retired General Eric Shinseki's warnings against insufficient suggested troop strengths for the Iraq invasion.²⁴

²³ Charles, "A Historical Perspective..."

²⁴ Thom Shanker, "New Strategy Vindicates Ex-Army Chief Shinseki," *The New York Times*, January 12, 2007, http://www.nytimes.com/2007/01/12/washington/12shinseki.html?_r=0.

CHAPTER 3 Personnel Readiness

Achieving and maintaining high readiness ratings for the ARFORGEN personnel metric and Aim Points as resources decline below pre-conflict levels will present significant challenges for Army Reserve commanders. During the Iraq and Afghanistan conflicts, the Army Reserve enjoyed significant funding increases to maintain high levels of readiness and ensure availability of forces to support global force deployment requirements. With the Army Reserve providing a tremendous value proposition for the relatively low resource cost, 25 the force served as a significant force multiplier for the Regular Army 6 to satisfy its supply requirements for troops overseas.

The challenge of meeting personnel metrics is not an insurmountable task and requires "hands on" attention from commanders at all levels to meet the personnel readiness requirements at each stage of the ARFORGEN cycle. To discuss this adequately, this chapter will examine the effects of funding shortfalls and the effect on training and school requirements of Army Reserve soldiers, the impact of allowing for the assignment of non-duty qualified personnel to formations, and the consequence of non-deployable Soldiers on the personnel readiness metrics.

²⁵ Chief of the Army Reserve, Army Reserve Posture..., 3.

²⁶ For the purposes of the project, the Regular Army is defined as the force maintained on the Active Duty List (Per Title X, U.S. Code), also referred to as Active Duty soldiers. Similarly, Army Reserve soldiers are maintained on the Reserve Active Status List.

The Personnel Rating Metric

To start the discussion of funding shortfalls and the impacts on personnel ratings requires a brief overview of the personnel rating metric, how it is measured, and what the metric enables to commanders to infer about the readiness of formations. "The personnel level (P-level) is calculated by comparing the available strength, the available military occupational specialty qualified (MOSQ) strength by duty position and the available senior grade strength by category with the required strength established in the unit's formal requirements and authorizations document." Additionally, each of the subcategories of personnel readiness is assigned a readiness level based on the percentage of the formulas noted above according to Table 2-1:

Level	Available strength	Available DMOSQ	By category
1	100-90 percent	100-85 percent	100-85 percent
2	89–80	84-75 percent	84-75 percent
3	79-70 percent	74-65 percent	74-65 percent
4	69 percent or less	64 percent or less	64 percent or less

Table 2-1, Metrics for Determining Personnel Level²⁸

When considering the P-level, it is important to note that the aggregate P-level cannot be higher than the lowest of the three components. Similarly, as discussed in an earlier section, the aggregate readiness of a unit cannot be higher than the lowest metric for personnel, equipment on hand, operational readiness rates, and training.

Each unit maintains a different required personnel strength²⁹ based upon the type of formation (light infantry, mechanized infantry, armour etc.) and the echelon level of

²⁷ Army, *Army Regulation 220-1...*, 42.

²⁸ Ibid, 44.

the unit. Two units of similar function may not necessarily have the same required end strength. For example, a Brigade Support Battalion, tasked with the direct support of a Brigade Combat Team, requires approximately 850-1000 troops in seven to eight companies to support each manoeuvre battalion while a Combat Sustainment Support Battalion may only require 650 personnel in five companies to support an entire battlefield area. Thus a common set of metrics to monitor personnel readiness, such as the P-level rating, is required to enable efficient management of forces.

Proposed decreases in funding levels threatens the ability of the Army Reserve to field a capable and ready force that meets Aim Points throughout the ARFORGEN cycle. Cuts of up to ten percent will impact more than the available funding for training, schools, and the fielding of personnel.³⁰ The decrease of funding will create secondary and tertiary effects that will jeopardize readiness and potentially erode the present readiness of the force. These threats posed to two of three personnel measurements, available strength and available MOSQ personnel will be discussed in the following sections.³¹

Available Strength

Proposed cuts to Army Reserve funding, which ultimately translates to end strength, creates a difficult challenge for senior leaders to confront given that mission

²⁹ According to Army Regulation 220-1, the required strength is established by the data entered in the requirements column of the unit's formal requirements and authorization document. Each document is produced and approved at the Department of the Army level during force management reviews and may be adjusted based on requirements or changes in force structure.

³⁰ Defense, "Secretary of Defense Speech..."

³¹ According to AR 220-1, while available senior grade strength is a measured metric, the assigned senior grade percentage is not a P-level metric and thus will not be discussed in this section.

requirements remain under the ARFORGEN cycle. As mentioned before, the ARFORGEN cycle requires the Army Reserve to maintain 24,000 soldiers in each readiness year of the five-year cycle. With a total of 120,000 of the 205,000 authorized end strength progressing through the ARFORGEN cycle, only 85,000 soldiers are left for training base operations and other administrative functions to support the Army Reserve force structure. Additionally, it is worth nothing that the Regular Army grew from a pre-9/11 level of 480,000 to a wartime peak of 570,000 soldiers. However, the Army Reserve contributed to both operations in Afghanistan and Iraq while maintaining a steady end-strength authorization at 205,000 from 2001 to the present. Assuming a global environment in which no major conflict requires mass deployments of U.S. personnel, the Regular Army is arguably better positioned to absorb cuts to force structure back to prewartime authorizations without a loss of capability to address minor conflicts and force deployments where U.S. troops are required.

Despite this disparity, strategic leadership in the U.S. Department of Defense is preparing for cuts to the end strength of the Army across the board and asking difficult questions on how the service components will meet personnel readiness. As a smaller force, the Army Reserve would be more sensitive and likely less capable of supporting the Regular Army in the same capacity it did during the United States' curiously named Global War on Terrorism if faced with cuts to its force structure. Under fiscal year 2015 proposals, the Army proposed a cut of 10,000 personnel from its part-time formations – advertised as a five percent decrease for the Army Reserve. Compounding the problem is an additional cut of 10,000 personnel in the following fiscal year if sequestration

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³² United States Army, "Army Listens to Community Concerns About Potential Force Reductions," *Army.mil*, December 5, 2014, http://www.army.mil/article/139467/Army_listens_to_community_concerns_about_potential_force_reductions.

measures remain in effect.³³ While five percent seems a reasonable amount following a demobilization of reserve forces and draw down from two major conflicts, there are two factors that complicate the argument for cutting the Army Reserve.

Firstly, the Army Reserve experienced no growth to personnel accounts and maintained its force structure levels over the 14 years of conflict in Afghanistan and Iraq. While the Regular Army gained nearly 80,000 soldiers to increase its force structure to accommodate the mission, the Army Reserve remained at 205,000 authorizations. Increases to Army Reserve budgets remained primarily to operations and maintenance (O&M) accounts whereas the Regular Army experienced expected increases to both O&M and personnel accounts to satisfy surge requirements. The increases in O&M funding enabled the Army Reserve to train its personnel to capability levels at near-parity with Regular Army counterparts during the period of conflict. The benefits from the training allowed Army Reserve and National Guard units to seamlessly serve next to their Regular Army counterparts – with some Regular Army senior leaders noting they could not discern a different between the full-time and part-time formations in theater. As mentioned earlier, prior to 9/11, Army Reserve component personnel were seen as largely incapable or taking too long to scale up to a level of capability enabling them to deploy with the Regular Army – an argument proven meritless with today's Army Reserve operational posture.

