

# NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

### MBA PROFESSIONAL REPORT

# AN ANALYSIS OF WHEN OFFICERS SHOULD ENTER THE ARMY CONTRACTING CAREER FIELD

**June 2016** 

By: Jose A. Crespo

Advisors: Ryan Sullivan

Amilcar Menichini

Approved for public release; distribution is unlimited



#### 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 instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE June 2016		TYPE AND DATES COVERED MBA professional report		
<b>4. TITLE AND SUBTITLE</b> AN ANALYSIS OF WHEN OF CONTRACTING CAREER FII	5. FUNDING NUMBERS				
6. AUTHOR(S) Jose A. Crespe	0				
7. PERFORMING ORGANIZ Naval Postgraduate School Monterey, CA 93943-5000	RESS(ES)	8. PERFORMING ORGANIZATION REPORT NUMBER			
9. SPONSORING /MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A  10. SPONSORING / MONITORING AGENCY REPORT NUMBER					
11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government. IRB Protocol number N/A					

**12a. DISTRIBUTION / AVAILABILITY STATEMENT**Approved for public release; distribution is unlimited

12b. DISTRIBUTION CODE

#### 13. ABSTRACT (maximum 200 words)

The purpose of this MBA project is to determine when active duty officers should be allowed to enter into the Army Acquisition Corps' Contracting Career Field. Contracting is a highly specialized career field that requires a technically proficient workforce with extensive contracting experience. Given the existing career timeline format, contracting military occupational specialty officers may only have approximately six years of experience working in contracting-related assignments, including staff positions, prior to being eligible for promotion to lieutenant colonel. In order to improve officers' technical proficiency before their promotion to contracting leadership positions as lieutenant colonels and colonels, the Army Acquisition Corps may need to admit officers into the career field earlier in their careers. Officers would then be afforded more contracting assignments, thus obtaining more experience prior to receiving contracting leadership positions. This project examines several courses of action that the Army Acquisition Corps can utilize to establish the most cost-efficient period for officers to join the Contracting Career Field.

14. SUBJECT TERMS Army Acquisition Corps, contra	15. NUMBER OF PAGES 71 16. PRICE CODE		
17. SECURITY CLASSIFICATION OF REPORT	18, SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
Unclassified	Unclassified	Unclassified	UU

NSN 7540-01-280-5500

Standard Form 298 (Rev. 2–89) Prescribed by ANSI Std. 239–18 THIS PAGE INTENTIONALLY LEFT BLANK

## Approved for public release; distribution is unlimited

# AN ANALYSIS OF WHEN OFFICERS SHOULD ENTER THE ARMY CONTRACTING CAREER FIELD

Jose A. Crespo, Major, United States Army

Submitted in partial fulfillment of the requirements for the degree of

### MASTER OF BUSINESS ADMINISTRATION

from the

# NAVAL POSTGRADUATE SCHOOL June 2016

Approved by: Ryan Sullivan, Ph.D.

Amilcar Menichini

Rene Rendon, Ph.D. Academic Associate Graduate School of Business and Public Policy THIS PAGE INTENTIONALLY LEFT BLANK

# AN ANALYSIS OF WHEN OFFICERS SHOULD ENTER THE ARMY CONTRACTING CAREER FIELD

#### **ABSTRACT**

The purpose of this MBA project is to determine when active duty officers should be allowed to enter into the Army Acquisition Corps' Contracting Career Field. Contracting is a highly specialized career field that requires a technically proficient workforce with extensive contracting experience. Given the existing career timeline format, contracting military occupational specialty officers may only have approximately six years of experience working in contracting-related assignments, including staff positions, prior to being eligible for promotion to lieutenant colonel. In order to improve officers' technical proficiency before their promotion to contracting leadership positions as lieutenant colonels and colonels, the Army Acquisition Corps may need to admit officers into the career field earlier in their careers. Officers would then be afforded more contracting assignments, thus obtaining more experience prior to receiving contracting leadership positions. This project examines several courses of action that the Army Acquisition Corps can utilize to establish the most cost-efficient period for officers to join the Contracting Career Field.

THIS PAGE INTENTIONALLY LEFT BLANK

# TABLE OF CONTENTS

I.	INT	RODUCTION1
	A.	BACKGROUND1
	В.	RESEARCH QUESTIONS2
	C.	METHODOLOGY3
	D.	ORGANIZATION AND RESEARCH4
II.	THE	E ARMY CONTRACTING CAREER FIELD7
	A.	ARMY ACQUISITION CORPS (AAC) OVERVIEW7
	В.	CURRENT ARMY FA 51C OFFICER CAREER TIMELINE12
	C.	ARMY OFFICER TRAINING15
		1. Basic Officer Leadership Course (BOLC)16
		2. Captain Career Course (CCC)18
		3. Intermediate Level Education (ILE)19
		4. Army Acquisition Corps Intermediate Qualification
		Course (IQC)20
	D.	CONTRACTING-SPECIFIC TRAINING20
		1. Defense Acquisition Workforce Improvement Act (DAWIA) Certification21
		2. Army Acquisition Foundation Course (AAFC)22
		3. Army Basic Contracting Course (ABCC)23
		4. Army Intermediate Contracting Course (AICC)23
	Е.	RELATED WORK
	E.	RELATED WORK23
III.	EST	ABLISHING THE COURSES OF ACTION (COA)27
	A.	ASSUMPTIONS28
	В.	THE STATUS QUO29
	C.	COA #1: ASSESS AFTER COMMISSIONING USING
		OVERALL ARMY OFFICER INVENTORY EQUIVALENCY32
	D.	COA #2: ASSESS AFTER COMMISSIONING USING ARMY
		AVIATION (AV) OFFICER INVENTORY EQUIVALENCY34
	<b>E.</b>	COA #3: ASSESS PRIOR TO CAPTAIN CAREER COURSE
		USING ARMY JUDGE ADVOCATE GENERAL'S CORPS
	_	(JAGC) OFFICER INVENTORY EQUIVALENCY37
	F.	COA #4: ASSESS PRIOR TO CAPTAIN CAREER COURSE
		USING ARMY SPECIAL FORCES (SF) OFFICER INVENTORY EQUIVALENCY
		11111111111111111111111111111111111111

IV.	CON	MPARING THE COURSES OF ACTION	43
	A.	COMPARING COSTS	43
	В.	COMPARING IMPACTS ON LEADERSHIP	
		DEVELOPMENT	
	C.	COMPARING IMPACTS TO TECHNICAL PROFICIENCY	45
	D.	COMPARING IMPACTS TO MULTI-FUNCTIONAL DEVELOPMENT	46
v.	CON	NCLUSION	47
	A.	SUMMARY	47
	В.	RECOMMENDED COURSE OF ACTION	48
	C.	RECOMMENDATIONS FOR FURTHER RESEARCH	
LIST	OF R	EFERENCES	51
INIT	IAL D	ISTRIBUTION LIST	53

# LIST OF FIGURES

Figure 1.	Contracting Team Structure. Source: Headquarters, Department of the Army, 2014a	9
Figure 2.	Contracting Support Alignments. Source: Headquarters, Department of the Army, 2014a.	10
Figure 3.	List of Contracting Support Brigades and Battalions. Source: Army Contracting Command, n.d.	11
Figure 4.	Army Standard Officer Career Timeline. Source: Headquarters, Department of the Army, 2014b.	12
Figure 5.	Army Officer Promotion Flow. Source: Headquarters, Department of the Army, 2014b.	14
Figure 6.	Acquisition Officer Career Timeline. Source: U.S. Army Acquisition Support Center, n.d.	15
Figure 7.	Army Officer Military Education Requirements. Source: Headquarters, Department of the Army, 2014b	16
Figure 8.	Army Basic Officer Leader Course Model. Source: Headquarters, Department of the Army Training and Doctrine Command, 2015	17
Figure 9.	Army BOLC Locations. Source: Headquarters, Department of the Army, 2014b.	18
Figure 10.	DAWIA Required Training for Contracting. Source: Brooker, Miner, & Montano, 2016.	.22

THIS PAGE INTENTIONALLY LEFT BLANK

# LIST OF TABLES

Table 1.	Army Acquisition Career Field Active Military Inventory as of July 2015. Source: Torres, 2015.	7
Table 2.	Army FA 51C Officer Inventory as of July 2015. Source: Torres, 2015	30
Table 3.	Army FA 51C Enlisted Inventory as of July 2015. Source: Torres, 2015	30
Table 4.	FY15 Army FA 51C Annual Individual Personnel Costs by Pay Grade. Source: Army Military-Civilian Cost System, 2015	31
Table 5.	FY15 Overall Army Officer Inventory Percentages. Source: Army Military-Civilian Cost System, 2015.	32
Table 6.	Course of Action #1 FA 51C Officer Inventory Modeled after Overall Army Inventory Percentages	33
Table 7.	Course of Action #1 FA 51C Enlisted Inventory Changes due to Officer Increases.	33
Table 8.	Course of Action #1 Calculated FA 51C Personnel Costs with Overall Army Officer Percentages Equivalency	34
Table 9.	FY15 Army Aviation Officer Inventory Percentages. Source: Army Military-Civilian Cost System, 2015.	35
Table 10.	Course of Action #2 FA 51C Officer Inventory Modeled after Army Aviation Inventory Percentages.	35
Table 11.	Course of Action #2 FA 51C Enlisted Inventory Changes due to Officer Increases.	36
Table 12.	Course of Action #2 Calculated FA 51C Personnel Costs with Aviation Officer Percentages Equivalency	36
Table 13.	FY15 Army Judge Advocate General Corps Officer Inventory Percentages. Source: Army Military-Civilian Cost System, 2015	38
Table 14.	Course of Action #3 FA 51C Officer Inventory Modeled after JAGC Inventory Percentages.	38
Table 15.	Course of Action #3 FA 51C Enlisted Inventory	39

Table 16.	Course of Action #3 Calculated FA 51C Personnel Costs with JAGC Officer Percentages Equivalency.	39
Table 17.	FY15 Army Special Forces Officer Inventory Percentages. Source: Army Military-Civilian Cost System, 2015	40
Table 18.	Course of Action #4 FA 51C Officer Inventory Modeled after SF Inventory Percentages.	40
Table 19.	Course of Action #4 FA 51C Enlisted Inventory Changes	41
Table 20.	Course of Action #4 Calculated FA 51C Personnel Costs with SF Officer Percentages Equivalency.	41
Table 21.	Course of Action Comparison.	43

### LIST OF ACRONYMS AND ABBREVIATIONS

1LT First Lieutenant Rank/O-2

2LT Second Lieutenant Rank/O-1

AAC Army Acquisition Corps

AACOE Army Acquisition Center of Excellence

AAFC Army Acquisition Foundation Course

ABCC Army Basic Contracting Course

ACC Army Contracting Command

AICC Army Intermediate Contracting Course

AMC Army Material Command

AMCOS Army Military-Civilian Cost System

AV Aviation Corps Branch

BAH Basic Allowance for Housing

BAS Basic Allowance for Subsistence

BOLC Basic Officer Leadership Course

CCC Captain Career Course

COA Course of Action

COL Colonel Rank/O-6

CPT Captain Rank/O-3

CSL Centralized Selection List

CT Contracting Team

DA Department of the Army

DAU Defense Acquisition University

DAWIA Defense Acquisition Workforce Improvement Act

DOD Department of Defense

DODI Department of Defense Instruction

FA Functional Area

ILE Intermediate Level Education

IQC Intermediate Qualification Course

JAGC Judge Advocate General's Corps

KD Key Development

LTC Lieutenant Colonel Rank/O-5

MAJ Major Rank/O-4

MEL Military Education Level

NCO Non-Commissioned Officer

NPS Naval Postgraduate School

OCS Operational Contract Support

PAM Pamphlet

PM Program Management

ROTC Reserve Officer Training Corps

SF Special Forces

SFC Sergeant First Class Rank/E-7

SGM Sergeant Major Rank/E-9

SGT Sergeant Rank/E-5

SSG Staff Sergeant Rank/E-6

YG Year Group

## **ACKNOWLEDGMENTS**

I would like to thank my advisors, Dr. Sullivan and Professor Menichini, for their time, guidance, assistance, and patience throughout this lengthy process. Your open thoughts and insights were crucial to the success of this project. Professors like you are what distinguish NPS from other graduate institutions. Thank you for all of the support that you have given and will give to NPS students in the past, present, and future. Finally, thank you to all the staff and faculty of the Graduate School of Business and Public Policy who supported me during my eighteen months here in Monterey and encouraged me to think freely.

