



NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

JOINT APPLIED PROJECT

**An Analysis of the Training and Development
of the Contract Specialist 1102 Interns**

**By: Pamela Jones
Dee Kluft, and
Valerie Pettygrue
December 2010**

**Advisors: Cary A. Simon
Cynthia L. King**

Approved for public release; distribution is unlimited

THIS PAGE INTENTIONALLY LEFT BLANK

REPORT DOCUMENTATION PAGE			<i>Form Approved OMB No. 0704-0188</i>	
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 December 2010	3. REPORT TYPE AND DATES COVERED Joint Applied Project	
4. TITLE AND SUBTITLE An Analysis of the Training and Development of the Contract Specialist 1102 Interns			5. FUNDING NUMBERS	
6. AUTHOR(S) Pamela Jones, Dee Klaft, and Valerie Pettygrue				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000			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) This thesis analyzed the U.S. Army Contracting Command (ACC) training and development programs for contract specialists (1102s). Involvement in two wars has generated unintended consequences in the contracting community, which may be adversely affecting the Army's ability to meet and sustain its contracting responsibilities, e.g., an expanding contracting mission accompanied by substantial attrition of experienced contracting professionals. The study analyzed 1102 training and development practices at two major Army Contracting Centers: (1) Tank-Automotive and Armaments Command (TACOM) Contracting Center; and (2) Joint Munitions & Lethality (JM&L) Contracting Center. The objective of the study was to draw conclusions on the overall efficacy of 1102 training and development programs and to recommend ways to mitigate the aforementioned gaps. Surveys and interviews were conducted with TACOM and JM&L Contracting Center employees, workforce development personnel, and a Defense Acquisition University professor. Conclusions included: (1) the vision and goal of becoming world-class contracting centers will remain works-in-progress for five to 10 years in the future; (2) the Army may be more focused on certifications than contracting performance outcomes; and (3) interns may be overwhelmed with classes, yet detached from obtaining sufficient On-the-Job Training (OJT). Recommendations include: substantially increasing OJT, appointing OJT coordinators, and offering well-structured training programs tailored to individual developmental assignments.				
14. SUBJECT TERMS Contract Specialist, Training Programs, Development Programs, Tank Automotive and Armaments Command (TACOM), Joint Munitions & Lethality (JM&L), Army Contracting Command (ACC).			15. NUMBER OF PAGES 157	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UU	

THIS PAGE INTENTIONALLY LEFT BLANK

Approved for public release; distribution is unlimited

**AN ANALYSIS OF THE TRAINING AND DEVELOPMENT OF THE
CONTRACT SPECIALIST 1102 INTERNS**

Pamela Jones, Civilian, United States Army
Dee Klaft, Civilian, United States Army
Valerie Pettygrue, Civilian, United States Army

Submitted in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE IN CONTRACT MANAGEMENT

from the

**NAVAL POSTGRADUATE SCHOOL
December 2010**

Authors:

Pamela Jones

Dee Klaft

Valerie Pettygrue

Approved by:

Cary A. Simon, Lead Advisor

Cynthia L. King, Support Advisor

William R. Gates, Dean
Graduate School of Business and Public Policy

THIS PAGE INTENTIONALLY LEFT BLANK

AN ANALYSIS OF THE TRAINING AND DEVELOPMENT OF THE CONTRACT SPECIALIST 1102 INTERNS

ABSTRACT

This thesis analyzed the U.S. Army Contracting Command (ACC) training and development programs for contract specialists (1102s). Involvement in two wars has generated unintended consequences in the contracting community, which may be adversely affecting the Army's ability to meet and sustain its contracting responsibilities, e.g., an expanding contracting mission accompanied by substantial attrition of experienced contracting professionals. The study analyzed 1102 training and development practices at two major Army Contracting Centers: (1) Tank-Automotive and Armaments Command (TACOM) Contracting Center; and (2) Joint Munitions & Lethality (JM&L) Contracting Center.

The objective of the study was to draw conclusions on the overall efficacy of 1102 training and development programs and to recommend ways to mitigate the aforementioned gaps. Surveys and interviews were conducted with TACOM and JM&L Contracting Center employees, workforce development personnel, and a Defense Acquisition University professor.

Conclusions included: (1) the vision and goal of becoming world-class contracting centers will remain works-in-progress for five to 10 years in the future; (2) the Army may be more focused on certifications than contracting performance outcomes; and (3) interns may be overwhelmed with classes, yet detached from obtaining sufficient On-the-Job Training (OJT). Recommendations include: substantially increasing OJT, appointing OJT coordinators, and offering well-structured training programs tailored to individual developmental assignments.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

I.	THESIS INTRODUCTION.....	1
A.	CHAPTER OVERVIEW.....	1
B.	RESEARCH PURPOSE AND OBJECTIVE.....	1
C.	BACKGROUND	1
D.	RESEARCH QUESTIONS	3
	1. Primary Research Question.....	4
	2. Subsidiary Research Questions.....	4
E.	METHODOLOGY	5
F.	LIMITS OF THE STUDY	5
G.	OVERVIEW OF STUDY	5
H.	SUMMARY	6
II.	LITERATURE REVIEW	7
A.	CHAPTER OVERVIEW.....	7
B.	HUMAN CAPITAL CHALLENGES	7
C.	DOD’S PLAN TO ADDRESS HUMAN CAPITAL CHALLENGES.....	15
D.	IMPORTANCE OF TRAINING AND DEVELOPMENT	18
E.	CHAPTER SUMMARY.....	20
III.	ARMY CONTRACTING COMMAND AND CONTRACTING CENTERS	21
A.	CHAPTER OVERVIEW.....	21
B.	U.S. ARMY CONTRACTING COMMAND	21
C.	DAWIA 1102 CERTIFICATION REQUIREMENTS	28
	1. Level I Certification Requirements.....	28
	2. Level II Certification Requirements.....	29
	3. Level III Certification Requirements.....	29
D.	DEFENSE ACQUISITION UNIVERSITY (DAU)	30
E.	TACOM CONTRACTING CENTER–WARREN	30
F.	JOINT MUNITIONS AND LETHALITY CONTRACTING CENTER (JM&L)	36
G.	CHAPTER SUMMARY.....	39
IV.	SURVEY AND INTERVIEW METHODOLOGY AND RESULTS	41
A.	CHAPTER OVERVIEW.....	41
B.	METHODOLOGY	41
	1. Methods Utilized	41
	2. Participants	42
	3. Layout and Design.....	43
	a. Surveys.....	43
	b. Interviews	46
	4. Procedures.....	49
	a. Surveys.....	49
	b. Interviews	49

C.	SURVEY AND INTERVIEW RESULTS AND ANALYSIS.....	49
1.	Intern Background Information	50
a.	<i>Length of Service and Experience</i>	<i>51</i>
b.	<i>Certification and Education Level</i>	<i>52</i>
c.	<i>Level of Education, Certification, and Years of 1102 Experience</i>	<i>53</i>
d.	<i>Previous Work Experience.....</i>	<i>54</i>
e.	<i>Hiring Attributes.....</i>	<i>55</i>
2.	Current Training Program.....	55
a.	<i>Interns With Trainers</i>	<i>56</i>
b.	<i>Intern On-the-Job Training Conducted</i>	<i>56</i>
c.	<i>Intern Training Funding Process</i>	<i>58</i>
d.	<i>Challenges With the Intern Training Program</i>	<i>59</i>
3.	Perceptions/Attitude About Training	60
a.	<i>Rating the Training Program.....</i>	<i>60</i>
b.	<i>The Benefits of the Intern Training Program</i>	<i>64</i>
c.	<i>Drawbacks of the Intern Training Program.....</i>	<i>66</i>
d.	<i>Confidence Level of the Intern Training Program....</i>	<i>68</i>
4.	Tracking Intern Performance	70
a.	<i>Rate the Performance of the Interns</i>	<i>70</i>
b.	<i>Results From the Training Program</i>	<i>72</i>
c.	<i>Adequacy of Training</i>	<i>73</i>
5.	Attrition.....	73
a.	<i>Loss of Experience</i>	<i>73</i>
b.	<i>Retention Incentives</i>	<i>74</i>
c.	<i>Attrite Interns</i>	<i>76</i>
6.	Recommendations for Training.....	76
a.	<i>Recommended Improvements.....</i>	<i>76</i>
b.	<i>Next Decade Recommended Improvements</i>	<i>79</i>
D.	DISCUSSION OF RESULTS	79
E.	CHAPTER SUMMARY.....	88
V.	CONCLUSIONS AND RECOMMENDATIONS.....	89
A.	CHAPTER OVERVIEW.....	89
B.	SUMMARY	89
C.	CHAPTER SUMMARY.....	94
	APPENDIX A. CONTRACT SPECIALIST ASSESSMENT QUESTIONNAIRE.....	95
	APPENDIX B. SUPERVISOR QUESTIONNAIRE.....	99
	APPENDIX C. INTERN COMMENTS FROM SURVEY QUESTION 9	103
	APPENDIX D. INTERN COMMENTS FROM SURVEY QUESTION 10	107
	APPENDIX E. INTERN COMMENTS FROM SURVEY QUESTION 11	111
	APPENDIX F. INTERN COMMENTS FROM SURVEY QUESTION 12	115
	APPENDIX G. SUPERVISOR COMMENTS FROM SURVEY QUESTION 2.....	117

APPENDIX H. SUPERVISOR COMMENTS FROM SURVEY QUESTION 3.....	119
APPENDIX I. SUPERVISOR COMMENTS FROM SURVEY QUESTION 4	121
APPENDIX J. SUPERVISOR COMMENTS FROM SURVEY QUESTION 7	125
APPENDIX K. SUPERVISOR COMMENTS FROM SURVEY QUESTION 8.....	127
APPENDIX L. DIVISION CHIEF INTERVIEW QUESTIONS	129
APPENDIX M. WORKFORCE DEVELOPMENT INTERVIEW QUESTIONS.....	131
APPENDIX N. DEFENSE ACQUISITION UNIVERSITY (DAU) INSTRUCTOR INTERVIEW QUESTIONS	133
LIST OF REFERENCES.....	135
INITIAL DISTRIBUTION LIST	137

