

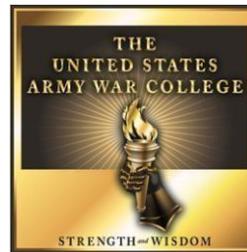
Strategy Research Project

Adapting Acquisition Strategies to Win in a Complex World

by

Colonel David C. Phillips
United States Army

Under the Direction of:
Professor Robert S. Hume



United States Army War College
Class of 2016

DISTRIBUTION STATEMENT: A

Approved for Public Release
Distribution is Unlimited

The views expressed herein are those of the author(s) and do not necessarily reflect the official policy or position of the Department of the Army, Department of Defense, or the U.S. Government. The U.S. Army War College is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools, an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.

REPORT DOCUMENTATION PAGE			Form Approved--OMB No. 0704-0188		
The public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.					
1. REPORT DATE (DD-MM-YYYY) 01-04-2016		2. REPORT TYPE STRATEGY RESEARCH PROJECT		3. DATES COVERED (From - To)	
4. TITLE AND SUBTITLE Adapting Acquisition Strategies to Win in a Complex World			5a. CONTRACT NUMBER		
			5b. GRANT NUMBER		
			5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S) Colonel David C. Phillips United States Army			5d. PROJECT NUMBER		
			5e. TASK NUMBER		
			5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Professor Robert S. Hume			8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army War College, 122 Forbes Avenue, Carlisle, PA 17013			10. SPONSOR/MONITOR'S ACRONYM(S)		
			11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION / AVAILABILITY STATEMENT Distribution A: Approved for Public Release. Distribution is Unlimited. Please consider submitting to DTIC for worldwide availability? YES: <input checked="" type="checkbox"/> or NO: <input type="checkbox"/> (student check one) Project Adviser recommends DTIC submission? YES: <input checked="" type="checkbox"/> or NO: <input type="checkbox"/> (PA check one)					
13. SUPPLEMENTARY NOTES Word Count: 6004					
14. ABSTRACT With Congress's renewed push for acquisition reform in 2016, the Department of Defense (DoD) and the Army must adapt their acquisition strategies to keep pace with the changing environment. Given the growing ends and diminishing budgets, the Army must look for new ways to reduce risk while prioritizing readiness. Acquisition reform is not new, and there is a long history of both success and failure. Recently, the DoD, the Army, and Special Operations Command have all seen that teams empowered with the right institutionalized authorities and culture can provide warfighters with innovative capabilities faster while meeting all the traditional requirements of cost, schedule, and performance. The Army should now seize two opportunities: first, institutionalize and reinforce rapid acquisition processes, authorities, and organizations; and second, use mission command to embed an operationally focused culture of integrity, innovation, and courage to take risk in its acquisition organizations. This will directly and positively impact future warfighters.					
15. SUBJECT TERMS Rapid Acquisition, Culture Change, Army Operating Concept					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES 34	19a. NAME OF RESPONSIBLE PERSON
a. REPORT UU	b. ABSTRACT UU	c. THIS PAGE UU			19b. TELEPHONE NUMBER (w/ area code)

Adapting Acquisition Strategies to Win in a Complex World

(6004 words)

Abstract

With Congress's renewed push for acquisition reform in 2016, the Department of Defense (DoD) and the Army must adapt their acquisition strategies to keep pace with the changing environment. Given the growing ends and diminishing budgets, the Army must look for new ways to reduce risk while prioritizing readiness. Acquisition reform is not new, and there is a long history of both success and failure. Recently, the DoD, the Army, and Special Operations Command have all seen that teams empowered with the right institutionalized authorities and culture can provide warfighters with innovative capabilities faster while meeting all the traditional requirements of cost, schedule, and performance. The Army should now seize two opportunities: first, institutionalize and reinforce rapid acquisition processes, authorities, and organizations; and second, use mission command to embed an operationally focused culture of integrity, innovation, and courage to take risk in its acquisition organizations. This will directly and positively impact future warfighters.

Adapting Acquisition Strategies to Win in a Complex World

Gentlemen, we have run out of money. It is now time to start thinking.

—Ernest Rutherford¹

On December 7, 1941, the United States faced a crisis that led to rapid and innovative change. After the Japanese attacked Pearl Harbor, the Navy and Army struggled to think of ways to strike back at Japan with existing capabilities. In just four months, a handful of senior Naval officers and an Army Lieutenant Colonel met the challenge with a rapid, innovative, and courageous solution requiring new training, quick modifications to existing aircraft, and employment of capabilities and personnel using ways not previously imagined. Their quick, innovative thinking allowed the U.S. to conduct a strong counterpunch, a bombing raid on Tokyo, with sixteen B-25 bombers launched from the aircraft carrier, USS Hornet, on April 18, 1942, boosting national morale and helping to shift “the course of World War (WW) II toward victory.”²

Today, in 2016, the crisis is the rapidly changing environment, described by retired General Michael Hayden as the new *global disorder*.³ Current threats coupled with shrinking resources strain existing strategies. Evaluating the 2015 *National Security Strategy* and *National Military Strategy* it is clear that *ends* and *risks* are increasing, while *means* are diminishing.⁴ By Art Lykke’s, U.S. Army War College (USAWC) definition, strategy consists of *ends, ways, means, and risk*.⁵ The evaluation of a strategy’s feasibility, acceptability, and suitability, yields a deliberate assessment of risk. Today’s growing *ends* and diminishing *means* with questionable suitability and feasibility have increased risks and the need for better *ways* to address them.

Leaders in Congress, the Department of Defense (DoD), and the Army agree on implementing faster, more innovative acquisition strategies.⁶ While DoD implements

new top-down ways of doing business like the Defense Innovation Initiative (DII), the Army has been slower to respond with more than just a focus on readiness. To make the most of limited modernization budgets, the Army must adapt its acquisition strategies, close gaps between warfighters, resourcers, and acquirers, and reinvigorate innovative culture in its acquisition workforce.⁷ Specifically, the time is right for the Army to seize two key opportunities: first, institutionalize rapid acquisition processes, authorities, and organizations; and second, use mission command to embed an operationally focused culture of integrity, innovation, and *courage to take risk* in its acquisition organizations.

For large, complex organizations like the Army, change is difficult and the barriers are steep. The Army is already adapting by prioritizing readiness and modifying its core doctrine with mission command and the new *Army Operating Concept (AOC)*--“Win in a Complex World.” However, the Army should go further and use mission command to balance command and control in its acquisition organizations and break down cultural barriers between the requirements and resourcing decision support systems (DSS). The next critical steps for the Army are to understand the environment, understand examples of successful rapid acquisition, examine Army acquisition culture and barriers to change, and identify opportunities for leadership to take action.

Background--Why Change?

Congressional members, DoD leaders, and scholars have chronicled both the history of and the need for rapid and innovative acquisition for over thirty years. Numerous reform efforts have proposed various specific changes to acquisition processes and culture, but unfortunately, most of these efforts have not reached their goals.⁸ Historically, major process and cultural change to the defense acquisition

system only occurs through long-term evolutionary change or with a crisis that forces a “fundamental relook.”⁹ Arguably, WW II was the catalyst that created the DoD, but its acquisition systems have evolved only when conditions forced them to.¹⁰

More recently, wars in Afghanistan and Iraq caused a critical review of acquisition strategies and the DoD is just now consolidating recent gains. The operation of the defense acquisition system (DAS), as described in DoD Instruction (DODI) 5000.02, provides a necessary mechanism, with tailorable methods to develop, test, and procure weapons systems. However, concerns have resurfaced over cost overruns, schedule delays, and a general “inability to get troops in the field the equipment they need when they need it,” putting Soldier’s lives and combat missions at risk.¹¹ Senior leaders are at an inflection point with forcing-functions that require a process and culture relook.

