

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188		
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 this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this 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) 12-06-2015		2. REPORT TYPE Master's Thesis		3. DATES COVERED (From - To) 21-07-2014 to 12-06-2015	
4. TITLE AND SUBTITLE Growing Effective Strength without Growing End Strength: Operational Utilization of the Reserve Component during Training Periods			5a. CONTRACT NUMBER		
			5b. GRANT NUMBER		
			5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S) Colonel Patrick J. Cobb, USAF			5d. PROJECT NUMBER		
			5e. TASK NUMBER		
			5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Joint Forces Staff College Joint Advanced Warfighting School 7800 Hampton Blvd Norfolk, VA 23511-1702			8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSOR/MONITOR'S ACRONYM(S)		
			11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release, distribution is unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT The Department of Defense (DoD) is at risk of being unable to meet its operational requirements. Ongoing budget and manpower reductions, combined with equipment recapitalization and increasing operational demands, present a situation that may become untenable to match finite resources against ballooning requirements. Fortunately, with the problem identified, many have begun seeking new and innovative ideas to overcome operational shortfalls. However, not many DoD leaders have considered utilizing the Reserve Component (RC) to support federal operations while in a training status. Historical precedence and legal restrictions have, until recently, kept RC training separate from operational missions. The laws and policies now allow and advocate utilizing the RC to augment operations while in a training status, but DoD must consolidate and codify guidance to institutionalize the RC Training/Operations Program. The program will help meet DoD operational requirements in a declining budget environment, alleviate stress on the active force, and, provide an as of yet unconsidered opportunity to hone and maintain RC wartime skills. Implementing the program inside the Defense Intelligence Community (IC) could net an additional 1,800 man-years of operational capacity per fiscal year. Once instituted, gaining access to RC "at rest" capacity will reap significant benefits across DoD. Turning this "at rest" capacity into effective strength gains is very inexpensive and easily within the department's grasp.					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT Unclassified	b. ABSTRACT Unclassified	c. THIS PAGE Unclassified	Unclassified Unlimited	53	19b. TELEPHONE NUMBER (include area code) 757-443-6301

***NATIONAL DEFENSE UNIVERSITY
JOINT FORCES STAFF COLLEGE***

JOINT ADVANCED WARFIGHTING SCHOOL



**Growing Effective Strength without Growing End Strength:
Operational Utilization of the Reserve Component during Training Periods**

by

**Patrick J. Cobb
Colonel, United States Air Force**

This page intentionally left blank

**Growing Effective Strength without Growing End Strength:
Operational Utilization of the Reserve Component during Training Periods**

by

Patrick J. Cobb
Colonel, United States Air Force

A paper submitted to the Faculty of the Joint Advanced Warfighting School in partial satisfaction of the requirements of a Master of Science Degree in Joint Campaign Planning and Strategy. The contents of this paper reflect my own personal views and are not necessarily endorsed by the Joint Forces Staff College or the Department of Defense. This paper is entirely my own work except as documented in footnotes.

Signature:


13 Apr 2015

Thesis Adviser: Signature:


Stephen C. Rogers, Colonel, USA
Thesis Advisor

Approved by: Signature:


Gregory Miller, PhD.
Associate Professor
Committee Member

Signature:


Robert M. Antis, PhD.
Professor
Director, Joint Advanced Warfighting School

This page intentionally left blank

Abstract

The Department of Defense (DoD) is at risk of being unable to meet its operational requirements. Ongoing budget and manpower reductions, combined with equipment recapitalization and increasing operational demands, present a situation that may become untenable to match finite resources against ballooning requirements. Fortunately, with the problem identified, many have begun seeking new and innovative ideas to overcome operational shortfalls. However, not many DoD leaders have considered utilizing the Reserve Component (RC) to support federal operations while in a training status.

Historical precedence and legal restrictions have, until recently, kept RC training separate from operational missions. The laws and policies now allow and advocate utilizing the RC to augment operations while in a training status, but DoD must consolidate and codify guidance to institutionalize the RC Training/Operations Program. The program will help meet DoD operational requirements in a declining budget environment, alleviate stress on the active force, and, provide an as of yet unconsidered opportunity to hone and maintain RC wartime skills. Implementing the program inside the Defense Intelligence Community (IC) could net an additional 1,800 man-years of operational capacity per fiscal year. Once instituted, gaining access to RC “at rest” capacity will reap significant benefits across DoD. Turning this “at rest” capacity into effective strength gains is very inexpensive and easily within the department’s grasp.

Dedication

To Chris, Charlie, Tom, and the rest of Seminar 1. You made a very challenging year more bearable. Thank you for the humor, insight, and camaraderie.

TABLE OF CONTENTS

Abstract	5
Dedication	vi
TABLE OF CONTENTS.....	vii
FIGURES	viii
Chapter 1: Current and Future DoD Challenges.....	1
Chapter 2: RC Organization and Utilization.....	7
Funding.....	8
Reserve Component Duty/Legal Statuses	9
Constitutional and Legal Foundations	10
DoD Policy Documents.....	12
Chapter 3: History of RC Utilization in support of Operations	18
Legal Requirements for RC Utilization in a Training Status	20
Why this Option was Never Fully Investigated?	21
Chapter 4: RC Training/Operations Program	22
RC Training/Operations Program (TOP) Roadmap.....	22
Accountability	25
Deployment Demands versus TOP Support.....	25
RC Training/Operations Program Application – RCIE	26
RCIE Training Capacity to Support Federal Operations.....	26
Identify Legal Restrictions	28
Chapter 5: Findings.....	33
RCIE Limiting Factor.....	36
Chapter 6: Recommendations and Conclusion.....	39
Bibliography	43
Definitions.....	48
Vita.....	53

FIGURES

Figure 1: National Defense Budget Authority (1947-2017)	2
Figure 2: RC Contributions (FY86-FY11)	4
Figure 3 DoD Total Force Manpower, December 31, 2014	7
Figure 4: Total Force Manpower, December 31, 2014.....	8
Figure 5: National Guard and Reserve Differences	12
Figure 6: Joint and Service Assigned RCIE Manpower	26
Figure 7: RCIE Man-Day and Man-Year Options.....	27
Figure 8: Production Categorization by Time	30
Figure 9: Production Categorization by Man-Hour Requirement	30
Figure 10: Total Force Production Assignment.....	31
Figure 11: RCIE TOP Cost Realization.....	35
Figure 12: Production Benefit vs Connectivity Costs.....	37

Chapter 1: Current and Future DoD Challenges

“Gentlemen, We Have Run Out Of Money; Now We Have to Think”— Sir Winston Churchill

The Department of Defense (DoD) is at risk of being unable to meet its operational requirements. Ongoing budget and manpower reductions, combined with increasing demands of global operations, are presenting a situation that may become untenable to match finite resources against ballooning requirements. When combined, these issues create a problem that, if unaddressed could haunt the department for at least the next decade.

When considering the 2014 Quadrennial Defense Review’s (QDR) ambitious objectives given the current budget environment, identifying and implementing solutions to minimize risk is critical to DoD success. The QDR identifies defense strategy and policy pillars (see below), which will drive DoD operations and budgetary decisions for the near future.

- Protect the homeland, to deter and defeat attacks on the United States and to support civil authorities in mitigating the effects of potential attacks and natural disasters.
- Build security globally, in order to preserve regional stability, deter adversaries, support allies and partners, and cooperate with others to address common security challenges.
- Project power and win decisively, to defeat aggression, disrupt and destroy terrorist networks, and provide humanitarian assistance and disaster relief.¹

1. U.S. Department of Defense, *The 2014 Quadrennial Defense Review* (Washington DC: Department of Defense, March 4, 2014), 11.

Moreover, the QDR itself recognizes the fiscal limitations and constraints on its ability to meet objectives. DoD spending has steadily climbed from 2001 to 2011 due to the wars in Afghanistan and Iraq. As Figure 1 shows, the

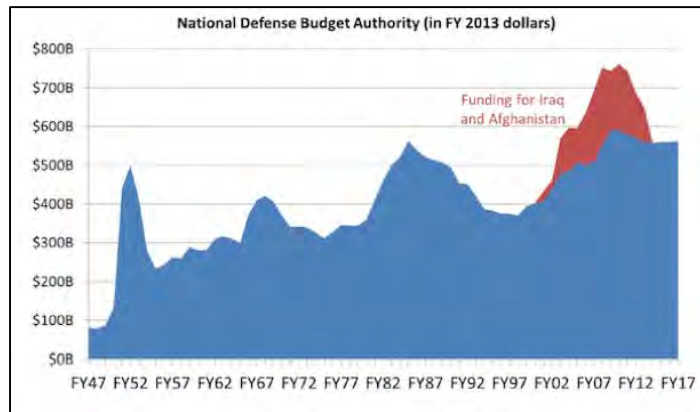


Figure 1: National Defense Budget Authority (1947-2017)

spending increases started to shrink in 2010 with the DoD budget actually coming in below previous years by 2011.² Most of the increase came through Overseas Contingency Operations (OCO) funding that paid for temporary end strength increases and war related operations. The wars took a heavy toll on equipment with some of it extended beyond the programmed life due to operational necessity, so as the country comes out of two lengthy conflicts, it must re-capitalize its weapon systems. Likewise, OCO funding for the Iraq and Afghanistan wars is decreasing and should be out of the DoD base budget by decade's end.

In addition, recapitalization to newer, more capable weapons is more expensive than the current equipment, so the cost to recapitalize is increasing. For example, the F-16 cost approximately \$18.8M (fiscal 1998 constant dollars)³ while current projections of its replacement, the F-35, is approximately \$98M.⁴ In addition to declining budgets and increased recapitalization costs, DoD also has an operational challenge. The plan was to be

2. Matthews, Dylan, "Defense Spending in the U.S., in Four Charts," Washington Post, <http://www.washingtonpost.com/blogs/wonkblog/wp/2012/08/28/defense-spending-in-the-u-s-in-four-charts/> (accessed October 2, 2014).

3. U.S. Department of the Air Force, "F-16 Fighting Falcon Fact Sheet," Air Force Link, <http://www.af.mil/AboutUs/FactSheets/Display/tabid/224/Article/104505/f-16-fighting-falcon.aspx> (accessed November 5, 2014).

4. Lockheed Martin Corporation, "HOW MUCH DOES THE F-35 COST? Producing, Operating and Supporting a 5th Generation Fighter," Lockheed Martin Corporation, <https://www.f35.com/about/fast-facts/cost> (accessed January 14, 2015).

out of Iraq and have a minimal footprint in Afghanistan, but the US is now sending military personnel back into Iraq, and may extend the Afghanistan mission too. Continued combat deployments have increased operations tempo for the Total Force, and requires Total Force solutions to minimize stress on the force.

DoD is working to bring down the tempo by creating deployment models that prescribe unit deployment and rest cycles. The current Active Component (AC) ratio is a one-to-two deployment model. This provides AC units/members two periods at home for every period deployed. The Reserve Component (RC) model is based on mobilization with a ratio of one mobilization period for every five non-mobilization periods, so the RC mobilizes and deploys at less than half the rate as the AC. The policy strives to build a predictable and sustainable model while maintaining a Total Force ready for sustained global operations. Even though deployment policies have lessened stress on the force, programmed manpower reductions may make continued operations untenable.

Since 2010, DoD end strength has decreased approximately 110,000 AC personnel.⁵ The US Army may lose another 70,000 active personnel by 2019.⁶ Reductions combined with increased operations tempo drive DoD to triage their missions. One option is to “do less with less”. This would essentially bring needs in line with budget realities. Unfortunately, DoD does not always get to dictate which operations to execute, and the enemy always gets a vote. Likewise, elected leaders ultimately decide how and when the military is used, so even though DoD may not want to exceed its operations tempo, it is not the final decision-maker.