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF FIGURES

Figure 1.	Civilian Agency Acquisition Spending vs. Workforce Growth	10
Figure 2.	Historical Size Comparison of DoD Acquisition Organization and Defense Acquisition Workforce (civilian + military).....	11
Figure 3.	Civilian Agency Share of Spending by Contract Category.....	13
Figure 4.	Defense Acquisition Workforce - Contracting Career Field Distribution by Years to Retirement Eligibility (Civilians) (FY09) (<i>From Defense Acquisition Workforce Strategy, 2010</i>).....	15
Figure 5.	U. S. Army Contracting Command Organizational Chart (From ACC, 2009).....	24
Figure 6.	FY08 Actions and Obligations (From APBI, 2009)	25
Figure 7.	Trends and Impacts (From APBI, 2009)	26
Figure 8.	TCC Org Chart (From TCC, 2010)	32
Figure 9.	JM&L Organizational Chart (From JM&L, 2010).....	37
Figure 10.	Intern Length of Federal Employment (data from surveys).....	51
Figure 11.	Length of Time as a Contract Specialist (data from surveys)	52
Figure 12.	Intern Current Level of DAWIA Certification (data from surveys)	53
Figure 13.	Previous Work Experience Prior to Becoming an Intern (data from surveys).....	55
Figure 14.	Importance of an On-The-Job Training Program (data from surveys).....	61
Figure 15.	Rating each type of training individually; rating the level of knowledge received (data from surveys)	62
Figure 16.	Quality of Overall Intern Training Program (data from surveys)	64
Figure 17.	Confidence in Intern Training Program (data from surveys)	69
Figure 18.	Overall Performance of Current Interns (data from surveys)	71
Figure 19.	The Overall Performance Ratings of the Graduating Interns (data from surveys).....	72
Figure 20.	The Success of Retaining Top Performer Incentives (data from surveys).....	75

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF TABLES

Table 1.	DoD Human Capital Factors (From OMB, 2009).....	8
Table 2.	Key Elements for Acquisition Training and Why They are Important–GAO-03-281	19
Table 3.	Level I Certification Requirements (From Army Acquisition Support Center, 2010)	28
Table 4.	Level II Certification Requirements (From Army Acquisition Support Center, 2010).....	29
Table 5.	Level III Certification Requirements (From Army Acquisition Support Center, 2010).....	29
Table 6.	What TACOM Procures (From TCC, 2010).....	33
Table 7.	Interns with Trainers (data from surveys)	56

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF ACRONYMS AND ABBREVIATIONS

ACC	Army Contracting Command
ACALA	Armaments & Chemical Acquisition and Logistics Activity
AEC	Army Education Center
AMC	Army Materiel Command
AMCOM	Aviation and Missile Command
APBI	Advance Planning Briefing to Industry
AQS	Acquisition Qualification Standards
ARDEC	Army Armament Research, Development, and Engineering Center
ATAP	Acquisition Tuition Assistance Program
BBC	Buyer Boot Camp
BENS	Business Executives for National Security
BMO	Business Management Office
BRAC	Base Realignments and Closures
BRDEC	Belvoir Research, Development, and Engineering Center
CECOM	Communications Electronics Command
CSRS	Civil Service Retirement System
DA	Department of the Army
DAPA	Defense Acquisition Performance Assessment
DAU	Defense Acquisition University
DAWIA	Defense Acquisition Workforce Improvement Act
DFARS	Defense Federal Acquisition Regulation Supplement
DoD	Department of Defense
FAR	Federal Acquisition Regulation
FERS	Federal Employee Retirement System
FY	Fiscal Year
GAO	Government Accountability Office
GS	General Schedule
HQE	Highly Qualified Expert
IDP	Individual Development Plan

IT	Information Technology
IUID	Item Unique Identification
JM&L	Joint Munitions & Lethality
JMTC	Joint Manufacturing and Technology Command
LCMC	Life Cycle Management Command
LOGCAP	Logistics Civil Augmentation Program
MAIS	Major Automated Information Systems
MDAP	Major Defense Acquisition Program
MICC	Mission Installation Contracting Command
MSC	Major Subordinate Commands
NCMA	National Contract Management Association
OJT	On-The-Job-Training
OMB	Office of Management and Budget
OPM-SANG	Office of Program Manager – Saudi Arabian National Guard
PARC	Principal Assistant Responsible for Contracting
PCO	Procurement Contracting Officer
PEO	Program Executive Officers
RDECOM	Research, Development and Engineering Command
SADBU	Small and Disadvantaged Business Utilization
SDDC	Surface Deployment and Distribution Command
SECDEF	Secretary of Defense
SPOT	Synchronized Predeployment and Operations
TACOM	Tank-Automotive and Armaments Command
TCC	Tacom Contracting Center
USD ATL	Under Secretary of Defense for Acquisition Technology & Logistics

ACKNOWLEDGMENTS

PAMELA JONES

I would like to begin by expressing my gratitude to Cary Simon and Cynthia King, the advisors for this interesting project. Not only were they awesome advisors, they were both interesting and informative professors in the classroom as well.

Secondly, I want to thank the Army for allowing me the opportunity to participate in the Contract Management program at the Naval Postgraduate School. The experience gained through this program was unique and enhanced the depth of my contracting knowledge as well as my appreciation for team participation.

Additionally, I want to thank my family and all of my friends for their extreme patience, support, and encouragement in my educational endeavor. I especially want to thank my children Richard, Steven, Mary, and their families for their love and patience as I worked to complete this program. I also want to say thank you to my project partners, Dee Kluft and Valerie Pettygrue, for their support, dedication, and passion for this project.

Last, but definitely not least, I want to thank my husband, David, for his constant love, support, and encouragement, as well as his patience while I completed the program. Now the only person left to thank is my Uncle Paul (deceased) who was not only my uncle, but my guardian, my father figure, and the wind beneath my wings. He encouraged me as a child, and told me I could do anything I put my mind to. The memory of his love and optimism guided me throughout the years and gave me the courage to believe in myself and do things I never thought were possible for me to achieve. Therefore, I dedicate this degree to his loving memory!

DEE KLAFT

I would like to thank our advisors for all their help and guidance. I would also like to thank my family for all their support, patience, and love. My daughters, Holly and Chelsey, have support me, reviewed papers, and missed time with me. My sister and brother sacrificed Saturday mornings to allow me time for my studies and surprised me by taking precious time away from their busy lives to attend my graduation ceremony. My dad was always supportive and filled me with encouragement when I was struggling with the pressures of the extra workload.

Lastly, I would like to thank my two thesis partners, Pam and Valerie. This project has taught me a lot about teamwork. I thank you for the experience. We did it!!

VALERIE PETTYGRUE

It is great to finally cross the finish line. Thank you to Professor Cary Simon and Dr. Cynthia King for your guidance and assistance throughout the thesis process. We are grateful and blessed to have you both as our advisors.

Thank you to Miss Tiffany Pettygrue, Miss Domonique Pettygrue, and Miss Jasmine Pettygrue for your patience and understanding as I pursued my Master's degree. I am grateful to have you encouraging me to go all the way. Now, I am waiting for the day when you enter the race to cross this same finish line.

Thanks to Ms. Dee Klaf, and Mrs. Pamela Jones for all the hours you invested in completing our thesis.

I. THESIS INTRODUCTION

A. CHAPTER OVERVIEW

This study focused on analyzing external environmental and internal organizational factors impacting the U.S. Army Contracting Command (ACC) training and development programs for contract specialists (1102s). These programs directly impact Army readiness as evidenced by an expanding contracting mission and workloads during the 2000s (e.g., steadily increasing demand for contracting services). The increased demand brought on through two overseas war zones is now being accomplished by a substantially undersized contract specialist workforce that was downsized in the 1990s and beyond.

B. RESEARCH PURPOSE AND OBJECTIVE

The purpose of this study is to describe and assess two major Army Contracting Centers' training and development programs for 1102 contract specialists to determine degree of fit with current mission workload requirements. Additionally, each Center's strategies are examined to determine how important issues are identified and addressed relating to the training and development of contract specialists. Conclusions and recommendations are offered to assist Army contracting leaders and managers on ways to improve training and development programs, particularly for new employees.

C. BACKGROUND

In the past 8 to 10 years, the Army's contracting workforce has experienced substantial changes in terms of expanding missions accompanied by insufficient numbers of contract specialists to effectively accomplish those missions. By the term effective, we refer to the extent to which organizations are able to adapt to changing external and internal environments. Consequently, a

major internal organizational change was made in October 2008; that the establishment of the U.S. Army Contracting Command (ACC). Another internal change is that the Army planned to hire about 1,300 civilian employees over the next three years to award, execute, and oversee more than \$80 billion in contracts (Army Contracting Command to Hire Mid Career Employees, Interns, 2008). While the mission and complexity of the workload has increased, Army contracting is continuing to lose experienced personnel that possess critical skills for maintaining the continuity needed for quality contracting. In an Army.Mil News article Executive Director, Jeffrey Parsons at ACC headquarters, Fort Belvoir, Va. stated, "About a third of all contracting officers have less than five years of experience and experienced contracting officers are desperately needed throughout the federal government" (Lorge, E.M. 2008, February 29). As large numbers of the experienced acquisition workforce near retirement, the process for replacing that sizable loss of knowledge may be lagging behind what is needed to close existing gaps.

Contracting Centers face similar problems confronting many firms, agencies, and bureaus—how to attract, hire, retain, and train new employees to meet expanding mission requirements—while seasoned contracting personnel migrate out the door. In a TACOM town hall briefing it was stated that a 2009 assessment of one of the Contracting Centers revealed that more than 50 percent of the acquisition workforce has less than five years of experience. Adding to the complexity, in 2009 Mr. Parsons reported "that more than 40 percent of the Army's acquisition workforce becomes eligible to retire in the next five years" (Army Contracting Command to Hire Mid Career Employees, Interns, 2008). An unintended consequence of this confluence of factors appears to have resulted in a shortage of qualified managers to fill leadership and senior management positions, and a shortage of trainers. It is generally accepted knowledge that in some cases, the Army is relying on interns to train other interns because of the lack of seasoned personnel.