Second, the five percent cut to force structure, while seemingly small, creates a critical dilemma for the Army Reserve and readiness. Five percent, or 10,000 Army Reserve soldiers, equates to a significant threat to capability. With 120,000 soldiers in the ARFORGEN cycle and the remaining 85,000 authorizations in the training base and

³³ Defense, "Secretary of Defense Speech..."

administration, neither side can easily absorb any cut without sacrificing capability. Evenly balancing the cuts across the force, such as decrementing five percent (approximately 1,200 soldiers) from each force pool in the ARFORGEN cycle, equates to removing whole units from each force package. To provide additional perspective, cutting 1,200 soldiers from each force pool in the ARFORGEN cycle to achieve a five percent reduction requires the inactivation of roughly two Combat Sustainment Support Battalions from each ARFORGEN cycle year. With each capable of supporting forces equivalent to a brigade on the battlefield, the decrement would pose a significant loss of capability for the Army Reserve. Complicating matters, if the sequestration measures enacted in 2013 remain in effect, the law would require reducing the Army Reserve further by an additional two battalion-sized units from the available force roster. These significant reductions in capability will directly impact the ability of the Army Reserve to conduct extended missions in both overseas theaters and domestic civil support missions in the U.S.

Ultimately, the proposed cuts to the Army and the share proposed for the Army Reserve will directly impact the personnel readiness ratings for the larger force and reduce readiness ratings in the short-term. Five percent cuts will immediately handicap the ability of commanders to accurately depict readiness in their formations by reducing the numerator in the aforementioned formula for determining readiness ratings.

Reductions would immediately reduce unit readiness ratings, possibly below Aim Point requirements, until force management actions catch up to adjust manning requirements documents and allow the denominator to "smooth" the math back to a normal level.

Interestingly, while cuts to funding and end strength are being debated, the Department of

Defense has not indicated whether it would reduce the manning requirements documents to reflect the new authorizations.

Duty Qualified Soldiers

Another measured area of readiness vulnerable to military resource reductions is the measurement of Duty Military Occupational Specialty Qualified (DMOSQ) soldiers. The sub-measurement is determined by dividing "the available military occupational specialty qualified strength by duty position." Simply put, a soldier who is DMOSQ is one who has all of the requisite professional military education and additional skill training for their particular trade and rank level. For example, sergeants with the Warrior Leader Course are considered DMOSQ while their non-graduate peers are not. Paradoxically, this qualification is fleeting and can quickly be usurped by a promotion action or reclassification of a soldier's trade – both positive actions that are easily managed by commanders and their staffs.

Funding cuts discussed earlier directly threaten the ability of commanders to ensure they can maintain and field formations that are qualified for their trade and grade in three primary areas. First, reductions will reduce the number of personnel able to fill authorizations on a unit manning document. Next, reductions in funding potentially require commanders to deliberately assume reductions in readiness to reclassify personnel. Finally, cuts to Army Reserve resources and personnel will reduce the number

³⁴ Army, Army Regulation 220-1..., 42.

³⁵ The Army defines the Warrior Leadership Course as the first leadership course Non-Commissioned Officers attend to learn the basic skills to lead small groups of soldiers.

of training slots available to train or reclassify soldiers into trade with personnel shortages.

Reductions in manpower will immediately reduce the number of DMOSQ personnel occupying appropriate billets on unit manning documents, creating an effect with potential long-term consequences. The stated five percent and potentially up to ten percent reductions in the Army Reserve force structure will require reductions in qualified personnel across the enterprise, immediately impacting the readiness of the force. Regardless of whether force structure cuts are weathered in the operational forces in ARFORGEN process or through the training and administrative base, units of all manners of specialties will experience an immediate reduction in capability and readiness upon the departure of the soldier without a scheduled replacement.

To combat this, commanders may need to exercise options to assume risk and accept non-DMOSQ personnel, those in another trade than their identified billet on the manning document, with the understanding commanders will be able to train them and achieve qualification in their new trade. However, this will immediately impact unit personnel readiness as a non-DMOSQ individual would occupy a billet otherwise available for fill should a qualified soldier seek to join the unit. The impact to readiness from the use of this personnel management method is one commanders have to exercise judiciously while also satisfying Army mandates to recruit and maintain their formations, lest they remain in a readiness category below their Aim Point(s).

Accepting non-qualified soldiers to man formations requires commanders to operate under the risky assumption that the training and administrative base can accommodate a soldier for training. Commanders ordinarily would accept up to a

percentage of their aggregate authorizations for those soldiers seeking to cross-train into a new specialty. To do so, soldiers would use active duty for training ³⁶ funding to fund their training attendance. However, active duty for training comes at a cost to both the unit and the soldier as units must request additional funding for unanticipated non-DMOSQ personnel gains and soldiers must commit to being away from their employers for more than the statutory 14 days of annual training. As available funding is cut, the impact grows in terms of unpredictability, prolonged levels of reduced readiness, and an erosion of employer support for Army Reserve soldiers.

Finally, cutting five to ten percent of available personnel structure and funding from the training and administrative base will reduce the capability of Army Reserve run trade schools used to teach and certify individual soldiers in their craft. The Army Reserve maintains its own cadre of drill instructors, technical instructors for trade schools, and instructors for other professional military education courses. These instructors and their associated equipment and classrooms are often co-located with Regular Army training formations to gain efficiencies and allow for multi-component training to facilitate maximum throughput in the training pipeline. The training base is critical for the generation of ready and trained forces capable of carrying out their battlefield tasks when deployed. However, the annual course requirements and availability of reserve instructors is a finite resource due to statutory duty obligations and limited funding. In an ideal scenario, instructors would teach multiple classes per year and soldiers would fill the available classes year round. Unfortunately, the reality is that

³⁶ Active duty for training is a type of active duty used by reservists to receive training, train others (usually as instructors or drill sergeants), and/or support the institutional training base. This is exclusive of the yearly requirement for reservists to participate in annual training with their unit.

instructors are often limited to one annual training tour to teach a course and potential students are limited to summer options, particularly those who are attending college or are in seasonal employment. This leads to a coordination challenge and bottleneck of students in the summer months while leaving winter classes unfilled. Cutting the budgets in the institutional training formations will exacerbate the problem by reducing available classes as instructors, while willing, may not have the resources at the unit to fund orders to teach additional iterations of professional military education.

To minimize the effect on the Army Reserve's ability to maintain its personnel readiness metric, commanders must employ creativity to ensure units maintain appropriate Aim Point readiness levels. To combat the vacancies created as personnel are decremented from the Army Reserve's overall end strength, commanders must both recruit and retain soldiers in those formations scheduled into an ARFORGEN force package. This would maintain the Army Reserve's operational capability in the short-term until force structure decisions are made to decrement positions on authorization documents. Additionally, commanders should be prepared to accept soldiers who are not DMOSQ with a willingness to train them on the position they join the unit for. This would enable commanders to temporarily accept risk in the early years of the ARFORGEN cycle to increase personnel numbers and maintain readiness.

Additionally, the Army Reserve should enable soldiers to maintain multiple specialities to provide maximum flexibility within the ranks. This would allow for soldiers to fill critical gaps when they arise while also providing valuable skills to the soldier for use in their civilian employment. While funding may become an issue, if the program is implemented with a long-term horizon in mind and commanders provide

readiness exemptions for soldiers identified as training on a new specialty, the program could enable a growth of capability without increasing end strength.

Summary

As discussed, one can easily notice that funding and end strength reductions will create a significant impact to the Army Reserve and make it difficult for commanders to maintain acceptable P-level ratings through the ARFORGEN cycle. Reductions in personnel end strength will create an immediate reduction in the overall end strength numerator and immediately reduce percentages and P-level ratings. Until force management actions adjust manning documents to reflect the actual requirements following any strength adjustment, the decrease in the formula numerator without any adjustment to the denominator will paint a bleak picture of readiness during the period of transition.

Additionally, cuts to funding will impact the ability of reservists to receive adequate training to be considered qualified for their position. A reduced funding environment will create a situation in which reservists will have limited training options available to them while also increasing the difficulty for scheduling, particularly if reservists have to attend Regular Army schools to receive their qualification. Ostensibly, Regular Army schools would offer training billets year-round but they are still tied to the same high-demands on summer offerings due to scheduled change of station moves and school graduations for new entrants. If reservists are unable to be trained on their particular trades, commanders will have their options limited for manning their

formations – particularly if they are looking to cross-train individuals from over-strength specialities to hard-to-fill or other technical specialities.