THIS PAGE INTENTIONALLY LEFT BLANK

### I. INTRODUCTION

This project examines several courses of action that explore when an active duty officer can join the Army Acquisition Corps (AAC) to serve in the contracting occupational specialty. Each of these courses of action provide an alternative to the existing professional timeline in order to allow officers to serve in contracting positions earlier in their careers, and to gain more contracting experience before promotion to lieutenant colonel. These different courses of action include admitting officers into the AAC Contracting Career Field upon being commissioned in the Army, immediately following the Basic Officer Leadership Course (BOLC), and prior to the Captain Career Course (CCC), between their third and fourth years of service. This project establishes two courses of action for each of these periods, identifies the costs of each, and compares them to determine the most effective time for officers to enter the Contracting Career Field.

#### A. BACKGROUND

Contracting is a career field in the Army Acquisition Corps. The AAC is a functional area (FA) in the United States Army that is responsible for developing, purchasing, delivering, sustaining, and disposing weapons systems for the Army while also providing contracting services (Headquarters, Department of the Army, 2014b). The Army contains three functional categories: Operations, Operations Support, and Force Sustainment. The Army Acquisition Corps falls under the Force Sustainment functional category. Since many of the unique functions in the AAC are based on statute requiring technical skills and mandatory certifications, they must be performed by members of the Defense Acquisition Workforce. The Acquisition Corps is responsible for managing this specialized workforce in addition to overseeing the Army's acquisition programs (Headquarters, Department of the Army, 2014b). Its functional designation is FA 51. The designation for the Contracting Career Field is FA 51C.

The Army Acquisition Corps is not one of the Army's accessions branches, therefore officers serve in Army basic branch assignments such as Infantry and Armor prior to entering the AAC. Each year, between 80 and 120 active duty Army captains with six to eight years of service are accessed into the Army Acquisition Corps through the Army Acquisition Corps Functional Designation Board or quarterly Voluntary Transfer Incentive Program (VTIP) panels (Headquarters, Department of the Army, 2014b). Officers are then assigned to the Contracting Career Field and receive initial contracting-specific training. By the time officers actually serve in contracting positions, they are usually senior captains or newly promoted majors. In 2007, a report was issued by the Commission on Army Acquisition and Program Management in Expeditionary Operations that stated:

Army military contracting personnel, both officers and non-commissioned officers, need to start their contracting career much earlier than they currently do. While the strength of company-level operational experience is seen as a significant strength of Army military contracting personnel (which is appreciated by both their civilian personnel and Air Force counterparts), entering the contracting field as a field-grade officer or high ranked NCO with low-level contracting skills and experience does a terrible disservice to our military contracting personnel. (Commission on Army Acquisition and Program Management in Expeditionary Operations, 2007)

Despite this recommendation, however, 88% of the captains in the AAC had eight or more years of time in service at the end of FY14, according to the Army Military-Civilian Cost System (AMCOS) (2015). This project looks at more drastic ways to lower this percentage by permitting officers to enter the Contracting Career Field earlier in their careers.

## B. RESEARCH QUESTIONS

This project seeks to answer a primary question and several subsidiary questions:

- 1. Primary Question: Is there a more cost effective alternative to the current Army FA 51C officer career timeline structure that allows for more opportunities to serve in contracting positions and better prepares officers for future contracting leadership positions?
- 2. The first subsidiary question is: What is the current Army FA 51C officer career timeline construct?
- 3. The second subsidiary question needing to be answered is: What are alternative timelines for a FA 51C officer's career?

4. Once those other timeline options are identified and defined, the third and final subsidiary question is: What are the costs of each of these alternatives?

Once the alternatives and their costs are established, a comparison can be conducted to determine if there is a more cost-effective alternative to the current FA 51C officer career timeline.

### C. METHODOLOGY

This project conducts a cost analysis of alternatives to the current active duty FA 51C officer career timeline with the Army Acquisition Corps being the stakeholder. Changing the current career timeline by admitting officers earlier in their careers will cause an increase in junior officers in the AAC to accommodate attrition rates. Since the present structure entails officers transferring later in their careers, the AAC Contracting Career Field has a higher percentage of field grade officers (majors and lieutenant colonels) than the Army average. According to AMCOS, 84% of officers in the Contracting Career Field are field grade officers compared to the overall Army field grade officer average of 38% (Army Military-Civilian Cost System, 2015). The method used to establish the courses of action, therefore, alters the distribution percentages of the existing AAC Contracting Career Field personnel inventory in order to compensate for this influx of junior officers entering the branch.

Rather than focusing on attrition rates, this project focuses on adjusting personnel levels by pay grade. An inventory model based on allocation percentages can be applied regardless of future personnel drawdowns. Attrition rates, on the other hand, can be manipulated using various approaches. For instance, if the Acquisition Corps is unable to sustain a FA 51C officer inventory level of 52% for its major/O-4 population, it can either increase service obligations for officers entering the functional area, increase the promotion rates to major, or increase the number of captains it assesses. This project, consequently, centers more on determining if the 52% is the most appropriate and cost-efficient percentage and, if not, then what is.

This project incorporates data from the Army Military-Civilian Cost System to reconfigure the Contracting Career Field's personnel inventory allocations to match the

personnel distribution percentages with those of the overall Army population along with three other Army branches. These four new proposed FA 51C personnel inventories are the foundations for the courses of action. After finalizing the personnel distributions of the Contracting Career Field for each scenario, the personnel costs for each proposed inventory structure are calculated utilizing individual costs, by military pay grade, obtained from AMCOS. Once the total costs for each proposed personnel inventory are established, the courses of action are compared to determine which is most cost effective.

#### D. ORGANIZATION AND RESEARCH

This project is divided into five chapters.

Chapter I: Introduction. This chapter consists of the purpose of the project, a background of the subject, research questions the project is answering, the methodology in which it does so, and how the document is organized.

Chapter II: The Army Contracting Career Field. This chapter gives an overview of the Army Acquisition Corps and where FA 51C officers place in it. It then examines the current officer career timeline, required officer training to include standard Army Officer Education and Contracting-specific training, and concludes with related work.

Chapter III: Establishing the Courses of Action. This chapter presents assumptions that are utilized in the project framework. It establishes the Status Quo by identifying current Contracting Career Field personnel inventories and their costs. It then describes alternative courses of action to the current FA 51C officer career timeline, and the effects that each alternative has on personnel inventory levels and the costs incurred.

Chapter IV: Comparing the Courses of Action. This chapter compares the courses of action to the Status Quo and each other. Specifically, it compares the costs of each alternative, the impacts each has on FA 51C officer leadership development, the impacts to technical proficiency, and how each alternative impacts the ability for FA 51C officers to serve in other Army Acquisition Corps career fields.

Chapter V: Conclusion. This chapter concludes the project by providing a summary of the work, a final recommendation of the best course of action, and recommendations for further research.

THIS PAGE INTENTIONALLY LEFT BLANK

### II. THE ARMY CONTRACTING CAREER FIELD

## A. ARMY ACQUISITION CORPS (AAC) OVERVIEW

Once assessed in the AAC, there are two primary career specialties or Acquisition Career Fields that officers can be assigned to: Program Management (PM), or FA 51A, and Contracting, or FA 51C. The Program Management Career Field consists of both officers and Civilian professionals. Officers can also pursue secondary career certifications in Information Management, FA 51R; Engineering, FA 51S; and Test and Evaluation, FA 51T after receiving primary certification in Program Management. In order to serve in an another primary career field, such as Contracting to Program Management or vice versa, officers must first be DAWIA Level III certified in their primary career field and if their career timelines allow for it.

The Contracting Career Field consists of officers, enlisted, and Civilian professionals. Civilians constitute the bulk of the workforce as officers only make up 4% of the entire Army Acquisition Workforce, while only 2% comprises enlisted personnel (all of which are in the Contracting Career Field) (Torres, 2015). A breakdown of the military personnel inventory for the Army Acquisition Workforce is listed in Table 1.

Table 1. Army Acquisition Career Field Active Military Inventory as of July 2015. Source: Torres, 2015.

POSITION											% of
CATEGORY	G0	COL	LTC	MAJ	CPT	SGM	MSG	SFC	SSG	TOTAL	AWF
Program Management											
(51A)	13	139	300	358	86					896	44.25%
Contracting (51C)	4	39	121	258	82	8	99	217	275	1,103	54.47%
51C Officer	4	39	121	258	82					504	24.89%
51C NCO						8	99	217	275	599	29.58%
ENGINEERING (51S)			3							3	0.15%
Testing & Evaluation											
(51T)		4	5	14						23	1.14%
TOTAL	17	182	429	630	168	8	99	217	275	2,025	100%

Officers who are selected for the Contracting Career Field are assigned to the Army Contracting Command (ACC). The Army Contracting Command is a two-star level command located at Redstone Arsenal in Huntsville, Alabama and is a subordinate command to the Army Material Command (AMC), which is also located at Redstone Arsenal. The ACC is responsible for providing contracting support to the Army and other federal agencies to include more than 100 Army supported installations worldwide, program executive offices and program managers supporting the U.S. Army's major acquisition programs, Army Material Command's life cycle management commands, and contingency operations (Army Contracting Command, n.d.).

The ACC is comprised of two one-star level subordinate commands and six Senior Executive Service (SES) level major contracting centers. The two subordinate commands are the Expeditionary Contracting Command responsible for locations outside the United States, also located at Redstone Arsenal, and the Mission and Installation Contracting Command for locations inside the United States, which is at Fort Sam Houston in San Antonio, Texas. The six major contracting centers that support AMC's life cycle management commands are located at Aberdeen Proving Ground, Maryland; Picatinny Arsenal, New Jersey; Orlando, Florida; Redstone Arsenal, Alabama; Rock Island, Illinois; and Warren, Michigan (Army Contracting Command, n.d.).

The foundation of military contracting is the contracting team. Contracting teams are five-person deployable units comprised of both FA 51C officers and enlisted personnel. They are led by a major and are responsible for developing, soliciting, awarding, managing, and closing out contracts (Headquarters, Department of the Army, 2014a). Contracting teams are assigned throughout the Army Contracting Command organization including the six major contracting centers and two subordinate commands. The contracting team layout is illustrated in Figure 1.

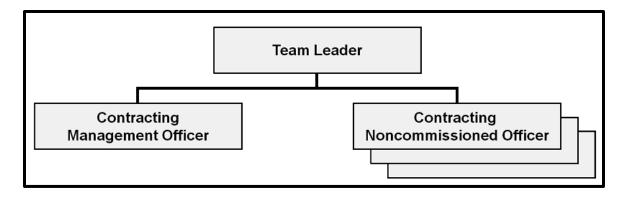


Figure 1. Contracting Team Structure. Source: Headquarters, Department of the Army, 2014a.

Contracting teams are organized under deployable contracting battalions commanded by FA 51C lieutenant colonels. Contracting battalions are responsible for providing command and control and contracting oversight over their contracting teams. They are also aligned to provide Operational Contract Support (OCS) planning and execution to Army Division level commands.