A huge external environmental factor impacting all contracting agencies has been the Federal Acquisition Workforce Restructuring Act of 1994 and a subsequent decade-long hiring freeze. When the Federal Acquisition Workforce Restructuring Act was enacted it called for the federal workforce to be reduced by 272,900 (Relyea, January 2001). According to the GAO report, Federal Downsizing (May, 1996), DOD was impacted most by the Federal Acquisition Workforce Restructuring Act, nearly 75 percent of all workforce reductions came from DOD in 1994, and 56 percent in 1995. The substantial reductions and lengthy hiring freeze have no doubt adversely impacted the Army's ability to close the widening human resources gap. This study includes descriptions of Defense and Army strategies, plans and policies for replacing an aging workforce.

The administrative Army appears to realize that many of its experienced contracting personnel have begun to retire, leaving little time to train new personnel who can assume responsibility for ongoing complex missions. Indeed, an overarching strategic issue is how the ACC will obtain an adequate capacity of human resources and how it will train and educate a much younger and inexperienced incoming flow of workers. Our premise is that national defense strategy depends on maintaining, improving and investing in defense force human capital, and a sufficient 1102, civilian contracting workforce is a crucial enabler for uniformed warfighters to accomplish their assigned missions. This study speaks directly to the issue of an insufficient contracting workforce, and proposes short and medium term alternatives for reversing this trend.

D. RESEARCH QUESTIONS

The research of this thesis was used to inform the status of the training and development programs for 1102s in the following two ACC major contracting centers, both facing similar but unique challenges in training and developing employees: (1) Tank-Automotive and Armaments Command (TACOM) Contracting Center; and (2) Joint Munitions & Lethality (JM&L) Contracting

Center. The study analyzed the efficiency and effectiveness of the two major contracting centers' training and development programs. The following primary research question and six subsidiary questions were addressed.

1. Primary Research Question

- a. How can the Army Contracting Command accomplish its ongoing and expanding contracting mission, including training approximately 1,300 new contract specialists over the next two years, developing existing employees with one to five years of experience, and mitigating contracting personnel attrition?

2. Subsidiary Research Questions

- a. How is the ACC currently training and developing interns, especially during a pervasive shortage of qualified trainers?
- b. How well are ACC Interns performing as a result of the current training?
- c. What is the status of succession planning in terms of ensuring sufficient numbers of qualified supervisors, managers, and senior executives?
- d. What is the nature of the real and/or perceived gap between the vision of becoming world-class contracting centers, and real-world contingencies and constraints?
- e. How can the contracting centers improve the training, education and certification process in developing new contracting personnel over the next few years?

- f. What is the role and trend of identifying and implementing relevant best-practices, including knowledge-sharing among Contracting Centers?

E. METHODOLOGY

This research was conducted to determine the adequacy of 1102 training and development programs, as well as considering best practices for resolving real and/or perceived shortfalls. Contracting personnel from the following two ACC major contracting centers were participants in this study: (1) Tank-Automotive and Armaments Command (TACOM) Contracting Center; and (2) Joint Munitions & Lethality (JM&L) Contracting Center. Contracting personnel perceptions on current training and development programs were obtained, including how attrition issues are being addressed. Chapter IV provides details about the participants, survey instrument, and interviews conducted.

F. LIMITS OF THE STUDY

The new Army Contracting Command has ten contracting centers that are responsible for providing warfighters with weapons and services needed to carry out their mission. However, this study is limited, in that two of the ten Contracting Centers provided inputs. These two contracting centers were chosen because of convenience, access, and similarity to other contracting centers as well as containing areas for useful comparison and contrast. Findings may have reasonable similarities to contracting centers not specifically analyzed.

G. OVERVIEW OF STUDY

The structure of the study is organized into five chapters: Introduction, Literature Review, Contracting Centers, Assessment Results and Recommendations, and Conclusions. Chapter I provided an introduction comprised of the purpose and objective, the background relating to the scope of the study, the primary and secondary research questions, a brief description of the methodology used for data collection, research limitations, and overview and

chapter summary. Chapter II, literature review provides detailed information supporting the relevance for conducting this study. Chapter III provides historical background on the two contracting centers analyzed. Chapter IV summarizes the research findings and provides details on the survey results and interviews conducted. Chapter V provides a summary, conclusions, and recommendations for improvements.

H. SUMMARY

The Army Contracting Command is entrusted to provide contracting support to U.S. defense and allied warfighters, having an enormous responsibility in managing critical and high interest congressional programs. It would appear essential that highly qualified personnel are assigned to manage and work in these programs. The unintended consequence of contracting organizations lacking sufficient personnel with the right skill sets and knowledge to execute the work could degrade national security strategy, including adverse impacts to warfighters, i.e., not having the supplies or services needed to complete their mission. Our goal is to assist the contracting community in understanding the nature of this complex set of factors, and to address and resolve strategic issues facing the community, Army contracting and ultimately the Department of Defense. This chapter began with a brief introduction followed by the study purpose and objective. We outlined the background supporting the need for the study, listed the primary and secondary research questions, and summarized the methodology and limitations. This chapter concluded with an overview of the research project, and Chapter II introduces relevant aspects of literature and policy review.

II. LITERATURE REVIEW

A. CHAPTER OVERVIEW

The overall focus of this study is the training and development of the acquisition workforce. This chapter consists of a literature review which describes human capital challenges facing the Department of Defense (DoD) in terms of the required size, needed skills, and potential for performance problems in the DoD acquisition workforce. Underlying factors surrounding these challenges are described, and DoD initiatives to address staffing, skills and workforce quality issues are examined. This chapter concludes with a summary of the intended purposes of the Defense initiatives relating to improving the training and development of the acquisition workforce.

B. HUMAN CAPITAL CHALLENGES

The acquisition workforce supports U.S. National security by awarding and administering over \$400 billion in contracts each year, ranging from purchases of Major Defense Acquisition Programs (MDAPs) through Major Automated Information Systems (MAIS) hardware and software, to essential spare and repair parts (DoD, April 2010, 15 Jun 2010). Since 2001, DoD's acquisition programs have grown in number by about 45 percent, from 70 to 102 programs, representing approximately \$1.6 trillion in aggregate invested cost (DoD, 2010). As a result of the increased number of programs, both the acquisition workload and the complexity of that workload have increased. While the workload and complexity has increased, the size of the workforce has not kept pace. Our premise is that these trends and dual increase in workload and complexity intensify DoD's need to commensurate increase in the *size* and the *capability* of the acquisition workforce. In short, enhancing the acquisition workforce is crucial to enabling DoD to keep pace with these trends. In order to accomplish national defense objectives and to meet acquisition requirements, higher levels of certification and experience levels are needed.

The Table 1 depicts the military and civilian FY09 DoD Acquisition Workforce Human Capital Fact Sheet. The chart describes the Size and Composition, Educational Attainment, Certification Levels, and Planning Considerations relevant to the acquisition workforce, including training and demographic statistics. Note that only 59 percent of the total (civilian and military) acquisition workforce has obtained the appropriate level of certification for the position they hold.

Human Capital Fact Sheet FY2009			
Defense Acquisition Workforce (DAW)	Civilian (Civ)	Military (Mil)	Total (Civ+Mil)
Size & Composition			
FY09 Workforce Organic Size	118,445	14,658	133,103
Change in size 2008-2009	6%	-2%	5%
Civilian/Military Composition	89%	11%	-
DOD DAW 2015 Growth Goal			~15%
Educational Attainment			
Bachelor's Degree or Higher	78%	83%	79%
Graduate Degree	27%	44%	29%
Certification (Cert)			
Level I or Higher	73%	63%	72%
Level II or Higher	62%	43%	60%
Level III	38%	20%	36%
Position Cert Requirement Met	60%	45%	59%
Planning Considerations			
% Baby Boomer/Traditional Generations	63%	13%	58%
Average Age	46.2	36.0	45.0
Workforce Life-Cycle Model	32/33/35	-	-
% Future/Mid-Career/Senior	(%)(Civ)		
Average Years of Service	16.6	13.2	16.3
Retirement Eligible	19,395(16%)	-	-
Retirement Eligible w/i 5 Years	21,567(18%)	-	-
Gains/Losses	19,786/13,042	-	-
Training Statistics			
	2007	2008	2009
DAU Course Graduates (Classroom)	33,191	35,861	39,568
DAU Course Graduates (Web)	90,600	118,391	154,399
DAU Continuous Learning Completions	244,072	333,332	494,568

Table 1. DoD Human Capital Factors (From OMB, 2009)

The Office of Management and Budget(OMB) did its own assessment of the defense acquisition workforce in 2009, and commented that "[t]he government needs talented and trained individuals who can develop, manage, and oversee acquisitions in accordance with sound acquisition management principles" (OMB, 27 Oct 2009, 14 Jun 2010). Previously, the Gansler report,

published in October 2007, shined a spotlight on the state of the [Army's portion of the DoD] acquisition workforce. Dr. Jacques Gansler, Chairman of the Gansler Commission, reported that "The Army has excellent, dedicated people; but they are understaffed, overworked, under-trained, under-supported and, most important, under-valued" (Gansler, 2007).

Dr. Gansler's assessment that the Army workforce is understaffed is supported by a number of other studies that drew the same conclusion about the defense acquisition workforce overall. These studies include the Defense Acquisition Performance Assessment (DAPA) report (Dec 2005); the Report of the Acquisition Advisory Panel ("1423") report (Jan 2007); the Defense Acquisition Structures and Capabilities Review report (Jun 2007); and the Business Executives for National Security (BENS) report, "Getting to Best: Reforming the Defense Acquisition Enterprise" (Jul 2009). After reading these reports, the President, Congress, Secretary of Defense, and DoD senior leaders now appear more committed to improving the acquisition workforce (DoD, 2010). The overarching plan of DoD is to implement acquisition workforce initiatives that focus on (1) recruiting and hiring, (2) retention and recognition incentives, and 3) training and workforce development initiatives (DoD, 2010).