The Complex Environment

The DoD’s environment is changing rapidly, and there are three key components to this change. First, there are no anticipated reductions to strategic objectives. Second, the current Administration, Congress, and DoD have applied strict constraints to defense spending with reductions in research, development, and acquisition (RDA) accounts prioritizing readiness over modernization. Third, the U.S. continues to face a volatile, uncertain, complex, and ambiguous world.¹² This type of environment, with greater ambiguities requires more innovation with less money.¹³ The interwar period between WW I and WW II provides examples of leaders that set the conditions for innovation. Individual leaders like British Air Marshall Hugh Dowding made wise investments in specific radar technologies that proved to be an air defense necessity during WW II. In contrast, German General Hans von Seeckt established a culture that

“placed a high value on study and analysis of changes in doctrine, tactics, and technology [creating] a climate ideally suited to innovation.”¹⁴

Today, the U.S. faces complex external threats including a resurgent Russia, an assertive China, the Islamic State of Iraq and the Levant (ISIL), Iran, and North Korea. While policy to address these threats may change year-to-year, major capabilities available to implement strategy have several year lead times.¹⁵ Given these timelines, the U.S. has also lost some of its technological advantage. With U.S. forces focused on the Middle East for fifteen years, many competitors have also modernized their capabilities to chip away at U.S. overmatch.¹⁶ Additionally, by necessity, the DoD and the Army have prioritized personnel and readiness over modernization for some time. Now, given constrained resources, the DoD is trying to make up for lost modernization investments and cannot afford the luxury of long acquisition timelines.

The Ends Continue to Grow

Expanding threats lead to a growing list of *ends*. There are four core national interests: security of the U.S., a stable international order, economic prosperity, and promotion of universal values.¹⁷ The 2014 *Quadrennial Defense Review* set DoD priorities for protecting the homeland, building security globally, projecting power, and winning decisively.¹⁸ It did not address the rise of the ISIL nor account for a resurgent Russia. Accordingly, the DoD now proposes to double its funding in the Fiscal Year (FY) 17 budget associated with fighting ISIL and quadruple funding for the European Reassurance Initiative focused on deterring Russian aggression.¹⁹ These responses aim to ameliorate the growing *ends* and reduce associated risks, but they are Band-Aids on the growing list of objectives, and the DAS is playing catch up.

While the Army must sustain a global mission set that has expanded again in the Middle East and Europe, it must also address increased risk to the homeland by violent extremist organizations (VEOs). Even though their level of threat is debatable, VEO's like ISIL can impact the security and the economy of the U.S.²⁰ The 9/11 terrorist attacks, for example, had a significant economic impact--one million jobs and investment equating to 3% of gross domestic product (GDP).²¹ This would equate to \$540 billion today given the \$18 trillion GDP.²² While this would be a significant blow to the economy, more recent self-imposed budget reductions are just as challenging.

The Means are Diminishing

Even though some observers optimistically believed decreased defense spending was imminent after the 2010 Iraq drawdown, Afghanistan operations have continued and the U.S. is back in Iraq.²³ Army Vice Chief of Staff (VCSA), General Dan Allyn, recently testified to Congress that there is no "peace dividend."²⁴ Whether or not Congress musters the political will to seriously address the national debt or perceived mandatory spending, one can assume future budgets will continue to severely constrain DoD funding. At best, the DoD's FY17 budget may just keep up with inflation. The recent National Commission on the Future of the Army report asserts that the FY16 budget levels are the minimum required to fund the Army due to the significant and emerging threats.²⁵ The FY17 President's budget substantiates this view--seeking funding at the FY16 enacted level, but also forcing decrements in the DoD FY18-22 Program Objective Memorandum (POM).²⁶ General Colin Powell, the 1989 inbound Army Forces Command (FORSCOM) commander said, "Show me your budgets and I will tell you what your strategy is."²⁷

From 2001-2011, the U.S. defense budget grew significantly (Figure 1).

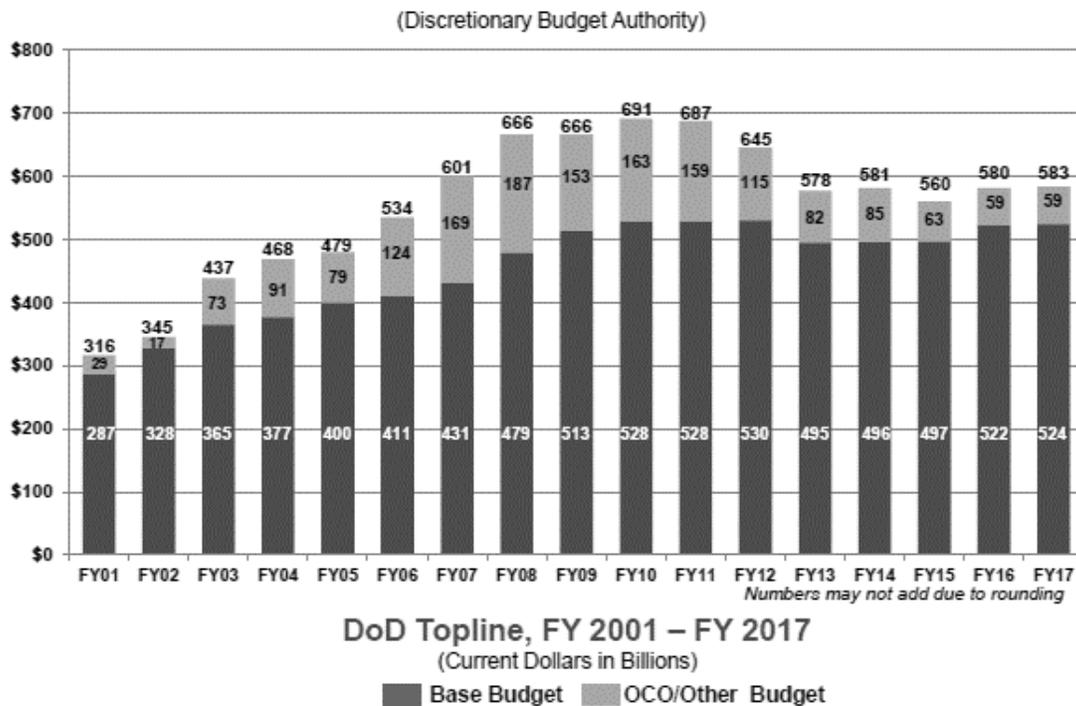


Figure 1. DoD Funding From 9/11 Through FY2017 Request²⁸

Wars in Afghanistan and Iraq cost \$1.6 trillion and the baseline defense budget almost doubled, growing from \$290 billion (B) in FY01 to \$526B in FY11.²⁹ This ten year 43% increase opened the proverbial spigot wide. Acquisition costs also climbed with increasing technology required to meet “exquisite requirements” and “stretched out...schedules.”³⁰ With this budget growth, continuing debate on the annual deficit, and perceived unacceptable increases to the aggregate national debt, Congress enacted the 2011 *Budget Control Act* (BCA).³¹

The BCA forces government discretionary spending to conform within prescribed limits.³² The DoD budgets for FY16-19 include additional modernization cuts, reduced pay and benefits growth, and reductions in combat system procurements.³³ Notably, Army RDA accounts decreased twice as fast as the Army budget. The budget top-line decreased by 14% while RDA decreased by 35% putting modernization and critical

science and technology at risk.³⁴ The recent budget request (\$148B in FY17) cuts Army aviation RDA from \$5.9B in FY16 to \$3.6B, an additional 39% cut, in order to fund training and readiness.³⁵ Budget-focused, pessimistic commentators believe “defense is in for a decade of austerity.”³⁶ However, the Army should look for a solution--new *ways* to live within current means and future budgets.

Leaders Recognize the Need for Change

Recognizing the changing environment, the DoD and the Army are already adapting their strategies and doctrine. In 2014, Undersecretary of Defense, Robert Work, revealed the *third offset concept* and the DII, and acknowledged that constrained *means* have led to an erosion of technological advantages. The DII looks to identify and invest in innovative *ways* to sustain America's military superiority.³⁷ Army Training and Doctrine Command (TRADOC) General David Perkins notes the same trends. The AOC, describes the future environment--an unknown future, and looks to build capabilities to “Win in a Complex World.”³⁸ New challenges include growth of enemy anti-access / area denial capability, cyber and space threats, and proliferation of weapons of mass destruction. The AOC justifies the need for innovative acquisition, and Army acquisition has to develop solutions faster to keep up.³⁹ Mission command doctrine further advocates for learning, empowered organizations with initiative that can exploit the future environment.⁴⁰

After serving as the Assistant Secretary of the Army for Acquisition Logistics and Technology (ALT) for five years, Heidi Shyu had several key observations. She characterized the DAS as very risk averse and “designed for the development of very complex, state-of-the-art systems.”⁴¹ She also noted that the Army’s deliberate acquisition process includes layers of oversight and approvals, forming a multilayered

bureaucracy designed to reduce risk but resulting in a focus on compliance.