Contracting battalions are structured under contracting support brigades commanded by FA 51C colonels. Contracting support brigades provide command and control and contracting oversight over their contracting battalions, while also providing OCS planning and execution to Theater Specific, Field Army, and Army Corps level commands. The alignment model for Army contracting support is illustrated in Figure 2.

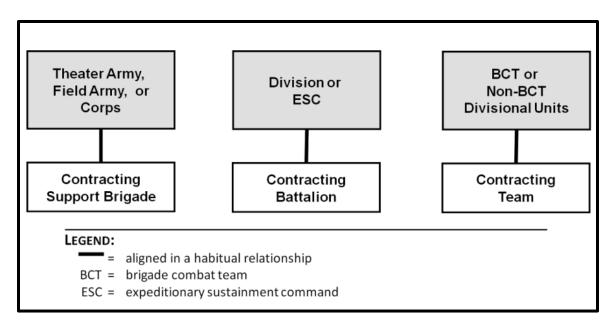


Figure 2. Contracting Support Alignments. Source: Headquarters, Department of the Army, 2014a.

In addition to serving in contracting team positions, FA 51C officers can also be assigned to headquarters staff positions in the various contracting battalions, brigades, and the ACC itself along with the major subordinate commands and contracting centers. The ACC contracting support brigade unit list as of March 2015 is depicted in Figure 3.

#### Contracting Support Brigades:

- 408th Contracting Support Brigade, Shaw Air Force Base, S.C.
  - o Two contracting teams
- 409th Contracting Support Brigade, Kaiserslautern, Germany
  - 903rd Contracting Battalion, Kaiserslautern, Germany
  - 928th Contracting Battalion, Grafenwoehr, Germany
  - Nine contracting teams
- 410th Contracting Support Brigade, Joint Base San Antonio-Fort Sam Houston, Texas
  - o 916th Contracting Battalion, Joint Base San Antonio, Texas
  - Six contracting teams
- 411th Contracting Support Brigade, Camp Coiner, Korea
  - o 906th Contracting Battalion, Camp Coiner, Korea
  - o Six contracting teams
- 413th Contracting Support Brigade, Fort Shafter, Hawaii
  - Seven contracting teams
- 414th Contracting Support Brigade, Vicenza, Italy
  - Four contracting teams

#### One Direct Report Battalion:

- 905th Contracting Battalion, Fort Bragg, N.C.
  - One contracting team

#### ECC contracting units integrated into stateside operations:

- 412th Contracting Support Brigade, Joint Base San Antonio-Fort Sam Houston
  - 904th Contracting Battalion, Fort Knox, Ky.
  - Six contracting teams
- · 418th Contracting Support Brigade, Fort Hood, Texas
  - o 901st Contracting Battalion, Fort Hood, Texas
  - 902nd Contracting Battalion, Joint Base Lewis-McChord, Wash.
  - o 918th Contracting Battalion, Fort Carson, Colo.
  - 919th Contracting Battalion, Fort Bliss, Texas
  - Sixteen contracting teams
- · 419th Contracting Support Brigade, Fort Bragg, N.C.
  - o 900th Contracting Battalion, Fort Bragg, N.C.
  - 922nd Contracting Battalion, Fort Campbell, Ky.
  - o 925th Contracting Battalion, Fort Drum, N.Y.
  - o Fourteen contracting teams
- · 926th Contracting Battalion under ACC-Aberdeen Proving Ground, Md.
  - Four contracting teams
- · Four contracting teams under ACC-New Jersey, Picatinny Arsenal
- 921st Contracting Battalion under ACC-Redstone, Ala.
  - o Four contracting teams
- 920th Contingency Contracting Battalion under ACC-Rock Island, Ill.
  - o Four contracting teams
- 923rd Contingency Contracting Battalion under ACC-Warren, Mich.
  - o Four contracting teams
- Sixteen contracting teams under the Field Directorate Office Joint Base Langley-Eustis, part of Mission and Installation Contracting Command
- Three contracting teams under MICC-Fort Belvoir, Va.

Figure 3. List of Contracting Support Brigades and Battalions. Source: Army Contracting Command, n.d.

#### B. CURRENT ARMY FA 51C OFFICER CAREER TIMELINE

Officers who enter the Contracting Career Field follow a similar career timeline as the overall Army officer leader development model, except FA 51C officers serve in non-acquisition assignments in other Army branches the first six to eight years of their careers. The standard Army officer career timeline is illustrated in Figure 4. The intent of requiring officers to serve in a basic branch prior to transferring into the Army Acquisition Corps is to ensure that they have operational experience prior to entering another functional area. In order to be eligible to transfer to the AAC via the Voluntary Transfer Incentive Program (VTIP), officers must be graduates of the Captain Career Course, successfully completed basic branch specific key developmental positions in the grade of CPT, and have approval from their basic branches to do so (U.S. Army Human Resources Command, 2016).

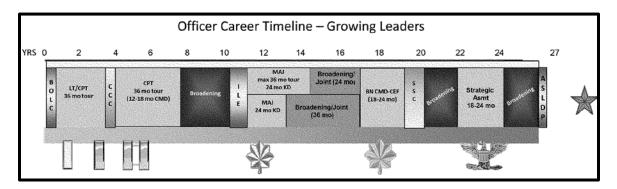


Figure 4. Army Standard Officer Career Timeline. Source: Headquarters, Department of the Army, 2014b.

After assessment into the AAC and completion of initial contracting training, FA 51C officers will be assigned to key developmental positions in contracting teams designed to develop their technical proficiency and functional understanding of the Contracting Career Field. Following these initial 24-month assignments, FA 51C officers usually transition to an educational phase of their careers, which incorporates Intermediate Level Education (ILE), Army Intermediate Contracting Course (AICC), and Advanced Civil Schooling (ACS), if selected to pursue a graduate degree at a Civilian institution.

FA 51C officers attending the Naval Postgraduate School do so via the ACS program. While some attend NPS prior to their initial contracting assignments, they must be selected for promotion to major in order to take JPME courses offered at the Naval War College to receive credit for ILE. Otherwise, those officers attending NPS prior to being selected for promotion to major will have to attend ILE following their initial contracting assignments (Office of the Assistant Secretary of the Army Acquisition, Logistics, and Technology, 2014b).

Essentially, FA 51C officers only need to serve two years in assignments that actually perform contracting-specific duties prior to holding contracting leadership positions as lieutenant colonels. Following the completion of their first contracting assignment, ILE, and AICC, FA 51C officers generally have enough time in their career timelines to serve in two more 24-month contracting assignments prior to being eligible for promotion to lieutenant colonel. These assignments, however, are more broadening, developmental, or nominative positions such as staff positions and do not necessarily perform contracting-specific duties.

Some FA 51C officers who are DAWIA Level III certified in contracting after their first two contracting assignments can, instead, request to serve their third acquisition assignment in the Program Management Career Field, FA 51A (Office of the Assistant Secretary of the Army Acquisition, Logistics, and Technology, 2014a). They would then be allowed to compete for both FA 51C and FA 51A key billets as lieutenant colonels, but would not have extensive technical proficiency in either.

In order to be eligible for promotion to LTC/O-5, FA 51C officers must: be Defense Acquisition Workforce Improvement Act (DAWIA) Level III certified in contracting; have obtained Army Acquisition Corps Membership; graduated Intermediate Level Education (ILE); and meet the times in service and in grade requirements listed in Figure 5. The criteria for an officer to obtain Acquisition Corps Membership includes: rank of major or above, DAWIA Level II certified in his/her primary Acquisition Career Field, received 24 semester hours from an accredited institution for business-related coursework, and have a minimum of four years of acquisition experience (Torres, 2015).

Time in service, time in grade, and promotion opportunity					
Promote to:	Time in service (DODI and 10 USC)	Time in grade (DODI)			
CW2	2 years WOS	18 months			
CW3	7 years WOS1	3 years			
CW4	12 years WOS	3 years			
CW5	17 years	3 years			
1LT/0-2	18 months	18 months			
CPT/0-3	4 years plus 1 year	2 years			
MAJ/0-4	10 years +/- 1 year	3 years			
LTC/0-5	16 years +/- 1 year	3 years			
COL	22 years +/- 1 year	3 years			

Figure 5. Army Officer Promotion Flow. Source: Headquarters, Department of the Army, 2014b.

After officers are selected for promotion to the rank of LTC, they can then choose to compete for Army Acquisition Corps key billets and contracting battalion command positions via the annual AAC Centralized Selection List (CSL) board (U.S. Army Human Resources Command, n.d.). The standard career timeline for AAC officers is depicted in Figure 6.

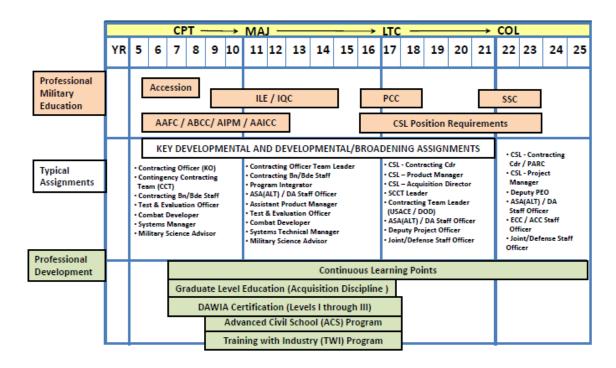


Figure 6. Acquisition Officer Career Timeline. Source: U.S. Army Acquisition Support Center, n.d.

### C. ARMY OFFICER TRAINING

The Army Officer Education System (OES) is a sequenced training system that is designed to produce and develop leaders who are technically and tactically competent, and fosters creative problem solving that can be applied in highly complex and dynamic environments. It is linked to promotions, assignments, and officer career models (Headquarters, Department of the Army, 2014b). The primary military schools that all Army officers are required to attend through the course of their careers, as depicted in Figure 7, are Basic Officer Leader Course (BOLC), Captain Career Course (CCC), Intermediate Level Education (ILE), and the Senior Service College (SSC).

Military education requirements for promotion intermediate level education "Complete" for promotion to colonel				
Grade from	То	Requirement		
2LT	1LT	BOLC		
CPT	MAJ	ccc		
MAJ	LTC	ILE Common Core		
LTC		ILE Common Core		

Figure 7. Army Officer Military Education Requirements. Source: Headquarters, Department of the Army, 2014b.

This project concentrates on Army Acquisition developmental and key developmental level assignment opportunities and, therefore, will not focus on costs for the Senior Service College, since it is for senior leadership positions.

## 1. Basic Officer Leadership Course (BOLC)

After individuals are commissioned as officers in the United States Army, they will attend entry-level officer training in their assigned basic branch. This training is known as the Basic Officer Leadership Course (BOLC). BOLC is comprised of two phases: BOLC A, which concentrates on teaching Army common core skills; and BOLC, B, which focuses on Army branch specific instruction along with additional branch immaterial training. BOLC A is conducted prior to commissioning at the officer's precommissioning source such as the United States Military Academy at West Point, Reserve Officer Training Corps (ROTC), or Officer Candidate School (OCS). BOLC B is conducted at the various Army branch school locations and the course lengths vary from branch to branch (Headquarters, Department of the Army, 2014b). Upon completion of BOLC B, officers will then attend any further required branch specific training and/or proceed to their initial assignments. The Army Training and Doctrine Command (TRADOC) model for BOLC is depicted in Figure 8. The Army branches, their branch codes, and their Basic Officer Leader Course locations are listed in Figure 9.

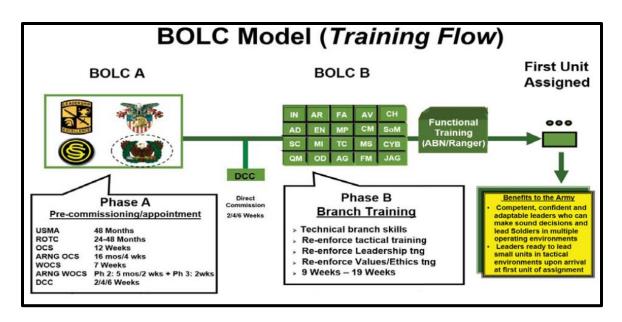


Figure 8. Army Basic Officer Leader Course Model. Source: Headquarters, Department of the Army Training and Doctrine Command, 2015.