5. U.S. Department of Defense, *Defense Budget Priorities and Choices*, Report, (Washington DC: Department of Defense, January 2012), 11.

6. U.S. Department of Defense, “FY15 Budget Preview,” U.S. Department of Defense, <http://www.defense.gov/Speeches/Speech.aspx?SpeechID=1831> (accessed January 14, 2015).

As active duty end strength declines and operations tempo continues unabated, DoD intends to rely more on the RC as one solution to manage risk. Integrating the RC into operations has increased since 9/11, when it essentially moved from a strategic to an operational reserve. Continued RC integration into operations is ongoing with the RC filling numerous deployments alongside its active counterpart (see Figure 2).⁷ With routine activations and deployments of RC units/members, one area that has not gained very much attention is the capability and capacity of the RC during their training periods to support federal operational missions.

DoD has several options to meet operations requirements as it reduces end strength. First, it could reduce its deployment tempo, but that option really depends on world events and presidential

direction. Second, it could increase RC mobilizations, but this option would drive a larger Military Personnel (MILPERS) bill. DoD could request additional end strength funding, but would probably be denied by the president and/or congress due to current fiscal limitations. The only option that is within the department's fiscal reach is using the RC in a training status to support federal operations. This option will not solve every issue or shortfall, but will assist in meeting operational requirements in some mission areas. Once DoD has maximized RC utilization, then exploring other options is warranted. As stated in the 2014 QDR, "the Department is committed to finding creative, effective, and efficient ways to

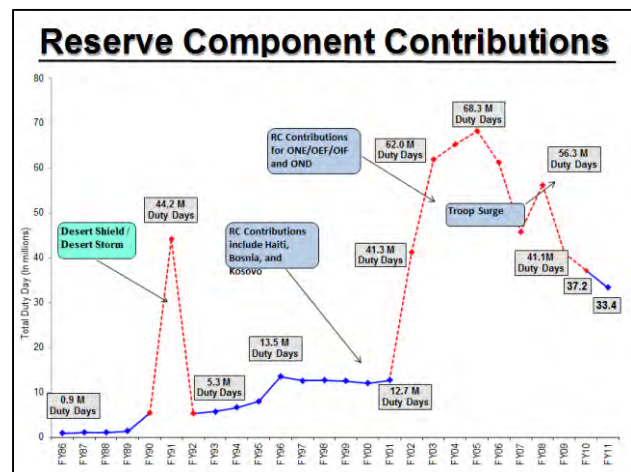


Figure 2: RC Contributions (FY86-FY11)

7. U.S. Department of Defense, "Mobilization Information and Resources Guide." Pamphlet. Department of Defense. (<http://ra.defense.gov/Portals/56/Documents/sections.pdf> (accessed 8 January 2015), 22.

achieve our goals and assist in making strategic choices”, so maximizing RC “at rest” capacity should be a DoD priority.⁸

Maximizing RC training periods to support federal operations will grow effective strength while not growing end strength. Historical precedence and legal restrictions have, until recently kept RC training separate from operational missions. Utilizing the RC to support operational missions while in a training status will help alleviate stress on the AC, while increasing RC readiness, which will assist DoD in meeting its objectives and managing risk.

Research concerning the relationship of RC training periods and the ability to increase effective strength without necessitating an increase in end strength would demonstrate the validity of the concept. The research will focus on the use of training periods to increase effective strength while not increasing end strength. The paper will also identify other options that DoD currently utilizes to increase capacity during contingencies, such as mobilization, but these will not be included options into the calculus of increasing effective strength. This is mainly because DoD already utilizes these options across the department to increase RC support to federal operations when needed. Though large-scale use of training periods to support federal operations has not been researched and planned for, this “at rest” capacity is an untapped resource DoD can harness at minimal cost.

The term “effective strength” refers to the ability of RC units/members to meet current DoD performance standards, in the respective mission areas, in order to be counted as providing effective strength. DoD and the Services create the standards for each mission

8. U.S. Department of Defense, *The 2014 Quadrennial Defense Review* (Washington DC: Department of Defense, March 4, 2014), VI.

area and the standards apply across the Total Force. Measuring gains in effective strength can be accomplished by evaluating performance against mission area standards.

Chapter 2 will provide a basic understanding of the RC for background purposes so RC operational utilization can be discussed at length in Chapter 3. Chapter 4 lays out an RC utilization roadmap and applies the roadmap to the RC Intelligence Enterprise (RCIE). Finally, the findings, recommendations, and conclusion will combine to demonstrate significant benefits and a way ahead for DoD.

Chapter 2: RC Organization and Utilization

“The Constitution is the guide which I will never abandon.” — George Washington

United State Codes (USC) Title 10 defines the purpose of the RC is to, “provide trained units and qualified persons available for active duty in the armed forces, in time of war or national emergency, and at such other times as the national security may require, to fill the needs of the armed forces whenever, during and after the period needed to procure and train additional units and qualified persons to achieve the planned mobilization, more units and persons are needed than are in the regular components.”¹

The Reserve Components comprise approximately thirty-nine percent of the Total Force, and include National Guard and Reserve forces; specifically, the Army National Guard of the United States, the Army Reserve, the Navy Reserve, the Marine Corps Reserve, the Air National Guard of the United States, and the Air Force Reserve. Current AC and RC end strength and percentages are in Figure 3.² Additionally, specific Service breakouts are in Figure 4.³

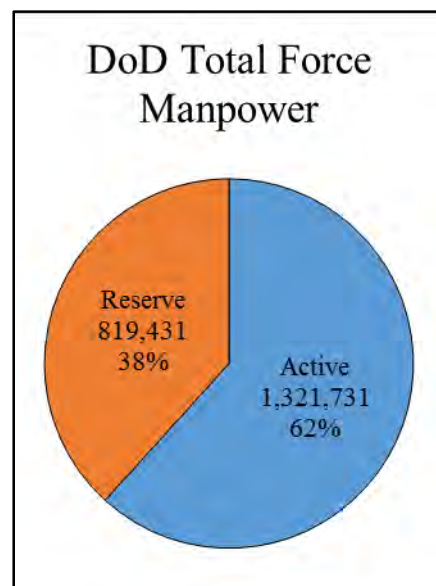


Figure 3 DoD Total Force Manpower, December 31, 2014

1. Cornell University Law School, “10 U.S. Code § 10102 - Purpose of reserve components,” Cornell University Law School, <http://www.law.cornell.edu/uscode/text/10/10102> (accessed 2 October 2014).

2. U.S. Department of Defense, *Active Duty Military Strength Report for December 31, 2014*, Report (Washington DC: Defense Manpower Data Center, December 31, 2014).

3. U.S. Department of Defense, *Department of Defense Selected Reserves by Rank/Grade: December 31, 2014*, Report (Washington DC: Defense Manpower Data Center, December 31, 2014).

In addition to separate RC forces for each Service, the RC is further subdivided into units, and Individual Mobilization Augmentees (IMAs). Every Service has IMAs that augment headquarters elements and some AC units, and all RC organizations utilize unit based

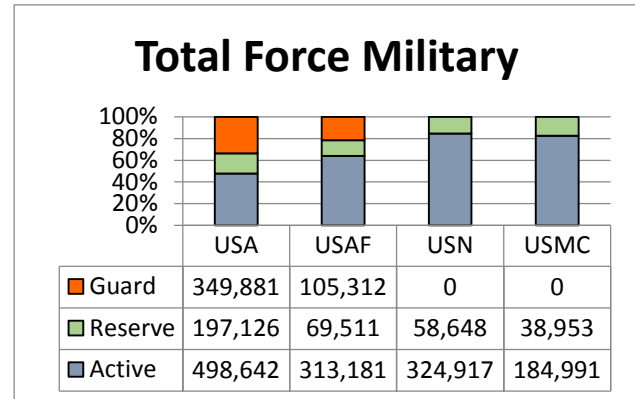


Figure 4: Total Force Manpower, December 31, 2014

constructs that closely mirror their AC counterparts. The National Guard is the only RC force that does not utilize the IMA program. Like the AC, RC units/personnel are primarily assigned to the Services with a small percentage assigned to the joint community.

Funding

All Reserve Components are authorized and appropriated funding from congress to organize, administer, recruit, instruct, and train (OARIT) their respective organizations. This funding is in the form of MILPERS and Operations and Maintenance (O&M) Appropriations. The funding allows the RC to train, pay personnel, and maintain their equipment. It is important to note, however, that the RC does not generally receive procurement funding to acquire new equipment. Equipment procurement is the responsibility of the active component, which programs for Total Force equipment during the budgeting cycle. Moreover, the RC generally does not receive funds to conduct federal operations. Since their primary purpose is to train to augment the active duty in times of crisis, the AC funds the RC when active federal augmentation is required through mobilization and volunteerism.

Reserve Component Duty/Legal Statuses

The two major duty/legal statuses of an RC member during military duty periods include training and federal active duty.⁴ Training status is broken out into Inactive Duty for Training (IDT) and Annual Training (AT) periods and designed for RC members to train for their federal mission. IDTs are also known as Unit Training Assemblies (UTAs) or “Drill Weekends”. IDTs allow members to muster at their local armory/base once a month to maintain their skills, and AT is generally a two-week program for more in-depth training at the local armory/base or another location depending on the unit’s training plan. All RC members are required to perform a minimum of 39 days of training per Fiscal Year (FY) through a combination of 24 IDT and 15 AT days. Members can serve beyond the 39 training days generally through federal active duty.

The second legal status is federal active duty. RC members enter into their respective Service as a reserve force to assist in federal operations through involuntary mobilization or voluntary active duty funded through Military Personnel Appropriation (MPA) days. The key difference between these two duty statuses is how congress authorizes and appropriates the funding for each. IDT and AT are authorized and appropriated for the purpose of maintaining RC readiness.⁵ These funds go to each RC, not their gaining Service. Federal active duty funds are authorized and appropriated to each Service for augmenting the active duty mission with RC units/members.⁶ The Services have great leeway on the execution of these funds, and regularly use the RC to fill capability and capacity gaps throughout the year.

4. There are over 30 separate duty/legal statuses for RC members, but there is not enough space or volume in this thesis, so I simplified it down to discuss training and active duty statuses.

5. National Guard Bureau, ANGI 36-2001: *Management of Training and Operational Support within the Air National Guard*, Air National Guard Instruction (Washington DC: Air National Guard Personnel Directorate, October 19, 2009), 5.

6. Ibid., 5.

The one large red line in the congressional funding stream is the use of RC training funds for federal operations. Since congress specifically directed these funds for training the RC, using these funds for federal operations is termed an Anti-Deficiency Act violation. This “system check”, established by congress in USC Title 31, ensures the RC receives appropriate training time without the Services misusing training funds solely for operational missions.⁷ Adequate training time is critically important so the RC can be the operational reserve needed in today’s environment. Recent initiatives, however, have re-looked at this “red line” and now hypothesize operational support in a training status will actually increase operational readiness of the RC.

Constitutional and Legal Foundations

Article I, Section 8 of the US Constitution states the congress shall have the power:

To provide for calling forth the Militia to execute the Laws of the Union, suppress Insurrections and repel Invasions...[and] To provide for organizing, arming, and disciplining, the Militia, and for governing such Part of them as may be employed in the Service of the United States, reserving to the States respectively, the Appointment of the Officers, and the Authority of training the Militia according to the discipline prescribed by Congress;

This section gives congress the “power of the purse” with the RC adhering to the training standards prescribed by congress. Congress exercises the power of the purse through the authorization and appropriation bills that once signed by the president become law. Likewise, “check and balance” of the Anti-deficiency Act (Title 31) ensures the executive branch adheres to the authorization and appropriation bills/laws. These three laws combine

7. U.S. Government Accountability Office, “Antideficiency Act Background,” Government Accountability Office, <http://www.gao.gov/legal/lawresources/antideficiencybackground.html> (accessed February 18, 2015).

to identify funds for a given purpose, authorize their use for that purpose, and provide a “check and balance” to ensure funds are executed in accordance with the law. Specifically, the RCs each receive separate authorization and appropriation each fiscal year for OARIT purposes their personnel. Even though the Army Reserve, Air Force Reserve, Navy Reserve, and Marine Reserve are purely federal organizations (Title 10), their funding is for OARIT purposes only. Historically, OARIT funds used for operational purposes, become an Anti-deficiency Act violation.