Despite prevailing talking points among defense leaders and other champions, some analysts paint an alternate picture where readiness will not be affected. Michael Tanner, from the libertarian CATO institute, noted that US\$46 billion annual cuts would not have a significant effect on readiness since this would take DoD back to 2007 budgetary levels when it was implementing the Iraq surge.³⁷ Additionally, Secretary of Defense Ashton Carter signalled personnel readiness would not be affected when leveraging host-nation partner capabilities to help defend against common threats, such as North Korea. 38 However, these positions rely upon two key premises to discount the threat to military readiness. First, minimizing the impact of funding cuts on readiness assumes officials have latitude in determining which programs to preserve while cutting others. Unfortunately, the Budget Control Act of 2011 mandates cuts across all programs at specified levels, which forces leaders to evenly apply sequestration measures without regard to priorities. Additionally, host-nation support and partner capability is not a reliable strategy in every country and assumes the presence of a willing and capable force. However, while partnerships in places such as Europe and South Korea provide a basis for the position, the recent examples of Iraq and Afghanistan quickly erode the credibility of the argument.

³⁷ Bryan Bender, "Defense Cut Damage Viewed as Overblown," *Boston Globe*, March 3, 2013, https://www.bostonglobe.com/news/nation/2013/03/03/spending-cuts-trigger-many-say-nation-security-won-suffer-feared/yWzYWIH5psHBpq6S3Nj7sO/story.html.

³⁸ Eun-jung Kim, "Pentagon Official Says U.S. Budget Cuts Won't Affected Readiness in S. Korea," *Yonhap News Agency*, March 18, 2013, http://english.yonhapnews.co.kr/national/2013/03/18/62/0301000000AEN20130318007451315F.HTML.

Reductions of personnel combined with reduced DMOSQ personnel stemming from the inability to fill critical specialities or offer cross-training options will directly reduce DMOSQ ratings and degrade the picture of readiness across the Army Reserve. As the Army Reserve maintained a steady end-strength objective throughout the Global War on Terrorism and ostensibly costs less to train and maintain capability, the Department of Defense should look to preserve overall end strength or even consider increasing authorizations while decreasing Regular Army requirements to achieve costs savings mandated by sequestration and other political actions. Otherwise, the Department of Defense will need to re-evaluate its current strategy to adjust the amount of commitments it can undertake across the globe – ultimately impacting the United States' foreign policy and employment of the military.

CHAPTER 4 Supply Readiness

Following 14-years of combat rotations and other missions, the United States

Army faces significant challenges as it seeks to repair and refurbish existing equipment to restore combat readiness. Due to the environmental conditions and operational tempo of

U.S. forces in Iraq and Afghanistan, equipment usage went far beyond normal planning rates used when acquiring and fielding the equipment. With operations largely concluded in Iraq and Afghanistan, the Army now must shift to a stance of recovery, repair, and refurbishment to prepare for the next potential conflict. As funding cuts take effect on Army budgets, enterprise decisions on priority of funding will invariably detract from readiness and sacrifice equipment through attrition.

As an example, the United States military embarked upon a rapid acquisition program to purchase and field the Mine-Resistant, Ambush-Protection (MRAP) vehicle to combat the large number of Improvised Explosive Devices (IEDs) causing casualties in Iraq and Afghanistan. The program resulted in the purchase of over 25,000 MRAP vehicles at a cost of US\$50 billion. However, as it was a rapid solution to combat the politically unpopular deaths of U.S. Soldiers to IEDs, the MRAP program opened new questions regarding the testing, fielding, and eventually use or disposal following the Iraq and Afghanistan conflicts. In 2007, U.S. Marine Corps Commandant, General Jim Conway, foreshadowed the fate of the vehicles today when he noted the best thing that could be done with the vehicles was to "wrap them in shrink wrap and put them in

asphalt somewhere."³⁹ He went further to state, "and as expensive as they are, that is probably not a good use of the taxpayers' money."⁴⁰

General Conway's comments about the MRAP highlighted one of the largest problems facing the United States military after the wars – how to maintain equipment readiness in the face of resources that would inevitably decline. Responding to the IED threats in theater and political challenges at home, DoD made procurement decisions without consideration for the post-operational environment. This institutional myopathy created a conundrum where, with the introduction of new equipment during the conflicts, both existing and new equipment would compete for the same dwindling pot of money to bring readiness back to pre-wartime levels. Unfortunately, this leaves difficult decisions that will directly impact Army Reserve readiness, as leaders will need to determine what will remain, what must be disposed of, and what can be repaired and returned to inventory.

The Equipment on Hand Rating Metric

To begin the analysis of decreased funding and the impact on equipment on hand ratings requires an introduction to the equipment on hand rating metric, how it is determined, and what the metric tells commanders about the equipment readiness posture of their formations. Army Regulation 220-1 defines the equipment on hand level (S-level) as:

³⁹ Alex Rogers, "The MRAP: Brilliant Buy, or Billions Wasted?" *Time.com*, October 2, 2012, http://nation.time.com/2012/10/02/the-mrap-brilliant-buy-or-billions-wasted.

⁴⁰ Ibid.

[S-level is] the second of the four measured area levels that are the primary factors in determining a unit's overall [readiness] level. The S-level is calculated by comparing the pacing items⁴¹ of mission essential equipment and the total mission essential equipment items currently in the unit's possession, under its control, or available to it within 72 hours (that is, available) with the corresponding quantities of mission essential equipment items required in accordance with its formal requirements and authorization document.⁴²

Each of the sub-categories of readiness for equipment on hand is assigned a readiness level based on the percentage of the formulas noted above according to Table 3-1:

Level equipment	1	2	3	4
Aircraft	100-90 percent	89-90 percent	79-65 percent	Less than 65 percent
	100-90 percent	89-90 percent	79-60 percent	Less than 60 percent

Table 2-1, Metrics for Equipment on Hand Level⁴³

The S-level has its own unique considerations for readiness that requires active management by commanders since it accounts of equipment that is provided to the unit upon deployment, or in the case of the Army Reserve, upon mobilization and deployment for a wartime mission. Available equipment can include theater provided equipment (TPE), or those items a unit may have assumed control of within the theater of operations. To be counted as a part of the unit's readiness level,

TPE items must be currently possessed/controlled by the deployed unit for mission execution (formal transfer of the TPE items to the unit's property book is not required), and the TPE items must match the deployed unit's current MTOE requirements or must be authorized substitutes for the MTOE required items.⁴⁴

This type of accounting provides two major benefits for a commander's readiness. First, a unit who may have a lower readiness level when in the United States will enjoy an

⁴¹ AR 220-1 defines pacing items as major weapon systems, aircraft, and other items of equipment central to an organization's ability to perform its designated mission. These items are subject to continuous monitoring and management at all levels of command.

⁴² Army, *Army Regulation 220-1...*, 45.

⁴³ Ibid, 46.

⁴⁴ Ibid, 45.

increase in readiness numbers while deployed upon taking possession of TPE upon arrival to their mission area. Second, this strategy enables commanders to ensure they will have the most modern equipment in their inventory as wartime stocks invariably take priority for fielding over garrisoned units (let alone over Army Reserve units) in home station.

However, anticipated decreases in funding levels will impact readiness and the ability for commanders to meet ARFORGEN Aim Points for equipment on hand in several ways. First, commanders will no longer have TPE available to bolster readiness numbers in theater and must rely upon their organization's organic equipment when responding to a mission. This will force commanders to assume risks in both mission capability and performance when mobilizing for a combat mission. Second, commanders will not enjoy a full complement of equipment as major end items are identified for disposal, depot level repair, and provision of replacement equipment to units with higher mission priority. This includes the destruction of excess or unserviceable equipment in theater and the sale of other serviceable equipment to host-nations to avoid large logistical retrograde costs. Finally, commanders will have to actively manage higher priority units through cross-levelling equipment as they progress through the ARFORGEN cycle, thus accepting risk to the readiness ratings for donor units in lower tiers of the ARFORGEN cycle. This chapter will analyze these issues.