Branch	Branch Code	Locations
Adjutant General	AG	Fort Jackson, South Carolina
Air Defense Artillery	AD	Fort Sill, Oklahoma
Armor	AR	Fort Benning, Georgia
Aviation	AV	Fort Rucker, Alabama
Chaplain Corps	CH	Fort Jackson, South Carolina
Chemical	CM	Fort Leonard Wood, Missouri
Engineer	EN	Fort Leonard Wood, Missouri
Field Artillery	FA	Fort Sill, Oklahoma
Finance	FI	Fort Jackson, South Carolina
Infantry	IN	Fort Benning, Georgia
Judge Advocate General Corps	JA	Charlottesville, Virginia
Medical Service Corps	MS	Fort Sam Houston, Texas
Medical Specialist Corps	SP	Fort Sam Houston, Texas
Military Intelligence	MI	Fort Huachuca, Arizona
Military Police	MP	Fort Leonard Wood, Missouri
Nurse Corps	AN	Fort Sam Houston, Texas
Ordnance	OD	Fort Lee, Virginia
Quartermaster	QM	Fort Lee, Virginia
Signal Corps	SC	Fort Gordon, Georgia
Transportation	TC	Fort Lee, Virginia
Veterinary Corps	VC	Fort Sam Houston, Texas

Figure 9. Army BOLC Locations. Source: Headquarters, Department of the Army, 2014b.

### 2. Captain Career Course (CCC)

The next phase of the Army's Officer Education System is the Captain Career Course (CCC). Officers who have been selected for promotion to the rank of captain in the Army and have a minimum of three years in service are eligible to attend their branch specific Captain Career Courses, which are also held at the same locations listed in Figure 9. Officers selected to the Special Forces Branch will attend the Maneuver Captain Career Course with Infantry and Armor officers at Fort Benning, GA. The CCC prepares officers for company, troop, or battery level commands along with battalion and brigade staff preparation. Completion of CCC is a prerequisite for promotion to major. Officers incur a one year active duty service obligation (ADSO) upon completion of CCC (Headquarters, Department of the Army, 2014b). Following CCC, officers serve an

additional one to three years in their basic branch where they hold positions such as company, troop, or battery command; and staff assignments prior to transferring to the Acquisition Corps and being selected for the Contracting Career Field.

### 3. Intermediate Level Education (ILE)

Officers who have been selected for promotion to the rank of major will attend Intermediate Level Education (ILE) no later than their fifteenth year of commissioned service (Headquarters, Department of the Army, 2014b). ILE is the Army's Intermediate Staff College for majors designed to prepare them for the next ten years of their careers. ILE consists of two phases: the Common Core Course and the Qualification Course. Phase 1 includes standard instruction for all Army officers to include Joint Professional Military Education (JPME) training, while Phase 2 offers tailored instruction tied to the technical requirements of an officer's branch or Functional Area (Headquarters, Department of the Army, 2014b).

There are several methods in which Acquisition Corps officers can attend Intermediate Level Education Common Core instruction. The primary means is to attend the 10-month resident ILE at the Command and General Staff College in Fort Leavenworth, Kansas. Other venues to receive resident ILE include Sister Service (Navy, Air Force, Marine) Command and Staff Courses, WHINSEC (Western Hemisphere Institute for Security Cooperation), and Foreign Command and Staff Schools. Acquisition Corps officers may also attend a 14-week Common Core course at one of the four Command and General Staff College Satellite locations at Fort Belvoir, Fort Lee, Fort Gordon, and Redstone Arsenal. The Army Human Resources Command conducts an annual selection board to determine which method of ILE eligible officers will partake. Those officers not selected to attend ILE at the resident course or any of the satellite locations can complete ILE via Distance Learning (DL) modules (U.S. Army Human Resources Command, n.d.). Acquisition Officers attending the Naval Postgraduate School who have been selected for promotion to major can obtain ILE Common Core instruction via a combination of Distance Learning modules for the Army specific portion while receiving JPME Phase 1 classroom training offered by the Naval War College resulting in a College of Distance Education Command and Staff diploma (Office of the Assistant Secretary of the Army Acquisition, Logistics, and Technology, 2015).

### 4. Army Acquisition Corps Intermediate Qualification Course (IQC)

In addition to Common Core instruction, Army Acquisition officers are required to attend the three week Acquisition Intermediate Qualification Course (IQC) at the Army Acquisition Center of Excellence (AACOE) located in Huntsville, Alabama. IQC provides training in acquisition-related leadership topics not found in the Core ILE and fulfills ILE Phase 2 requirements. It is part of the FA51 Leader Development Plan and together with ILE grants Military Education Level-4 (MEL-4) certification. AAC Officers who attend NPS and earn a Naval War College, College of Distance Education Command and Staff diploma receive full credit for IQC and won't need to attend the course in Huntsville (Office of the Assistant Secretary of the Army Acquisition, Logistics, and Technology, 2015).

### D. CONTRACTING-SPECIFIC TRAINING

In addition to standard Army officer education, FA 51C officers are required to complete Acquisition specific training upon transferring into the Army Acquisition Corps from their basic branches. The training is intended to familiarize officers with the Army Acquisition Corps, teach technical proficiency, and fulfill statutory training and certification requirements for members of the Department of Defense Acquisition Workforce. The statutory obligations are set forth in a provision of the Defense Authorization Act of 1991 known as the Defense Acquisition Workforce Improvement Act (DAWIA). This act directed the DOD to establish an education based certification system in order to professionalize the Acquisition Workforce. The curriculum FA 51C officers are required to complete in order to meet these obligations includes: the Army Acquisition Foundation Course (AAFC), the Army Basic Contracting Course (ABCC), and the Army Intermediate Contracting Course (AICC) (U.S. Army Acquisition Support Center, n.d.).

### 1. Defense Acquisition Workforce Improvement Act (DAWIA) Certification

There are three levels of DAWIA certification, each with basic requirements intended to ensure that individuals in the Acquisition Workforce maintain a minimum level of technical proficiency in their Acquisition Career Fields. In addition to receiving the training listed in Figure 10, the requirements for obtaining DAWIA Level I certification in contracting include: attain at least one year of contracting experience, acquire a Baccalaureate degree in any field of study, and have at least 24 semester hours in accounting, law, business, finance, contracts, purchasing, economics, industrial management, marketing, quantitative methods, or organization and management. In addition to receiving the training listed in Figure 10, the requirements for obtaining DAWIA Level II certification in contracting include: being Level I certified in contracting and having at least two years of contracting experience. In order to reach DAWIA Level III certification in contracting, one must be Level II certified in contracting, complete the training listed in Figure 10, and have a minimum of four years of contracting experience (Defense Acquisition University, 2016).

Course number	Course Title	Resident or on	line # Days
DAWALI			
CON 090	Federal Acquisition Regulation (FAR) Fundamentals	Resident	28.0
CON 100	Shaping Smart Business Arrangements	Online	2.5
CON 121	Contract Planning	Online	1.5
CON 124	Contract Execution	Online	1.6
CON 127	Contract Management	Online	1.3
CON 170	Fundamentals of Cost and Price Analysis	Resident	10.0
CLC 025	Small Business Program for Contracting Officers	Online	0.5
CLC 033	Contract Format and Structure for DoD e-Business Environment	Online	0.4
CLC 057	Performance Based Payments and Value of Cash Flow	Online	0.5
CLC 058	Introduction to Contract Pricing	Online	0.3
			46.5
DAWALII			
ACQ 101	Fundamentals of Systems Acquisition Management	Online	3.1
CON 200	Business Decisions for Contracting	Online	2.4
CON 216	Legal Considerations in Contracting	Online	2.9
CON 270	Intermediate Cost and Price Analysis	Resident	9.5
CON 280	Source Selection and Administration of Service Contracts	Resident	9.5
CON 290	Contract Administration and Negotiation Techniques in a Supply Environment	Resident	9.5
CLC 051	Managing Government Property in the Possession of Contractors	Online	0.2
CLC 056	Analyzing Contract Costs	Online	2.1
HBS 428	Negotiating	Online	0.3
			39.4
DAWAI III			
ACQ 202	Intermediate Systems Acquisition, Part A	Online	4.4
CON 360	Contracting for Decision Makers	Resident	9.5
НВ	Harvard Business Elective (estimated based on average)	Online	1.0
ELECTIVE	Select ONE of the below electives (estimated based on average elective course length for courses below)	Resident	6.4
ACQ 315	Understanding Industry	Resident	4.5
ACQ 370	Acquisition Law	Resident	4.5
CON 232	Overhead Management of Defense Contracts	Resident	10.0
CON 244	Construction Contracting	Resident	4.5
CON 252	Fundamentals of Cost Accounting Standards	Resident	8.0
CON 334	Advanced Contingency Contracting Offier's Course	Resident	4.0
CON 370	Advanced Contract Pricing	Resident	9.5
	•		21.3
	ours in business related courses		
**Bachelor's Deg	·		
Time computed in	n days. If online course assumed 8 hour work day to calculate number of days.	Total	107.2

Figure 10. DAWIA Required Training for Contracting. Source: Brooker, Miner, & Montano, 2016.

### 2. Army Acquisition Foundation Course (AAFC)

Prior to receiving their first acquisition assignment, newly transferred AAC officers not selected to attend NPS must complete initial Acquisition training beginning with the Army Acquisition Foundation Course (AAFC). The AAFC is a three-week resident course at the Army Acquisition Center of Excellence (AACOE) located in Huntsville, Alabama. The training is designed for both Program Management Career Field officers and Contracting Career Field officers and noncommissioned officers to attend. It provides a basic understanding of DOD materiel acquisition and contracting principles and processes, and how to apply them across the acquisition life cycle (U.S.

Army Acquisition Support Center, n.d.). It also provides DAU equivalency for ACQ 101, CON 121, CON 124, and CON 127 (Defense Acquisition University, 2016).

### 3. Army Basic Contracting Course (ABCC)

Upon completion of the AAFC, Contracting Career Field officers will then attend the Army Basic Contracting Course (ABCC). The AABC is a four-week resident course also located at the AACOE in Huntsville, Alabama. It delivers DAWIA Level I contracting instruction and prepares officers for entry-level contracting positions (U.S. Army Acquisition Support Center, 2016). The AABC equivalents for DAU courses are CON 090, CON 100, CON 170, and CON 234 (Defense Acquisition University, 2016). Officers will then depart for their first contracting assignments following completion of the ABCC.

### 4. Army Intermediate Contracting Course (AICC)

After a minimum of two years of operational contracting experience in their first acquisition assignments, FA 51C officers are eligible to attend the Army Intermediate Contracting Course (AICC). The AICC is a four-week resident course also located at the AACOE in Huntsville, Alabama. It delivers DAWIA Level II contracting instruction and addresses intermediate contracting principles of the Federal Acquisition Regulation (FAR) by emphasizing contracting functions for commodities, services, and construction using acquisition procedures, negotiation and other approved methods of contracting (U.S. Army Acquisition Support Center, n.d.). AICC also provides DAU equivalency for CON 200, CON 216, CON 270, CON 280, and CON 290 (Defense Acquisition University, 2016).

### E. RELATED WORK

This project incorporates a unique concept to identify cost effective alternatives to the current career timeline of Army active component FA 51C officers and provide them more contracting assignment opportunities earlier in their careers. Despite its uniqueness, however, there are several instances of related work.