The DoD recruiting and hiring initiative is a major focus because the growth in the acquisition workforce has not kept pace with the growth in the acquisition workload. The Figure 1 depicts the correlation between acquisition spending and workforce growth.

Civilian Agency Acquisition Spending vs. Workforce Growth

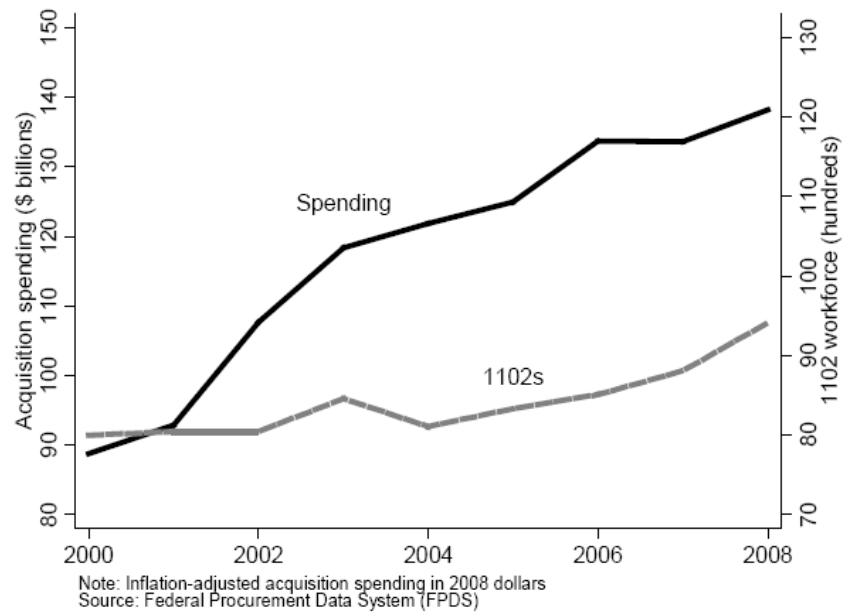


Figure 1. Civilian Agency Acquisition Spending vs. Workforce Growth

As depicted in OMB's chart above, "between FY2000 and FY2008, acquisition spending by civilian agencies expanded by 56 percent, from \$80 billion to \$138 billion (in inflation-adjusted dollars). Over this same time period, the number of contract specialists (GS-1102s, the only segment of the acquisition workforce for which historically consistent data is available) grew by only 24 percent from 7,995 to 9,921" (OMB 2009). This closely parallels developments during the same time period in the DoD acquisition workforce. In both populations, as the rate of acquisition spending and complexity grew, the staffing of the workforce did not keep pace.

Since 1989, the DoD, including the acquisition workforce has struggled to adapt to the whipsaw decade of sustained downsizing and hiring freezes followed by direct involvement in two wars. Between 1989 and 1999, DoD was

required to downsize its civilian acquisition workforce by almost 50 percent, to an end strength of about 124,000 personnel as of September 30, 1999 (GAO-02-630).

The Figure 2 depicts annual changes to the size of the workforce beginning with 1987 through 2008. In 1987 to 2004, DoD's acquisition organization count decreased by 56 percent. The chart also shows the 1102 series decreased by 17 percent from 1987 to 2008.

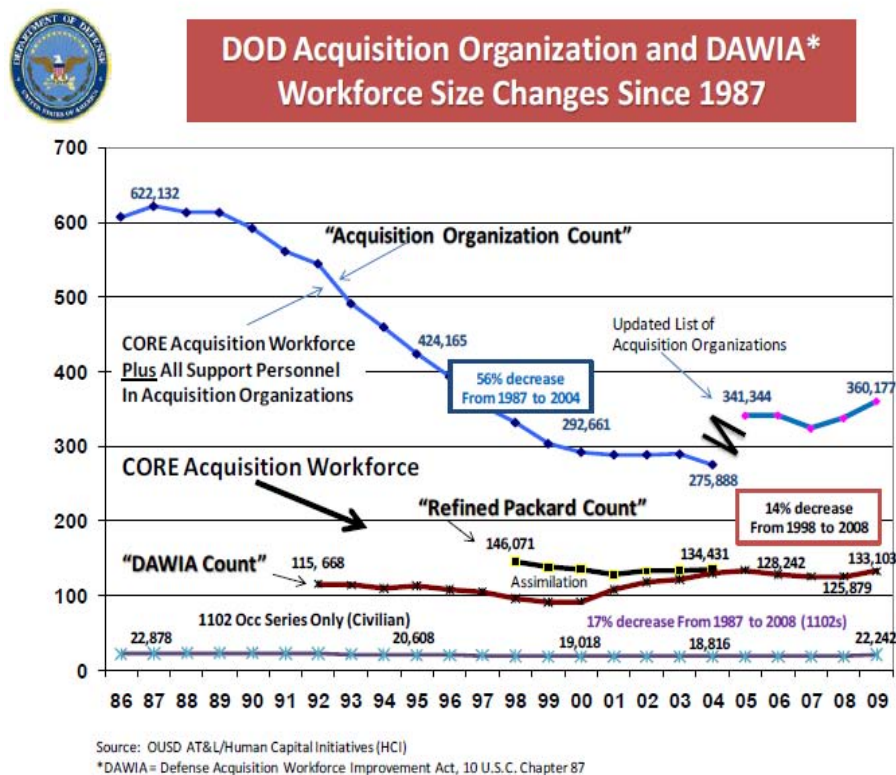


Figure 2. Historical Size Comparison of DoD Acquisition Organization and Defense Acquisition Workforce (civilian + military).

These reductions resulted from several DoD actions including the implementation of acquisition reforms, base realignments and closures, and congressional direction (GAO 02-630). The scope and impact of change on the workforce then escalated due to the workload spike that developed when US forces engaged in the ongoing Afghanistan war. The amount and complexity of

acquisition work requirements increased as the U.S. military operational tempo surged. This markedly demanded more and better trained acquisition employees who could support global contingencies and expeditionary operations. Human capital remnants of a downsized, Cold-War community were not properly staffed to meet their expanded role in the new century.

Beginning with the 2003 Iraq war, which opened a second front in addition to Afghanistan in Southwest Asia, the DoD acquisition leadership came to recognize that the defense acquisition organizations lacked sufficient human capital resources to handle the demands of what became prolonged overseas conflicts on two fronts. The numbers of procurements rose while the workforce to support these so-called *contingency operations* in Southwest Asia did not keep pace. This workload/workforce disparity was absorbed by the workforce during the early stages of the Iraq war, but could not be sustained without workforce and performance degradations. Gaps between the workload and workforce worsened as the complexity of the acquisition process deepened, further compounding the human capital shortfalls.

Figure 3 depicts the percentage of total federal acquisition spending from the years 2000 through 2008 for Services, Research and Development (R&D), and Products.

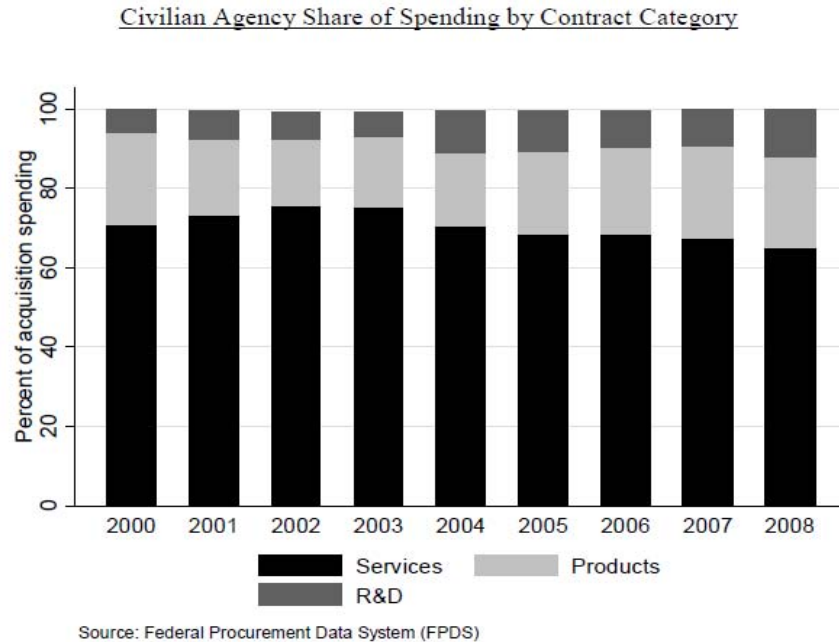


Figure 3. Civilian Agency Share of Spending by Contract Category

R&D contracting is more complex in nature than the typical contract action for supplies or non-R&D services, and accordingly requires a different mix of skills than is true of other types of acquisition. According to OMB, the percentage of spending in support of R&D actions increased from 6 percent to 12 percent between FY2000 and FY2008 (OMB 2009). Concurrently, the complexity has increased with the increase in R&D spending.

The Government Accountability Office (GAO-07-1098T) released a report titled, *Federal Acquisitions and Contracting Systemic Challenges Need Attention*, listing 15 acquisition challenges facing DoD. Among the 15 systemic challenges noted in the report was a concern regarding the size, skills, knowledge, and succession planning of the acquisition workforce. The report discussed observations about the federal government's ability to strategically plan and effectively manage individual programs and contracts. The observations noted in the report included these:

- The government faces serious acquisition workforce challenges (e.g., size, skills and knowledge, and succession planning).

- Key program staff rotates too frequently from one job assignment to another, thus promoting myopia and reducing accountability (e.g., tours based on elapsed time versus achievement of key program milestones).
- Inadequate oversight has resulted in little or no accountability for recurring and systemic problems. Having poor oversight reduces the chances of success in the acquisition, contracting, and other key business areas.