Additionally, she observed that requirements could change without understanding cost, schedule or technical risks. This is counter to her view of commercial acquisition where program managers (PMs) often make deliberate trades while balancing risk.⁴² These are critical observations that the Army struggles with across many of its programs.

The Defense Acquisition System (DAS)--History and Opportunity

The DoD's three separate DSS (resourcing, requirements, and acquisition) create one complex adaptive system (Figure 2). The DAS or little "a" is one of three systems that overlap and interact to produce warfighting capability. Congressional leaders, Army Commanders, and warfighters desire DSS (big "A") that are collectively responsive, agile, and provide timely overmatch capabilities.

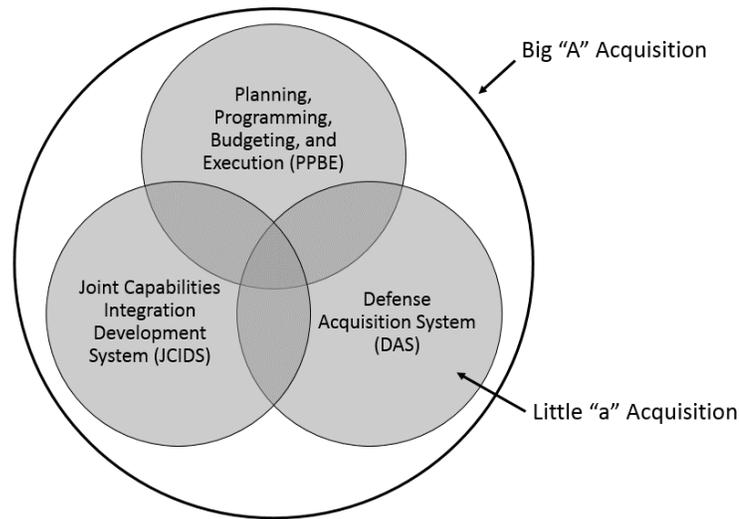


Figure 2. DoD Decision Support Systems (DSS)⁴³

A PM and former combat developer summarized the desired outcome: delivering capabilities as promised, which increases warfighter trust and leads to greater requirements, resourcing, and acquisition freedom of maneuver.⁴⁴

A Brief History of Acquisition Reform

From 1960-2009, government and academic institutions conducted twenty-seven major acquisition studies and reform efforts. These include familiar named efforts such as the Packard Commission, Carlucci's initiatives, Goldwater-Nichols, and several Gansler reports.⁴⁵ Most recently, then Undersecretary of Defense for Acquisition Technology and Logistics (AT&L), and now Secretary of Defense, Ashton Carter initiated the Better Buying Power (BBP) initiatives (1.0, 2.0, and 3.0) which have been somewhat successful.⁴⁶ However, a critical view is that most of the efforts to improve DAS have not achieved their goals. There is no shortage of ideas, but the difficulty in achieving acquisition efficiencies through directed reform efforts centers on identifying and changing culture. Without focused effort, acquisition problems are resilient to many of the proposed remedies.⁴⁷

Congressional angst with the DAS has resurfaced in the last twenty-four months. The Chairman of the Senate Armed Services Committee, John McCain, compares the problems today with similar issues from thirty years ago citing recommendations from the 1986 Packard Commission that are still not implemented. He believes the Army's Mine-Resistant Ambush Protected program was successful only because it did not go through the normal acquisition process. McCain also describes the trend of continued cost growth and schedule delays, going as far as to say that Goldwater-Nichols reforms have been largely ineffective. While these perceptions are debatable, McCain makes valid arguments that the DoD has been slow to change and questions whether the current bureaucratic organization is capable of meeting current and future security challenges.⁴⁸

Today's DAS operates across a continuum from deliberate to urgent which the most recent DODI 5000.02 lays out in detail.⁴⁹ There is no one-size-fits-all checklist to apply to every capability gap. The DoD and Army leaders recognize they should not change the DAS all at once--it is too complex. Instead, senior leaders should focus on key areas where effort will benefit most.

Rapid Acquisition Success and Opportunities

In 1996, General Dennis Reimer, Army Chief of Staff, started by institutionalizing rapid acquisition with the Warfighter Rapid Acquisition Program (WRAP).⁵⁰ The WRAP was a forerunner for today's organizations that are now taking root, transitioning to permanent organizations with authorities and funding. In 2004, faced with rapidly evolving threats in Iraq and Afghanistan, Deputy Secretary of Defense, Paul Wolfowitz, established the Joint Rapid Acquisition Cell (JRAC) and the Joint Urgent Operational Needs Statement (JUONS) process. The JUONS identified urgent capability gaps and the JRAC helped to align funding and assign service responsibility. Even with their successes, there was still a perception from leaders like Secretary of Defense Robert Gates that, "The troops are at war, but the Pentagon is not."⁵¹ Gates was so unhappy, that for further emphasis and oversight, he instantiated the Senior Integration Group (SIG) in 2009, which became the Warfighter SIG in 2012, as established by the DODI 5000.71, "Rapid Fulfillment of Combatant Commander Urgent Operational Needs."⁵² Potentially the most significant outcome of subsequent DoD efforts to consolidate gains was the most recent DODI 5000.02, with Enclosure 13, Rapid Fielding of Capabilities. This document, published in January 2015, further codified the rapid acquisition process and updated specific authorities and guidance. The continued focus and updated guidance shows that Secretary of Defense Ashton Carter and the DoD are taking proper

steps to institutionalize change. Subsequently, the Congress signaled their approval for additional future change with the FY16 NDAA that called out rapid acquisition twelve separate times and included an increase to the rapid acquisition authority for funding from \$200M to \$400M for contingency operations.⁵³

Within the Army, General John Keane, then VCSA, established the Army Rapid Equipping Force in 2002 that fielded numerous urgently needed capabilities to Iraq and Afghanistan including: lethal miniature aerial munitions systems, aerostats, and expeditionary labs.⁵⁴ In 2014, the Army finally made a long-term commitment to the Rapid Equipping Force (REF), "...with this decision, the Army ensures the institutionalization, not only of a rapid equipping capability, but the invaluable lessons learned after more than eleven, comprehensive years of delivering tangible results."⁵⁵ However, is the REF sufficient for the entire Army's rapid innovation needs? As Army manning requirements change, the total army analysis process will look to institutional organizations like the REF for spaces. Leaders should resist the urge to cut the REF, and maintain its capability and experience even if staffed by civilians or contractors. Still, the Army can do more. Army ALT and TRADOC should update Army policy and doctrine in accordance with the direction from the FY16 NDAA and the DODI 5000.02. While TRADOC Regulation 71-20 does discuss the REF in detail, Army Regulations 71-9 (*Warfighting Capabilities Determination*), 70-1 (*Army Acquisition Policy*), and 70-3 (*Army Acquisition Procedures*) contain only sparse discussion of innovation, streamlining and tailoring, or the urgent needs process. Army ALT and TRADOC should update and simplify Army regulations to clearly describe authorities and potential areas

to tailor processes based on risk. The Army might also consider the following three examples when updating authorities, policy, and procedures.