Equipment Availability Issues

The non-availability of Theater Provided Equipment combined with a resource constrained environment will ultimately impact the ability of Army Reserve units to quickly deploy and satisfy mission requirements. TPE provides Army Reserve units an expedient method of mitigating risks from equipment shortages by filling requirements with equipment left behind by previously deployed units. Army Reserve units, at one point with only 86 percent of required equipment on-hand, 45 relied upon TPE to ensure units met acceptable readiness thresholds for mobilization. Additionally, TPE enabled Army Reserve units the ability to deploy without receiving backfills of equipment from existing shortages on their property books caused by previous lack of resources, low fielding priority, or from donating equipment to TPE stocks in past rotations. Falling in on TPE in Iraq and Afghanistan held an ancillary benefit for Army Reserve units and readiness. TPE enabled deploying units to minimize S-level readiness impacts on sister units in their organic formations by not forcing higher priority units to harvest equipment from units in lower tiers of the ARFORGEN cycle. Thus, TPE enabled deploying units to increase their own readiness metrics and meet Aim Point standards for mobilization without harming the readiness of other units.

Funding constraints and the reduction of TPE will create additional challenges for commanders to manage when maintaining S-level readiness ahead of new global contingencies. As the contemporary operating environment moves away from established theaters of operation with mature logistics infrastructure, commanders will need to

⁴⁵ C. Todd Lopez, "Reserve Components Need Equipment to Keep Soldiers Engaged, Onboard," *Army.mil*, May 23, 2012, http://www.army.mil/article/80373.

balance the equipment on-hand with reconstitution requirements, replacement of equipment, and procurement of newer equipment via force modernization efforts. TPE formerly provided Army Reserve commanders a method of putting the problems off as other Regular Army and Army Reserve units left modern equipment in theater for subsequent units to use and maintain. However, as new threats emerge and other theaters of operation are opened with no guarantee of an extended commitment as seen in Iraq and Afghanistan, commanders will need to find the balance of equipment efforts that will enable their units to deploy with on-hand organic equipment as even today's wartime prepositioned stocks overseas may not be appropriate or modern enough to address future threats.

The second problem that funding constraints present to commanders is units will not enjoy a full complement of equipment on hand as major end items are identified for disposal, depot level repair, and provision of replacement equipment to units with higher mission priority. As the efforts wound down in Iraq and Afghanistan, logisticians were faced with an interesting problem – what should be brought home to the United States, what should be sold to the local government, and what should happen to the rest. No program or equipment was spared scrutiny. A factor in the decision calculus came from the condition of the equipment as, "in April 2005, the Department of Defense (DOD) reported Army equipment usage rates averaged two to eight times that of peacetime rates."

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⁴⁶ Statement of William L. Solis, "Defense Logistics: Preliminary Observations on Equipment Reset Challenges and Issues for the Army and Marine Corps," *Government Accountability Office Online*, March 30, 2006 http://www.gao.gov/assets/120/113232.pdf.

Additionally, strategic myopathy used when making program decisions combined with funding constraints will negatively impact equipment readiness. Decision myopathy and acquisition blunders were highlighted during the disposal of some equipment, notably the MRAP vehicle. With a cost of US\$50 billion spent to procure the MRAP, the Department of Defense had to choose between retaining the vehicle and developing a logistics infrastructure to support the vehicle or dispose of the vehicles to save the costs on developing the maintenance structure. "Saddled with so many expensive, hulking vehicles bought solely as a wartime contingency, the services are getting rid of as many MRAPs as possible — even going so far as to shred thousands in Afghanistan instead of sending them home." 47 While some pundits note that items should be sent back for reuse and repair rather than disposal, fixing vehicles is not a cheap proposition with reset and repair costs coming in at up to \$150,000 per vehicle. 48 In a simplistic calculation, putting all 25,000 MRAPs through reset would equate to roughly US\$3.75 billion, making it no surprise that the vehicles would see the scrap yard instead of returning to the Army inventory. Those costs of repair combined with the cost of replacing aged vehicles that suffered at the high usage rates during the wars in Iraq and Afghanistan will force commanders to make decisions to accept risks in equipment readiness during the combined reset and modernization efforts for the Army Reserve.

Additionally, commanders face an uphill battle with gaining funding for equipment modernization that otherwise was put on hold during the 14-year Global War

⁴⁷ Paul McLeary, "Majority of US MRAPs to be Scrapped or Stored," *DefenseNews.com*, http://archive.defensenews.com/article/20140105/DEFREG02/301050007/Majority-US-MRAPs-Scrapped-Stored.

⁴⁸ Ibid.

on Terrorism. As of 2012, only 66 percent of the 85 percent of required equipment on hand was considered modern equipment in the Army Reserve. ⁴⁹ This dismal picture of modernization directly impacted the ability of units to conduct their wartime mission with their Regular Army counterparts who would receive modern equipment as it is fielded. Units employing legacy equipment have a difficult time maintaining communication and capability parity, which creates additional employment challenges for commanders in the field. A lack of interoperability and loss of synergy will not only impact readiness, but is lethal on the battlefield. If funding continues to decrease, commanders must accept delays in modernization and reset programs, which will limit their ability to maintain their status as an operational Army Reserve. ⁵⁰

Summary

With the fiscal decisions in the United States government continually impacted by the threat of sequestration looming in the background, the Army Reserve must steel itself for a future of decreased equipment readiness. Equipment used in the Iraq and Afghanistan theaters of operation requires extensive reset and repairs to regenerate the military's capability to respond to threats around the world. However, as funding accounts are smaller than in years past, Army leadership is forced to make tough choices

⁴⁹ Lopez, "Reserve Components..."

⁵⁰ Though commanders can work through some of these issues to raise their readiness metrics, however, the true efficacy will require additional study beyond the scope of this project. First, as TPE will no longer be available for consideration for use in a contingency theater, commanders will need to requisition equipment to relieve shortages. Additionally, commanders can also laterally transfer equipment to sister units in their formations to shore up a unit's readiness during the later years of the ARFORGEN cycle. Finally, commanders will have to actively manage higher priority units through cross-levelling equipment as they progress through the ARFORGEN cycle, thus accepting risk to the readiness ratings for donor units in lower tiers of the ARFORGEN cycle.

on disposal, repair, refurbishment, procurement, and which units will receive priority of fill.

Additionally, as Army Reserve forces intuitively cost less than their Regular Army counterparts, leaders should look toward growing capability in the Army Reserve to preserve experience gained over 14 years of conflict while also achieving must desired cost savings. Analysis from a National Guard interest group noted, "Cutting the active component by 100,000 and increasing the reserve component by the same amount would save "\$15.7 billion annually with no loss in Total Army end-strength." While the interest group spoke about shifting personnel from the Regular Army to the Army Reserve and Guard, similar gains could be achieved through the provision of equipment to the Army Reserve and National Guard where they would be maintained appropriately but would not be run as often, thus preserving equipment readiness.

Contrarians note an important distinction underpinning most arguments that funding cuts would impact readiness – everyone is pushing for 100 percent readiness.

The same pundits argue, "It is crucial to remember that no military force in human history has ever been 100 percent ready, with every finger on every trigger." Advocates for defense cuts will state the accomplishment of 100 percent readiness is impossible and militaries should focus on tiered readiness to mitigate funding shortfalls. However, this theory assumes the Army Reserve and other forces in the U.S. military are in control of their own budgets, a notion dispelled by the across the board approach of the Budget

⁵¹ Ibid.

⁵² Sydney J. Freedberg Jr., "Army Adopting 'Progressive,' AKA Tiered Readiness: Vice Chief Campbell," *Breaking Defense*, August 26, 2013, http://breakingdefense.com/2013/08/army-adopting-tiered-readiness-vice-chief-campbell.

⁵³ Ibid.

Control Act of 2011. As such, military leaders cannot prioritize programs and assume risk in certain areas to preserve capability in others, something former Undersecretary of Defense for Policy Michele Flournoy advocates when discussing the feasibility of cuts.⁵⁴ Until the capability to make such decisions is restored to military senior leaders, readiness will suffer with each subsequent cut.

⁵⁴ Bender, "Defense Cut..."