Additionally, the Constitution dictates that the RC will adhere to AC performance standards. This better prepares the RC for easier integration into operational service, and saves time and money. Once federalized, the Constitution identifies the president as the commander-in-chief of the National Guard, but the president is always the commander-in-chief for the other RC forces because they always remain in a federal status.

The two primary United State Codes (USC) that govern the Total Force, are Title 10 and Title 32. Both derive their authorities from the Article I, Section 8 of the Constitution. Title 10 directs AC/RC organize, train, and equip authorities, while Title 32 provides additional direction on the National Guard. Organizing, training, and equipping the Total Force falls to the Services, per Title 10, while OARIT authorities reside with each RC.⁸ These authorities include funding to ensure the RCs are ready for federal operations when called on. Title 10 also lays out the basis for command authorities of Administrative Control (ADCON), Operational Control (OPCON), and Tactical Control (TACON).⁹ For the federal RCs, ADCON remains with their respective services while OPCON and TACON align with

8. Cornell University Law School, “U.S. Code: Title 10 - ARMED FORCES,” Cornell University Law School, <http://www.law.cornell.edu/uscode/text/10> (accessed October 2, 2014).

9. Ibid.

the higher command when performing operational missions. ADCON, OPCON, and TACON remain with the respective governor while the National Guard units/members remain in a non-federalized status. Once federalized, ADCON moves to the National Guard Bureau (NGB), and OPCON / TACON moves to the gaining operational command (see Figure 5).¹⁰

Title 32 outlines the role and authorities of the National Guard and has five main subsections: Organization; Personnel; Training; Service, Supply and Procurement; and Homeland Defense Activities.¹¹ National Guard personnel remain in non-federal status (Title 32) under the direction of their governor until called to federal status. Once federalized (Title 10), their commander-in-chief is the president.¹²

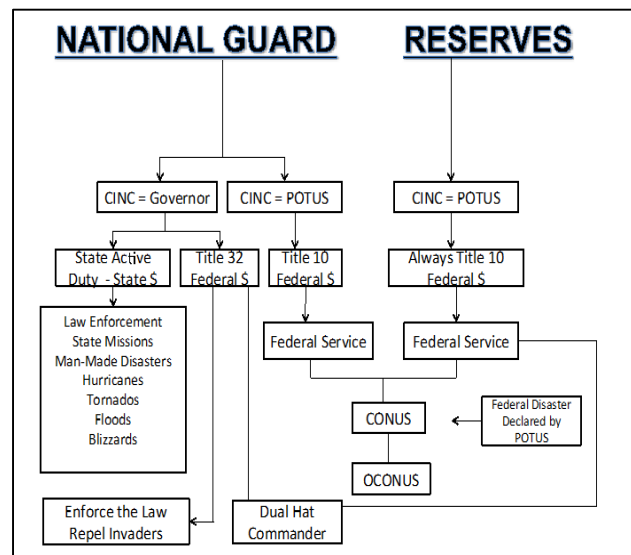


Figure 5: National Guard and Reserve Differences

DoD Policy Documents

The vast majority of DoD documents regarding RC utilization in a training status are Intelligence, Surveillance, and Reconnaissance (ISR) related. This does not mean that only the Defense Intelligence Community is the only mission area able to utilize RC

10. U.S. Department of Defense, Office of the Assistant Secretary of Defense Reserve Affairs Command Briefing, Briefing (Washington DC: Department of Defense, February 4, 2015), 47.

11. Cornell University Law School, "10 U.S. Code § 10102 - Purpose of Reserve Components," Cornell University Law School, <http://www.law.cornell.edu/uscode/text/10/10102> (accessed October 2, 2014).

12. U.S. Department of Defense, Office of the Assistant Secretary of Defense Reserve Affairs Command Briefing, Briefing (Washington DC: Department of Defense, February 4, 2015), 47.

units/members in a training status for federal operational support, but it does seem to indicate that this mission area has been working toward this goal for some time. Starting in 1995, the DoD IC started to see the benefits of AC/RC integration. A memorandum from the Deputy Secretary of Defense stated that a “greater, more effective utilization of the Reserve Intelligence force structure is essential to meet the needs of the military commander, particularly in a time of active force drawdown”.¹³ The memorandum goes on to identify the benefits not only to DoD, but also to the RC. The memo created the Joint Reserve Intelligence Program (JRIP) that created and managed the Joint Reserve Intelligence Centers (JRICs), and initiated several updates to DoD Instructions (DoDIs) and policy memorandums that govern AC/RC Intelligence integration.

In 2007, DoDI 3305.07 updated JRIP guidance, originally envisioned in the 1995 memo and a 2000 version of 3305.07. The program identified DoD policy to fully integrate the RCIE across the spectrum of DoD operations and duty statuses.¹⁴ The three biggest points are the listed below:

5.2.1 (USD(I) shall) Plan, execute, and integrate the JRIP as a Defense Intelligence enterprise throughout the Department of Defense as a model for DoD-wide reachback....

5.5.1 (The Heads of the DoD Components shall) Integrate RCIE into peacetime through wartime intelligence operations and missions, coincident with wartime readiness training, and properly address RC integration in the appropriate Combatant Commands’ Operations Plans, Contingency Plans, and Joint Intelligence Operations Centers....

5.7.1 (The Chairman of the Joint Chiefs of Staff shall) Integrate RCIE into peacetime through wartime intelligence operations and missions, coincident with wartime readiness training.¹⁵

13. U.S. Department of Defense, *Peacetime Use of the Reserve Component Intelligence Elements*, Memorandum (Washington DC: Department of Defense, January 5, 1995).

14. U.S. Department of Defense, *DoD Instruction 3305.7: Joint Reserve Intelligence Program (JRIP)* (Washington DC: Department of Defense, March 27, 2007).

15. *Ibid*, 4-7.

The instruction directs the Service Chiefs and the Chairman to fully integrate the RCIE into intelligence operations. It also directed the Under Secretary of Defense for Intelligence (USD(I)) to build the program as the model for DoD-wide reachback operations.

DoDI 3300.05 RCIE Management followed up DoDI 3305.07 on July 17, 2013. The instruction established policies and responsibilities to promote the effective use of Reserve Military Intelligence (RMI) capabilities.¹⁶ This is the first DoDI that specifically identifies the use of RC units/personnel utilizing training to support federal operations.¹⁷ It also states that USD(I) will coordinate with the Assistant Secretary for Legislative Affairs (ASD(LA)) to identify legislation that impedes the use of RMI to meet operational requirements during active and inactive duty periods. It also tasks the Combatant Commands (CCMDs), Combat Support Agencies (CSAs), NGB, and the Services to implement programs that rely on reachback and distributed capabilities to satisfy operational training requirements and get the RC into operations.

DoD Directive (DoDD) 1200.17, *Managing the Reserve Components as an Operational Force*, published October 29, 2008, starts to direct utilization of the RC as an operational force with strategic depth. It states:

Ensure that total force policies encourage optimum integration of AC and RC personnel to provide the most efficient training opportunities to all personnel, allow for shared use of resources, and provide the most operational benefits and mission capability.

Develop policies for managing the RCs as an operational force, which is a necessity in an era of persistent conflict and global engagement.¹⁸

16. U.S. Department of Defense, *DoD Instruction 3300.05: Reserve Component Intelligence Enterprise (RCIE) Management* (Washington DC: Department of Defense, July 17, 2013).

17. *Ibid.*, 6.

18. U.S. Department of Defense, *DoD Directive 1200.17: Managing the Reserve Components as an Operational Force*, (Washington DC: Department of Defense, July 17, 2013), 3.

Due to significant ARC changes directed in the 2005 BRAC process, the USAF invested large amounts of effort to identify all possible ways for the ARC to augment the AC. Air Force Instruction (AFI) 90-1001 *Responsibilities for Total Force Integration*, was published in an effort to facilitate the transition of ARC units from traditional flying missions to numerous non-flying missions. AFI 90-1001 identified operations incidental to training for ARC augmentation of the active force.

The operations incidental to training option allows the ARC to perform an operational mission while in a training status as long as the mission is not in the active kill chain, and that the primary purpose is to maintain wartime skills. If the use of this option moves beyond training, it becomes a purpose violation. ARC units transitioning to new missions were required, per AFI 90-1001, to submit a Total Force Integration Plan (I-Plan) Judge Advocate (JA) Worksheet to ensure their new mission met legal requirements. Of particular note, the Air National Guard (ANG) Cryptologic Support Site Total Force Integration Plan identified the upper limit for operations incidental to training as 24 training days.¹⁹ This was the first known legally reviewed and approved hard number that commanders could use to plan for operations incidental to training missions. The 15 remaining days are for other readiness requirements such as fitness testing, yearly physicals, and ancillary training.

A legal review performed by the Headquarters Air Force Operations and International Law Division in 2007 provides further legal backing that basic analysis does not have to be performed in a Title 10 status. The review answered a question regarding the use of civilians in the Air Force – Distributed Common Ground System (AF-DCGS) weapon system, but the

19. U.S. Department of the Air Force, *Total Force Integration Plan, Judge Advocate Review Worksheet: ANG Cryptologic Support Site Classic Associate (139 IS and 201 Intelligence Squadrons)* (Washington DC: U.S. Department of the Air Force, September 10, 2009), 8.

section below provides insight into an area where civilians operating under Title 5, or possibly RC members in a non-operational status, could perform analysis that does not involve imminent real-world harm to enemy personnel or equipment.

...Persons further removed from providing targeting for an immediate mission, who instead support the targeting function by collecting intelligence data, performing analysis, creating plans, or developing information for future missions, will not have the same degree of LOAC [Law of Armed Conflict] risk. When it comes time for execution others will review, reconsider, and make binding decisions prior to the execution of a planned activity (e.g. targeteers, commanders, and shooters) for this reason, the involvement of civilians in intelligence collection, analysis, and planning will be less objectionable.²⁰

In 2009, the National Security Agency (NSA) and NGB signed a memorandum of understanding (MOU) that further developed the operations incidental to training concept. It authorized National Guard units to work for NSA in a contributory support role. The MOU specifically looked at the use of the National Guard in a Title 32 training status. It states: “...the NSA/CSS and the NGB intend to further expand the mission support arrangements leveraging the NG in a Title 32 status to support strategic cryptologic requirements incidental to service required readiness training.”²¹

The next significant directive to come about was DoDI 3300.05, RCIE Management, in July 2013. The instruction identifies how DoD manages RC intelligence functions, and lays out significant direction to responsible organizations. Of particular note, it directs the integration of RCIE into the total force across the Defense Intelligence Enterprise to

20. U.S. Department of the Air Force, *Civilians in the Air Force Distributed Common Ground System (DCGS)*, Memorandum (Washington DC: U.S. Air Force Operations and International Law Division, November 29, 2007), 12.

21. National Guard Bureau and National Security Agency, *Memorandum of Understanding between the National Security Agency/National Security Service (NSA/CSS) and the National Guard Bureau (NGB) for National Guard (NG) Cryptologic Support to NSA/CSS* (Washington DC: NGB and NSA/CSS, June 9, 2009).

maximize the contribution across the full spectrum of DoD operations and to utilize training to provide operational support, where legal.