The first example is the Joint Improvised Explosive Device Defeat Organization (JIEDDO). The JIEDDO was another reaction to a crisis requiring rapid capability development, acquisition, and fielding to outpace a fast-evolving threat--the improvised explosive device. Established in 2006, JIEDDO proved to be one of the most valuable organizations in the DoD and became a go-to organization for Combatant Commanders (CCDR's). Speed was a cornerstone of its foundation, and external studies showed that JIEDDO effectively balanced rapid acquisition and fielding with adequate oversight.⁵⁶ The JIEDDO had authorities for requirements, acquisition, and financial management all within one organization. Understanding the value of this trifecta, JIEDDO codified a rigorous, but rapid process. The JIEDDO Capability Approval, Acquisition, and Management Process (JCAAMP) ensures oversight and accountability in accordance with the Defense Federal Acquisition Regulations (DFARS).⁵⁷ The JCAAMP's tactics, techniques, and procedures (TTPs) nest under the DFARS similar to U.S. Special Operations Command's (USSOCOM's) processes. Recognizing the need to preserve this capability, the DoD recently decided to rename JIEDDO the Joint Improvised-Threat Defeat Organization (JIDO) and made it permanent under the Defense Threat Reduction Agency.⁵⁸

The second example that may be useful to the Army is the USSOCOM acquisition process executed by Special Operations Forces (SOF) AT&L. The SOF AT&L operates under the same rules, regulations, and laws as Army acquisition, but focuses on SOF acquisition TTP's and critical cultural traits. The SOF AT&L leadership believes

a culture of competence, creativity, courage, and integrity are critical to SOF mission success. In addition, SOF AT&L operates in a decentralized manner, pushing decision authority to the lowest suitable level while aggressively managing risks. Finally, acquisition principles are simple: deliver capability, exploit proven technologies, and keep the warfighter involved.⁵⁹ The USSOCOM also has its own set of documents guiding each of the major areas: requirements; research, development, and acquisition; and operational test and evaluation (OT&E). Notably, these documents are succinct and written with direct, clear language.⁶⁰ They include tailorable strategies to allow for flexibility. When urgent or rapid capabilities are required, there are provisions for how to accelerate those efforts. For example, SOF acquisition leaders can use the *combat evaluation* process to rapidly assess potential solutions for *urgent* requirements. These combat evaluations do not replace OT&E. Instead, they address critical needs faster “through the evaluation of a limited number of assets in an operationally representative environment.”⁶¹

The USSOCOM Mobile Technology Repair Complex (MTRC) is a third example of a successful innovative acquisition effort that entails more than just buying a commercial off the shelf (COTS) item quickly. In *Innovate or Die*, Dr. Robert Spulak describes how the MTRC breaks down traditional cultural barriers between requirements and acquisition by bringing the engineer closer to the user. The MTRC is made up of forward deployed mobile workshops that provide engineering and fabrication capability to address warfighter’s emerging requirements. Government engineers staff these workshops and have communications capability that enables collaboration with CONUS support elements. The MTRC’s mission is to “innovate,

modify, adapt, and repair material 'in situ' to enhance capabilities of SOF."⁶² The MTRC shortens the gap between deployed operators, engineers, and PM's. Recently, USSOCOM recognized the MTRC's value, validating the requirement in accordance with the SOF Capability Integration Development System validation process.

There is a possibility that urgent requirements may impact existing Programs of Record and disrupt detailed acquisition strategies.⁶³ This risk is acceptable because when a CCDR or operator identifies a gap, they expect immediate solutions even if it requires accepting the "80 percent solution today rather than the 100 percent solution years from now."⁶⁴ Many acquisition practitioners may also believe that the USSOCOM and JIDO examples are not scalable and cannot work for the Army, but that is a culturally biased and skewed point of view. With similar TTPs, the Army has absolutely made innovative gains in many areas like the REF during the last fifteen years of war. The issue is that these gains can be fragile and subject to regression.⁶⁵ Sustaining change in the DAS has historically proven to be a very difficult task. Only institutional change coupled with cultural change can endure the test of time.⁶⁶ Perhaps a lasting solution would be to focus on culture within Army ALT where the workforce of 38,000 provides a rich target audience.⁶⁷

Barriers to and Opportunities for Cultural Change

Resistance to change comes in many forms. Organizations see threats to traditional norms, are entrenched in old ways of doing business, and are accustomed to stove-piped bureaucracies. The Army's system has historically been effective at producing capabilities like the "Big Five" during the Cold War.⁶⁸ However, years of "doing business the way we've always done it;" the complex force management system;

and parochialism between requirements, resourcing, and acquisition organizations create a culture where innovative efforts thirst for survival.

Changing Culture

Cultural change is the hardest, but most powerful way to implement DAS change. Leaders can shape culture to influence the context of rapid and innovative acquisition using the tenets of mission command and relevant theories of cultural change. Creating a community that is willing to innovate starts with creating a sense of purpose and shared values. Rules of engagement that encourage collaboration, discovery driven learning, and integrative decision-making will ensure Army success.⁶⁹

Noted social psychologist and author Edgar Schein offers a model of organizational culture that can help senior leaders understand Army culture. In Schein's model, there are three levels of culture (Figure 3). The only observable parts of a culture are its artifacts. The norms, values, and underlying assumptions are not observable, but make-up the majority of the culture, similar to an iceberg.⁷⁰ The DoD and Army leaders should embed and reinforce new norms, values, and underlying assumptions instead of just focusing on the artifacts.

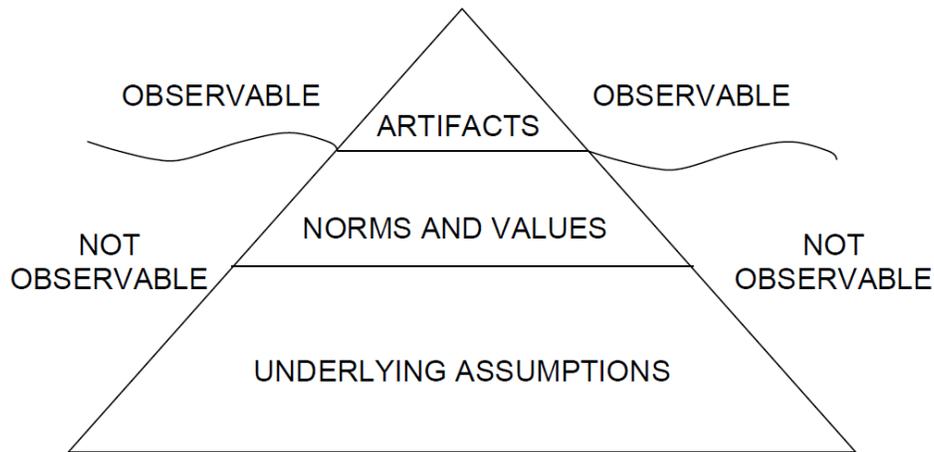


Figure 3. Schein's Model of Organizational Culture⁷¹

To embed new norms, the Army should begin by addressing norms between operational users, resourcers, and acquirers. Breaking down barriers to collaboration will facilitate an environment where PM's can address program risks through clear and open communication with users and resourcers. Additionally, leaders should use mission command to embed innovation into culture and reinforce it to convey a sense of ownership and accountability. To reach the large Army acquisition workforce, senior leaders need to carefully craft and then over-communicate their vision. Institutional venues exist at battalion and brigade pre-command courses (PCC's), Defense Acquisition University (DAU) courses, and mentorship programs.

Resistance to change is inherent in the DoD. The DoD is the largest employer in the U.S. with over two million full time personnel and the Army accounts for over half.⁷² Reinvigorating culture in an organization this large is a challenge in itself. The myriad of stove-piped systems multiplies these challenges with "resistance [to] and insufficient technical capacity [for] change."⁷³ With ongoing change (Sexual Harassment, the Army Operating Concept, and BBP), it will be a challenge to communicate a new initiative like acquisition cultural change. The BBP 3.0 is already underway as a set of reforms aimed

at changing practices. However, changing the practices, artifacts of the DAS, will only very slowly alter organizational norms and behaviors. Researcher Zack Huitink also warns that “mandating reform” skips a critical citation step in the change process, the guiding coalition.⁷⁴ He further argues that the system’s complexity and stakeholders can thwart even the best plans to implement change. Even though BBP comes at a good time and has shown positive trends, some defense officials believe that the system will wait out real change.⁷⁵

The Army’s service-specific culture also presents a barrier to instilling a rapid and innovative culture. For example, the Cameron and Quinn Competing Values Model (Figure 4) depicts organizational culture using two axes: flexibility versus control and internal versus external focus. Steve Gerras, Leonard Wong, and Charles Allen, professors at the USAWC believe the Army’s nature, with its emphasis on “chain-of-command and well-defined policies,” follows a *hierarchy* based on this model.⁷⁶