CHAPTER 5 Equipment Operational Readiness

Another readiness metric for Army units in the ARFORGEN cycle involves the measurement of equipment readiness. Units in the final train/ready year (T/R3) must ensure equipment is operational and available to the unit based upon pre-determined readiness requirements. As noted in the previous chapter, equipment readiness is measured within two categories – pacing items, or those vehicles or weapons systems central to the performance of the unit's mission, and other items of equipment. These pieces of equipment are of such importance that units are afforded measures to expedite maintenance on pacing items at the expense of other units with similar items when competing for parts at the national level.

Funding cuts to the Army base budget will have a tremendous impact on the ability of units to maintain equipment readiness throughout the ARFORGEN cycle. If resources are cut, it could impact units in terms of manpower available to repair equipment, equipment procurement, and availability of repair parts. To date, the Army Reserve "ha[s] been drawing on personnel and equipment from non-deployed forces" to meet readiness levels. However, as units return to garrison and no longer have the impetus of combat deployments enabling them to cross-level from other organizations, commanders face the risk of reduced equipment readiness. Additionally, whereas units could cross level equipment to enable a tranche of units to maintain high levels of readiness while decrementing units expected to maintain lower Aim Points, commanders will have to manage a diluted unit readiness across the entirety of their organizations.

⁵⁵ Department of Defense, "Department of Defense Fact Sheet: Sequestration's Impact to Regaining Readiness," *Defense.gov*, http://www.defense.gov/pubs/DoD_Readiness_Fact_Sheet_FINAL.pdf.

The Equipment Readiness Metric

An analysis of the equipment readiness metric should begin with an explanation of the metric, how it is calculated, and what the rating tells commanders when analyzing a unit's readiness. The equipment readiness metric, or R-level, is defined in Army Regulation 220-1 as:

The R-level indicates how well the unit or organization is maintaining its on-hand equipment. For [unit status reporting] purposes, equipment is considered operationally ready if it is determined to be "fully mission capable" (FMC) in accordance with the standards prescribed in the applicable technical manual.⁵⁶

To determine the percentage rating, the total number of fully mission capable equipment items are divided by the total number of items of equipment and then assigned a rating based on the table 4-1 below:

Level for percentage of equipment fully mission capable				
Level	1	2	3	4
Equipment other than air- craft	100-90 percent	89-70 percent	69-60 percent	less than 60 percent

Table 2-1, Metrics for Equipment on Hand Level 57

Unlike in the previously discussed S-level metric, the R-level has an additional step in determining the overall level. First, commanders are to measure the readiness for all maintenance reportable items and determine the percentage. Commanders then determine the readiness level for each type of pacing item tracked as a part of their readiness. The lowest measured item is the overall readiness level for the measured unit. For example, a Transportation Company's pacing items are FMC at the following rates:

⁵⁶ Army, Army Regulation 220-1..., 50.

⁵⁷ Ibid, 51.

Pacing Item:	FMC Rate:
M-4 Carbine:	98%
Palletized Load Systems	92%
Cargo Truck	85%

With one of the company's pacing items at 85% readiness, then the overall R-level is 85% regardless of the aggregate level. The primary reason for this caveat is that units' pacing items are the primary items required to conduct their wartime mission – if one set of items are at a lower readiness, then it can only perform its mission to that level.

Reduced funding levels will directly impact the ability of commanders to meet equipment readiness ratings in several ways. Firstly, as funding and personnel levels decline, the number of personnel will likely decrease. The anticipated reduction of 10,000 to 20,000 Army Reserve soldiers⁵⁸ will directly impact the level of maintenance personnel available as the Army Reserve maintains "most of the Army's medical, logistical, ⁵⁹ transportation, full-spectrum engineering, civil affairs, legal, and chemical capabilities." Additionally, funding reductions will invariably reduce the available budget to order repair parts for vehicles and increase the time equipment will spend in a non-mission capable status. Finally, funding cuts will likely hamper efforts to conduct refurbishment for a couple of reasons. The first is as commanders return from missions overseas, they are less likely to place their equipment into the reset program in favour of regaining readiness quickly with equipment on hand. Second, contracted maintenance labour faces cuts as the Department of Defense attempts to scale back on contract labour

⁵⁸ Defense, "Secretary of Defense Speech..."

⁵⁹ This category includes maintenance and supply personnel.

 $^{^{60}}$ Army Reserve, "The Army Reserve at a Glance," $Army\ Reserve,$ http://www.usar.army.mil/ourstory/Pages/default.aspx.

to save costs. This chapter will discuss these issues and potential solutions to overcome these difficulties.

Impact of Cuts on Maintenance Personnel

The anticipated cuts of up to ten percent of the Army Reserve's end strength and subsequent funding to maintain the training for personnel creates a complex issue with secondary and tertiary effects on readiness. While it is foolhardy to assume logistics personnel (to include maintenance soldiers) would bear the brunt of the cuts, it would be reckless to believe other expeditionary capabilities, such as civil affairs and medical personnel, would not be prioritized over logistics personnel. Thus, as maintenance personnel face a potential end strength cut of at least ten percent, commanders should prepare for longer repair times and non-mission capability rates across the force.

Army Reserve commanders will especially face difficulty in ensuring equipment maintenance is completed during normal training times. Reserve soldiers are only budgeted for 39 days of training (24 weekend days and 15 active duty days), which translates to roughly 312 hours a soldier is present for duty annually. With the Army manpower utilization standard at 50 percent of available man-hours, 61 commanders are faced with the challenge of ensuring 158 hours of maintenance are conducted per year while also accounting for various mandatory annual training requirements, planned absences, school absences, and unanticipated mission requirements taking mechanics away from maintenance duties. In previous years, commanders had operational funds available to put soldiers onto various paid duty statuses to complete missions on behalf of

⁶¹ United States Army, *Department of the Army Pamphlet 750-1: Commanders' Maintenance Handbook* (Washington, DC: Department of the Army, 2013), 46.

the command – to include performing maintenance and increase unit readiness. However, funding cuts will threaten those resource pools to allow soldiers to complete additional duty, thus lengthening the time for man-hour intensive maintenance job orders and subsequently extending the time a unit may spend in a lower equipment readiness tier.

Additionally, commanders will face difficulty in training maintenance personnel due to cuts to operations budgets that otherwise would be used to send soldiers to advanced level training in their trades. Such training refreshes maintenance skills and teaches new techniques that may not have been available when the soldier originally attended training. On some occasions, soldiers would leverage the same funding to receive cross-training in other maintenance trades to complement their skills, such as a generator mechanic cross-training on quartermaster/chemical equipment to widen the skill depth available in the motor pool, thus increasing the efficiency of the maintenance operation. Removing this option through funding cuts will exacerbate shortages of personnel in low-density trades with a requirement for an above average depth of technical expertise. Qualified soldiers, coming from the upper-tiers of aptitude on entrance examinations, are a steady pool of personnel that cannot be easily surged during times of shortage. This in turn may create a maintenance backlog across the force as shortages in maintenance personnel, spare parts, and decreased numbers of experienced personnel reduce the available man-hours to conduct maintenance on unit equipment with a direct negative impact to readiness.

Spare Parts and Funding

Funding reductions to the Army base budget will have a direct impact on the availability of spare parts and the capability of units to order parts when needed to repair unit equipment. The dearth of spare parts ordering will create a dilemma for commanders as they determine what items of equipment they would prioritize for repair. Commanders will be forced to choose between the pacing items on their unit property accounts (weapons, key vehicles, and other critical systems) and the normal measured items of equipment (cargo trucks, generators, and other utility equipment). Keeping in mind the earlier discussion on how the formula to determine the R-level metric, commanders face a difficult choice as any particular type of pacing item going offline or being identified for reset (for items returning from Iraq or Afghanistan) can derail their readiness rating. The reductions in spare-parts funding availability will imbalance unit equipment readiness across the Army Reserve as commanders will prioritize items for repair based on their own command priorities when absent of a programmed mission.