The most recent research literature was conducted in 2015 by Brooker, Miner, and Montano. In their NPS MBA Professional Report entitled "Army Acquisition Training: An Analysis of Costs and Benefits." In this research, the authors analyze the most cost effective means for Army Acquisition officers to earn a graduate degree, obtain military education level four and satisfy technical training requirements of the Defense Acquisition Workforce Improvement Act. The authors conclude that the most cost-effective alternative is to accomplish these concurrently while attending the Naval Postgraduate (Brooker et al., 2016). Although many of the costs calculated in their analysis are similar to this project, particularly training and education costs, the costs in this project are more comprehensive. Additionally, since this project examines personnel inventory levels of the Contracting Career Field, the method that FA 51C officers should earn a graduate degree is not significant in determining the appropriate personnel inventory breakdown.

Another piece of related work was conducted in 2014 by Lene and Poppler in their NPS joint applied project entitled "Army Contracting Workforce Development Building Core Competencies and Skills." In this research, the authors examine whether there is a disconnection between the contracting competencies taught by DAU, and the competencies required by individuals in the Contracting Career Field performing contracting tasks. In their research, the authors discover that 88% of the contracting workforce members that participated in their project preferred on-the-job training over DAU training. Additionally, they find that the military contracting workforce in their study had both less experienced based contracting knowledge and institutional education based knowledge than their civilian counterparts. They also conclude that since the majority of the military contracting personnel lacked contracting experience, they were less likely to receive complex requirements. As a result, the majority of the military contracting personnel in their study were less proficient in advanced contracting tasks (Lene & Poppler, 2014). In other words, the more contracting-specific experience a contracting professional has, the more complex contracting workload they will be entrusted with and gain more technical proficiency. This project aims to remedy this by allowing officers to enter into the Contracting Career Field earlier in their careers to gain more experience and ultimately be entrusted with more advanced contracting issues prior to being assigned to lead one of these contracting offices as a lieutenant colonel.

In 2011, Allen, Doran, and Westbrook explored the Army Contracting Command's recruitment programs, personnel development programs, and personnel retention programs in their NPS joint applied project entitled "Army Acquisition and Contracting Personnel Requirements: How are the Army's Current Recruitment, Development and Retention Programs Meeting Current and Future Personnel Requirements?" In their research, the authors find that there is a limited talent pool of experienced acquisition personnel, thus, requiring a more effective succession planning system in the Army Contracting Command. In order to remedy this, they recommend that organizations need to expand leadership development activities and experiences to prepare future leaders to replace current leaders (Allen et al., 2011). More experiences require more time, and currently FA 51C officers may not have the requisite amount of time in their career timelines to gain these vital contracting experiences before receiving senior leadership positions, which is why this project is exploring alternative career timelines.

These three related works are evidence that improvements are necessary and possible for the Army Acquisition Corps to address and strengthen its officer development in the Contracting Career Field. Consequently, in 2012, the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD [AT&L]) instituted *Better Buying Power 2.0* prioritizing this leader development initiative for the DOD Acquisition Workforce by stating that:

Our key leaders must have the required qualifications, not just certification, for the positions they hold—this includes the appropriate amount of relevant experience, education, and training. (Office of the Secretary of Defense for Acquisition, Technology and Logistics, 2012)

Next, this project explores alternative career timelines and their costs to allow for the added relevant contracting experiences necessary in FA 51C officer development.

THIS PAGE INTENTIONALLY LEFT BLANK

### III. ESTABLISHING THE COURSES OF ACTION (COA)

The courses of action (COA) in this project are modeled after the officer personnel inventory levels of other branches in the Army. The first two courses of action encompass admitting officers into the AAC Contracting Career Field through direct commissioning. Admitting officers so early will cause the greatest influx of junior officers into the branch, therefore, these two courses of action will require the greatest changes to existing personnel inventory levels to compensate. It also means that the distribution of the Contracting Career Field's officer inventory will resemble regular Army officer inventory allocations rather than the existing heavy field grade officer structure of the Contracting Career Field.

Course of Action #1, consequently, examines the impacts of modeling the Contracting Career Field's military personnel inventory after the overall Army officer personnel inventory distribution percentages. Course of Action #2, on the other hand, models the Contracting Career Field's military personnel allotments after the Army's Aviation Branch officer inventory distribution. The Aviation Branch was selected since, like contracting, it is a highly specialized career field that requires a technically proficient workforce.

The other two alternatives to the existing contracting military occupational specialty officer career timeline that this project examines entail admitting officers into the AAC Contracting Career Field between an officer's third and fourth year of service prior to attending the Captain Career Course (CCC). Currently, officers who attend CCC incur a 1-year active duty service obligation (ADSO) in their basic branches following graduation from the course which delays their reassignment to the Contracting Career Field (Headquarters, Department of the Army, 2014, p. 7). Requiring officers to transfer to the Contracting Career Field prior to attending CCC maintains the existing system of allowing officers to serve in an Army basic branch and gain operational experience, however, necessitates them to transfer from their basic branches earlier than they do now.

To properly examine what impact officers transferring to the AAC during this period will have, Courses of Action #3 and #4 should model the Contracting Career Field personnel inventories after other Army branches with similar timelines. Course of Action #3, accordingly, adjusts the distribution of the Contracting Career Field personnel inventory to align with officer inventory percentages of the Army Judge Advocate General's Corps (JAGC). Although JAGC officers are primarily direct commissioned, their entry is delayed in order to complete law school which produces a similar officer inventory distribution to what would be required in order to allow officers to enter the FA 51C specialty prior to CCC.

Course of Action #4, likewise, molds the personnel inventory of the Contracting Career Field after the percentage breakdown of Army Special Forces (SF) officers. The timeframe officers can apply for Special Forces are comparable to the alternative being explored, which makes SF an ideal branch to replicate. Furthermore, the SF branch officer distribution structure is the most similar to that of the AAC making it an even more desirable course of action.

### A. ASSUMPTIONS

This project makes several assumptions that both standardize the courses of action and simplify the data calculations. This is done, in part, to avoid complications that may arise from attempting to forecast future personnel end strengths due to the Army's ever changing personnel landscape. Those key assumptions are the following:

- 1. The personnel distributions proposed in each of the courses of action will not exceed the total active duty FA 51C inventory as of July 2015.
- 2. The courses of action will examine changes in the Army Contracting Career Field's personnel inventory from the pay grades E-6 to E-8 and O-1 to O-5 only.
- 3. The number of FA 51C SGM/E-9 and COL/O-6 personnel will remain unchanged in order to maintain existing key leadership positions.
- 4. This project does not attempt to forecast future personnel inventories and future costs, therefore, the calculations in the courses of action only include data from Fiscal Years 2014/2015.

- 5. Reductions in FA 51C LTC/O-5 inventory levels will not interfere with existing Centralized Selection List (CSL) key billets, but AAC will be able to reduce rank requirements for certain Non-CSL billets currently slotted for lieutenant colonels and majors as dictated by the courses of action.
- 6. The AAC will be able to transition enlisted positions to junior officers for any courses of action that require a reduction in FA 51C enlisted inventory levels.
- 7. Although the courses of action will necessitate FA 51C officer eligibility requirements to be changed, the existing stipulations for FA 51C enlisted reclassification will be unaffected.
- 8. Changes to the FA 51C Active Component inventories will not affect the Reserve Component or National Guard.

### B. THE STATUS OUO

The Status Quo for this project represents the actual FA 51C personnel inventory levels as of July 2015 along with their percentage breakdowns. It also includes the FY 15 Army individual FA 51C personnel costs by pay grade calculated by the Army Military-Civilian Cost System.

Although the focus of this project is to analyze alternative career timelines for FA 51C officers, some of the courses of action require such an increase in junior officers that a reduction in the FA 51C enlisted inventory will be necessary. It is, therefore, prudent to also include the FA 51C enlisted inventory and associated costs into the Status Quo and analysis of the courses of action.

To reiterate, this project is not altering FA 51C COL/O-6 and SGM/E-9 inventory levels, therefore, the inventory count for those two categories listed in the Status Quo will remain the same throughout and will anchor the inventory distributions for each of the course of action to maintain consistency.

The Status Quo also does not contain any 2LT/O-1 or 1LT/O-2 officers because there are none currently in the AAC. This stems from existing AAC branch transfer stipulations to include being a graduate of the Captain Career Course (or Enrolled in the Captains Career Course) and successful completion of the appropriate key/developmental

position in the grade of captain. The Army FA 51C officer personnel inventory breakdown is listed in Table 2.

Table 2. Army FA 51C Officer Inventory as of July 2015. Source: Torres, 2015.

STATUS QUO (51C OFFICER INVENTORY)								
Officer Pay Grades	01	02	О3	04	<b>O</b> 5	<b>O</b> 6	TOTAL	
Inventory	0	0	82	258	121	39	500	
% Breakdown	0%	0%	16%	52%	24%	8%	100%	

The FA 51C enlisted inventory in the Status Quo, too, does not include any SGT/E-5 and below personnel given the eligibility requirements for enlisted reclassification to FA 51C include: being an E-5 with 48 months of time in service (TIS), 10-months of time in grade (TIG), completion of the Warrior Leaders Course (WLC), and have at least one noncommissioned officer evaluation report (NCOER) (U.S. Army Acquisition Support Center, n.d.). The current FA 51C enlisted personnel inventory breakdown is listed in Table 3.

Table 3. Army FA 51C Enlisted Inventory as of July 2015. Source: Torres, 2015.

STATUS QUO (CURRENT 51C ENLISTED INVENTORY)										
Enlisted Pay Grades E6 E7 E8 E9 TOTAL										
Inventory	275	217	99	8	599					
% Breakdown	46%	36%	17%	1%	100%					

In addition to personnel inventory levels and percentages, the Status Quo also comprises of individual personnel costs calculated for each FA 51C pay grade. Again, since FA 51C COL/O-6 and SGM/E-9 inventory levels are not being changed, their costs are not calculated nor factored into the Status Quo and courses of action. These costs are the full manpower costs for each FA 51C pay grade calculated by AMCOS in accordance with Department of Defense Instruction (DODI) 7041.04. These full manpower costs include:

- The average base pay for each pay grade
- The average Basic Allowance for Housing (BAH) for each pay grade
- The average Basic Allowance for Subsistence (BAS) for each pay grade
- The average incentive and specialty pays for each pay grade
- The average permanent change of station expenses for each pay grade
- The average contributions to medical health care coverage for each pay grade
- The average contributions to the retired pay accrual account for each pay grade
- The programmed amount of costs of additional benefits for each pay grade to include subsidized groceries, child development, family support services, family housing subsidies, education assistance and advertising and recruiting
- The average training costs for each pay grade to include BOLC, CCC, AAFC, ABCC, AICC, IQC, and ILE for officers or Basic Training, Basic Leaders Course, Advanced Leaders Course, Senior Leaders Course, AAFC, ABCC, and AICC for enlisted

The training costs include the average Army BOLC and CCC costs per officer and are not tied to a specific branch such as the Infantry Basic Officer Leader Course or the Combined Logistics Captain Career Course. The total annual manpower costs for each FA 51C pay grade, calculated by AMCOS, are depicted in Table 4.

Table 4. FY15 Army FA 51C Annual Individual Personnel Costs by Pay Grade. Source: Army Military-Civilian Cost System, 2015.

<b>PAY GRADE</b>	INDIVIDUAL COSTS
E6	\$141,689
E7	\$155,573
E8	\$170,517
01	\$165,842
O2	\$191,260
O3	\$229,626
O4	\$256,244
O5	\$281,091
TOTALS	\$ 1,591,842

### C. COA #1: ASSESS AFTER COMMISSIONING USING OVERALL ARMY OFFICER INVENTORY EQUIVALENCY

Courses of Action #1 and #2 suggest that the Army Acquisition Corps alters its accessions process to allow officers to enter the Contracting Career Field through direct commission. This would allow FA 51C officers to attend the Army Acquisition Foundation Course and the Army Basic Contracting Course earlier in their careers as second lieutenants following BOLC then the Army Intermediate Contracting Course as seasoned contracting captains after completing the Captain Career Course. The timeframe to complete Intermediate Level Education and the Army Acquisition Corps Intermediate Qualification Course would remain the same.