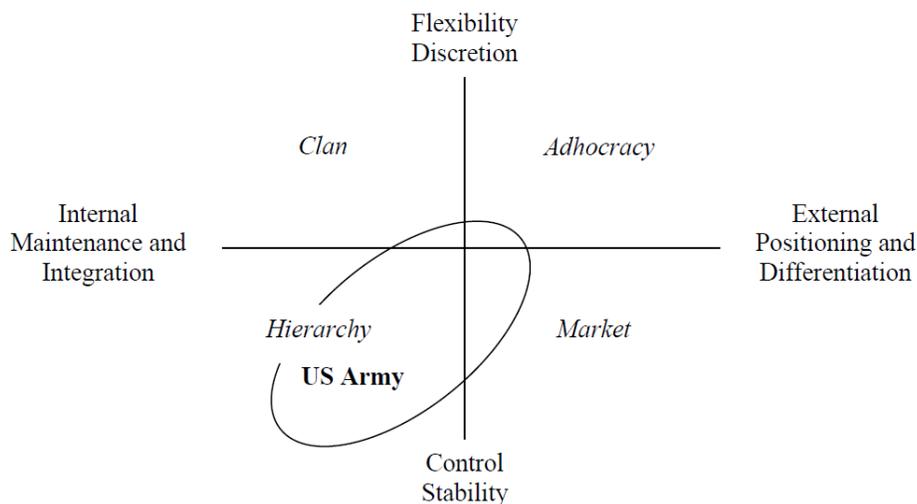


Figure 4. Competing Values Model⁷⁷

Both big “A” and little “a” Army organizations are comfortable with these well-defined policies and checklists, and are typically constrained by the previous ways of doing business. Adaptive and innovative ways are often overlooked by leaders because the approvals to engage in these practices seem out of reach or likely to fail.

Another barrier to change is the inordinate focus on constraints to the budget during the Planning, Programming, Budgeting, and Execution (PPBE) process. Focusing on the big “A” artifacts (funding and difficulties in reprogramming) reinforces senior leader power distance (one of the nine Global Leadership and Organizational Behavior Effectiveness (GLOBE) criteria).⁷⁸ This focus leaves only a few Colonels, Lieutenant Colonels, and Senior Army Civilians making the hard calls on budgets, with little time for discussion on how to be innovative or speed up existing processes. A more effective way would be to reduce hierarchy and empower leaders. Successful leaders like Major Kevin Linzey (who saved \$42 million from his budget in Afghanistan) have some of the best ideas on how to change cultural norms, and contend that the right balance requires synchronization of both “resourcers and ops.”⁷⁹ Instead of focusing on PPBE artifacts, the Army should adopt examples like Major Linzey’s, which will result in resourcers and acquirers spending more time with users in the cost-capability-schedule-risk trade-off discussion.

In theory, the Army staff represents operational users in the PPBE, JCIDS and DAS processes, but this representation tends to break down at higher levels the farther the process gets from the field. It is feasible to keep warfighters involved, but much of the underpinning analysis and trades only occur during the analysis of alternatives that occurs early in the acquisition process. The Government Accountability Office notes that

the Joint Requirements Oversight Council has historically failed to adequately address cost-schedule-performance trades.⁸⁰ The right place to address trades is through the reinvigoration of the Army Requirements Oversight Council (AROC) and/or the creation of an Army Warfighter Senior Integration Group (SIG). The Secretary of the Army should establish this council/group with monthly meetings to balance readiness risks with trades in cost, schedule, and performance for major programs. The Army Chief of Staff (CSA) should lead the council/group and have voting FORSCOM, TRADOC, Army Materiel Command, Army Staff, and Acting Assistant Secretary of the Army (Acquisition, Logistics and Technology) members with others included as required. This should not replace other decision forums, but should focus on balancing requirements, budgets, and acquisition risks. The CSA should drive improved linkages between the Army DSS by increasing visibility, reducing bureaucracy, and reducing stovepipes leading to better efficiency and improved effectiveness of existing processes.

Another cultural artifact and financial barrier to acquisition change is the “spend culture,” emphasized by comptrollers and budget offices. Future orientation, another GLOBE criteria, addresses how much “an organization collectivity encourages and rewards future oriented behaviors such as planning, delaying gratification, and investing in the future.”⁸¹ Today, the DoD incentivizes a *spend culture* through the financial management chain with goals for obligation of government dollars even though comptroller and AT&L guidance directly states these goals should not “be a measuring stick for program execution and must not be regarded as a failure.”⁸² In most budget and program offices, this is exactly the opposite. The goals drive obligating organizations to spend all dollars available during a budget period. If funds are not

obligated, resourcing headquarters will provide less the next year.⁸³ This disincentivizes future orientation. Instead of focusing satisfying obligation rates, leaders should reward those who save money and identify where to accept risk, even if this entails using efficiencies gained to share with another program or service. Year of execution *above and below threshold reprogramming actions* or POM trades may be required. Within USSOCOM, policies and procedures have institutionalized this accepted practice. Program Executive Officers carefully consider funding risks inside and between program portfolios, and senior acquisition, operation, and resourcing leaders are always involved in reprogramming decisions. Additionally, SOF acquisition and financial management professionals always execute these actions in accordance with the rules of DoD Financial Management Regulations.

Reinvigorating and Sustaining Change

There are several ways to reinvigorate and sustain ongoing institutional Army acquisition change. DoD has retained selected rapid acquisition organizations and talks about innovation, but the question remains, to what extent are these practices taking root in the Army? To be clear in its message, the Army should go back to clearly communicating a sense of urgency and vision inside its ranks. Articles and interviews with senior Army leaders discuss the challenges and imperatives clearly, but who is the action officer inside the Army to affect real cultural change? Senior leaders understand the impetus for rapid and innovative acquisition, but they need to synchronize their own deeds and words. Poor or infrequent communication is another significant barrier that can undermine change, but nothing can undermine change more than inconsistencies in deeds and words.⁸⁴

Leaders need to communicate the vision and provide the tools and incentives to execute this vision. Mid-grade iron Majors and Department of the Army Civilian leaders should be the target audience. Recent graduates of the Army's Product Manager Command Course have said that true change has yet to permeate the midgrade ranks.⁸⁵ Handouts and smart cards detailing rapid and innovative processes could be a start, but incorporating culture into PCC's and DAU courses is the best method. The Army should also reduce power distance for acquisition decisions, shifting toward more of an adhocracy (Figure 4) where assertive midgrade leaders are empowered and incentivized to adopt flexible and innovative culture. The Army should also look for incentives as embedding mechanisms to reward behaviors in its workforce. Industry has bonuses, stock options, and overtime, but with budget constraints since 2010, no similar incentives exist today in the Army.⁸⁶ However, public recognition, annual evaluation reports, and promotions are existing tools that are still available. Finally, senior leaders must set the example by sharing efficiencies, and incentivizing future orientation across their staffs and subordinate leaders. Rewarding positive behaviors is crucial to embedding and reinforcing this change.

Finally, risk aversion is a norm that drives most Army program plans, and the perception is that if a program fails, there is a stigma of poor program management, sunk cost, and wasted time attached to the failure. Acquisition researcher, Pierre Chao, argues DoD's tolerance for acquisition failure has been lost over the last thirty years. Even though it has resurfaced during the last fourteen years of war, leadership must still address embedded cultural fears of failure, prevent recidivism back to the old risk-averse ways of doing business, and not punish those who fail after taking risks.⁸⁷ Even

the Army's mission command doctrine says risk tolerance must increase; and senior raters should reward subordinate leaders that take risk and succeed. Leaders must be willing to accept prudent risk to get innovation.⁸⁸ The JIEDDO's leadership instilled "the right culture ... a passion for the mission, a tolerance for risk, and a push for speed."⁸⁹

Forging a Path to Real Change

Several broad ideas merit priority in an effort to achieve some real change. First, the Army should continue to invest in updated authorities, policies, and processes that align with the DODI 5000.02. Senior leaders should look for and implement changes to retain and reinforce innovative and rapid acquisition. A specific review and update of policy and regulations must ensure the Army retains these capabilities and protects them in the future budgets. Specific attention should focus on updating Army Regulations 70-1, 71-9, and 70-3; and budgetary guidance that allows for agility in financial management. Additionally, the Army should consider reinvigorating the AROC or building an Army SIG that provides a leadership forum for requirements-cost-schedule-performance trades across the program's life cycle to be convened at all major milestones. In Army aviation alone there have been notable program failures resulting in broken promises and sunk costs. Lack of effective DSS contributed to at least two major programs spending billions of dollars and failing to deliver promised capability: the Comanche (\$7B) and the Armed Reconnaissance Helicopter (ARH) (\$500 million).⁹⁰ With better input and oversight, the Army may have identified risks earlier in these programs and traded off requirements for cost and schedule, which may have led to program success instead of termination.