Additionally, during the past conflicts in Iraq and Afghanistan, the expectation was that redeploying "units [would] maintain their assigned equipment to a fully mission capable condition to facilitate the transfer of equipment to deploying units." Such a resourcing strategy, while not ideal, was the most viable method of ensuring units preparing to go into Available year met equipment on-hand (S-level) and equipment readiness (R-level) requirements. However, the ability to maintain assigned equipment to fully mission capable condition is predicated on the ability to maintain adequate numbers of mechanics and the availability of spare parts. Under a resource constrained

⁶² Solis, "Defense Logistics..."

environment, even these types of extreme strategies will be difficult to maintain without adequate spare parts to repair vehicles.

Funding Cuts and Refurbishment Programs

Funding cuts will create complications for the Army Reserve's larger reset efforts to refurbish equipment back to full operating capability. This will stem from commanders' unwillingness to turn in equipment from overseas and the constant threat of funding cuts for commercial contractors across the department of defense. Both of these factors threaten the ability of the servicing depots seeking to refurbish equipment through challenges in achieving adequate throughput and the capacity for timely equipment repairs when under resourced.

Commanders, motivated by a fear of lacking of replacement equipment or slow fielding times, remain unwilling to surrender equipment to the maintenance depots. "Units fear that they will have to wait for replacement equipment because their unit priority is not high enough within the Army to ensure immediate replacement of the equipment items." Instead, units end up retaining equipment for training in order to reconstitute their units quickly and prepare for the next rotation or mission overseas. Such fears will only be exacerbated when funding cuts slow the fielding of equipment, reduce available spare parts, and increase maintenance down times for equipment awaiting repair at a depot.

Cuts to contractor spending will also directly impact commanders' ability to sustain S-level readiness metrics. Following the reductions in the Department of

⁶³ Ibid.

Defense's base and overseas contingency fund budgets, "contract spending fell by 16 percent, from \$373 billion to \$314 billion, while non-contract spending remained flat from 2011 to 2013." This includes labour from across the entirety of the Department of Defense, to include contracted maintenance personnel providing various services filling wartime shortfalls while uniformed personnel deployed to combat operations in Iraq and Afghanistan. With higher than normal Army equipment usage rates and repair costs averaging \$150,000 per vehicle, the Department of Defense can ill afford to decrease maintenance personnel unless it is willing to accept risk and influence the Executive Branch to reduce its commitments overseas.

Summary

Reduced funding available for the Department of Defense will translate to increased difficulties for Army Reserve commanders to build and maintain readiness during the ARFORGEN cycle. With proposed personnel end strength cuts for the Army Reserve looming at 10 percent, units will invariably lose maintenance personnel compounded by the high concentration of logistics personnel in the Army Reserve component of the Army enterprise. Next, funding reductions will impact the ability of units and repair depots to order spare parts to repair vehicles quickly and up to readiness standards. Coupled with a potential decrease in maintenance personnel, units will soon

⁶⁴ Kevin McCaney, "Report Details Sequestration's Impact on DoD Contractor Spending," *Defense Systems*, October 17, 2014, http://defensesystems.com/Articles/2014/10/17/CSIS-DOD-spending-sequestration.aspx.

⁶⁵ Solis, "Defense Logistics...".

⁶⁶ Ibid.

face longer equipment regeneration times as fulfillment of spare parts orders lags and less maintenance personnel are available to complete the work.

Finally, budget cuts will hinder refurbishment efforts of Army Reserve equipment for a variety of reasons. Whether it is commanders refusing to turn over equipment to maintenance depots for refurbishments or reductions in the contractor labour workforce, equipment will not be repaired quickly or restored to pre-deployment levels. This would be exacerbated if commanders feel funding cuts will impair their ability to receive replacement equipment for items in depot maintenance so as to not interrupt training or other deployment efforts.

A review of existing literature shows defense analysts are largely in agreement that cuts to funding will impact equipment readiness rates, regardless of how the cuts are prioritized. The question becomes what missions will the military need to divest, reinforcing the earlier point that no military is every truly 100 percent ready. However, despite the presented problems, commanders still have a multitude of options to overcome these difficulties until budgets stabilize and equipment readiness catches up.

The first solution is to develop consolidated motor pools for battalion or brigade sized elements. This would enable units to pool mechanics owned by subordinate units and leverage economies of scale when assigning job orders, particularly for more involved or difficult repairs. Additionally, the larger pool of mechanics would enable more effective management of leaves of absence for training, mission, or other circumstances.

⁶⁷ Freedberg Jr., "Army Adopting..."

Next, spare parts should be centrally managed to ensure units with higher priority receive a larger share of the reduced funding threatened by anticipated budget cuts. This would enable units in T/R3 or Available year to meet or exceed Aim Point requirements, particularly as the expeditionary units would be of a high priority. For those units in reset or lower T/R years, consolidated motor pools would also allow maintenance officers to determine, in coordination with their commander, whether or not they could cannibalize parts from donor vehicles in the lowest state of repair. This action would be undertaken with the intent to keep other vehicles running and provide pool of spare parts units can use from frames that are habitually in non-mission capable status or are scheduled for disposal.

Finally, commanders should leverage reset and depot refurbishment programs during their earlier years of ARFORGEN. This will enable units to put equipment back into serviceable condition, ensure vehicles and equipment are updated in accordance with the latest specifications, and utilize maintenance programs and spare parts purchased from centralized Army accounts vice using their own O&M funding to cover repairs.

Such measures will ensure commanders can maintain the highest levels of readiness possible despite friction caused by funding cuts and competition for resources across the enterprise.

CHAPTER 6 Training Readiness

The final readiness metric for discussion measures training readiness of Army units. Of all four of the readiness metrics used in the ARFORGEN cycle, the training metric is the most subjective as it requires a commander's assessment on a unit's capability to perform tasks from its Mission Essential Task List (METL). The attainment of the appropriate Aim Points for the training metric is largely dependent on units having an opportunity to practice on the METL tasks and demonstrate proficiency for a commander's certification. For Army Reserve units, this is generally attained through the participation in large annual training exercises enabling them to perform their collective tasks while in a simulated combat environment. Army Reserve units in the mid to later years of the ARFORGEN cycle participate in two annual exercises, the Warrior Exercise (WAREX) and Combat Support Training Exercise (CSTX), ⁶⁸ which enables commanders to practice and assess unit competency as they transition from T/R2 to T/R3 and T/R3 to Available year respectively. These exercises involve multiple units of varying echelon, types, and function to ensure units gain the benefit of training with multi-echelon and functional units.

Reduction of training dollars will greatly impact the ability of the Army Reserve to conduct these mass collective training events and limit commanders' options to evaluate their unit's ability to conduct a collective METL task. Participation in these training events is cost intensive, as units must ship organic equipment to the training centers and personnel must travel to the training location, which incurs additional

⁶⁸ Slide presentation, "Future of Army Force Generation: A Total Army Approach," Association of the United States Army, https://www.ausa.org/meetings/2011/annual/Documents/Presentation_ CMF%20ARFOGEN%20Bromberg.pdf. commercial cost. However, the training value achieved is immeasurable as units practice critical and applicable skills as they approach their Available year. The reduction of funding and the potential preclusion of training opportunities would create an area of risk commanders must address, particularly as they are the primary certifiers of whether a unit is trained to conduct its wartime mission or whether the unit will need additional training in the particular task. While home station training always remains a potential option to provide an alternate opportunity for collective training, as units in each force package are geographically dispersed, the value is diminished as units do not get to train with their projected wartime counterparts. As the Army Reserve works within new fiscal realities, commanders must address several key areas to maintain training proficiency of their units and achieve Aim Point milestones in the ARFORGEN cycle.

The Training Readiness Metric

Analysis of the training readiness metric must begin with an explanation of the metric, how it is calculated, and what the rating tells commanders when analyzing a unit's readiness. Out of the four readiness metrics, the training readiness metric requires the most mathematical calculations to determine a readiness level. The training readiness metric, or T-level, is defined in Army Regulation 220-1 as "reflect[ing] the commander's assessment of unit proficiency in the [Mission Essential Tasks] associated with its core functions/designed capabilities." According to AR 220-1, commanders use the following methodology to calculate the T-METL percentage and to determine the corresponding T-level:

⁶⁹ Army, Army Regulation 220-1...51.