In order to match the overall Army officer inventory distribution, the Contracting Career Field would need to increase the number of second lieutenants by 10%, first lieutenants by 16%, and captains by 20% from the Status Quo. The number of majors would need to be reduced by 31% and lieutenant colonels by 12%. The disparity between the two inventories is illustrated in Table 5.

Table 5. FY15 Overall Army Officer Inventory Percentages. Source: Army Military-Civilian Cost System, 2015.

OVERALL ARMY OFFICER INVENTORY PERCENTAGES										
O1 O2 O3 O4 O5 O6										
OVERALL ARMY	10%	16%	36%	21%	12%	5%				
51C (STATUS QUO)	0%	0%	16%	52%	24%	8%				
DELTA	10%	16%	20%	-31%	-12%	-3%				

To partner the Contracting Career Fields' officer inventory with the overall Army officer percentage dispersal, Course of Action #1 adds 78 second lieutenants, 124 first lieutenants, and an additional 199 captains. It then shrinks the number of majors by 94 and lieutenant colonels by 27 as shown in Table 6.

Table 6. Course of Action #1 FA 51C Officer Inventory Modeled after Overall Army Inventory Percentages.

COA #1 (51C OFFICER INVENTORY CHANGES)									
Officer Pay Grades	01	02	О3	04	O5	O6	TOTAL		
Overall Army % Equivalent	10%	16%	36%	21%	12%	5%	100%		
COA 1 Inventory	78	124	281	164	94	39	780		
Status Quo Inventory	0	0	82	258	121	39	500		
Delta	78	124	199	-94	-27	0	280		

As stated previously, the number of FA 51C colonels will remain unchanged for each of the courses of action. The overall Army inventory, however, reduces the percentage that colonels comprise of the officer inventory from 8% to 5%. Course of Action #1, therefore, requires an additional 280 officers in order to match the existing FA 51C colonel inventory of 39 with the overall Army allocation of 5% and counterbalance the massive amount of additional junior officers. The additional 280 personnel must be extracted from the FA 51C enlisted inventory to compensate, since the total Contracting Career Field personnel inventory must remain the same. As a result, 130 staff sergeants, 103 sergeants first class, and 47 master sergeants are reduced to make up for the shortfall while also maintaining a relatively equal apportionment of FA 51C enlisted personnel below the rank of sergeant major. Table 7 portrays these changes to the enlisted inventory.

Table 7. Course of Action #1 FA 51C Enlisted Inventory Changes due to Officer Increases.

COA #1 (51C ENLISTED INVENTORY CHANGES)									
Enlisted Pay Grades E6 E7 E8 E9 TOTAL									
COA 1 Inventory	145	114	52	8	319				
Status Quo Inventory	275	217	99	8	599				
Delta	-130	-103	-47	0	-280				
% Breakdown	45%	36%	16%	3%	100%				

After applying the individual costs to the adjusted personnel inventory, the total cost of Course of Action #1 results in an \$8.2 million annual increase from the Status Quo. The primary cost driver for this increase is the additional number of captains to the inventory which costs an additional \$45.7 million annually. This is followed by the

inclusion of first lieutenants and second lieutenants in the inventory which adds \$23.7 million and \$12.9 million in extra costs per year respectively. Although there are costs savings by reducing the number staff sergeants, \$18.4 million; sergeant first classes, \$16.02 million; master sergeants, \$8.01 million; majors, \$24.09 million; and lieutenant colonels, \$7.6 million, these savings don't outweigh the escalation of junior officer costs. The Course of Action #1 breakdown of costs and comparison to the Status Quo is illustrated in Table 8.

Table 8. Course of Action #1 Calculated FA 51C Personnel Costs with Overall Army Officer Percentages Equivalency.

	COA #1 (TOTAL ANNUAL 51C PERSONNEL COSTS)									
PAY GRADES	INVENTORY	INDIVIDUAL COSTS	TOTAL COSTS	STATUS QUO	DELTA					
E6	145	\$141,689	\$20,544,896	\$38,964,457	\$18,419,561					
E7	114	\$155,573	\$17,735,324	\$33,759,344	\$16,024,020					
E8	52	\$170,517	\$8,866,899	\$16,881,211	\$8,014,312					
O1	78	\$165,842	\$12,935,651	\$0	(\$12,935,651)					
O2	124	\$191,260	\$23,716,201	\$0	(\$23,716,201)					
O3	281	\$229,626	\$64,524,997	\$18,829,359	(\$45,695,638)					
O4	164	\$256,244	\$42,024,090	\$66,111,069	\$24,086,979					
O5	94	\$281,091	\$26,422,545	\$34,011,999	\$7,589,454					
TOTALS	1052	\$ 1,591,842	\$216,770,601	\$208,557,439	\$ (8,213,162)					

## D. COA #2: ASSESS AFTER COMMISSIONING USING ARMY AVIATION (AV) OFFICER INVENTORY EQUIVALENCY

Course of Action #2 alters the Contracting Career Field personnel inventory to match the Army Aviation Branch (AV) officer distribution percentages. The Aviation Branch is responsible for managing the Army's rotary-wing, fixed-wing, and unmanned aircraft systems (UAS) platforms and personnel. According to DA PAM 600-3, it is a basic branch under the Army's Operations Branch, so:

All newly commissioned Aviation lieutenants attend BOLC and Initial Entry Rotary Wing training at the U.S. Army Aviation Center of Excellence (USAACE), Fort Rucker, AL. (Headquarters, Department of the Army, 2014b)

Officers in the Aviation Branch are required to maintain a standard aviation level of readiness training, technical certification, and flight proficiency which makes it an ideal branch to emulate an officer inventory after. The Aviation Branch's officer inventory

below the rank of general, as shown in Table 9, allocates 12% of its population to second lieutenants and 17% to first lieutenants. It also includes 17% more captains than the FA 51C Status Quo, while maintaining 31% less majors and 12% less lieutenant colonels.

Table 9. FY15 Army Aviation Officer Inventory Percentages. Source: Army Military-Civilian Cost System, 2015.

ARMY AVIATION OFFICER INVENTORY PERCENTAGES											
O1 O2 O3 O4 O5 O6											
ARMY AVIATION	12%	17%	33%	21%	12%	5%					
51C (STATUS QUO)	0%	0%	16%	52%	24%	8%					
DELTA	12%	17%	17%	-31%	-12%	-3%					

To align the Contracting Career Field's officer inventory percentages with those of the Aviation Branch, Course of Action #2 adds 94 second lieutenants and 133 first lieutenants to the officer inventory. It also increases the number of FA 51C captains by 175. Course of Action #2 then decreases the number of majors in the Contracting Career Field by 94, and eliminates 28 lieutenant colonels. These adjusted numbers are explained in Table 10.

Table 10. Course of Action #2 FA 51C Officer Inventory Modeled after Army Aviation Inventory Percentages.

COA #2 (51C OFFICER INVENTORY CHANGES)									
	O1 O2 O3 O4 O5 O6 TOTAL								
Aviation % Equivalent	12%	17%	33%	21%	12%	5%	100%		
COA 2 Inventory	94	133	257	164	93	39	780		
Status Quo Inventory	0	0	82	258	121	39	780		
Delta	94	133	175	-94	-28	0	0		

Like the overall Army inventory, the Aviation Branch also includes a smaller percentage of colonels, 5%, in its officer population. In order to correspond with the AV officer inventory, Course of Action #2 reduces the percentage that colonels comprise of the Contracting Career Field's officer inventory from 8% to 5%. This, therefore, also requires an additional 280 officers to counterbalance the additional junior officers. Like Course of Action #1, Course of Action #2 extracts the additional 280 personnel from the FA 51C enlisted inventory to compensate. Subsequently, 130 staff sergeants, 103

sergeants first class, and 47 master sergeants are reduced to make up for the shortfall and maintain a relatively equal apportionment of FA 51C enlisted personnel below the rank of sergeant major. Table 11 portrays these changes to the enlisted inventory.

Table 11. Course of Action #2 FA 51C Enlisted Inventory Changes due to Officer Increases.

COA #2 (51C ENLISTED INVENTORY CHANGES)									
Enlisted Pay Grades E6 E7 E8 E9 TOTAL									
COA 2 Inventory	145	114	52	8	319				
Status Quo Inventory	275	217	99	8	599				
Delta	-130	-103	-47	0	-280				
% Breakdown	45%	36%	16%	3%	100%				

The changes to the personnel inventory in Course of Action #2 compound the Contracting Career Field's annual costs by \$6.8 million from the Status Quo. This is due to the additional number of captains to the inventory which costs an additional \$40.2 million annually. The inclusion of first lieutenants and second lieutenants in the inventory also adds \$25.4 million and \$15.6 million in extra costs per year respectively as shown in Table 12. Despite the costs savings from reducing the number staff sergeants, \$18.4 million; sergeant first classes, \$16.02 million; master sergeants, \$8.01 million; majors, \$24.09 million; and lieutenant colonels, \$7.9 million, these savings don't outweigh the escalation of junior officer costs.

Table 12. Course of Action #2 Calculated FA 51C Personnel Costs with Aviation Officer Percentages Equivalency.

	COA# 2 (TOTAL ANNUAL 51C PERSONNEL COSTS)									
PAY GRADES	INVENTORY	INDIVIDUAL COSTS	TOTAL COSTS	STATUS QUO	DELTA					
E6	145	\$141,689	\$20,544,896	\$38,964,457	\$18,419,561					
E7	114	\$155,573	\$17,735,324	\$33,759,344	\$16,024,020					
E8	52	\$170,517	\$8,866,899	\$16,881,211	\$8,014,312					
O1	94	\$165,842	\$15,589,118	\$0	(\$15,589,118)					
O2	133	\$191,260	\$25,437,538	\$0	(\$25,437,538)					
O3	257	\$229,626	\$59,013,965	\$18,829,359	(\$40,184,606)					
O4	164	\$256,244	\$42,024,090	\$66,111,069	\$24,086,979					
O5	93	\$281,091	\$26,141,454	\$34,011,999	\$7,870,545					
TOTALS	1052	\$ 1,591,842	\$215,353,283	\$208,557,439	\$ (6,795,844)					

# E. COA #3: ASSESS PRIOR TO CAPTAIN CAREER COURSE USING ARMY JUDGE ADVOCATE GENERAL'S CORPS (JAGC) OFFICER INVENTORY EQUIVALENCY

Unlike Course of Action #1 and #2, Course of Action #3 and #4 entail officers to continue to serve in a primary Army branch, but enter the Contracting Career Field prior to attending the Captain Career Course. Course of Action #3 models the Contracting Career Field's personnel inventory after that of the Army Judge Advocate General's Corps (JAGC), which manages the Army's attorneys. According to DA PAM 600–3, JAGC assesses its officers:

Primarily from law school students, Reserve Officer Training Command (ROTC) officers attending law school on an educational delay, active members of the civilian bar, and active duty commissioned officers seeking participation in the Funded Legal Education Program. (Headquarters, Department of the Army, 2014b)

Other than those officers assessed in the Funded Legal Education Program (FLEP), the majority of officers in the JAGC do not serve in other Army branches like FA 51C officers. Despite most of its officers serving only in one branch, however, the JAGC's officer inventory is comprised of mostly captains and above, especially since, according to DA PAM 600–3, those officers who are directly commissioned after earning a law degree are:

Awarded 18 months constructive credit for promotion for the time spent in law school. Officers who do not qualify for appointment as captains are appointed as first lieutenants and are usually eligible for promotion to the rank of captain upon completion of initial entry training. (Headquarters, Department of the Army, 2014b)

This makes the JAGC an ideal inventory to model the FA 51C officer levels after, since officers entering the Contracting Career Field before the Captain Career Course is also the same timeframe officers are appointed as judge advocates. Additionally, 92% of JAGC's officer corps is below the rank of general similar to the Contracting Career Field, which is another reason why it is a suitable officer inventory to replicate.