Second and most important, the Army should change cultural norms to break down barriers among the three DSS, specifically targeting the Army's portion of the

DAS. Reducing power distance, increasing adhocracy versus hierarchy, and implementing mission command in acquisition is a start. The PCCs and the DAU can spread the word. Leaders should be deliberate with evaluations, awards, promotions, and talent management to incentivize innovative leaders that demonstrate integrity and the courage to take and mitigate risks. Given additional time and resources, the next step would be to develop a clear and succinct vision and strategy with objectives and action plans to institutionalize these new *ways*. Even though other options are available to adapt the *ends, ways, means, and risk* paradigm (reducing ends or simply taking more risk), current debates between DoD and Congress are forcing both sides to make almost impossible choices, and most are sacrificing modernization for readiness.⁹¹

Most rapid acquisition organizations began uniquely in response to specific demands. Their tailored processes are not applicable for every situation. Rapid may be suitable for wartime or incremental acquisition, but building a future vertical lift aircraft with a rapid process will likely result in unforeseen and often insurmountable cost, schedule, or performance issues. The Army's ARH program was an example of an acquisition category I-D program that started as a rapid acquisition effort to replace the OH-58D Kiowa Warrior, but ended up with two Nunn-McCurdy breaches and eventual program termination. The ARH program worked to capitalize on a commercial airframe with quick military modifications, but ended up facing significant cost and schedule issues.⁹² A more rapid process might have forced the Army to contain its appetite for more, but the Army abandoned a simple COTS strategy because of early requirements creep from both the government and industry. Therefore, Army leaders must create an environment where tailored acquisition strategies thrive and senior leaders must know

the difference in associated risks between the rapid and deliberate processes discussed in DODI 5000.02. Rapid “doesn’t mean you need to go willy-nilly and throw all the rules out.”⁹³

Conclusion

Environmental change is outrunning Army acquisition’s ability to develop and field capabilities. Core cultural changes will take time to reach midgrade Army officers and civilians. However, senior leaders should diligently invest in people and be determined to build a culture that adapts its assumptions and norms. The culture should bring operational users, the acquisition workforce, and resourcers closer together to think about and solve problems in new ways. To sustain this culture, senior acquisition leaders should apply tenets of mission command, incentivizing and recognizing innovative leaders that demonstrate the character and courage to innovate by taking and managing risk.⁹⁴ The overall focus should be retaining proven ways that work, and embedding positive cultural traits into leaders in the Army’s acquisition system.⁹⁵

Collectively, these efforts will empower initiative and set conditions to reduce risk to Army modernization strategies. In summary, the Army should (1) retain and protect proven rapid acquisition processes, authorities, and organizations; and (2) apply the tenets of mission command to double down on efforts that embed and reinforce innovation, courage to take risk, and rapid acquisition into the Army’s DSS and the Army Acquisition Corps.

Endnotes

¹ Alistair Burnett, *Yale Global Review*, quoted in Edward Luce, *Time to Start Thinking: America and the Spectre of Decline* (New York: Little Brown and Company, 2012), <http://yaleglobal.yale.edu/content/time-start-thinking-america-and-spectre-decline> (accessed March 27, 2016).

² Richard Sassaman, "The Impossible Raid," *America in World War II*, June 2007, www.americainwwii.com/articles/the-impossible-raid/ (accessed March 27, 2016); Travis J. Titten, "Doolittle Raiders Honored in Capitol Ceremony," *Stars and Stripes Online*, April 15, 2015, <http://www.stripes.com/doolittle-raiders-honored-in-capitol-ceremony-1.340391> (accessed March 27, 2016).

³ Michael V. Hayden, "Understanding the New Global Disorder: Three Tectonics," November 19, 2014, <http://www.fpri.org/?s=understanding+the+new+global+disorder> (accessed March 27, 2016).

⁴ Barack Obama, *2015 National Security Strategy of the United States* (Washington, DC: The White House, February 2015), unnumbered iii; U.S. Joint Chiefs of Staff, *The National Military Strategy of the United States of America 2015* (Washington, DC: U.S. Joint Chiefs of Staff, June 2015), http://www.jcs.mil/Portals/36/Documents/Publications/National_Military_Strategy_2015.pdf (accessed March 27, 2016).

⁵ David Jablonsky, "Why is Strategy Difficult?" in *U.S. Army War College Guide To National Security Issues I: Theory Of War And Strategy, Directive* (Carlisle Barracks: U.S. Army War College, June 2008), 3.

⁶ John McCain, "It's Time to Upgrade the Defense Department," *War on the Rocks*, November 10, 2015, <http://warontherocks.com/2015/11/its-time-to-upgrade-the-defense-department/> (accessed March 26, 2016); Ashton Carter, "Running the Pentagon Right: How to Get the Troops What They Need," *Foreign Affairs* 93, no. 1 (January 2014): 2-4, <http://search.proquest.com/docview/1468448016> (accessed March 27, 2016); Heidi Shyu, "Association of the United States Army, 2015 Global Force Symposium Speech," April 1, 2015, *YouTube*, video file, https://www.youtube.com/watch?v=ilYSe91IT_gM (accessed March 27, 2016).

⁷ Edie Williams and Alan R. Shaffer, "The Defense Innovation Initiative--The Importance of Capability Prototyping," *Joint Force Quarterly*, 2nd Quarter 2015, 34-35.

⁸ J. Ronald Fox, *Defense Acquisition Reform: 1960-2009, An Elusive Goal*, CMH Pub 51-3-1 (Washington, DC: Center of Military History, U.S. Army, October 31, 2011), xi-xii.

⁹ There are different types of innovation, process innovation being one. Pierre Chao, "What Kind of Innovation Do You Want?" *Army AL&T Magazine Online*, November 18, 2015, <http://asc.army.mil/web/news-what-kind-of-innovation-do-you-want/> (accessed March 27, 2016).

¹⁰ The National Security Act of 1947 created the Department of Defense (DOD), but the way the DOD acquired, budgeted for, and fielded new equipment did not markedly change until the large defense budgets of the Korean War. Larger defense budgets after the Korean War yielded the first peacetime defense industry in U.S. history requiring effective processes to manage large military research and development efforts. In the sixty years since then, there have been numerous modifications to the Defense Acquisition System (DAS) focused on making the system more effective and efficient. Fox, *Defense Acquisition Reform*, 10.

¹¹ Moshe Schwartz, *Defense Acquisitions: How DOD Acquires Weapon Systems and Recent Efforts to Reform the Process* (Washington, DC: U.S. Library of Congress, Congressional Research Service, May 23, 2014), 15.

¹² Stephen J. Gerras, ed, *Strategic Leadership Primer*, 3d ed. (Carlisle Barracks, PA: U.S. Army War College, 2004), 11.

¹³ Williamson Murray and Allan Reed Millett, *Military Innovation in the Interwar Period* (Cambridge, UK: Cambridge University Press, 1996), 300.

¹⁴ *Ibid.*, 306-308, 310.

¹⁵ Colin Gray, *After Iraq: The Search for a Sustainable National Security Strategy* (Carlisle, PA: U.S. Army War College, January 2009), 38.

¹⁶ U.S. Department of the Army, *U.S. Army Operating Concept: Win in a Complex World*, Training and Doctrine Command (TRADOC) Pamphlet 525-3-1 (Washington, DC: U.S. Department of the Army, October 31, 2014), 11.

¹⁷ Susan Rice, "Remarks by National Security Advisor Susan Rice on the 2015 National Security Strategy" February 2015, <https://www.whitehouse.gov/the-press-office/2015/02/06/remarks-national-security-advisor-susan-rice-2015-national-security-stra> (accessed March 27, 2016).

¹⁸ U.S. Department of Defense, *Quadrennial Defense Review 2014* (Washington, DC: U.S. Department of Defense, March 2014) v.

¹⁹ Tara Copp, "DOD Budget Increases Funds for Islamic State Fight with an Eye on Russia, China," *Stars and Stripes Online*, February 2, 2016, www.stripes.com/news/dod-budget-increases-funds-for-islamic-state-fight-with-an-eye-on-russia-china-1.391772 (accessed March 27, 2016).