The next policy document, published April 29, 2014 is the *Implementation Plan for the Reserve Component Military Intelligence Strategic Plan*. The plan lays out a specific way ahead to ensure the RCIE is fully integrated with its AC counterparts. The plan's vision is to have an operationally engaged, seamlessly integrated, globally networked Total Force.²² Additionally, the RC will be operationally engaged, seamlessly, and postured to meet the full spectrum of operations.²³

The final ISR-specific guidance is the *Intelligence, Surveillance, and Reconnaissance Joint Force 2020 White Paper*, published September 11, 2014. The white paper provides the vision of how DoD must shape, grow, and integrate ISR capabilities to remain effective and relevant in the future.²⁴ It highlights that the joint ISR force must be an affordable Total Force that maximizes ISR architectures, leveraging reachback to technically proficient and operationally focused analysts worldwide.²⁵

The RC is a large, capable operational force that also provides strategic depth. The department has reassessed the RC's ability to augment the AC while in a training status, but only a few organizations have taken advantage of the recent policy changes. DoD needs to look beyond current augmentation options (e.g., mobilization) and incorporate training periods into the operational mix.

22. U.S. Department of Defense, *Implementation Plan for the Reserve Component Military Intelligence Strategic Plan*, Memorandum (Washington DC: Department of Defense, April 29, 2014), 2.

23. Ibid, 2.

24. U.S. Joint Chiefs of Staff, *Intelligence, Surveillance, and Reconnaissance Joint Force 2020 White Paper* (Washington DC: Joint Chiefs of Staff, September 11, 2014).

25. Ibid., 5.

Chapter 3: History of RC Utilization in support of Operations

“When we assumed the Soldier, we did not lay aside the Citizen.” — George Washington

Since World War II, the RC was the strategic reserve designed to augment the AC during major contingencies. The RC was involuntarily mobilized four times during the Cold War, which was an average of once per decade.¹ Due to the underutilization of the RC in Vietnam, military leaders purposefully linked the components together, so that future conflicts required RC mobilization. This change linked the Total Force, but kept the RC as a strategic reserve. RC units would train and the AC would execute the majority of federal operations. Since the end of the Cold War, the RC became an operational reserve regularly augmenting global operations. Since 1990, the RC was involuntary mobilized six times; an average of once every four years.² After Desert Storm, the US Air Force (USAF), in particular, started to utilize the RC to fill capacity gaps that arose during prolonged “no fly” zone operations.

The USAF kept the AC and Air Reserve Component (ARC) at the same readiness levels so the ARC easily rotated into operations, which reduced AC deployment tempo and provided the ARC real world experience. The increased use and investment in the ARC during the 1990s paid off on 9/11. The USAF quickly mobilized numerous ARC units in the minutes and hours after the 9/11 attacks providing critical capacity for DoD. Other Services utilized their RC in the 1990s but not to the same extent. This was due to the other Services

1. Congressional Research Service, *Reserve Component Personnel Issues: Questions and Answers*, (Washington DC: Government Printing Office, June 13, 2014), ii.

2. Ibid.

moving back to something closer to pre-Desert Shield operations tempo while the USAF maintained a much higher operations tempo; simultaneously sourcing three major operations.

The Defense Intelligence Community (IC) also started to nudge increased use of the RC in the 1990s, and built JRICs where RC units/members could utilize equipment and connectivity to maintain their wartime skills. It was a great success in that RC units/members could maintain proficiency, and allowed for RC augmentation of the Services, CSAs, and CCMDs. Because of the significant costs associated with equipment, connectivity, and secure facilities in the 1990s, the JRIP Office built only 28 JRICs nationwide, thus most RC intelligence units could not take full advantage of the program.

In 2005, the USAF reviewed the requisite duty status for ARC members to legally accomplish certain missions in an attempt to expand their use. The initial legal reviews focused on “kill chain” operations in the Remotely Piloted Aircraft (RPA) and associated AF-DCGS weapon systems. The USAF converted several ARC units to the RPA and AF-DCGS missions, and needed to ensure that ARC personnel were in the correct legal status. To execute overseas ISR operations, members had to be in an Active Duty for federal operations status. This covered the members legally during operations (e.g., LOAC).

In 2007, the USAF again looked at the utilization of the ARC to support federal operations, and specifically reviewed how training periods might be of use. The result was that ARC members could support federal operations outside of the “kill chain” for the primary purpose of training, but that operational benefit must be incidental to the training mission.³ Once training requirements were satisfied, operations became the primary purpose of the mission and it was no longer legal for the ARC to augment the AC in a training status.

3. U.S. Department of the Air Force, U.S. Air Force Instruction 90-1001: *Responsibilities for Total Force Integration* (Washington DC: U.S. Department of the Air Force, January 23, 2014), 29.

Legal Requirements for RC Utilization in a Training Status

The laws and policy documents identified provide the legal guidance that allows, and in fact advocates for, RC utilization in a training status. Even though many of the documents focus on the Defense IC, there is nothing unique about this mission area, so the guidance should apply to all mission areas. There are two requirements every mission area must satisfy before utilizing the RC to support operations in a training status.

The first legal requirement involves adherence to congressional law and intent. The literature review clearly establishes that using training funds to support federal operations is legal if the primary purpose is to maintain wartime skills, and consistent with the unit's formal training program.⁴ There can be an incidental benefit to federal operations, but it becomes an Anti-Deficiency Act violation once federal operations become the primary purpose (e.g., anything over 24 days per year) or the task is not part of the unit's mission.

The second issue involves the legality of personnel in a training status performing the federal operational mission. A legal review is required to ensure that personnel in a training status performing the task will not violate national or international law (e.g., LOAC) before final approval. For example, intelligence analysis not intended for immediate targeting and which will not cause a LOAC issue is authorized.⁵ Prior review by a Title 10 member before the product is used in a kinetic action is required. As the information gets closer to the "kill chain" the level of Title 10 oversight increases. Actively executing a mission that will cause death or destruction of enemy combatants and/or enemy equipment in the immediate future

4. Ibid.

5. U.S. Department of the Air Force, *Civilians in the Air Force Distributed Common Ground System (DCGS)*, Memorandum (Washington DC: U.S. Air Force Operations and International Law Division, November 29, 2007).¹²

cannot be performed in a training status.⁶ For example, flying a strike mission against an enemy position must be in a federal operational status, but members performing position maintenance on a communications satellite could perform that mission in a training status.

While there is no clearly defined law that states that RC federal operation support is allowed in a training status, numerous DoD documents provide a solid foundation for the legal use of the RC, and demonstrates that RC members can support activities while in a training status without violating legal restrictions.

Why this Option was Never Fully Investigated?

DoD has not fully utilized this option due to four possible reasons. The first is that the RC was historically a strategic reserve, so DoD never really relied on it for operational capacity. Secondly, limited experience with the RC may give pause to utilizing it except for major contingencies. The third reason is resource related (funding and personnel). Generally, DoD had enough AC resources to cover past contingencies so there was little initiative to utilize the RC. Finally, reachback operations are relatively new, so the nexus between reachback operations and RC support in a training status may not be clear.

Any one of these issues could be the primary reason why this capability has not been maximized, but the root cause is probably a combination of all four. When combined, it was easier for the AC to fill operational requirements. The reduction in manpower and funding, combined with the need to recapitalize equipment and maintain a robust operations tempo, should drive DoD to look for new ways to satisfy capability and capacity gaps.

6. Ibid., 12.

Chapter 4: RC Training/Operations Program

“The best way to use the RCs is to, in fact, use them.” — Reserve Forces Policy Board

This chapter describes the steps required to identify if a mission area will benefit from an RC Training/Operations Program (TOP), and the steps needed to implement the program. The steps are generic, but should provide enough information so leaders and portfolio managers can properly implement an effective program. The second half of the chapter will apply the TOP steps to the RCIE and demonstrate the tangible benefits of this program

To begin with, senior leaders must take ownership of the program. Even though many portfolio managers only view the AC portion of their portfolio as “theirs”, senior leadership must start to view the entire portfolio as “theirs” for Total Force integration to succeed. Likewise, creation of clear processes so everyone involved understands the plan and where they “fit”. Finally, there needs to be accountability throughout the community. Senior leaders, program managers, and unit leaders are accountable for their actions, inactions, successes, and failures.

RC Training/Operations Program (TOP) Roadmap

Step 1 requires the higher headquarters (HHQ) portfolio manager to view the operational environment and identify tasks within the mission area that they believe the RC could perform in a training status. If tasks are available, the manager evaluates the tasks to see if they also fulfill a federal operational requirement. The goal in step one is to identify possible tasks that could fulfill a training task for the RC and an operational requirement for the AC. If the manager decides that they do not have tasks that satisfy both requirements,

then this program probably does not fit their mission area and the process ends at step one.

On the other hand, if there are tasks that fulfill both objectives, then proceed to step two.

After it is determined that the mission area is suitable for RC support, step 2 involves a legal review. The review will evaluate the mission area to determine if it does in fact meet:

1. Primary purpose is training and it must be consistent with the unit's formalized training program ; and
2. Tasks must not be part of an immediate kill chain

If the review determines that the requirements cannot be met, then the mission is not a candidate for RC support. If approved, the next step is the task categorization phase.

In step 3 the portfolio manager reviews the tasks within the mission and categorizes each task into two time-related buckets. The first bucket is for time-sensitive and short-notice tasks that require completion within hours or days. The second bucket are for longer-term tasks. The categories allow the portfolio manager to assign each task based on completion requirements, and which type of unit (AC or RC) could probably best satisfy the task. RC units will generally be better at longer-term tasks, because they do not have large full-time organizations that can quickly complete bucket one tasks, while the AC has the full-time force to handle short-notice tasks. Categorizing each task will provide the manager with a "big picture" view of all the tasks within the overall mission area.

Next, the portfolio manager analyzes and estimates the amount of time required to complete each task. Some tasks may only need a few hours to complete while others may take several weeks. This time estimation step will not be perfect at the start, but continual feedback will assist in improving accuracy of these estimations. Identifying the man-hours required to complete each task will assist the Total Force in the assignment step.

Once properly binned, the portfolio manager and Total Force units meet in step 5 to build the master plan for the upcoming Fiscal Year (FY). Most time sensitive tasks would fall towards the AC units while the RC units would receive a greater portion of the long-term tasks. The RC could cover some short-term tasks that would coincide with the units' Annual Training period. Likewise, the AC forces should cover some long-term tasks. Managing task assignment to ensure each component receives the right amount of tasks across the entire mission area is fundamental to building a full spectrum plan that maximizes training opportunities for the Total Force. The assignment phase should happen no later than the second quarter of the current FY, because most RC training plans are built three to six months before the start of the next FY. The timing allows training managers to build the upcoming FY's training cycle around the assigned tasks.

Step 6 is the performance phase. Units start the performance phase based on the tasks assigned and associated completion date of each task. HHQ and unit program managers monitor completion of assigned tasks, and ensure respective customers receive the output.

The final step is feedback from every organization involved (HHQ, the units, and customers). HHQs provide feedback to the units on meeting performance standards. Units also provide feedback to HHQ managers on actual time to complete each task and possible improvements to future tasks. Customer feedback is also beneficial. Customers may want the product tweaked, so they can better accomplish their mission; but without this feedback the portfolio manager and units may never know that the customer preferences changed. As with any program, open and honest feedback will make or break it, which directly ties into program accountability.