An additional dynamic that intensifies DoD's human-capital challenges is the number of contracting professionals eligible for retirement or reaching eligibility within the next ten years. At the end of FY09, DoD performed an acquisition workforce analysis to determine retirement eligibility through 2020. The findings of the study revealed that before 2020, 22,862 (37.5 percent) of the civilian members of the defense acquisition workforce will be eligible to retire with full benefits (DoD, 2010). This is a substantial concern, however, based on past retirement trends, approximately 19 percent of employees retire in the first year of becoming eligible for retirement, while approximately 54 percent retire within the first four years of eligibility. The generally accepted logic in the acquisition community is that retaining institutional knowledge is equally vital to hiring new employees. Another concern that is doubly important is retaining experienced 1102s, because they are directly involved in the training of new employees. Obviously, rising numbers of retiring baby boomers could seriously erode institutional knowledge. This is true even though some countervailing trends do exist, for example, the likelihood that part of the pool of retirement-eligible contracting personnel will choose to postpone retirement (for reasons having to do with the ongoing U.S. recession, for example). To the extent that some retirement-eligible acquisition employees defer retirement, the result is an extension in the time DoD agencies have available to recruit and train replacements.

Figure 4 depicts the percentage of the acquisition workforce that is eligible for retirement up to 2020. It also shows the two retirement systems: (1) Civil Service Retirement System (CSRS), which is the older retirement system that covers many baby boomers; and (2) Federal Employee Retirement System (FERS) that replaced CSRS, and covers nearly all members of the current DoD acquisition workforce who did not have 5 years of creditable civilian service by December 31, 1986.

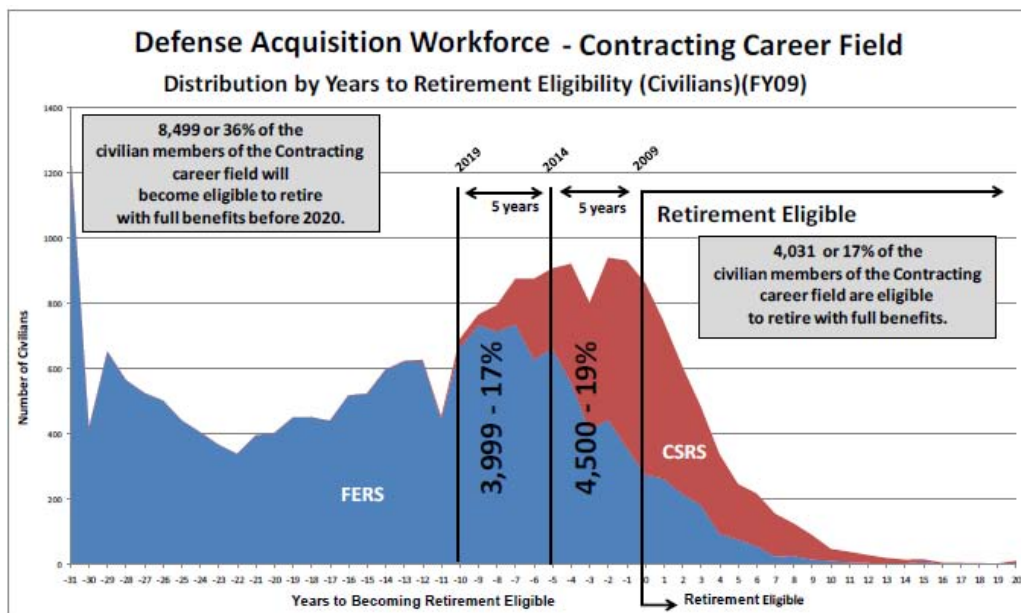


Figure 4. Defense Acquisition Workforce - Contracting Career Field Distribution by Years to Retirement Eligibility (Civilians) (FY09) (From *Defense Acquisition Workforce Strategy*, 2010)

C. DOD'S PLAN TO ADDRESS HUMAN CAPITAL CHALLENGES

To address its human capital challenges, DoD is implementing a series of initiatives to increase, re-shape, and rebalance the acquisition workforce with special emphasis on improving workforce quality (DoD, 2010). A reasonable premise being made by DoD leadership is that when there is a lack of workforce capacity, trade-offs will occur during the acquisition life-cycle that can degrade quality, thereby exposing warfighters to delays or missed equipment and

services. In April 2010, the Under Secretary of Defense for Acquisition, Technology and Logistics (USD (AT&L)), the Honorable Dr. Ashton Carter (hereafter referred to as the Under Secretary) released the *DoD Strategic Human Capital Plan Update, The Defense Acquisition Workforce*. The Under Secretary announced that DoD's hiring strategy for FY09 to FY15 is to (i) hire 9,887 new acquisition employees; and (ii) convert 10,000 outsourced jobs to in-house positions (DoD, 2010). The hiring initiatives are intended to increase the acquisition workforce from a total of approximately 127,000 to 147,000 by the year 2015 (DoD, 2010).

Mr. Frank Anderson, DAU's President, stated in an interview with Defense AT&L magazine, "Workforce size is important, but quality is paramount." In general the hiring initiatives are necessary to achieve DoD's goal to be adequately staffed, but that in itself is not sufficient to achieve a high-quality workforce. The Under Secretary has set the tone for a quality workforce within DoD by emphasizing, "To successfully accomplish the acquisition mission we will place greater emphasis on a high-quality workforce having the right competencies and skill sets, at the right places at the right time" (DoD, 2010). To carry out this directive, DoD has implemented the following key defense acquisition workforce initiatives:

(1) Achieve the Secretary of Defense (SECDEF) Growth Strategy - 20,000.

This initiative is intended to grow, re-shape, and rebalance the acquisition workforce. DoD expects to hire approximately 20,000 new employees by 2015. To better address inherently governmental functions, a portion of this initiative entails converting 10,000 outsourced positions to DoD civilian and military positions, i.e., insourcing.

(2) Deploy Tools to Assess, Track, and Account for "Total Force" Defense Acquisition Workforce Capability and Capacity.

The objective of this initiative is to establish traceability for count and skill sets acquired of deployed acquisition civilians and contractors working in support

of Major Defense Acquisition Programs (MDAP) and Major Automated Information System Programs (MAIS) (DoD, 2010).

(3) The objective is to right-size and right-shape MDAP and MAIS office staffing with the appropriately skilled people to enable successful program outcomes.

The intention of this top priority DoD initiative is to properly staff agencies that manage MDAP and MAIS programs with high-quality personnel (DoD, 2010).

(4) Establish enterprise certification goals as a management tool for improving workforce quality.

This initiative is focused on improving the quality of the workforce by increasing the number of workforce members that meet or exceed certification requirements (DoD, 2010). Improving the certification requirements includes making certification standards tougher, implementing Acquisition Qualification Standards (AQS), and establishing enterprise certification goals as a key metric (DoD, 2010).

(5) Establish a comprehensive workforce analysis and decision-making capability.

The objective of this initiative is to assist DoD leaders and managers in aligning decision-making and workforce metrics with national strategic objectives. As a result, DoD leaders should have greater capability to track, understand, and adjust current workforce strategies required to attain the requisite workforce numbers, skills, knowledge and capabilities (DoD, 2010).

(6) Establish robust recruiting strategies focused on interns, journeymen, and Highly Qualified Expert (HQE) initiatives.

This initiative focuses on hiring strategies to mitigate the expected losses in the most highly experienced portion of the acquisition workforce, whose members are currently, or soon to be eligible for retirement, and who will leave soon after becoming eligible (DoD, 2010).

(7) Attract and retain a high quality, high performing military, and civilian acquisition workforce.

The purpose of this initiative is to address retention concerns. Analysis showed that 58 percent of the population of former DoD acquisition employees that retired in FY2009 did not meet full retirement eligibility (DoD, 2010).

(8) Provide an integrated, interactive learning environment that helps acquisition workforce members, teams, and organizations improve acquisition outcomes.

This initiative focuses on training and development measures to establish and sustain a high-quality workforce. Through this initiative, some changes to the acquisition certification process will be implemented such as a new integrated acquisition leadership development program to include a Level IV certification, by September 2011 (DoD, 2010). Other processes to improve the quality of the workforce are program start-up and critical milestone workshops; intact team training; immersive learning simulations; and executive coaching for DoD acquisition leaders (DoD, 2010).

D. IMPORTANCE OF TRAINING AND DEVELOPMENT

DoD leaders acknowledge that the acquisition workforce is crucial for defense mission accomplishment, and they recognize that the workforce is in trouble due to the factors described above. Therefore, investing in the training and development of the acquisition workforce has not only been planned but is being implemented. Some expected training benefits include: 1) ensuring employees, to include relatively junior employees, are technically competent in the acquisition process, 2) developing effective communication, decision making and problem solving skills for acquisition employees at all seniority levels, 3) increasing job knowledge, satisfaction and career growth, and 4) increasing productivity and work quality.

In support of its initiatives to improve the workforce in critical risk areas, DoD is planning to expand and improve its training programs in leadership development, cost estimating, source selection, pricing and contracting (DoD,

2010). DoD planners indicate that they are taking measured steps by first performing an assessment to identify critical risk areas within the acquisition lifecycle and then establishing training programs structured to target these areas. In 2003, GAO recommended the approach shown in Table 2, in its report number GAO-03-281, titled “*Acquisition Management, Agencies Can Improve Training on New Initiatives.*” The information in the report is intended to benefit organizations by identifying key elements necessary for implementing new acquisition initiatives.

Table 1. Key Elements for Acquisition Training and Why They Are Important	
Key Element	Importance
Prioritize initiatives most important to an agency	Focuses on those acquisition initiatives that are most relevant to accomplishing the agency's mission
Demonstrate top-level commitment and provide resources	Emphasizes to managers, trainers, and implementers the importance of the initiative and the necessary support to sustain reform efforts
Identify those needing training and set training requirements	Targets training to those who are integral to the success of an initiative
Tailor training to meet the needs of the workforce	Recognizes that acquisition staff with different functions or at different levels may need customized training
Track training to ensure it reaches the right people at the right time	Increases the chances of having the right people with the right skills available when needed to implement acquisition initiatives
Measure the effectiveness of training	Links training to agency results, demonstrates improved individual and organization performance, and provides feedback for adjusting or redefining acquisition initiative training

Source: GAO.