²⁰ Peter Jamison, "Biden: Islamic State Does Not Pose 'an Existential Threat'," *Los Angeles Times*, November 16, 2015, <http://www.latimes.com/nation/la-pol-ca-biden-garcetti-paris-isis-20151116-story.html> (accessed March 27, 2016)

²¹ Nick Bloom, *The Economic Impact of 9/11*, SIEPR Policy Brief (Stanford, CA: Stanford Institute for Policy Research, February 2007), 1, http://siepr.stanford.edu/sites/default/files/publications/policybrief_jan07_0.pdf (accessed March 27, 2016).

²² Lisa Mataloni, *Gross Domestic Product: Third Quarter 2015* (Washington, DC: Bureau of Economic Analysis, U.S. Department of Commerce, October 29, 2015), 7, https://www.bea.gov/newsreleases/national/gdp/2015/pdf/gdp3q15_3rd.pdf (accessed March 27, 2016).

²³ Todd Harrison, *The New Guns versus Butter Debate*, (Washington, DC: Center for Strategic and Budgetary Assessments (CSBA), May 2010), 9; David R. Francis, "Defense Budget: After Afghanistan and Iraq Withdrawal, a Peace Dividend?" *Christian Science Monitor*, March 29, 2010, <http://www.csmonitor.com/Commentary/David-R.-Francis/2010/0329/Defense-budget-After-Afghanistan-and-Iraq-withdrawal-a-peace-dividend> (accessed March 27, 2016).

²⁴ Richard Whittle, "There Is No Peace Dividend: Army Vice Chief of Staff Rails against Sequester," *Breaking Defense*, January 29, 2015, <http://breakingdefense.com/2015/01/there-is-no-peace-dividend-army-vice-chief-rails-against-sequester/> (accessed March 27, 2016).

²⁵ National Commission on the Future of the Army, *National Commission on the Future of the Army Report to the President and Congress of the United States* (Arlington, VA: National Commission on the Future of the Army, January 28, 2016), 39-43.

²⁶ Richard Whittle, "Army Aviation Budget Plunges Earthward," *Breaking Defense*, February 9, 2016, <http://breakingdefense.com/2016/02/army-aviation-budget-plunges-earthward/> (accessed March 27, 2016).

²⁷ Colin Powell, "The Changing Foreign Policy Environment," lecture to the Woodrow Wilson School at Princeton University, February 13, 1989, cited in Michael J. Meese, "Strategy and Force Planning in a Time of Austerity," *Strategic Studies Quarterly* 8, no. 3 (Fall 2014): 1.

²⁸ U.S. Office of Management and Budget, "Historical Tables: Table 4.1- Outlays by Agency," <https://www.whitehouse.gov/omb/budget/historicals> (accessed March 27, 2016); Sarah Thannhauser and Christoff Luehrs, "The Human and Financial Costs of Operations in Afghanistan and Iraq," in *Lessons Encountered: Learning from the Long War* (Washington, DC: National Defense University Press, 2015), 433.

²⁹ Ibid.

³⁰ Harrison, *The New Guns*, 7.

³¹ The Budget Control Act capped discretionary spending from FY11-FY21, and penalized any budget that would exceed these caps with a 10% across the board cut called "sequester." The DOD budget stopped growing with annual budgets of \$553B, \$518B, \$520B, \$521B respectively from FY12-15. Amy Belasco, *Defense Spending and the Budget Control Act Limits* (Washington, DC: U.S. Library of Congress, Congressional Research Service, July 22, 2015), i.

³² Josh Zumbrun, "Q&A: What the \$18 Trillion National Debt Means for the U.S. Economy," *Wall Street Journal Online*, February 1, 2015, www.wsj.com/articles/BL-REB-30486 (accessed March 27, 2016).

³³ Belasco, *Defense Spending*, 5, 36, 41.

³⁴ Heidi Shyu, "Contemporary Military Forum #7: Delivering Innovation," Washington, DC, October 14, 2014, video file, <https://www.dvidshub.net/video/366902/contemporary-military-forum-7-delivering-innovation#.Vo3C3-w8LCQ> (accessed March 27, 2016); National Commission on the Future of the Army, *National Commission on the Future of the Army Report to the President and Congress of the United States*, 39.

³⁵ Whittle, "Army Aviation Budget Plunges Earthward."

³⁶ Harrison, *The New Guns*, 10; Kori Schake, "Margin Call: How to Cut a Trillion from Defense," *Orbis* 56, no. 1 (2012): 3.

³⁷ Robert Work, "The Third U.S. Offset Strategy and its Implications for Partners and Allies," January 28, 2015, <http://www.defense.gov/Speeches/Speech.aspx?SpeechID=1909> (accessed March 27, 2016).

³⁸ David Perkins, "U.S. Training and Doctrine Command Update," briefing slides with commentary, Carlisle Barracks, PA, U.S. Army War College, November 4, 2015.

³⁹ U.S. Department of the Army, *U.S. Army Operating Concept: Win in a Complex World*, i, 11, 34.

⁴⁰ U.S. Department of the Army, *Mission Command*, Army Doctrine Publication (ADP) 6-0 (Washington, DC: U.S. Department of the Army, March 12, 2014), iv.

⁴¹ Shyu, "Association of the United States Army, 2015."

⁴² Ibid.

⁴³ Figure was adopted from the Defense Acquisition University, *Defense Acquisition Guidebook*, Chapter 1, Figure 1.1.F1. DoD Decision Support Systems, <https://acc.dau.mil/CommunityBrowser.aspx?id=488288> (accessed March 30, 2016).

⁴⁴ Former U.S. Special Operations Command (USSOCOM) Combat Developer and Program Manager, email message to author, October, 2015.

⁴⁵ Fox, *Defense Acquisition Reform*, xi-xii.

⁴⁶ Frank Kendall, "Better Buying Power 4 Years On: Is It Making a Difference?" *Defense One*, April 29, 2014, <http://www.defenseone.com/ideas/2014/04/better-buying-power-4-years-it-making-difference/83392/> (accessed March 26, 2016).

⁴⁷ Fox, *Defense Acquisition Reform*, xii-xiii.

⁴⁸ McCain, "It's Time to Upgrade."

⁴⁹ Office of the Under Secretary of Defense (AT&L), *Operation of the Defense Acquisition System*, DOD Instruction 5000.02 (Washington, DC: U.S. Department of Defense, January 7, 2015), <http://www.dtic.mil/whs/directives/corres/pdf/500002p.pdf> (accessed November 12, 2015).

⁵⁰ James C. Naudain, *Institutionalizing the Warfighter Rapid Acquisition Program*, Strategy Research Project (Carlisle Barracks, PA: U.S. Army War College, April 7, 1998), iii.

⁵¹ Carter, "Running the Pentagon Right," 2-4.

⁵² Ibid.

⁵³ *Fiscal Year 2016 National Defense Authorization Act*, H.R. 1735, 114th Cong. 1st sess. (May 19, 2015), 167, <https://www.gpo.gov/fdsys/pkg/CRPT-114srpt49/pdf/CRPT-114srpt49.pdf> (accessed March 27, 2016).

⁵⁴ Rapid Equipping Force Magazine, September 30, 2014, 2-16, http://www.ref.army.mil/docs/20140930_Rapid_Equipping_Force-magazine.pdf (accessed March 27, 2016).

⁵⁵ Steven Silwa quoted in Kara Ewell, "Army Confirms Rapid Equipping Force as 'Enduring'," *Army Times Online*, January 31, 2014, http://www.army.mil/article/119292/Army_confirms_Rapid_Equipping_Force_as_enduring/ (accessed March 27, 2016).

⁵⁶ Brad Martin et al., *Assessment of Joint Improvised Explosive Device Defeat Organization (JIEDDO) Training Activity* (Santa Monica, CA: RAND Corporation, 2013), viii, http://www.rand.org/pubs/research_reports/RR421.html (accessed March 27, 2016).

⁵⁷ “Joint Improvised Explosive Device Defeat Capability Approval and Acquisition and Management Process (JCAAMP) Briefing,” briefing slides, August 21, 2013.