As stated previously, the FA 51C officer inventory has a higher percentage of field grade officers compared to the rest of the Army, and this is no different compared to

the JAGC. According to AMCOS, the JAGC apportions 25% less majors and 11% less lieutenant colonels to its officer inventory than the Contracting Career Field at the start of FY15, depicted in Table 13. The JAGC, on the other hand, allocates 35% more captains to its officer corps than FA 51C does. There is also 1% dedicated to JAGC first lieutenants who have yet to complete BOLC. This additional percent will be added to the captains' inventory for this course of action, since first lieutenants will not be able to attend the FA 51C Captain Career Course.

Table 13. FY15 Army Judge Advocate General Corps Officer Inventory Percentages. Source: Army Military-Civilian Cost System, 2015.

JAGC OFFICER INVENTORY PERCENTAGES								
O1 O2 O3 O4 O5 O6								
JAGC	0%	1%	51%	27%	13%	8%		
51C (STATUS QUO)	0%	0%	16%	52%	24%	8%		
DELTA	0%	1%	35%	-25%	-11%	0%		

When the FA 51C officer personnel inventory is adjusted to match the percentages utilized by the JAGC, the results are 178 more captains, 122 less majors, and 56 less lieutenant colonels than the Status Quo. These adjustments don't require modifications to the FA 51C enlisted inventory. The Course of Action #3 adjusted officer and enlisted personnel inventory distributions are illustrated in Tables 14 and 15.

Table 14. Course of Action #3 FA 51C Officer Inventory Modeled after JAGC Inventory Percentages.

COA #3 (51C OFFICER INVENTORY CHANGES)								
O1 O2 O3 O4 O5 O6 TOTAL								
JAGC % Equivalent	0%	0%	52%	27%	13%	8%	100%	
COA 3 Inventory	0	0	260	136	65	39	500	
Status Quo Inventory	0	0	82	258	121	39	500	
Delta	0	0	178	-122	-56	0	0	

Note: The 52% O-3 inventory level combines JAGC's original inventory breakdown of 51% captains and 1% first lieutenants, since there will be no first lieutenants in the FA 51C inventory due to Captain Career Course attendance eligibility requirements.

Table 15. Course of Action #3 FA 51C Enlisted Inventory.

COA #3 (51C ENLISTED INVENTORY CHANGES)								
E6 E7 E8 E9 TOTAL								
COA 3 Inventory	275	217	99	8	599			
Status Quo Inventory	275	217	99	8	599			
Delta	0	0	0	0	0			
% Breakdown	46%	36%	17%	1%	100%			

The Army Acquisition Corps would save an additional \$6.1 million annually if it changed its officer personnel inventory levels to reflect that of the JAGC. Although there would be an increase of more than \$40.8 million in annual costs due to adding 178 captains to meet the new 52% inventory requirement, the reductions in majors and lieutenant colonels would save a combined \$47 million annually. The costs of the enlisted personnel would remain unchanged from the Status Quo. Since this course of action does not involve adding any 2LT or 1LT officers to the Contracting Career Field inventory, no costs are incurred for those ranks. The total annual costs of Course of Action #3 and its savings compared to the Status Quo are depicted in Table 16.

Table 16. Course of Action #3 Calculated FA 51C Personnel Costs with JAGC Officer Percentages Equivalency.

COA #3 (TOTAL ANNUAL 51C PERSONNEL COSTS)								
PAY GRADES	INVENTORY	INDIVIDUAL COSTS	TOTAL COSTS	STATUS QUO	DELTA			
E6	275	\$141,689	\$38,964,457	\$38,964,457	\$0			
E7	217	\$155,573	\$33,759,344	\$33,759,344	\$0			
E8	99	\$170,517	\$16,881,211	\$16,881,211	\$0			
O1	0	\$165,842	\$0	\$0	\$0			
O2	0	\$191,260	\$0	\$0	\$0			
O3	260	\$229,626	\$59,702,844	\$18,829,359	(\$40,873,485)			
O4	136	\$256,244	\$34,849,245	\$66,111,069	\$31,261,824			
O5	65	\$281,091	\$18,270,909	\$34,011,999	\$15,741,090			
TOTALS	1052	\$ 1,591,842	\$202,428,011	\$208,557,439	\$ 6,129,429			

### F. COA #4: ASSESS PRIOR TO CAPTAIN CAREER COURSE USING ARMY SPECIAL FORCES (SF) OFFICER INVENTORY EQUIVALENCY

Course of Action #4 models the FA 51C officer inventory levels after the officer percentages of the Army Special Forces (SF) branch. Of the four alternatives being analyzed in this project, the SF branch has the most similar personnel allocation to the

Army Acquisition Corps. Special Forces officers serve in other basic branches prior to being selected to join the branch, like the AAC, and then attend the Maneuver Captain Career Course in Georgia. The SF branch, therefore, does not have any 2LTs or 1LTs, and CPT, MAJ, and LTC ranks make up 92% of its officer corps below the rank of general also like the Contracting Career Field. The difference, as depicted in Table 17, is the SF branch allocates 24% more captains to its officer corps than FA 51C does. Consequently, it apportions 21% less majors and 3% less lieutenant colonels than the Contracting Career Field does to its officer inventory.

Table 17. FY15 Army Special Forces Officer Inventory Percentages. Source: Army Military-Civilian Cost System, 2015.

SF OFFICER INVENTORY PERCENTAGES									
O1 O2 O3 O4 O5 O6									
SF	0%	0%	40%	31%	21%	8%			
51C (STATUS QUO)	0%	0%	16%	52%	24%	8%			
DELTA	0%	0%	24%	-21%	-3%	0%			

When the FA 51C officer personnel inventory is adjusted to match the percentages utilized by the SF branch, the results are 119 more captains, 103 less majors, and 16 less lieutenant colonels than the Status Quo. Since these changes are modest, the enlisted inventory is unaffected. The Course of Action #4 adjusted officer and enlisted personnel inventory distributions are illustrated in Tables 18 and 19.

Table 18. Course of Action #4 FA 51C Officer Inventory Modeled after SF Inventory Percentages.

COA #4 (51C OFFICER INVENTORY CHANGES)								
	01	02	О3	04	O5	O6	TOTAL	
SF % Equivalent	0%	0%	40%	31%	21%	8%	100%	
COA 4 Inventory	0	0	201	155	105	39	500	
Status Quo Inventory	0	0	82	258	121	39	500	
Delta	0	0	119	-103	-16	0	0	

Table 19. Course of Action #4 FA 51C Enlisted Inventory Changes.

COA #4 (51C ENLISTED INVENTORY CHANGES)								
E6 E7 E8 E9 TOTAL								
COA 4 Inventory	275	217	99	8	599			
Status Quo Inventory	275	217	99	8	599			
Delta	0	0	0	0	0			
% Breakdown	46%	36%	17%	1%	100%			

After applying the costs to the new personnel distribution of Course of Action #4, the costs of the enlisted personnel remain unchanged from the Status Quo. Since this course of action does not involve adding any 2LT or 1LT officers to the Contracting Career Field inventory, no costs are incurred for those ranks. The only cost increases in Course of Action #4 from the Status Quo are derived from the additional number of captains, which results in an additional \$27.3 million annually. The savings from the reduction of majors and lieutenant colonels, however, not only mitigate this increase, but offer an annual savings of over \$3.5 million dollars if adopted by the AAC. The total annual costs of Course of Action #4 and its savings compared to the Status Quo are depicted in Table 20.

Table 20. Course of Action #4 Calculated FA 51C Personnel Costs with SF Officer Percentages Equivalency.

COA 4 (TOTAL ANNUAL 51C PERSONNEL COSTS)								
PAY GRADES	INVENTORY	INDIVIDUAL COSTS	TOTAL COSTS	STATUS QUO	DELTA			
E6	275	\$141,689	\$38,964,457	\$38,964,457	\$0			
E7	217	\$155,573	\$33,759,344	\$33,759,344	\$0			
E8	99	\$170,517	\$16,881,211	\$16,881,211	\$0			
O1	0	\$165,842	\$0	\$0	\$0			
O2	0	\$191,260	\$0	\$0	\$0			
O3	201	\$229,626	\$46,154,891	\$18,829,359	(\$27,325,532)			
O4	155	\$256,244	\$39,717,890	\$66,111,069	\$26,393,179			
O5	105	\$281,091	\$29,514,545	\$34,011,999	\$4,497,454			
TOTALS	1052	\$ 1,591,842	\$204,992,338	\$208,557,439	\$ 3,565,101			

THIS PAGE INTENTIONALLY LEFT BLANK

### IV. COMPARING THE COURSES OF ACTION

### A. COMPARING COSTS

When comparing the costs, both Course of Action #1 and #2 exceed the total annual costs of the Status Quo. This is mainly due to the reduction in enlisted personnel, which have lower individual costs, and replacing them with more expensive junior officers. The influx of junior officers is so large in both courses of action that even the reduction in majors and lieutenant colonels in the personnel inventory levels could not compensate for the increased costs. Course of Action #1, which is modeled after the overall total Army officer inventory levels, would incur the greatest costs because it had the largest increase in captains. Course of Action #2, which is modeled after the Army Aviation branch, is the second most expensive option because it required the largest increase in first lieutenants and second lieutenants. The roll-up of the inventory levels and total costs for the four courses of action plus the Status Quo is captured in Table 21. Admitting officers into the Contracting Career Field as second lieutenants following commissioning is clearly more costly than the current FA 51C officer career timeline.

Table 21. Course of Action Comparison.

COA COMPARISON									
PAY GRADES	STATUS QUO	COA#1		COA #2	COA #3	COA#4			
E6	275		145	145	275	275			
E7	217		114	114	217	217			
E8	99		52	52	99	99			
O1	0		78	94	0	0			
O2	0		124	133	0	0			
O3	82		281	257	260	201			
O4	258		164	164	136	155			
O5	121		94	93	65	105			
ANNUAL COSTS	\$ 208,557,439	\$ 216,770	601	\$215,353,283	\$ 202,428,011	\$ 204,992,338			
	DELTA	\$ (8,213	3,162)	\$ (6,795,844)	\$ 6,129,428	\$ 3,565,101			

Both Course of Action #3 and #4, on the other hand, are more cost effective than the Status Quo. They each preserve the enlisted inventory levels unchanged from the Status Quo driving costs down compared to the Pre-BOLC courses of action. Course of Action #3, modeled after the personnel inventory percentages of the Judge Advocate General Corps where officers' careers are delayed due to law school, has the lowest total

cost of all of the alternatives. This is mainly a byproduct of the largest reduction of both FA 51C majors and lieutenant colonels compared to the others. Course of Action #4, based on the officer inventory percentages of the Special Forces branch, nets the second lowest cost of all of the options and encompasses the smallest increase in captains. In the end, allowing officers to transfer into the Contracting Career Field prior to the Captain Career Course delivers the most cost effective options.

### B. COMPARING IMPACTS ON LEADERSHIP DEVELOPMENT

As stated previously, the intent of requiring officers to serve in a basic branch prior to transferring into the Army Acquisition Corps is to ensure that they have operational experience prior to entering another functional area. It is, therefore, prudent to consider the effects each of the courses of action has on FA 51C officer leadership development by reducing operational experience.

Both Course of Action #1 and #2 would eliminate any operational experience FA 51C officers would have prior to joining the Contracting Career Field. This lack of operational experience has two consequences: a lack of institutional knowledge of the Army, and an absence of important leadership opportunities.