Accountability

Everyone involved with the program is accountable for its success or failure. Senior leaders are accountable for direction and oversight of the program; portfolio managers are accountable for the categorization and assignment of tasks, and daily management; and unit leaders are accountable for task and quality performance completion. All of the leaders are accountable for feedback to continuously improve the program. The portfolio managers, in hopes of building a better overall program, recognize success and mentor those falling short. Ultimate accountability resides with senior mission area leaders. As stated before, they must view the entire portfolio as “theirs” and ensure everyone is maximizing the program. It would be misleading to request additional funds for a mission shortfall that an RC Training/Operations Program could fill.

Deployment Demands versus TOP Support

One potential complicating factor in executing the program is how best to resolve the program with deployment demands. The Services have two possible options to satisfy operational demand. The first is to assign the RC units to a specific area of operations (AOR), and then rotate those units only to that AOR. This rotation can be either in a deployed status or in reachback, depending on the operational requirement.

The second possibility is to maintain AOR alignment, but rotate all RC units through the contingency at hand. This will provide a larger pool of units to pull from, which will reduce overall personnel tempo. The downside to rotating units through a contingency in another AOR is that there will be a drop in support to the habitually connected command/AOR. There is ample time to plan a stopgap measure for the temporarily “losing” RC support, since RC mobilizations are planned well in advance. One option is to call for

volunteers from the IMA program to augment the command/AOR on extended orders during the RC unit deployment. A second option is to shift the tasks to another unit, and provide it with additional days to work the tasks. In the end, there are plenty of options available, so there should be minimal drop in support when RC units need to deploy.

RC Training/Operations Program Application – RCIE

This section will take the RC Training/Operations Program and apply it directly to the RCIE. The goal is to demonstrate through applying the program that RC utilization while in a training status can benefit DoD. It will also provide a brief overview of the RCIE for better overall understanding of TOP application.

The RCIE is a robust community with 16,199 billets spread across the Services in the form of units and IMAs. RCIE personnel are assigned to every CCMD and Intelligence-related CSA. The Services currently assign 4,849 billets to CCMDs and CSAs with the remainder Service assigned (see Figure 6).¹

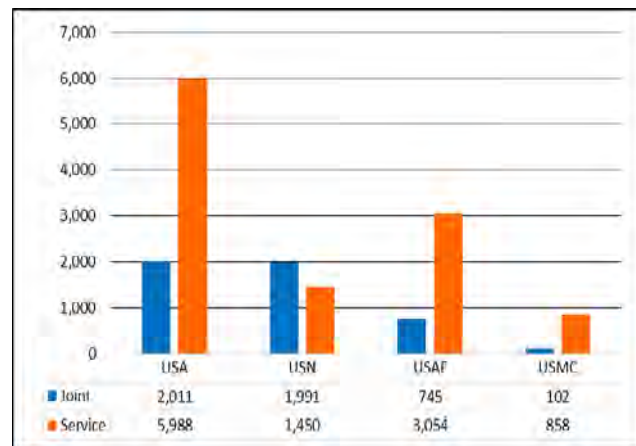


Figure 6: Joint and Service Assigned RCIE Manpower

RCIE Training Capacity to Support Federal Operations

For illustrative purposes, the case study will use the USAF codified number of 24 training days allowed to perform federal operational support per fiscal year to deduce

1. U.S. Department of Defense, *Reserve Military Intelligence Manpower Requirements Review – Summary Report* (Washington DC: Department of Defense, 23 January 2014).

capability and capacity across the RCIE. As stated earlier, the RCIE is comprised of 16,199 authorizations with most of the billets Service-assigned, but they can and do support the joint community directly or through fulfilling component command requirements.

There are up to 388,776 training days per year to support federal operations (see Figure 7). Dividing that number by 360 paydays yields 1,080 man-years, which provide an “apples-to-apples” comparison to AC manpower. Another way to compare the total capability of the RCIE is to turn the 388,776 training days

	Option #1	Option #2
RCIE Billets	16,199	16,199
Training Days / FY	24	24
FY Totals	388,776	388,776
Pay Days	360	360
Weekends	N/A	104
Federal Holidays	N/A	10
Leave	N/A	30
Totals	360	216
Man-Year Totals	1,080	1,800

Figure 7: RCIE Man-Day and Man-Year Options

into real work years by subtracting out the 104 weekend days, 10 federal holidays, and 30 days of authorized leave for every AC member. This leaves the AC member with 216 actual workdays per year. Using this total workday number yields 1,800 man-years.

A couple of caveats to the numbers above that shrink the total number to some degree. Not every billet is filled and even if a billet is filled, it may be by a member who is in the training pipeline, so they would not be able to assist in production until fully trained. Based on FY12 attrition numbers, the estimated 17.6 percent of the billets would be non-qualified personnel/empty billets.² Additionally, some missions do not mesh well with the program, so based on a review of the RCIE missions, an initial estimate of ten percent would not participate in the program. The number would change from year-to-year depending on

2. Congressional Research Service, *Recruiting and Retention: An Overview of FY2011 and FY2012 Results for Active and Reserve Component Enlisted Personnel*, (Washington DC: Government Printing Office, May 10, 2013), 13.

operations tempo and associated missions, and the number will probably drop as experience with the program grows. Combining these two numbers and rounding to the nearest whole number estimates 28 percent of the RCIE would not contribute to the program at this time. This number referred to later in the findings to provide a picture of the program's overall benefits. With a basic understanding of the RCIE, the application of the roadmap to the RCIE will demonstrate how Defense IC portfolio managers can build effective strength that will increase their capacity for minimal cost.

Identify Legal Restrictions

To begin with, Priority Intelligence Requirements (PIRs) focus on the enemy / adversary and the operational environment, and drive intelligence collection and production requirements.³ In step 1, the portfolio managers from each CCMD, CSA, and Service review their PIRs and associated production requirements to see if RCIE personnel can satisfy any of the tasks. Since some commands are currently utilizing RCIE support, the answer from every command and CSA is most likely, yes. A quick review of Joint Publication 2-0 reveals the basic intelligence production categories:

- Warning intelligence
- Current intelligence
- General military intelligence
- Target intelligence
- Scientific and technical intelligence
- Counterintelligence
- Estimative intelligence
- Identity intelligence⁴

3. U.S. Joint Chiefs of Staff, *Joint Operations*, Joint Publication 3-0, (Washington DC: Joint Chiefs of Staff, August 11, 2011), III-11.

4. U.S. Joint Chiefs of Staff, *Joint Intelligence*, Joint Publication 2-0, (Washington DC: Joint Chiefs of Staff, October 22, 2013), I-18.

The RCIE could assist in all production areas, but the ones that may yield the largest benefit are general military, targeting, estimative, and identity intelligence. RCIE units/members could contribute in each area by building the foundational intelligence that each area requires to generate useable intelligence. Scientific and technical intelligence could also benefit from RCIE support, but it would require specialized recruiting, training, and retention of personnel with this unique skill set. RC units could contribute to warning intelligence, but more in the area of building the indicators and long-term predictive warning. The areas where long dwell on a problem would greatly benefit the level and quality of intelligence while not always requiring short-term suspenses are ideally suited for the RCIE. With many RC members remaining in one unit for a majority of their careers, assignment of tasks that require deep analysis over an extended period makes sense.

The second step takes the initial list of tasks that the managers believe the RCIE can perform to the legal division in the respective HHQ for a formal legal review to ensure the tasks meet the legal requirements.

- Primary purpose is training and it must be consistent with the unit's formalized training program; and
- Tasks must not be part of an immediate kill chain

Once again, some commands are currently utilizing the RCIE, so most reviews should approve RCIE operational support. An up-front legal review will provide a higher level of comfort that the program is legally sufficient.

Once the legal reviews are complete, the portfolio managers now get to work on step 3, categorizing their production requirements into the two time suspense buckets. This will take some time, and not every categorization will be exact, but the managers must start the

process. As the program matures, categorization improvements will happen and follow on years will benefit from the upfront work.

Figure 8 illustrates how portfolio managers will categorize, for example, Targeting Intelligence tasks. After categorization is complete, the product owner estimates the time required to complete each product in the man-hour estimation phase.

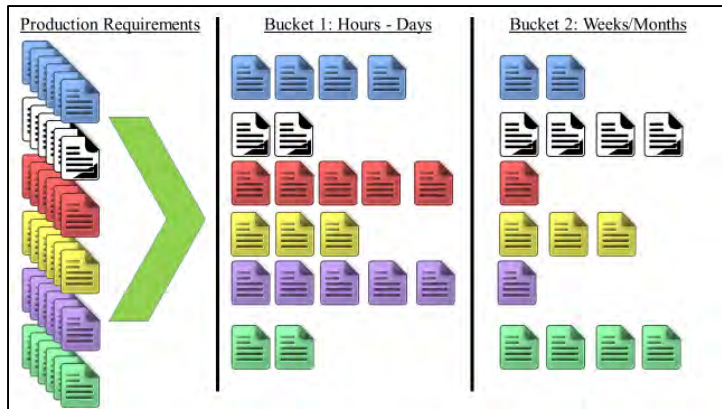


Figure 8: Production Categorization by Time

Figure 9 takes the categorization from Figure 8 and demonstrates managers binning the tasks based on estimated man-hours to complete each task. Each task is unique with its own unique set of variables, but initial

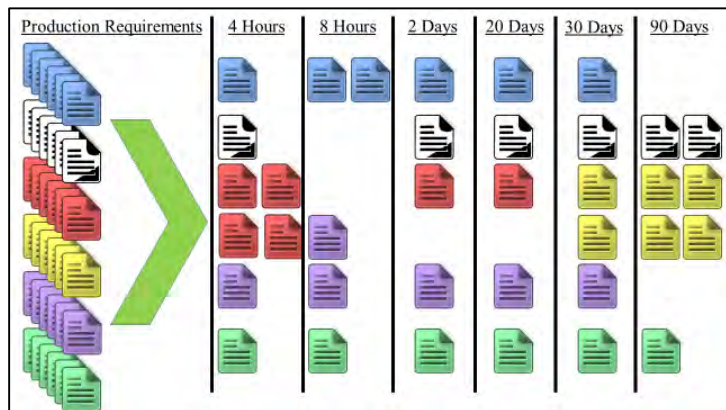


Figure 9: Production Categorization by Man-Hour Requirement

estimates will probably be rather accurate because the Defense IC has decades of experience performing intelligence production. This step actually turns the requirement into a total number of hours/days required, so the owner and supporting unit both understand what it will take to complete the project. For example, a targeting folder may require four days each to complete so one member could build six folders per year. Steps 3 and 4 provide data not only for the RC, but for AC units as well. Understanding the task requirements provides

DoD a better understanding of unit and Total Force mission capacity. This data is critical for planning and execution across the full spectrum of operations.

This step should include both AC and RC units since this step will assign all production requirements to the units for the FY. Generally, AC units work more time sensitive tasks while RC units would handle longer-term projects that would easily fit into their training schedule. The AC units would generally produce more products since all of the unit personnel are full-time. The tasks would be identified with detailed product instructions to include work hour data requirements, and the suspense for the final product. Since the Services retain most of the RCIE capacity, the Services need to review their production requirements, and offer up any excess capacity to the CCMDs and CSAs. There may not be any excess capacity, but not maximizing utilization would hinder overall IC production.

The assignment meeting should take into account the training program timelines most RC units follow and meet in the February to April time as previously mentioned. This will allow the unit training managers

Production Assignments	QTR 1	QTR 2	QTR 3	QTR 4
RC Unit #1				
RC Unit #2				
RC Unit #3				
AC Unit #1				
AC Unit #2				
AC Unit #3				

Figure 10: Total Force Production Assignment

enough time to build the upcoming FY training schedule around the assigned tasks. Waiting too late in the FY to lock in unit tasks will potentially result in the first few UTA weekends of the new FY not being as effective as desired. Table 6 provides an illustrative example of task assignment based on the data in Tables 4 and 5.