⁵⁸ Jen Judson, “JIDA to Become JIDO under Defense Threat Reduction Agency,” *Defense News*, February 2, 2016, <http://www.defensenews.com/story/defense/land/2016/02/02/jida-become-jido-under-defense-threat-reduction-agency/79707958/> (accessed March 27, 2016).

⁵⁹ James Geurts, “Audio: USSOCOM Acquisition Executive, on Special Operations’ Acquisition Authorities and Culture,” October 11, 2013, audio file, <http://csis.org/multimedia/audio-james-hondo-geurts-ussocom-acquisition-executive-special-operations-acquisition-aut> (accessed March 27, 2016).

⁶⁰ U.S. Special Operations Command, *Research, Development, and Acquisition, Acquisition Systems Management Policy*, USSOCOM Directive 70-1 (MacDill Air Force Base, FL: U.S. Special Operations Command, March 19, 2010), 2; U.S. Special Operations Command, *Force Development: Special Operations Forces Capabilities Integration And Development System (SOFCIDS)*, USSOCOM Directive 71-4 (MacDill Air Force Base, FL: U.S. Special Operations Command, May 10, 2012), 2; U.S. Special Operations Command, *Force Development: Operational Test And Evaluation*, USSOCOM Directive 71-5 (MacDill Air Force Base, FL: U.S. Special Operations Command, August 5, 2010), 2.

⁶¹ U.S. Special Operations Command, *Research, Development, and Acquisition*, D-1.

⁶² Robert G. Spulak, *Innovate or Die: Innovation and Technology for Special Operations*, JSOU Report 10-7 (MacDill AFB, FL: Joint Special Operations University: December 2010), 44-45.

⁶³ Anthony S. Pelczynski, *Rapid Acquisition Impact On Major Defense Acquisition Programs*, Strategy Research Project (Carlisle Barracks, PA, U.S. Army War College, March 30, 2010), 2.

⁶⁴ Zachary J. Lemnios, Statement Testimony before the United States House of Representatives Committee on Armed Services Subcommittee on Terrorism, Unconventional Threats and Capabilities, March 23, 2010, cited in Spulak, *Innovate or Die*, 44.

⁶⁵ John P. Kotter, *Leading Change* (Boston: Harvard Business School Press, 1996), 13.

⁶⁶ Office of the Undersecretary of Defense for Acquisition, Technology, and Logistics, *Report of the Defense Science Board Task Force on the Fulfillment of Urgent Operational Needs* (Washington, DC: U.S. Department of Defense, July 2009), vii-xii, <http://www.acq.osd.mil/dsb/reports/ADA503382.pdf> (accessed March 27, 2016).

⁶⁷ LinkedIn, “U.S. Army Acquisition Support Center (USAASC),” <https://www.linkedin.com/company/usaasc> (accessed March 28, 2016).

⁶⁸ The “Big Five” commonly refers to five successful major Army acquisition programs that were fielded in the late 1970s and early 1980s: the M1 Abrams Tank, M2 Bradley Infantry

Fighting Vehicle, UH-60 Blackhawk Helicopter, AH-64 Apache Helicopter, and the MIM-104 Patriot Air Defense Missile System.

⁶⁹ Linda A. Hill et al., "Collective Genius," *Harvard Business Review*, June 2014, 95-102.

⁷⁰ Stephen J. Gerras, Leonard Wong, and Charles D. Allen, *Organizational Culture: Applying a Hybrid Model to the U.S. Army* (Carlisle Barracks, PA: U.S. Army War College, November 2008), 5.

⁷¹ *Ibid.*, 17.

⁷² Harrison, *The New Guns*, 3.

⁷³ Zach S. Huitink and David M. Van Slyke, *Beyond Business as Usual: Improving Defense Acquisition through Better Buying Power* (Washington, DC: IBM Center for the Business of Government, 2015), 115.

⁷⁴ In Kotter's eight step change process, creating urgency is step one and creating a guiding coalition is step two. Without a guiding coalition, senior leaders will be challenged to gain buy-in for a new vision and communicating the vision to those without a guiding coalition is a challenge. Steps 3-8 are: Developing a Vision and Strategy; Communicating the Change Vision; Empowering Employees for Broad-Based Action; Generating Short-Term Wins; Consolidating Gains and Producing More Change; Anchoring New Approaches in the Culture. Kotter, *Leading Change*.

⁷⁵ U.S. Department of Defense, *Performance of the Defense Acquisition System, 2015 Annual Report* (Washington, DC: Under Secretary of Defense, Acquisition, Technology, and Logistics (USD[AT&L]), September 2015), iii; Huitink and Van Slyke, *Beyond Business*, 113-117, 123.

⁷⁶ Gerras, Wong, and Allen, *Organizational Culture*, 3.

⁷⁷ *Ibid.*

⁷⁸ *Ibid.*, 7.

⁷⁹ Kevin Linzey, "Overcoming Obstacles to Achieving a Cost Culture," *The Armed Forces Comptroller* 59, no. 2 (Spring 2014): 43.

⁸⁰ U.S. Government Accountability Office, *DOD Weapons Systems: Missed Trade-off Opportunities during Requirements Reviews* (Washington, DC: U.S. Government Accountability Office, June 16, 2011), 8, <http://www.gao.gov/new.items/d11502.pdf> (accessed November 27, 2015).

⁸¹ Gerras, Wong, and Allen, *Organizational Culture*, 7.

⁸² OSD Comptroller and USD (AT&L) guidance conflicts with financial management practices in DoD. Guidance says: "... (2) obligation rates slower than established benchmarks should not be the determinative measuring stick for program execution and must not be regarded as a failure. (3) Late obligation of funds should not be presumed to imply that the funds are not needed or that future budgets should be reduced unless there is other evidence to

support that conclusion. (4) Providing savings to the organization, military service, or DoD component as early in the fiscal year as possible should be encouraged and rewarded, professionally and visibly. (5) Savings will not be reallocated at any higher DoD level than necessary to fulfill shortfalls in priority requirements. (6) Managers who release unobligated funds to higher priorities will not automatically be penalized in their next year's budget with a lower allocation and may be candidates for additional funding to offset prior year reductions....” in “Obligations and Expenditures: An Investigation into the Factors that Affect OSD Goals,” briefing presented to: Honorable Katrina McFarland, February 5, 2013, chart 2, https://dap.dau.mil/aphome/Documents/OSD%20Obs%20%20Exps%20Study_2013.pdf (accessed March 27, 2016).

⁸³ Huitink and Van Slyke, *Beyond Business*, 112.

⁸⁴ Kotter, *Leading Change*, 9, 89-90.

⁸⁵ Current Army Product Managers, email messages to author, January 4, 2016.

⁸⁶ Shyu, “Association of the United States Army, 2015.”

⁸⁷ Chao, “What Kind of Innovation Do You Want?”

⁸⁸ U.S. Department of the Army, *Mission Command*, 5; Chao, “What Kind of Innovation Do You Want?”

⁸⁹ James P. Craft, “JIEDDO Experience Provides Rapid Acquisition Insights,” *Signal Magazine*, October 1, 2015, <http://www.afcea.org/content/?q=Article-jieddo-experience-provides-rapid-acquisition-insights> (accessed March 27, 2016).

⁹⁰ Dan Ward, “Real Lessons from an Unreal Helicopter,” *Time Magazine Online*, May 25, 2012, <http://nation.time.com/2012/05/25/real-lessons-from-an-unreal-helicopter/>; Author’s personal knowledge from the Armed Reconnaissance Helicopter program.

⁹¹ Researcher Kori Schake believes the DoD might consider “forgoing counterinsurgencies, simplifying war aims, [and] shifting responsibilities to allies.” This argument is appealing, but it assumes that DoD can dictate the strategies and choose which future conflicts to participate in, which may not be the case. Schake, “Margin Call,” 3. Another option is for DoD to find a balance between competing strategic priorities taking more risk in some areas. Harrison, *The New Guns*, 10.

⁹² U.S. Army Audit Agency, *After Action Review: Armed Reconnaissance Helicopter Termination* (Alexandria, VA: Office of the Auditor General, January 22, 2009), 1-3.

⁹³ Chao, “What Kind of Innovation Do You Want?”

⁹⁴ Williams and Shaffer, “The Defense Innovation Initiative,” 35.

⁹⁵ Gerras, Wong, and Allen, *Organizational Culture*, 17.