- (1) The METs associated with the unit's core functions/designed capabilities that are assessed by the unit commander as T are multiplied by 3, the applicable METs assessed by the unit commander as P are multiplied by 2, the applicable METs assessed by the unit commander as U are multiplied by 1, and then the results are summed
- (2) The total number of METs associated with the unit's core functions/designed capabilities is multiplied by 3.
- (3) The T-METL percentage is calculated by dividing the sum from (1) by the product from (2), then multiplying the result by 100.
- (4) Subsequently, [commanders] determine the T-level as follows:
- (a) When all applicable METs are assessed as either "trained" (T) or "needs practice" (P) and no applicable MET is assessed as "untrained" (U), then the T-level is determined by applying the T-METL percentages contained in table [5-1], below.⁷⁰

Translating the T-mission essential task list percentage into a T-level				
T-METL percentage determined	T-level (Applicable to only the METs associated with the unit's core functions/designed/capabilities			
85 percent or greater	T1 (no untrained MET)			
70 percent to 84 percent	T2 (no untrained METs)			
55 percent to 69 percent	Т3			
Less than 55 percent	T4			

Table 5-1, Metrics for Training Level⁷¹

Reduced funding levels will directly impact the ability of commanders to meet training level Aim Points in several ways. First, decreases in available training dollars will strain the availability of training resources, such as ammunition, equipment, and fuel for units to consume during normal training rotations in the ARFORGEN cycle. These shortages will reduce the effectiveness, if not preclude commanders' ability to hold collective training events that will enable soldiers to practice their wartime mission

⁷⁰ Ibid.

⁷¹ Ibid.

essential tasks. Additionally, end strength and funding cuts will impact the ability for training bases to conduct multi-component training (Regular Army training with Army Reserve or National Guard formations), thus forcing commanders to train at home-station for a reduce training value. Funding cuts of this nature that reduce the frequency and breadth of the training audience in collective training events essentially reduces the ability of units to train with those units they are slated with for deployment in their Available year as contingency force. Time spent collectively training is important as sister units learn each other's capabilities, limitations, and cultures, thus enabling successful deployment in future engagements. Finally, as the Army Reserve incurs the cuts to its formations, personnel will likely be diverted from training and administrative formations to filling vacancies in ARFORGEN force packages moving through the pipeline. This will reduce the available scheduling for units collective training events and potential force prioritization of T/R3 units into training at the expenses of units in earlier ARFORGEN force packages, further reducing training opportunities for units scheduled for future rotations. This chapter will discuss these concerns and propose solutions to overcome these difficulties.

Impact of Cuts on Training Resources

Anticipated funding cuts of up to 10 percent of the Army Reserve's end strength and budget translates into a significant threat for training readiness. With the Army's goal of training and providing a "highly ready and capable Army, able to dominate any opponent across the full spectrum of operations,"72 funding cuts provide a direct threat to

⁷² Chief of the Army Reserve, *The United States Army...*, 5.

the ability of the Army and Army Reserve to meet this goal. The cuts, targeted for up to 10 percent of personnel and similar amounts in funding, "negatively impact [the Army Reserve's] ability to provide needed technical enablers and capabilities"73 in both training and its ability to meet contingency requirements. For the T-level, this poses a significant challenge, as units must train on their METL tasks to ensure they can meet Aim Points as they transition through ARFORGEN years. In order to achieve a minimum of a T2 level, required by most command guidance in the Army Reserve for contingency force requirements, units cannot have any untrained tasks, as noted in the earlier discussion on the T-level metric. However, if units cannot train on their METL tasks through collective training and enable a demonstration of the functional capability for a commander's assessment, some may invariably remain at a T-level of T3 or below. This creates a situation where a commander must either accept risk and certify their unit as at least "needs practice" to achieve a T2 or maintain the lack of training with an "untrained" rating, which will keep the unit's T-level at a T3 or lower.

With funding cuts, commanders will likely face shortages in training resources such as ammunition, fuel, and equipment required to practice their METL tasks in a simulated combat environment. While Army Reserve leaders will likely not face the aforementioned 2005 scenario where the British Royal Army had some troops "forced to shout 'bang, bang' on military training exercises," the scenario clearly demonstrates the potential impact of shortages diminished training impact on soldier training.

⁷³ Ibid.

⁷⁴ Rayment, "Soldiers Forced..."

Impact on the Total Army Concept

Shortages will also force commanders to move away from the total army training concept currently used to achieve total force integration during collective training events. In 2012, the Army issued Army Directive 2012-08 (Total Force Policy), which emphasizes standing DoD policy "requir[ing] the military departments to organize, man, train, and equip their active and reserve components as an integrated operational force to provide predictable, recurring, and sustainable capabilities."⁷⁵ Additionally, the directive notes that "the Army will integrate [active component] and [reserve component] forces and capabilities at the tactical level (division and below)...this will include some predeployment collective training of tactical-level organization, including for those organizations that will routinely deploy as multicomponent forces."⁷⁶ The intrinsic training value of the dual component collective training is invaluable for preparing Army Reserve soldiers for deployments and acculturating them from a part-time to a full-time mentality. Losing the ability to train with active component soldiers will directly impact the quality of training for the Army Reserve and lengthen pre-mobilization requirements when preparing for deployment.

Commanders working to mitigate the effects of losing total Army collective training events can use home station training events to address training requirements for units in the ARFORGEN cycle. However, this training has limited value since units will not gain the benefit of cross-pollination achieved during total Army training events.

Reserve and National Guard units, who have to date benefitted from integration in the

⁷⁵ United States Army, *Army Directive 2012-08 (Total Force Policy)*, September 9, 2012, 1.

⁷⁶ Ibid, 2.

training centers, will have an additional cultural obstacle to adapt to in the event of a future multi-component mobilization and deployment. While on the surface, it seems as if the loss of integrated training would be of minimal effect, the acculturation and integration step for those soldiers not previously used to training or deploying with their counterparts may add additional complications during integration operations. Soldiers not used to working with other component counterparts may encounter distrust, organizational friction, frustration, and decreased efficiency until units are fully integrated. These complications, while normal for newly formed organizations, can prove to be significant distracters to a unit's mission in a forward deployed operation where events may not afford a newly formed task force the time to fully integrate.

Additionally, the effects of funding cuts on units will still hamper commanders who choose to address training requirements with home station training. As noted by retired General Odierno in an article on the Army's website, "home-station training will also be severely underfunded, which in turn means decreased training levels." With units facing diminished training resources, fewer personnel, and lower operational readiness rates for equipment, the value of any training will be compromised, particularly when commanders must choose between which METL tasks to train on and where the unit will accept risk. These issues, in the aggregate for the total force, will compel the Army Reserve to spend more time in the pre-mobilization training phase of an ARFORGEN mobilization tour to ensure units are up to speed and capable prior to deploying in support of overseas operations, something the Chief of the Army Reserve has fought to move away from.

⁷⁷ Army, "Odierno Warns..."

Training at a Reduced Level

End strength reductions and funding cuts will affect the ability of the training base to conduct effective collective training as personnel will likely be diverted from their administrative and training formations to fill vacancies in ARFORGEN force packages. With the Army Reserve maintaining approximately 24,000 Soldiers in each ARFORGEN force package, a 5 or 10 percent cut to manning results in a shortage of 1,200 or 2,400 soldiers, respectively. These shortages will inevitably be filled by cross-levelling soldiers to ensure personnel rating Aim Points are met. However, this solution presents turbulence to the force and is not ideal for maintaining collective proficiency of a unit and reducing disruptions for Army Reserve personnel and their families. This will reduce the available scheduling for unit collective training events and potentially force the prioritization of T/R3 units for training at the expense of units in earlier ARFORGEN force packages. This methodology would create a cascading effect by further reducing training opportunities for units scheduled for future rotations due to loss to other units prioritized ahead of them in previous years.