Table 2. Key Elements for Acquisition Training and Why They are Important—GAO-03-281

One likely outcome is, increasingly, new and less-experienced employees will start assuming responsibility for high dollar value and complex programs. Another anticipated outcome is fewer experienced acquisition members will be available to train the newest members of the workforce. This situation may place more emphasis on the importance of structured training programs.

“In 2001, the Defense Department spent over \$138 billion on contracts, and in 2009 spending reached \$384 billion—\$208 billion was for services” (DoD, 2010). The use of service contracts increased substantially during this time because, as a matter of policy, the DoD placed a lot of reliance on contractor support to manage and administer defense programs. A RAND study showed

that approximately 50 percent of the Air Force's cost estimating community was supported by contractor support personnel (DoD 2010). Since DoD plans to in-source 10,000 out-sourced jobs, there will likely be a higher demand for Defense Acquisition University (DAU) to expand its training offerings in order to provide training to this substantial pool of new Government acquisition employees. As DoD contracting workforce continues to expand, having an adequate plan in place to train and develop the 1102 workforce is essential to the national defense strategy, which heavily depends on the 1102 workforce to provide contracting support to warfighters.

E. CHAPTER SUMMARY

This chapter explained and summarized human capital and other challenges facing the defense acquisition community over the next decade or so. The challenges discussed include the size and skills gap, performance declines, and possible retirement prospects. Next, a brief discussion of DoD's plans and initiatives to grow, reshape, rebalance, and improve the acquisition workforce. The chapter concluded with a discussion of the expanded role of training and development programs for the acquisition workforce. The next chapter provides an overview of the Army Contracting Command and two of its Contracting Centers' missions and training plans.

III. ARMY CONTRACTING COMMAND AND CONTRACTING CENTERS

A. CHAPTER OVERVIEW

The overall focus of this study is the training and development of the acquisition workforce in the Department of Defense (DoD). This chapter addresses key components of the study, including identifying the organizations primarily responsible for training and developing the Army's acquisition workforce. Next, it provides details of the Defense Acquisition Workforce Improvement Act (DAWIA) certification requirements. Discussion on Defense Acquisition University (DAU) and its role in training the Acquisition workforce is provided. Next, an overview is provided, focusing on two of ACC's major contracting centers: TACOM, and Joint Munitions and Lethality (JM&L) Contracting Centers. The overview will describe each center's mission, organizational structure, and training plan. This chapter concludes with a summary of the role that ACC and its contracting centers serve in providing warfighters contracting support.

B. U.S. ARMY CONTRACTING COMMAND

In 2007, an independent commission, known as the Gansler Commission, was convened to review Army Acquisition and Program Management in Expeditionary Operation. The commission produced a number of findings and recommendations; however, the essential theme of the Gansler Commission Report was that the Army lacked organizational structure to support the increased requirements for Army contracting support (Bokinsky, 2008, October). In short, there was an insufficient number of professionally trained contracting

personnel, including insufficiencies in oversight, controls, and contract administration (Bokinsky, 2008). “Additionally, the Commission emphasized the need for the Army’s commitment to recognize contracting as a core competency and to enhance training, professional development, and career opportunities among the workforce.” (Bokinsky, 2008)

As a result of the commission’s recommendation to restructure Army contracting efforts and assign responsibility to facilitate contracting, the Secretary of the Army made the decision to establish a dedicated Army contracting command that could provide contract management for both expeditionary and U.S.-based operations. The newly established command is “U.S. Army Contracting Command” (ACC) headed by a two-star general. It was provisionally stood up in March 2008, and formally established in October 2008. The ACC is aligned under the Army Materiel Command (AMC) as one of its 11 major subordinate organizations. “The U.S. Army Materiel Command (AMC) is the Army’s premier provider of materiel readiness—technology, acquisition support, materiel development, logistics power projection, and sustainment—to the total force, across the spectrum of joint military operations (U.S. AMC website, 2008)”. AMC also manages a multi-billion dollar business in providing Army equipment and services to U.S. allies.

To fulfill its complex missions, AMC relies on the ACC for managing a majority of its contracting needs. The ACC administers approximately 70 percent of Army warfighter contracting requirements, including contracting services for deployed units and installation-level services, supplies and common-use information technology hardware and software (U.S. AMC website, 2008). The remaining 30 percent is handled by the Defense Logistics Agency (DLA), which manages the consumable-items. The ACC’s organizational structure consists of two subordinate commands, each headed by a one-star general, the

Expeditionary Contracting Command, and Mission and Installation Contracting Command (MICC). In total, the ACC includes 36 installation-level Directorates of Contracting, organized into six regional contracting centers. Further, the ACC encompasses the following nine Contracting Centers that support major AMC organizations:

1. U.S. Army Aviation and Missile Command (AMCOM)
2. U.S. Army Communications Electronics Command (CECOM)
3. Joint Munitions and Lethality Contracting Center (JM&L)
4. Tank-Automotive and Armaments Command (TACOM) Contracting Center
5. National Capital Region
6. U.S. Army Research, Development and Engineering Command (RDECOM)
7. Rock Island
8. Surface Deployment and Distribution Command (SDDC)
9. Office of the Program Manager - Saudi Arabian National Guard (OPM-SANG)

Figure 5 depicts ACC's reporting structure.

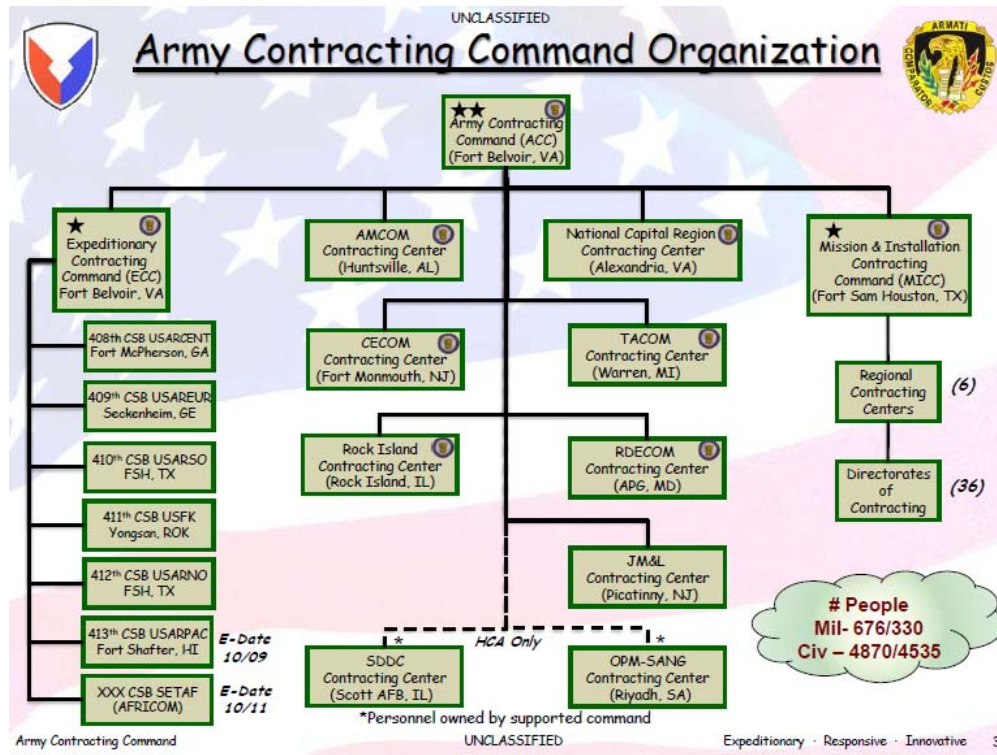


Figure 5. U. S. Army Contracting Command Organizational Chart
(From ACC, 2009)

The ACC provides global contracting to U.S. Army operational forces for Research and Development, Weapon Systems, Spare and Repair Parts, Logistics Civil Augmentation Program (LOGCAP), Chemical Demilitarization/ Ammunition, and Other (IT/Services). In 2009, Mr. Jeffery Parsons, Executive Director of the U.S. Army Contracting Command, briefed at an Advance Planning Briefing to Industry (APBI) that in FY08 ACC's contracting professionals processed a total of 246,000 actions and obligated \$104 Billion. (Army Sustainment Command's Advance Planning Briefing to Industry, 2009; Figure 6).