Units begin to work tasks based on their assignments in step 6, and submit completed products to the portfolio managers in the agreed upon timelines. Some products may require a quality check by a member in a federal status (i.e., Title 10) prior to dissemination. An active duty member at the supported organization (e.g., Defense Intelligence Agency) could accomplish this, or an RC member could accomplish this task on an MPA day at the supported organization or the unit that produced the product. Some products would need this check every time they are completed while some should only require a quality check if they were actually used in kill chain operations (e.g., targeting products). Quality checks would reduce to spot checks once portfolio managers were comfortable that units are meeting performance standards; however, the supported organization would need to review the quality control procedures with their legal before moving to spot checks.

Although feedback is Step 7, it must be a continuous process so the portfolio managers and production units can debrief on all aspects of the tasking and final product. What could be improved in the process? Were the estimated man-hours accurate? Is the product in the correct format? Without this step, performance will suffer, communication will decrease, and refinement of the required man-hours will never happen.

All of these steps would happen at the CCMD, Service Components, and CSAs to ensure that maximum Total Force effort would happen throughout DoD, as there are units/members assigned to every organization and echelon, and they need to be tasked in a holistic process. Currently, there are a few initiatives utilizing RCIE units/members, but maximizing this program requires a whole-of-community approach. Every DoD intelligence organization and RCIE unit/member must be included in this effort to achieve the qualitative and quantitative benefits identified in the next chapter.

Chapter 5: Findings

“If we’re going to continue to be the best, we need to be open to the future and open to change.”— Secretary of Defense Ashton Carter

There are qualitative and quantitative benefits in utilizing the RC Training/Operations Program. The RC has transitioned from the strategic to an operational reserve with tremendous benefits for the Total Force. Senior civilian and uniformed leaders have stated publically that DoD must maintain the significant investment in the operational RC and not return it to a strategic posture. Specifically in regards to the RCIE application, there is a threefold qualitative benefit to implementing the program:

- Reduce AC stress by adding RCIE capacity
- Increase RCIE readiness through regular skills training on real world data
- Increase morale across the Total Force

The ability to achieve these benefits through the regular utilization of the RCIE during training periods at home station is significant. The Reserve Forces Policy Board’s (RFPB) February 2014 report to the Secretary of Defense backs up the benefits of regular utilization of the RC. As stated in the RCIE Implementation Plan, “experience has demonstrated that conducting operational intelligence support is the most effective means of hands-on training to attract, retain, and motivate RCIE professionals.”¹

The RFPB’s February 2014 report looked into the benefits and costs associated with maintaining an operational Reserve. The board stated that the best way to use the RC was to use it operationally and avoid the tendency to move it back to a strategic force.² Today the

1. U.S. Department of Defense, *Implementation Plan for the Reserve Component Military Intelligence Strategic Plan*, Memorandum (Washington DC: Department of Defense, April, 29 2014), 1.

2. U.S. Department of Defense, *Report of the Reserve Forces Policy Board on Reserve Component Use, Balance, Cost and Savings: A Response to Questions from the Secretary of Defense*, Report (Washington DC: Department of Defense, February 11 2014), 6.

RC accounts for approximately 38 percent of the Total Force for nine percent of the total budget.³ This is a tremendous return on investment, and to maintain the investment, the board recommended using the RC to fulfill peacetime engagements and contingencies at home and abroad.⁴ The board highlighted the benefits of increased use of the RC:

- Maintaining experience levels, skills, and readiness
- Free up AC force to ensure their availability to respond to no-notice contingency war fighting requirements
- Reducing AC deployment tempo and aids in the preservation of an all-volunteer force⁵

The board primarily looked at rotational RC support, so units would have a spin up period followed by a deployment period. By instituting the RC Training/Operations Program, RCIE units would always be in a higher state of readiness because they would be performing operational support on a regular basis, fully understand the latest tactics, techniques, and procedures (TTPs), and be in daily, direct contact with the supported command. All of these combine to build a better RC that can quickly and easily transition into a contingency or planned operation with little to no spin-up time required. If units can maintain a habitual relationship with an organization/AOR, then DoD will quickly build uniformed subject matter experts (SME). With attrition numbers low RC-wide (FY12: 17.6 percent), the program would create SMEs that normally remain in one unit for their career.⁶ This provides DoD with a repository of highly skilled units/members that maintain their skills and expertise throughout their military career. This expertise is the strategic depth that is also required from the RC if/when needed.

3. Ibid, 21.

4. Ibid, 13.

5. Ibid.

6. Congressional Research Service, *Recruiting and Retention: An Overview of FY2011 and FY2012 Results for Active and Reserve Component Enlisted Personnel*, (Washington DC: Government Printing Office, May 10, 2013), 13.

The quantitative benefits of implementing the program are also threefold. The first is that DoD could grow, effective strength versus growing end strength by accessing the RCIE. The available manpower ranges from 1,080 – 1,800 depending on man-year calculations (see Figure 11). Since RC personnel do not receive pay for leave, federal holidays, or days off, they essentially perform

	Option #1	Option #2
RCIE Billets	16,199	16,199
Training Days / FY	24	24
FY Training Day Totals	388,776	388,776
Pay Days	360	360
Weekends	N/A	104
Federal Holidays	N/A	10
Leave	N/A	30
Totals	360	216
Man-Year Totals	1,080	1,800
Non-Participating (28%)	302	504
Overhead (30%)	324	540
Totals	1,102	1,836
AC Cost / FY (Enlisted)	\$85,880	\$85,880
FY Cost Realization	+\$94,599,568	+\$157,665,947
FYDP Cost Realization	+\$472,997,841	+\$788,329,735

Figure 11: RCIE TOP Cost Realization

piecework based on the number of tasks completed in the 24 days allotted. Realistically, the second man-year calculation is more realistic to use in this instance. This is a substantial increase in capacity especially if the AC had to create these additional billets.

This benefit continues to grow when a 30 percent overhead cost is added to the man-year range mentioned above. This overhead estimate covers the leadership, administration, and information technology support/maintenance required for the analysts to perform their mission. When combined, the total man-years range from 1,404 - 2,340 to equal the same capability on active duty. Based on the FY 14 AC manpower cost figures of \$85,880 per active duty member, and man-year calculation options, Figure 11 identifies the cost savings by executing the program.⁷ The Future Years Defense Program (FYDP) cost realization would range from \$472 to \$788 million, which would be a significant savings for DoD.

7. National Commission of the Structure of the Air Force, *Report to the President and Congress of the United States* (Washington DC: National Commission of the Structure of the Air Force, January 30, 2014), 36.

The second quantitative benefit is the ability to maintain or even increase capacity during the drawdown by accessing 1,800 man-years worth of intelligence capacity. These man-years are already funded in each of the RCs budget, so through this program, DoD is gaining access to fully funded, “at rest” capacity; essentially growing its effective capacity. Increasing effective strength using the program is significant, but the program also provides DoD with an unmatched surge capability when required.

The final quantitative benefit is that DoD would have ready access to the full surge capacity of the RCIE when required. In today’s fast-paced operations, near instantaneous access to the entire fully trained, highly ready RCIE is a significant advantage. Taken together, the qualitative and quantitative benefits clearly demonstrate that implementing the RC Training/Operations Program makes sense, and provides significant gains in effective strength while not growing end strength.

RCIE Limiting Factor

The main limiting factor to maximizing RCIE utilization is the lack of classified network connectivity at some units. Planning, programming, and budgeting for proper connectivity for every RCIE unit is a challenge during the current budget crunch, but this upfront investment would pay for itself through DoD gaining access to the “at rest” capacity resident in the non-connected units. An RC unit without connectivity cannot contribute during steady state operations, and requires significant training prior to deployment. Likewise, the unit must forward deploy to support operations since it is not connected. This drives a travel bill in addition to a higher personnel tempo bill, due to deployment policies. Not being connected induces its own burdens to the AC through the additional training

required for every unit activation. With home station connectivity, units could support operations, maintain a higher state of readiness, and contribute to steady state operations.

Even though it would be an up-front cost for DoD, a newly connected unit would “pay” for the installation costs in approximately 2.25 years (see Figure 12).⁸ The example in Figure 12 uses a generic unit with 100 enlisted analysts which is an overall lower cost versus utilizing officers in analytical production (FY15 officer man-day cost approximately \$434 versus \$229 for enlisted personnel).⁹ The

Analysts	100
Training Days / FY	24
FY Totals	2,400
MPA Day Cost (Enlisted)	\$229
FY Totals	\$549,600
FYDP Totals	\$2,748,000
10 Year Totals	\$5,496,000
Equipment Install (approx)	\$900,000
Reoccurring Costs / FY (approx)	\$150,000
FYDP Costs	\$1,500,000
10 Year Costs	\$2,250,000
FYDP Cost/Benefit	+\$1,248,000
10 Year Cost/Benefit	+\$3,246,000

Figure 12: Production Benefit vs Connectivity Costs

\$900,000 provides classified network connectivity, servers, and analyst systems. The yearly costs to maintain the equipment and connectivity is approximately \$150,000, so the unit would “cover” yearly costs the first quarter of the FY and operate in “positive” territory the remainder of the year.¹⁰

By investing in connectivity, DoD gains access to a significant capability especially when compared to not utilizing the unit at all, or sending it in Temporary Duty (TDY) status to augment the AC. The notional unit above would generate 2,400 days’ worth of production per FY, which saves DoD approximately \$549,000 in MILPERS funding, if DoD were to

8. National Guard Bureau, *Intelligence Unit Connectivity Costs*, Electronic Memorandum (Washington DC: Air National Guard Intelligence Surveillance, and Reconnaissance Directorate, February 4, 2015).

9. Ibid.

10. Ibid.

create the same capacity in the AC. Since the initial installation is a one-time expense, the “interest” gained in the investment only grows in the out years.

Another benefit is that RCIE units will be significantly more ready to support contingency operations once connected, because it now can maintain critical wartime skills at home station. This translates into minimal spin-up time, which saves money and provides an almost immediate surge capability. Moreover, DoD can utilize the unit beyond just the 24 training periods each year through the use of MPA Day volunteers and partial mobilization if/when needed. Connecting the units opens up numerous opportunities for DoD to increase RCIE utilization for little cost.

One temporary option, while DoD budgets for the connectivity, is to physically mail the data and finished intelligence products between the portfolio manager and the non-connected units. With some non-time sensitive requirements, the commands could securely mail the raw data to the units, and the units could return the finished products very inexpensively. This option is a way to start utilizing the non-connected RCIE units while awaiting funding. This temporary option would not be practical during contingencies due to the time lag involved with physically shipping data and products, but is a way to start these units down a contributory path.

Once instituted, gaining access to the RCIE “at rest” capacity will reap significant benefits across DoD. Turning this “at rest” capacity into effective strength gains is very inexpensive and easily within the department’s grasp.

Chapter 6: Recommendations and Conclusion

“You can’t surge trust.” — General Anthony Zinni

The goal of this thesis was to demonstrate that DoD could increase its effective strength while not increasing end strength through the use of RC training periods. The laws and policies allow and advocate utilizing the RC to augment operations while in a training status as long as training is the primary purpose, and the tasks are not in the immediate kill chain. Growing effective strength without growing end strength, along with increasing RC readiness are the most evident benefits of this program. The application of the RC Training/Operations Program to the RCIE also proves that DoD would realize \$788 million worth of AC analytical capacity across the FYDP by allowing RCIE units/members to augment operations during their training periods. Adding the RC to operations will greatly improve morale not only for the RC, but also for the AC because this will lift some of the operational burden from their shoulders.