Commanders will face diminished collective training value and unit proficiency as the Army Reserve experiences reduced funding levels and the ability to field mass multi-component training events. As the Army Reserve is forced to cross-level personnel out of the training base to fill shortages in the ARFORGEN force packages created by the 5 or 10 percent personnel cuts in the force structure, the ability of the Army Reserve to plan and execute training events will experience a direct negative impact. This may force the Army Reserve to reduce the number of multi-component collective training events in favour of home-station training or accepting risk in the pre-mobilization readiness of

units in the ARFORGEN cycle. Such a situation will represent a direct regression from the current Army Reserve goals of maintaining an operational force capable of responding quickly to national contingencies or calls for mobilization.

Summary

Resource reductions in future years will erode the ability of commanders to train their units via challenging collective multi-component training in the later years of the ARFORGEN cycle. The projected 5 to 10 percent cuts to Army Reserve funding and end strength presents a tremendous challenge that presents secondary and tertiary effects that will degrade the operational posture and readiness of the Army Reserve as a whole. By reducing the funding and resources available, units will have to spend more time accommodating shortages to ammunition, fuel, and other supplies that enable realistic training in austere environments.

Additionally, both advocates and opponents of defense cuts discuss similar concerns on funding impacts on training, using different avenues of approach to discuss the mitigations of reduced readiness. Advocates of cuts maintain the earlier position that the military should be afforded the opportunity to prioritize programs and areas of emphasis while absorbing budget reductions. However, opponents have largely seized on the opportunity to push a bleaker picture as previous efforts to repeal the Budget Control Act of 2011 failed in 2013. Reductions in funding will present situations where the three Army components, particularly the Army Reserve, will need to make resourcing decisions on whether to decrement the training base to shore up reductions in the ARFORGEN force packages, throttle back on an operational posture, or reduce available capability. All of the scenarios require the Army to accept cuts to force capabilities and

require a paradigm of "do less with less," contrary to the common "do more with less" attitude of recent years.

Commanders seeking to overcome the effects of shortages on unit training should seek creative and lower cost solutions to maintain a unit's ability to train while keeping them engaged during training periods. Solutions include a shift to home station training to avoid the current travel and equipment shipping costs incurred to move units to a centralized training facility for larger collective training events. Savings incurred may enable commanders to conserve funding for other critical training enables such as ammunition, fuel, rations, and other required supplies dependent upon the type of training required by a unit.

Additionally, the Army Reserve should shift the model away from engaging in collective training during each year of the ARFORGEN cycle, saving such costly but valuable opportunities for the later years (T/R2 and T/R3) of ARFORGEN. Units currently will travel to collective training each year, usually supporting larger collective exercises as "training enablers" providing support capabilities not organic to the units training (example: a supply company supporting an engineer battalion that has a small capability to support itself in the short-term but requiring external support for extended employment). By allowing units that otherwise are not in the training audience to conduct home station training and conserve funding, units requiring training in the later years of the ARFORGEN cycle will be able to absorb some, if not all, of the cuts proposed to Army Reserve funding levels.

Finally, the potential requirement to cross-level Army Reserve soldiers out of the training base to fill shortages in the ARFORGEN cycle will require more intensive

personnel management by the Army Reserve to ensure Aim Points are met. A potential solution to address training base shortfalls while maintaining unit personnel readiness in ARFORGEN force packages involves loaning soldiers in the earlier years of the training cycle to the training base. Soldiers in earlier years of ARFORGEN, provided they remained with the unit following their Available year employment, are a significant source of valuable experience. These experienced soldiers, instead of engaging in collective training as a mission enabler, can serve as trainers or observers on behalf of training base units running collective training for units in T/R2 and T/R3. This enables ARFORGEN force packages to continue maintaining their Aim Point levels while also serving to preserve funding in Army accounts.

Ultimately, Army Reserve commanders must embrace an inevitable cut to funding and personnel to satisfy training requirements and maintain T-level readiness. The current political environment in the United States, following the conclusion of two extended and expensive conflicts, requires cuts to the standing force. However, while readiness will be negatively impacted, commanders can utilize various strategies to minimize the impact to readiness and maintain some measure of valuable multicomponent collective training events. Regardless of the solution, commanders must work diligently to preserve these training events and maintain training resources to avoid a precipitous drop in readiness across the Army Reserve and meet the Chief, Army Reserve's intent to maintain an operational reserve.

CHAPTER 7 Review and Recommendations for Future Study

Funding cuts to the base Department of Defense budget and ultimately the Army Reserve budget will create a similar situation for all components of forces in the years to come. As the United States continues to re-evaluate its level of commitment to military operations overseas, similar choices will be made again depending upon the appetite of the country to finance such operations abroad. However, this will not alleviate the requirement for the U.S. Army and its reserve components to maintain forces ready and capable of deploying whenever contingencies requiring military force occur.

Commanders will remain the lynchpin of taking the appropriate measures to maintain readiness and minimize the impact of funding cuts on their formations. The decision to accept or mitigate risk will require an analysis of the current capabilities, their current point in the ARFORGEN, and the status of their Aim Points. Each commander would need to evaluate the risks incurred and nest it within the guidance of their higher commanders to ensure synchronization in their formations.

Personnel measures commanders will need to explore the active recruitment of personnel and retraining others to ensure unit requirements for mission critical specialties are met. While the recruiting piece will often be at the expense of other units, until authorizations are decremented to reconcile the losses in end strength, the requirement to maintain 24,000 soldiers in each ARFORGEN force package will drive manning decisions. Additionally, commanders will need to retrain personnel who may not be DMOSQ to ensure their metrics do not reflect a constant readiness shortfall. This may come at the expense of training the individual soldier with the unit, as resources grow

scarcer and would require commanders to determine who to provide that training value to a soldier who otherwise may not be afforded more than the statutory 14 days of annual training.

Next, Army Reserve commanders will have to consider methods enabling them to maintain their equipment on-hand readiness metrics during times of austere funding. As theater provided equipment will no longer be an option for Army Reserve commanders to leverage to maintain readiness numbers, commanders will need to address equipment shortages through cross levelling equipment from formations in earlier ARFORGEN years while waiting on shortages to be filled through normal requisition channels. As the Army writ large has not effectively implemented a process or program to effectively address the issue, this is an area recommended for future study by logistics officers.

To address equipment readiness issues, commanders can implement several measures that will help uphold the readiness of units proceeding through their T/R2 and T/R3 years and ensure they are ready for their Available year. First, units can develop consolidated motor pools for battalion or brigade sized elements to provide a ready set of equipment that can be cross-levelled to units needing a higher level of readiness to meet their Aim Points. Additionally, commanders should consider centralized management of spare parts to accommodate prioritized job orders for units needing equipment to remain ready in later ARFORGEN force packages. The use of consolidated motor pools enables commands to cannibalize parts from donor vehicles in lower tier units. All of these measures will assist in maintaining higher states of readiness while accepting risk in units at the lower tiers of the ARFORGEN cycle. However, the implementation of such programs, if left to small-units, will not be uniform across the force. Effective

development and implementation of such a plan would require policy changes and is another area of potential future study for logistics officers interested in maintenance and equipment issues.

Finally, for training readiness, commanders will need to be diligent to ensure their units receive maximum training value from reduced opportunities as funding dwindles. Funding cuts will certainly impact the ability of units to provide training resources that enhance unit training such as ammunition, fuel, and batteries. Commanders would need to make resource trade-off decisions between frequency, depth, and multi-component training to maximize available funding while still providing value-added training. This may come at the expense of the frequency of total Army training the Army Reserve current engages in, forcing unit commanders to choose between training less frequently with the various Army components or training more frequently at home station. Each individual unit, based on ARFORGEN year and mission, must make that determination to do what is best for that unit. A potential area for future study is the operational efficacy of multi-component training and whether the Army is accomplishing desired goals from integrated training.

Ultimately, the primary brunt of the anticipated funding and end strength cuts will fall squarely on the shoulders of commanders for resolution. While the Army draws down from its previous level of commitments overseas, the requirement to retrain and reset unit equipment remains. Enterprise level decisions will set the guideposts for commander decisions, but individual unit commanders will need to conduct the mission analysis on what works best for their own units. Additionally, the Army Reserve must evaluate its

current level of commitment to an operational reserve and whether sourcing requirements should be reduced in line with the anticipated funding drawdowns.

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