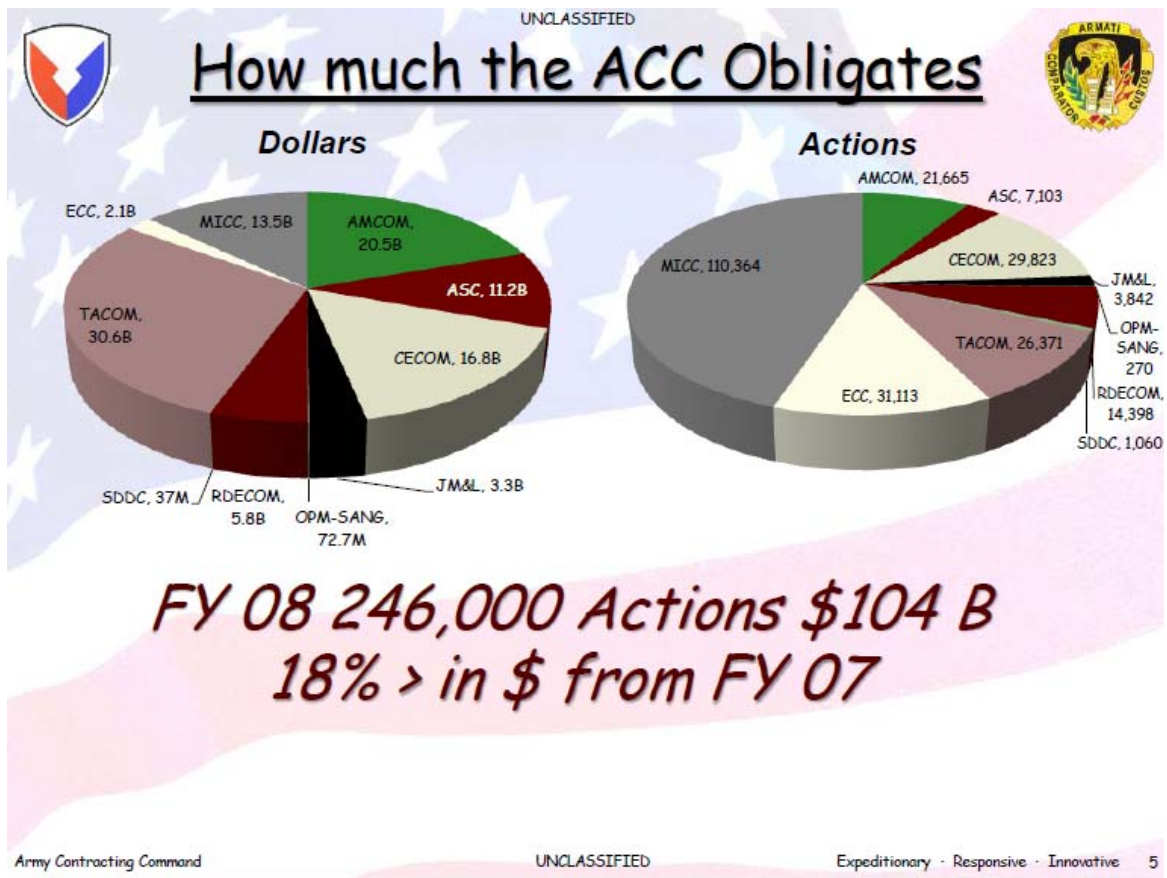


Figure 6. FY08 Actions and Obligations (From APBI, 2009)

The number of contractual actions processed by the organizations that now are part of the ACC increased by 359 percent from FY95 to FY08, and dollars obligated have increased by 463 percent from FY95 to FY08, while the total contracting workforce employed by these organizations has decreased by 53 percent from FY95 to FY08. In summary, while the Army's contracting workload has clearly expanded and dollars obligated have increased, the workforce needed to perform the mission has decreased. Figure 7 depicts the changes in people, dollars and actions from FY95 to FY08.

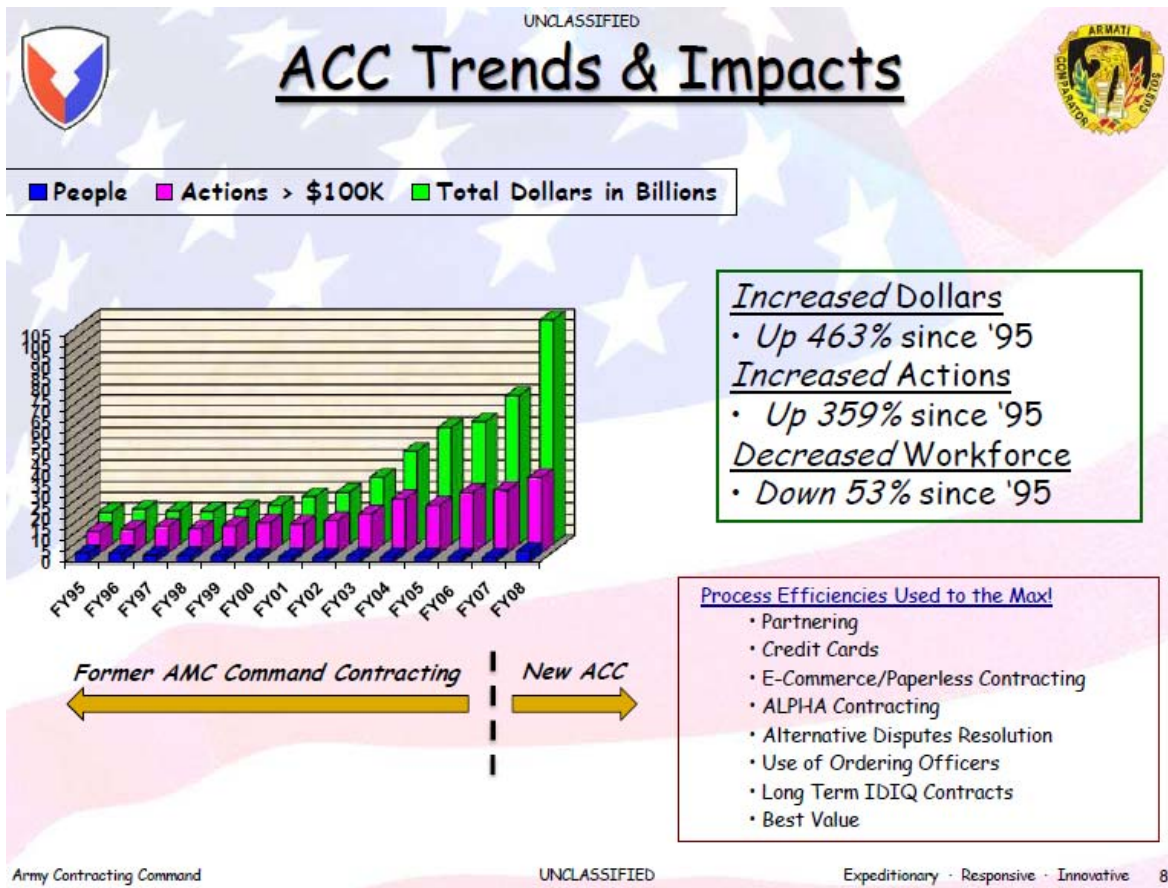


Figure 7. Trends and Impacts (From APBI, 2009)

In order for Government Contract Specialists in the 1102 career series to be eligible for promotion, they must undergo a progression of formal training and on-the-job experience to gain the ability to handle increasingly complex procurements. As the mission of ACC increases, initiatives must be implemented to balance the contracting workforce to have the correct number of people with the right amount of training available. The ACC is charged with ensuring that it has both the workforce quality and quantity necessary to execute the complete contracting mission. To meet its increasing workload demands, ACC espouses the following broad strategic priorities:

- Grow and develop a professional civilian and military workforce.
- Maintain superior customer focus.

- Standardize, improve and assure quality business processes and policies across the organization.
- Obtain and maintain needed resources.
- Enhance Working Environment/Quality of Life.

“The President, the Secretary of Defense, and Congressional leaders agree decisive action must be taken to build the right capability and capacity in the acquisition workforce” (Defense Acquisition Workforce Strategy, 2009). ACC has listed growing and developing its professional civilian and military workforce as its top strategic priority. Training and developing new contracting professionals is done primarily at the local level, meaning at the level of the individual ACC Contracting Centers. ACC’s goal is to hire more than 1,000 contract specialists in 2010 to meet future and ongoing workload requirements (McCaskill, L.D., 2009 Oct 15). This is consistent with parallel initiatives going on in the Department of Defense, where “the Secretary of Defense Robert Gates announced his plan to increase the size of the defense acquisition workforce by converting 11,000 contractor positions and hiring an additional 9,000 government acquisition professionals by 2015—beginning with 4,100 in fiscal year 2010” (McCaskill, 2009). The Secretary of Defense has also stated “To operate effectively, the acquisition system must be supported by an appropriately sized cadre of acquisition professionals with the right skills and training to successfully perform their jobs” (Defense Acquisition Workforce Strategy, 2010). Alongside the difficulty of large-scale hiring is the challenge of developing GS-1102 series personnel (contract specialist interns) once hired. Although hiring new contracting professionals will help with personnel shortfalls, these contracting professionals are not instantly a journeyman buyer operating at the full-performance level. It normally takes a minimum of five years before a new hire can handle a GS-12 workload.

C. DAWIA 1102 CERTIFICATION REQUIREMENTS

The Defense Acquisition Workforce Improvement Act (DAWIA) was enacted in November 1990 as part of the FY 1991 National Defense Authorization Act. The intent of DAWIA is to establish education and training standards, as well as certification requirements for acquisition workforce professionals who work for the federal government. Acquisition professionals have mandatory DAWIA criteria that include acquisition education, training, experience, and tenure established that must be met in order to attain professional status. Certification requirements at each career field is (1) Level I Basic or Entry (GS 5–9), (2) Level II Intermediate or Journeyman (GS 9–12), and (3) Level III Advanced or Senior (GS 13 and above). In support of this study, the certification requirements for each of the three levels are provided in Tables 3 through 5.

1. Level I Certification Requirements

Core Certification Standards (Required for DAWIA certification.)	
Acquisition Training	None required
Functional Training	▶ CON 100 Shaping Smart Business Arrangements ▶ CON 110 Mission-Support Planning ▶ CON 111 Mission Strategy Execution ▶ CON 112 Mission-Performance Assessment ▶ CON 120 Mission-Focused Contracting (R) ▶ CLC 033 Contract Format and Structure for DoD eBusiness Environment ▶ Effective 1 June 2010, the following course is also required: ▶ CON 090 Federal Acquisition Regulation (FAR) Fundamentals (R)
Education	▶ At least 24 semester hours in accounting, law, business, finance, contracts, purchasing, economics, industrial management, marketing, quantitative methods, or organization and management ▶ Baccalaureate degree (Any Field of Study)
Experience	▶ 1 year of contracting experience.

Unique Position Training Standards	
Level 1 Contracting Personnel Assigned to support a MDAP/MAIS program	▶ ACQ 101 Fundamentals of Systems Acquisition Management

Table 3. Level I Certification Requirements
(From Army Acquisition Support Center, 2010)

2. Level II Certification Requirements

Core Certification Standards (Required for DAWIA certification.)	
Acquisition Training	▶ ACQ 101 Fundamentals of Systems Acquisition Management
Functional Training	▶ CON 214 Business Decisions for Contracting ▶ CON 215 Intermediate Contracting for Mission Support (R) ▶ CON 216 Legal Considerations in Contracting ▶ CON 217 Cost Analysis and Negotiation Techniques (R) ▶ CON 218 Advanced Contracting for Mission Support (R)
Education	▶ At least 24 semester hours in accounting, law, business, finance, contracts, purchasing, economics, industrial management, marketing, quantitative methods, or organization and management ▶ Baccalaureate degree (Any Field of Study)
Experience	▶ 2 years of contracting experience.