If this solution is to have merit, then there must be senior leader direction and oversight. In regards to the case study, USD(I) must actively lead and maintain emphasis on fully integrating the Reserve Component’s “at rest” capacity. The use of RC forces to support federal operations while in a training status, to include the maximum number of days; currently identified as 24 by the USAF must be clarified. Without direction, few will step up and implement the program in their mission area. Continued senior leader involvement to ensure the program does not stagnate or “die on the vine” is critical. Additionally, headquarters and unit level leadership is required. Clear, concise guidance transmitted from senior leaders down through the CCMD, CSA, and Service headquarters to

the RC so everyone understands the implementation waypoints and goals of the program is vital. Likewise, honest and open communication and feedback must flow up and down the chain, so instituting best practices and eliminating obstacles become second nature.

The DoD can use the RCIE as the test case for the RC Training/Operations Program. Total Force integration is the goal of USD(I)'s *Reserve Component Military Intelligence Strategic Plan*, so charging USD(I) with leading the effort makes sense. If the test case is successful, then DoD can identify other mission areas to integrate and grow effective strength while not growing end strength. For minimal cost, DoD can integrate the RC into operations thereby doing more as it draws down; something rarely seen and instinctively contradictory.

This thesis did not address many other issues that surround the topic. Future researchers could move this area forward through analysis of the items below. The ability to answer them will make the program more effective, efficient, and mission focused.

One area that needs further research is how best to present reachback capabilities so that they align with other DoD capabilities. Reachback capabilities need to be aligned so senior leaders and planners can make an "apple-to-apples" comparison. For example, the USAF has built sortie generation rates for aviation squadrons, so they know how many sorties every squadron can produce over a period (eg, 90-days), but there are no similar rate data for many reachback missions. Reachback mission capabilities and capacity metrics need closely to resemble other mission sets' metrics for use in planning and execution.

If DoD plans to increase the use of the RC in daily operations, then it needs to review the training requirements for each mission area to ensure proper resourcing and development of standardized training plans for all RC units' personnel. Standardized training along with reoccurring evaluation are critical to ensure the Total Force maintains one standard. Due to

the pace of today's operations, the supported command cannot wait for supporting units to become proficient in the mission. Units must adhere to a common set of standards agreed upon by the community, so the Services can train members, and all organizations (Services, CCDMs, and CSAs) can maintain a common set of standards.

Ideally, future research will assist in refining the use of RC training periods for federal operational support across DoD. Further exploration and consideration of capability, capacity, and training will enhance DoD operations while mitigating risk to mission.

This page intentionally left blank

Bibliography

- American Enterprise Institute. "Defense Spending 101." American Enterprise Institute. <http://www.aei.org/publication/defense-spending-101/> (accessed December 9, 2014).
- Congressional Research Service. *Recruiting and Retention: An Overview of FY2011 and FY2012 Results for Active and Reserve Component Enlisted Personnel*. Washington DC: Government Printing Office, May 10, 2013.
- . *Reserve Component Personnel Issues: Questions and Answers*. Washington DC: Government Printing Office, June 13, 2014.
- Cornell University Law School. "U.S. Code: Title 10 - ARMED FORCES." Cornell University Law School. <http://www.law.cornell.edu/uscode/text/10> (accessed October 2, 2014).
- . "U.S. Code: Title 32 - NATIONAL GUARD." Cornell University Law School. <http://www.law.cornell.edu/uscode/text/32> (accessed October 2, 2014).
- . "U.S. Code: Title 50 - WAR AND NATIONAL DEFENSE." Cornell University Law School. <http://www.law.cornell.edu/uscode/text/50> (accessed October 2, 2014).
- . "10 U.S. Code § 10102 - Purpose of Reserve Components." Cornell University Law School. <http://www.law.cornell.edu/uscode/text/10/10102> (accessed October 2, 2014).
- Harrison, Todd. *Analysis of the FY 2015 Defense Budget*. Washington DC: Center for Strategic and Budgetary Assessments, September 4, 2014.
- Lockheed Martin Corporation. "HOW MUCH DOES THE F-35 COST? Producing, Operating and Supporting a 5th Generation Fighter." Lockheed Martin Corporation. <https://www.f35.com/about/fast-facts/cost> (accessed January 14, 2015).
- Matthews, Dylan. "Defense Spending in the U.S., in Four Charts." Washington Post. <http://www.washingtonpost.com/blogs/wonkblog/wp/2012/08/28/defense-spending-in-the-u-s-in-four-charts/> (accessed October 2, 2014).
- National Commission of the Structure of the Air Force. *Report to the President and Congress of the United States*. Washington DC: National Commission of the Structure of the Air Force, January 30, 2014.
- National Guard Bureau. *ANGI 36-2001: Management of Training and Operational Support within the Air National Guard*. Air National Guard Instruction. Washington DC: Air National Guard Personnel Directorate, October 19, 2009.

- . *NGB/A2 Operating Instruction 10-1: Air National Guard Distributed Common Ground System Personnel Activation from Title 32 USC 502 to Title 10 USC 12301(d) and 12302(d) Status*. Washington DC: Air National Guard Intelligence, Surveillance, and Reconnaissance Directorate, September 30, 2011.
- . *NGB/A2 Operating Instruction 10-2: Air National Guard Remotely Piloted Aircraft Personnel Activation from Title 32 USC 502 to Title 10 USC 12301(d) and 12302(d) Status*. Washington DC: Air National Guard Intelligence, Surveillance, and Reconnaissance Directorate, September 30, 2011.
- . *Federated Intelligence Program Overview*. Briefing. Washington DC: Army National Guard Intelligence Directorate, December 10, 2014.
- . *Intelligence Unit Connectivity Costs*. Electronic Memorandum. Washington DC: Air National Guard Intelligence Surveillance, and Reconnaissance Directorate, February 4, 2015.
- National Guard Bureau and National Security Agency. *Memorandum of Understanding between the National Security Agency/National Security Service (NSA/CSS) and the National Guard Bureau (NGB) for National Guard (NG) Cryptologic Support to NSA/CSS*. Washington DC: NGB and NSA/CSS, June 9, 2009.
- Office of the Secretary of Defense. *Report to Congress on Unit Cost and Readiness for the Active and Reserve Components of the Armed Forces*. Washington DC: Office of the Secretary of Defense, December 20, 2013.
- . *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense*. Pamphlet. Washington DC: Office of the Secretary of Defense, January 5, 2012.
- Osborn, Kris. “Air Force implements ISR recommendations.” DoD Buzz. <http://www.dodbuzz.com/2013/04/18/air-force-implements-isr-recommendations/> (accessed January 28, 2015).
- Stevens, Steve G. “Maximizing Reserve Component Intelligence: Progress, Problems, and Proposals.” Master’s Thesis, U.S. Army War College, 2014.
- U.S. Department of the Air Force, *Civilians in the Air Force Distributed Common Ground System (DCGS)*. Memorandum, Washington DC: U.S. Air Force Operations and International Law Division, November 29, 2007.
- . “F-16 Fighting Falcon Fact Sheet.” Air Force Link. <http://www.af.mil/AboutUs/FactSheets/Display/tabid/224/Article/104505/f-16-fighting-falcon.aspx> (accessed November 5, 2014).

- . *Total Force Integration Plan, Judge Advocate Review Worksheet: ANG Cryptologic Support Site Classic Associate (139 IS and 201 Intelligence Squadrons)*. Washington DC: U.S. Department of the Air Force, September 10, 2009.
- . *U.S. Air Force Instruction 14-201: Intelligence Production and Applications*. Washington DC: U.S. Department of the Air Force, November 29, 2007.
- . *U.S. Air Force Instruction 90-1001: Responsibilities for Total Force Integration*. Washington DC: U.S. Department of the Air Force, January 23, 2014.
- U.S. Department of Defense. *Active Duty Military Strength Report for December 31, 2014*. Report. Washington DC: Defense Manpower Data Center, December 31, 2014.
- . *Defense Budget Priorities and Choices*. Report. Washington DC: Department of Defense, January 2012.
- . *Department of Defense Selected Reserves by Rank/Grade: December 31, 2014*. Report. Washington DC: Defense Manpower Data Center, December 31, 2014.
- . *DoD Instruction 3000.06: Combat Support Agencies*. Washington DC: Department of Defense, April 15, 2010.
- . *DoD Instruction O-3115.07: Signals Intelligence (SIGINT)*. Washington DC: Department of Defense, November 19, 2010.
- . *DoD Instruction 3300.05: Reserve Component Intelligence Enterprise (RCIE) Management*. Washington DC: Department of Defense, July 17, 2013.
- . *DoD Instruction 3305.7: Joint Reserve Intelligence Program (JRIP)*. Washington DC: Department of Defense, March 27, 2007.
- . *DoD Instruction 3305.8: Management and Administration of the Joint Reserve Intelligence Program (JRIP)*. Washington DC: Department of Defense, April 11, 2001.
- . *DoD Instruction 5100.01: Functions of the Department of Defense and Its Major Components*. Washington DC: Department of Defense, December 21, 2010.
- . *DoD Instruction 5100.20: National Security Agency/Central Security Service (NSA/CSS)*. Washington DC: Department of Defense, January 26, 2010.
- . *DoD Instruction 5143.01: Under Secretary of Defense for Intelligence (USD(I))*. Washington DC: Department of Defense, October 24, 2014.
- . *Estimated Impacts of Sequestration-Level Funding – Fiscal Year 2015 Budget Request*. Report. Washington DC: Department of Defense, April 3, 2014.

- . *DoD Instruction 5205.12: Military Intelligence Program (MIP)*. Washington DC: Department of Defense, November 14, 2008.
- . *DoD Instruction 5240.01: DoD Intelligence Activities*. Washington DC: Department of Defense, August 27, 2007.
- . “FY15 Budget Preview.” U.S. Department of Defense. <http://www.defense.gov/Speeches/Speech.aspx?SpeechID=1831> (accessed January 14, 2015).
- . *Implementation Plan for the Reserve Component Military Intelligence Strategic Plan*. Memorandum. Washington DC: Department of Defense, April, 29 2014.
- . “Mobilization Information and Resources Guide.” Pamphlet. Department of Defense. <http://ra.defense.gov/Portals/56/Documents/sections.pdf> (accessed January 8, 2015).
- . *Office of the Assistant Secretary of Defense Reserve Affairs Command Briefing*. Briefing. Washington DC: Department of Defense, February 4, 2015.
- . *Peacetime Use of the Reserve Component Intelligence Elements*. Memorandum. Washington DC: Department of Defense, January 5, 1995.
- . *Report of the Reserve Forces Policy Board on Reserve Component Use, Balance, Cost and Savings: A Response to Questions from the Secretary of Defense*. Report. Washington DC: Department of Defense, February 11, 2014.
- . *Reserve Intelligence Integration Office: Council of O6’s*. Briefing. Washington DC: Department of Defense, November 22, 2013.
- . *Reserve Military Intelligence Manpower Requirements Review – Summary Report*. Report. Washington DC: Department of Defense, January 23, 2014.
- . *Unit Cost and Readiness of Active and Reserve Components of the Armed Forces: Report to the Congress*. Washington DC: Department of Defense. December 20, 2013.
- U.S. Government Accountability Office. “Antideficiency Act Background.” Government Accountability Office. <http://www.gao.gov/legal/lawresources/antideficiencybackground.html> (accessed February 18, 2015).
- U.S. Joint Chiefs of Staff. *Capstone Concept for Joint Operations: Joint Force 2020*. Washington DC: Joint Chiefs of Staff, September 10, 2012.
- . *Compendium of Key Joint Doctrine Publications*. Joint Publication. Washington DC: Joint Chiefs of Staff, January 3, 2014.