In the current Status Quo, officers have a good 7–8 years of experiences serving in Army basic branch positions such as platoon leader, company executive officer, battalion staff, and company command. These assignments provide a fundamental understanding of how a conventional Army unit operates, especially in a deployed environment if afforded the opportunity. By requiring officers to serve in these assignments prior to joining the Contracting Career Field, the AAC is counting on these experiences teaching FA 51C officers how to better support conventional units similar to the ones they previously served in, since they are their primary contracting customers. Course of Action #1 and #2 don't allow for this chance for FA 51C officers to better understand their customers, which could hinder their customer service and ability to deconflict potential contracting issues such as requirement development and contract administration. Course of Action #3 and #4, on the other hand, do allow for officers to experience this institutional knowledge, just not as extensive as the Status Quo.

Serving in basic branch positions also provide officers tremendous opportunities for leadership development that will benefit them not only when they join a contracting team but also contracting leadership positions later in their careers. As 23-year-old second lieutenants, Army officers are presented with unique chances to hold supervisory positions as platoon leaders responsible for leading up to 30 Soldiers on a day to day basis. They then can further craft their leadership skills by serving as company commanders as 26-year-old captains where they can supervise over 100 Soldiers. As company commanders, officers are given Uniform Code of Military Justice (UCMJ) authorities, so they also learn that aspect military leadership. All of these situations afford Army officers the opportunity to enhance their leadership techniques that few other professions offer.

Course of Action #1 and #2 sacrifices all of these leadership opportunities and would force FA 51C officers to acquire leadership skills and techniques as contracting team leaders or battalion commanders later in the careers. Course of Action #3 and #4 affords officers the ability to serve as platoon leaders, but not as company commanders, since they would join the Contracting Career Field prior to CCC. They, therefore, would have some leadership experience prior to entering the career field, but not the UCMJ familiarity.

### C. COMPARING IMPACTS TO TECHNICAL PROFICIENCY

While the current Status Quo sacrifices FA 51C officers' contracting technical proficiency in exchange for their ability to gain leadership experiences and institutional knowledge, Course of Action #1 and #2 maximize contracting professional development. Admitting officers into the career field as a basic branch would establish a "contracting first" culture that emphasizes contracting skills. Officer would have double the amount of contracting-specific assignments then is currently afforded in the Status Quo. This would guarantee the appropriate amount of relevant experience that the Under Secretary of Defense for Acquisition, Technology, and Logistics desired by instituting *Better Buying Power 2.0* in 2012. While Course of Action #3 and #4 would not incorporate as extensive

a path to increased technical proficiency as the other two, they still, none the less, would afford greater chances to perform contracting duties then the Status Quo.

### D. COMPARING IMPACTS TO MULTI-FUNCTIONAL DEVELOPMENT

Course of Action #1 and #2 present the AAC with additional possibilities that it rarely has a chance to achieve: to allow more FA 51C officers to serve in Program Management Career Field positions. Currently, officers can serve in another career field once they have achieved DAWIA Level III certification and if their career timelines allow for it. Unfortunately, by the time most FA 51C officers are certified Level III in contracting, they only have time to serve in one PM assignment before being eligible for promotion to lieutenant colonel. This means that the maximum certification that they can receive in Program Management is Level II, so they don't meet the minimum Level III eligibility requirement to also apply for PM Key billets, in addition to Contracting Key billets, as lieutenant colonels.

Course of Action #1 and #2, consequently, afford officers the ability to receive Level III certification in contracting far earlier in their careers allowing them to also serve in more PM positions. This would supply the AAC with more officers who are Level III certified in both PM and Contracting strengthening its overall acquisition curriculum. It would also create more assignment opportunities for the officers who are currently limited to just one career field. Course of Action #3 and #4 also can provide this benefit as well, but that would negate the additional contracting assignments that admitting officers in the career field earlier is intended to create.

### V. CONCLUSION

#### A. SUMMARY

This project explored whether there is a more cost effective alternative to the current Army FA 51C officer career timeline structure that enables more opportunities to serve in contracting positions and better prepares officers for future contracting leadership positions. This project accomplished this by first examining the current construct for a FA 51C officer's career timeline along with the training requirements. Next, this project identified alternative timelines for a FA 51C officer's career and established courses of action modeled after the officer personnel inventory levels of other branches in the Army.

The first two courses of action encompassed admitting officers into the AAC Contracting Career Field through direct commissioning with Course of Action #1 modeling the Contracting Career Field's military personnel inventory after the overall Army officer personnel inventory distribution percentages. Course of Action #2 models the Contracting Field's military personnel allotments after the Army's Aviation Branch officer inventory distribution. The other two courses of action comprised of admitting officers into the AAC Contracting Career Field between an officer's third and fourth year of service prior to attending the Captain Career Course (CCC). Course of Action #3 aligned with the officer inventory percentages of the Army Judge Advocate General's Corps, while Course of Action #4 restructured the personnel inventory of the Contracting Career Field after the officer percentage breakdown utilized by Army Special Forces.

After the personnel inventory percentages for each of the courses of action were established, the costs for each proposed inventory were calculated utilizing individual costs, by military pay grade, obtained from the Army Military/Civilian Cost System AMCOS.

#### B. RECOMMENDED COURSE OF ACTION

Based upon the results of this analysis, I recommend that the Army Acquisition Corps permits officers to transfer into the Contracting Career Field prior to attending the Captain Career Course. The AAC can redistribute its personnel inventory structure to reflect the percentages allocated in either Course of Action #3, which is modeled after the officer breakdown of the Judge Advocate General's Corps, or Course of Action #4, modeled after the Special Forces branch. Either of these inventory structures would require the AAC to lower its percentages of majors and lieutenant colonels to compensate for the increase in captains, but would not affect the non-commissioned officer personnel inventory levels of the Contracting Career Field, unlike the other courses of action.

Course of Action #3 and #4 would both still afford officers the opportunity to obtain operational experience prior to joining the Contracting Career Field. While both of the two Pre-CCC courses of action are acceptable, Course of Action #4 is the most comparable to the existing FA 51C officer career timeline, since Special Forces officers also serve in other basic branches prior to being selected to join the branch. Additionally, allowing officers to transfer earlier in their careers affords them opportunities to serve in multiple key developmental contracting team assignments and gain more contracting technical proficiency.

Conversely, while both courses of action offer lower total costs than the Status Quo, Course of Action #3 represents the most cost effective alternative to the current FA 51C officer career timeline resulting in \$6 million in annual savings for the Army Acquisition Corps. Aligning the Contracting Career Field's officer inventory levels and percentages with those proposed in Course of Action #3 is the most cost efficient method available to ensure that FA 51C officers receive maximum contracting-specific assignments prior to receiving leadership positions.

### C. RECOMMENDATIONS FOR FURTHER RESEARCH

For future research, I recommend that an analysis be conducted on the possibility of the Army supplementing the Contracting Career Field by temporarily assigning officers from the Logistics Branch to serve in staff and planning positions much like the

Navy does with its Supply Corps officers. This would afford FA 51C officers more time to serve in contracting-specific positions and improve their contracting knowledge.

Additionally, I recommend that research and analysis be conducted for future projects addressing the following related questions:

- What is the most efficient way for the Army Acquisition Corps to transition from its current personnel inventory breakdown to the one that is recommended in this project and how long will it take?
- What would be an effective curriculum if the Army Acquisition Corps instituted its own Basic Officer Leadership Course and Captain Career Course for the Contracting Career Field?
- How would the Army Acquisition Corps incorporate a similar personnel inventory structure change to the Program Management Career Field?

THIS PAGE INTENTIONALLY LEFT BLANK

### LIST OF REFERENCES

- Allen, K., Doran, J., & Westbrook, B. (2011). Army acquisition and contracting personnel requirements: How are the Army's current recruitment, development and retention programs meeting current and future personnel requirements? (master's thesis). Retrieved from Calhoun: http://calhoun.nps.edu/bitstream/handle/10945/10797/11Sep\_Allen\_JAP.pdf?sequ ence=3&isAllowed=y
- Army Contracting Command. (n.d.). About Army Contracting Command. Retrieved April 27, 2016, from http://acc.army.mil/about/
- Army Military-Civilian Cost System. (2015). AMCOS Lite. Retrieved from https://www.osmisweb.army.mil/amcos/app/home.aspx
- Brooker, C., Miner, K., & Montano, S. (2016). Army acquisition training: An analysis of costs and benefits (master's thesis). Retrieved from Calhoun http://calhoun.nps.edu/bitstream/handle/10945/47908/15Dec\_Brooker\_Miner\_Montano.pdf?sequence=3&isAllowed=y
- Congressional Budget Office. (2012, November 14). Costs of military pay and benefits inthe defense budget. Washington, DC: Author.
- Commission on Army Acquisition and Program Management in Expeditionary Operations. (2007). *Urgent reform required: Army expeditionary contracting*. Washington, DC: Assistant Secretary of the Army (Acquisition Logistics and Technology).
- Defense Acquisition University (DAU). (2016, February 10). Equivalent course listing for DOD schools. Retrieved from https://myclass.dau.mil/bbcswebdav/institution/NonDAU\_Providers/01%20-%20Equivalent\_Providers/11%20-%20Equivalency%20Postings/2%20-%20DoD%20Schools
- Headquarters, Department of the Army. (2014a, October 14). *Contracting support to unified land operations* (Army Technical Publication [ATP] 4-92). Washington, DC: Author.
- Headquarters, Department of the Army. (2014b, December 03). *Commissioned officer professional development and career management* (Pamphlet [PAM] 600–3). Washington, DC: Author.
- Headquarters, Department of the Army Training and Doctrine Command. (2015, September 1). *Basic officer leader training policies and administration* (TRADOC Regulation [TR] 350-36). Fort Eustis, VA: Author.

- Lene, C., & Poppler, D. (2014). Army Contracting Workforce development building core competencies and skills (master's thesis). Retrieved from Calhoun http://calhoun.nps.edu/bitstream/handle/10945/43945/14Sep\_Lene\_Poppler\_need s\_supplemental.pdf?sequence=5&isAllowed=y
- Office of the Assistant Secretary of the Army, Acquisition, Logistics and Technology. (2014a, August 20). *Department of the Army, acquisition career field certification policy*. Retrieved from http://asc.army.mil/web/wp-content/uploads/2014/09/doa-acfcert-policy-20aug14.pdf
- Office of the Assistant Secretary of the Army Acquisition, Logistics, and Technology (2014b, October 25). *Director, Acquisition Career Management (DACM) fiscal year 2015 military acquisition assignment guidance*. Retrieved from http://asc.army.mil/web/
- Office of the Assistant Secretary of the Army Acquisition, Logistics, and Technology (2015, August 13). FA 51 Intermediate Level Education(ILE)/Joint Professional Military Education-1 (JPME-1) while attending the Naval Postgraduate School (NPS). Washington, DC: Author.
- Office of the Secretary of Defense for Acquisition, Technology and Logistics. (2012, November 13). *Better buying power 2.0*. Retrieved from http://bbp.dau.mil/
- Torres, I. (2015, July). U. S. Army acquisition support center (USAASC)—Army DACM Office. [PowerPoint Presentation]. Presented at Naval Postgraduate School, Monterey, CA.
- U.S. Army Acquisition Support Center (n.d.). Career planning steps. Retrieved April 27, 2016, from http://asc.army.mil/web/career-development/military-officer/career-planning-steps/
- U.S. Army Human Resources Command (n.d.). Acquisition Management Branch FA51. Retrieved April 27, 2016 from https://www.hrc.army.mil/OPMD/Acquisition%20Management%20Branch%20FA51

### INITIAL DISTRIBUTION LIST

- Defense Technical Information Center Ft. Belvoir, Virginia
- 2. Dudley Knox Library Naval Postgraduate School Monterey, California