- . *Department of Defense Dictionary of Military and Associated Terms*. Joint Publication 1-02. Washington DC: Joint Chiefs of Staff, December 15, 2014.
- . “Gen. Dempsey’s Remarks and Q&A at the Reserve Officers Association’s National Security Symposium.” Joint Chiefs of Staff.
<http://www.jcs.mil/Media/Speeches/tabid/3890/Article/5038/gen-dempseys-remarks-and-qa-at-the-reserve-officers-associations-national-secur.aspx> (accessed October 1, 2014).
- . *Intelligence, Surveillance, and Reconnaissance Joint Force 202 White Paper*. Washington DC: Joint Chiefs of Staff, September 11, 2014.
- . *Joint and Coalition Operational Analysis (JCOA), Decade of War, Volume I: Enduring Lessons from the Past Decade of Operations*. Joint Publication. Washington DC: Joint Chiefs of Staff, June 15, 2012.
- . *Joint Intelligence*. Joint Publication 2-0. Washington DC: Joint Chiefs of Staff, October 22, 2013.
- . *Joint Intelligence Preparation of the Operational Environment*. Joint Publication 2-01.3. Washington DC: Joint Chiefs of Staff, May 21, 2014.
- . *Joint Mobilization Planning*. Joint Publication 4-5. Washington DC: Joint Chiefs of Staff, February 21, 2014.
- . *Joint and National Intelligence Support to Military Operations*. Joint Publication 2-01. Washington DC: Joint Chiefs of Staff, January 5, 2012.
- . *Joint Operations*. Joint Publication 3-0. Washington DC: Joint Chiefs of Staff, August 11, 2011.
- U.S. President. *The National Intelligence Strategy of the United States*. Washington DC: Government Printing Office. October 2014.

Definitions

(Derived from US Government sources)

ACTIVE COMPONENT (AC) -- The unrestricted, continuously available personnel, units, and equipment of the Services.

ACTIVE DUTY -- Full-time duty in the active military service of the United States, including active duty or full-time training duty in the Reserve Component.

ADMINISTRATIVE CONTROL (ADCON) -- Direction or exercise of authority over subordinate or other organizations in respect to administration and support.

AIR FORCE DISTRIBUTED COMMON GROUND SYSTEM (AF-DCGS) -- also referred to as the AN/GSQ-272 SENTINEL weapon system, is the Air Force's primary ISR collection, processing, exploitation, analysis and dissemination (CPAD) system.

AIR RESERVE COMPONENT (ARC) -- The forces of the Air National Guard and Air Force Reserve.

AREA OF RESPONSIBILITY (AOR) -- The geographical area associated with a combatant command within which a geographic combatant commander has authority to plan and conduct operations.

CAPABILITY -- The ability to maintain the necessary level and duration of operational activity to achieve military objectives. Entails force structure, modernization, readiness, and sustainability.

CAPACITY -- The force structure required to meet a single or multiple military objectives.

COMBATANT COMMAND (CCMD) -- A unified or specified command with a broad continuing mission under a single commander established and so designated by the President, through the Secretary of Defense and with the advice and assistance of the Chairman of the Joint Chiefs of Staff.

COMBAT SUPPORT AGENCY (CSA) -- A Department of Defense agency so designated by Congress or the Secretary of Defense that supports military combat operations.

DEPLOY-TO-DWELL (DTD) -- Ratio of time Active Component military organizations spend deployed compared to the amount of time they spend not deployed. Thus, 1:2 means that for the period deployed the organization would spend two periods at home.

FEDERAL SERVICE -- A term applied to National Guard members and units when called to active duty to serve the United States Government under Article I, Section 8 and Article II, Section 2 of the Constitution and Title 10, United States Code, Sections 12401 to 12408.

FUTURE YEARS DEFENSE PROGRAM (FYDP) -- A five-year program and financial plan for the Department of Defense as approved by the Secretary of Defense. It is also provided to the Congress in conjunction with the President's budget.

FULL MOBILIZATION -- Expansion of the active Armed Forces resulting from action by Congress and the President to mobilize for the duration of the emergency plus six months all Reserve Component units and individuals in the existing approved force structure, as well as all retired military personnel, and the resources needed for their support to meet the requirements of a war or other national emergency involving an external threat to the national security.

HOME STATION -- The permanent location of active duty units and Reserve Component units.

JOINT RESERVE INTELLIGENCE CENTER (JRIC) -- An intelligence production and training capability enabling RC Intelligence forces to meet Service, CCMD, CSA, and IC training, readiness and operational requirements. JRICs are generally located within a Service Component-owned, managed, and maintained intelligence facility.

JOINT RESERVE INTELLIGENCE PROGRAM (JRIP) -- A DoD program supporting mobilization readiness and operational requirements for intelligence collection, processing, analysis, production, and dissemination by utilizing RC Intelligence forces to the fullest extent possible. The JRIP enables RC Intelligence capabilities to support DoD intelligence requirements.

INACTIVE DUTY TRAINING (IDT) -- Authorized training performed by a member of a Reserve Component not on active duty or active duty for training and consisting of regularly scheduled unit training assemblies, additional training assemblies, periods of appropriate duty or equivalent training, and any special additional duties authorized for Reserve Component personnel by the Secretary concerned, and performed by them in connection with the prescribed activities of the organization in which they are assigned with or without pay.

INDIVIDUAL MOBILIZATION AUGMENTEE (IMA) -- An individual reservist attending drills who receives training and is pre-assigned to an Active Component organization, a Selective Service System, or a Federal Emergency Management Agency billet that must be filled on, or shortly after, mobilization.

KILL CHAIN -- To execute a successful attack, one must: find the target; determine target's location, course and speed; communicate that information coherently to the platform launching the weapon; and, launch the attack using anything from a kinetic weapon to electromagnetic systems to cyber.

LAW OF ARMED CONFLICT (LOAC) -- is the “customary and treaty law applicable to the conduct of warfare on land and to relationships between belligerents and neutral States.” It “requires that belligerents refrain from employing any kind or degree of violence which is not actually necessary for military purposes and that they conduct hostilities with regard for the principles of humanity and chivalry.”

MAN-DAY -- Military funding paid to Reservists to perform duty over and above their minimum number of days for inactive duty training and annual tour. Each Man-Day pays the member one day’s base pay, housing allowance, subsistence allowance, and other appropriate military pay entitlements.

MILITARY PERSONNEL APPROPRIATION (MPA) -- Active Component military funding paid to Reservists to support the short-term needs of the Active force. Each Man-Day pays the member one day’s base pay, housing allowance, subsistence allowance, and other appropriate military pay entitlements.

MOBILIZATION (MOB) -- The process by which the Armed Forces of the United States or part of them are brought to a state of readiness for war or other national emergency, which includes activating all or part of the Reserve Component as well as assembling and organizing personnel, supplies, and materiel.

MOBILIZATION-TO-DWELL (MTD) -- Ratio of time Reserve Component organizations or individuals spend mobilized for active duty compared to the amount of time they spend in a ready reserve state. Thus, 1:5 means that for each period mobilized the organization or individual would spend five periods at home.

MODERNIZATION -- Updating an existing system to improve operational capability or technical performance.

OPERATIONAL CONTROL (OPCON) -- The authority to perform those functions of command over subordinate forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction necessary to accomplish the mission.

OPERATING TEMPO (OPTEMPO) -- A measure of the pace of an operation or operations in terms of equipment usage.

OPERATIONAL RESERVE -- A term used to describe the current situation in which the Air Force holds Reserve Component forces to the same standards of readiness as the Active Component, and regularly rotates these forces onto active duty service, whether in times of war or in peacetime.

PARTIAL MOBILIZATION -- Expansion of the active Armed Forces resulting from action by Congress (up to full mobilization) or by the President (not more than 1,000,000 for not more than 24 consecutive months) to mobilize Ready Reserve Component units,

individual reservists, and the resources needed for their support to meet the requirements of a war or other national emergency involving an external threat to the national security.

PERSONNEL TEMPO (PERSTEMPO) -- The time an individual spends away from home station, whether for deployment, unit training events, special operations and exercises, or mission support temporary duty.

PRESIDENTIAL RESERVE CALL-UP (PRC) -- Provision of a public law (Title 10, United States Code, Section 12304) that provides the President a means to activate, without a declaration of national emergency, not more than 200,000 members of the Selected Reserve and the Individual Ready Reserve (of whom not more than 30,000 may be members of the Individual Ready Reserve), for not more than 365 days to meet the requirements of any operational mission, other than for disaster relief or to suppress insurrection.

PRIORITY INTELLIGENCE REQUIREMENT (PIR) -- An intelligence requirement stated as a priority for intelligence support, that the commander and staff need to understand the adversary or other aspects of the operational environment.

REACHBACK -- The process of obtaining products, services, and applications, or forces, or equipment, or material from organizations that are not forward deployed.

READINESS -- The ability of a military unit to respond to and meet the demands of missions assigned in its Designed Operational Capability statement.

RECAPITALIZATION -- Replacing an existing weapon system with another weapon system. Frequently, the new weapon system is more modern than the existing weapon system.

RESERVE COMPONENT (RC) -- The Armed Forces of the United States Reserve Component consists of the Army National Guard of the United States, the Army Reserve, the Navy Reserve, the Marine Corps Reserve, the Air National Guard of the United States, the Air Force Reserve, and the Coast Guard Reserve.

RESERVE COMPONENT INTELLIGENCE ENTERPRISE (RCIE) -- The intelligence personnel, structures, systems, facilities and processes providing and enabling RC intelligence capabilities to meet the operational requirements of the Service Components, supported commands and agencies, other DoD entities, the Intelligence Community and Interagency partners.

SERVICE COMPONENT COMMAND -- A command consisting of the Service component commander and all those Service forces, such as individuals, units, detachments, organizations, and installations under that command, including the support forces that have been assigned to a combatant command or further assigned to a subordinate unified command or joint task force.

STRATEGIC RESERVE -- A Reserve force intended for use during later stages of a protracted or large-scale operation but not on a day-to-day basis.

SURGE -- A rapid or concerted increase in the commitment of forces to fend off an attack, meet a sudden demand, or accomplish a strategic military objective.

TACTICAL CONTROL (TACON) -- The authority over forces that is limited to the detailed direction and control of movements or maneuvers within the operational area necessary to accomplish missions or tasks assigned.

TOTAL FORCE (TF) -- All U.S. Air Force organizations, units, and individuals—Active, Reserve, Guard, and civilian—that provide the capabilities to support the Department of Defense in implementing the national security strategy.

UNIT -- 1. Any military element whose structure is prescribed by competent authority. 2. An organization title of a subdivision of a group in a task force. 3. A standard or basic quantity into which an item of supply is divided, issued, or used. Also called **unit of issue**. 4. With regard to Reserve Component of the Armed Forces, a selected reserve unit organized, equipped, and trained for mobilization to serve on active duty as a unit or to augment or be augmented by another unit.

Vita

Colonel Patrick Cobb was commissioned into the United States Air Force in 1991 following graduation from the University of Florida. His background is in intelligence and strategic planning and programming. He was the commander of the 102d Intelligence Wing [Massachusetts Air National Guard (ANG)], and was the Director of Intelligence, Surveillance, and Reconnaissance (ISR) for the ANG. He has served as the ANG ISR Functional Manager for Intelligence, ANG Intelligence Career Field Manager, flying unit intelligence officer, and a watch officer. Colonel Cobb's most recent assignment was the ANG Advisor to Deputy Chief of Staff for ISR, Headquarters United States Air Force. He participated in Operation Deny Flight, Operation Decisive Endeavor, Operation Northern Watch, and Operation Deliberate Guard. Colonel Cobb is a distinguished graduate of Air Force Reserve Officer Training Corps and Squadron Officers' School. He completed Air Command and Staff College, and Air War College by correspondence, and holds a Master Degree in Strategic Intelligence from the Joint Military Intelligence College.