Unique Position Training Standards	
Level II contracting personnel assigned to support a MDAP/MAIS program	▶ ACQ 201A Intermediate Systems Acquisition, Part A ▶ ACQ 201B Intermediate Systems Acquisition, Part B (R)
Core Plus Development Guide (Desired training, education, and experience.)	Type of Assignment

Table 4. Level II Certification Requirements
(From Army Acquisition Support Center, 2010)

3. Level III Certification Requirements

Core Certification Standards (Required for DAWIA certification.)	
Acquisition Training	▶ ACQ 201A Intermediate Systems Acquisition, Part A
Functional Training	▶ CON 353 Advanced Business Solutions for Mission Support (R) ▶ 1 additional course from the Harvard Business Management Modules
Education	▶ At least 24 semester hours in accounting, law, business, finance, contracts, purchasing, economics, industrial management, marketing, quantitative methods, or organization and management ▶ Baccalaureate degree (Any Field of Study)
Experience	▶ 4 years of contracting experience

Unique Position Training Standards	
Level III contracting personnel assigned to or devoting at least 50% of their time in support of a MDAP/MAIS program	▶ ACQ 201B Intermediate Systems Acquisition, Part B (R)

Table 5. Level III Certification Requirements
(From Army Acquisition Support Center, 2010)

D. DEFENSE ACQUISITION UNIVERSITY (DAU)

Defense Acquisition University (DAU) has a key role in the learning and development of the Defense Acquisition Workforce. DAU is a learning institution that provides a wide range of training to the Defense Acquisition Workforce to include basic, intermediate and advanced certification training, assignment-specific training, applied research, and continuous learning opportunities. DAU's goals to meet training needs are to provide an integrated, interactive, learning environment that helps achieve desired outcomes. DAU has several learning environments it uses to accomplish its mission; (1) classroom training, (2) online training, and (3) conferences. As an extension to the services offered by DAU, it also provides mission specific assistance to its customers, such as consulting services, tailored organizational training, and rapid deployment training. DAU also has knowledge-sharing resources available on its website to support a continuous learning environment.

During 2009, the President, Congress, and DoD senior leaders established initiatives to improve government contracting, reform weapon systems acquisition, and increase the capability and capacity of the Defense Acquisition Workforce (DAU, 2009). DAU has a critical role in implementing the initiative to improve government contracting. With the influx of new contracting professionals, DAU is challenged with creating timely curricula development that meets the demands for classes. The next two subsections of Chapter III provide an overview of two of the major ACC Contracting Centers, and describe their training and development programs.

E. TACOM CONTRACTING CENTER–WARREN

TACOM Contracting Center (TCC) is one of the nine contracting centers aligned under ACC responsible for providing Army warfighter contracting support. TACOM's mission has expanded throughout the 1990s. The first Gulf War provided a real-world test of TACOM's ability to fulfill its mission in the post-Cold War world. That challenge was followed by Base Realignment and Closure

(BRAC) rulings that gave TACOM operational control, beginning in FY 94, of three Army organizations; Armament and Chemical Acquisition and Logistics Activity (ACALA) (Rock Island, IL), Army Armament Research, Development, and Engineering Center (ARDEC) (Picatinny Arsenal, NJ), and Belvoir Research, Development and Engineering Center, (BRDEC, VA).

Those organizations officially became part of TACOM at the beginning of FY 95, and the name of the command was changed to the Tank-Automotive and Armaments Command. The well-known TACOM acronym that formally stood for U.S. Army Tank-Automotive Command was therefore retained. TACOM operational control of Red River Army Depot (Texarkana, Texas) and Anniston Army Depot (Anniston, Alabama) began early 1999. These additions nearly doubled the size of the total TACOM community, which is now widely distributed geographically. Additionally, it further expanded both the command's mission and its importance to the soldier in the field.

TCC's organizational structure consists of the following seven subordinate contracting offices:

- 1) TACOM Rock Island
- 2) TACOM Warren
- 3) Anniston Army Depot
- 4) Watervliet Arsenal
- 5) Red River Army Depot
- 6) Sierra Army Depot
- 7) Rock Island Arsenal Joint Manufacturing and Technology Center (JMTC)

In FY08, TCC was responsible for placing 26,371 actions on contract and obligating \$30.6 Billion (Army Sustainment Command's Advance Planning Briefing to Industry, 2009).

Although TACOM Contracting Center has a total of seven subordinate contracting offices, this study focuses on the largest of the seven sites; the TACOM Contracting Center (TCC) Warren. TCC senior leadership consists of

the Principal Assistant Responsible for Contracting (PARC) Office and two Associate Directors who manage eight contracting divisions. The organizational structure for TCC Warren is provided in Figure 8.

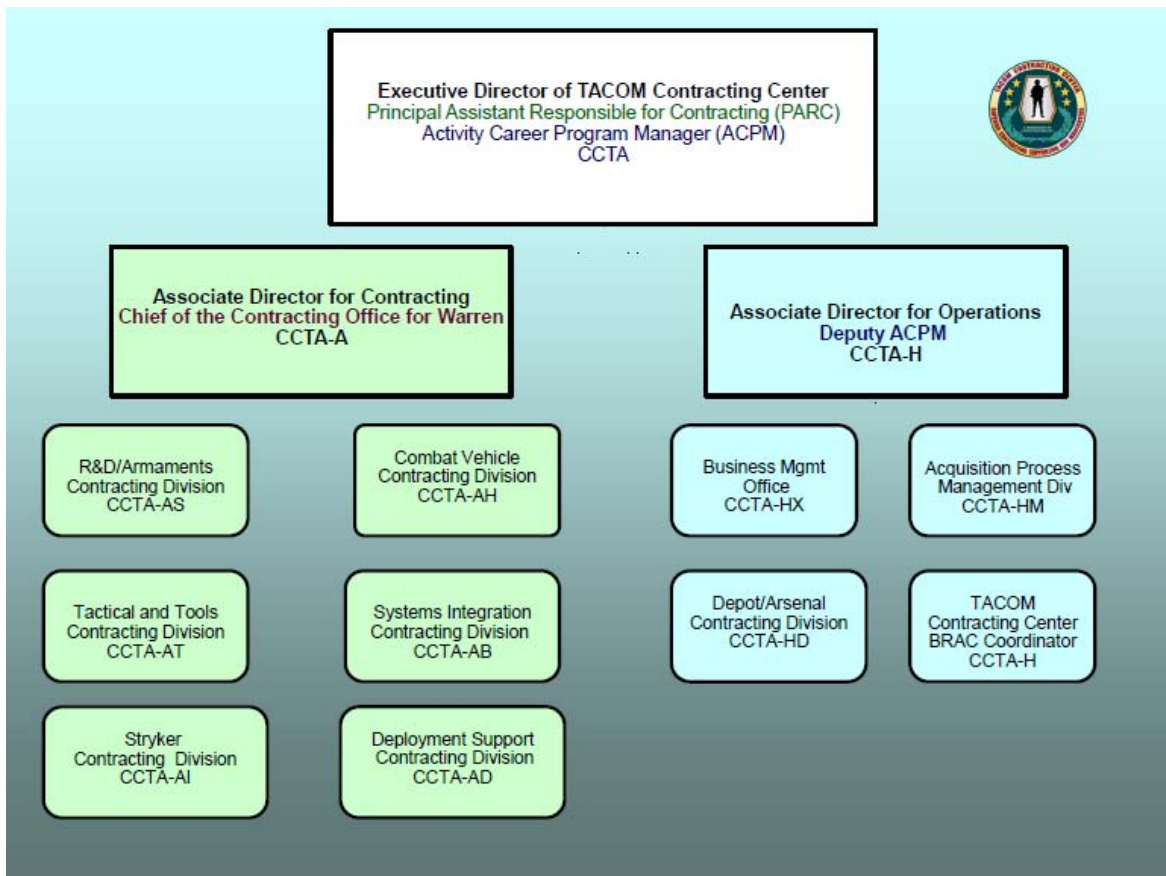


Figure 8. TCC Org Chart (From TCC, 2010)

TCC is responsible for acquisition support and contracting for (1) the Army's major ground weapon systems and tactical and logistics vehicles, (2) ground systems and equipment supporting other services, and (3) foreign military sales customers. TCC ensures Army warfighting readiness by purchasing the development and production of ground combat vehicles, tactical vehicles, small arms, chemical/biological systems, targetry, supporting services, repairable parts and the Brigade Combat Team Modernization program (TACOM Contracting Center (TCC)).

TCC procures research and development, systems, repair parts and services for all of the following (Table 6):

Combat vehicles	Combat Vehicle Armaments
Tactical vehicles /Trailers	Training Devices
Support Equipment	Fire Control Systems
Tactical Bridges	Cannons 105-165mm
Construction and material handling equipment	Recovery Vehicles
Fuel and Water Distribution Systems	Mortars
Watercraft and Railcars	Aircraft Armaments
Brigade Combat Team Modernization	Small Arms
Artillery	Mine-Resistant-Ambush
Base operation support	Protected Vehicle (MRAP) support
Depot maintenance	
Advanced Science and Technology Programs	

Table 6. What TACOM Procures (From TCC, 2010)

TACOM Warren contracting professionals are often called upon by senior Army leaders to serve as subject matter experts for special projects, inter-service programs, and emergency technical assistance. This reputation has led senior leaders to entrust TACOM Warren with the management and contracting of some of the Army's most critical and visible programs. These programs receive the highest levels of scrutiny and Congressional Oversight, which means that their execution requires skilled, experienced contracting professionals. It is the premise of this study that hiring, developing, and retaining a professional contracting community is integral to national security, because it is this community that has responsibility for providing contracting support to warfighters who defend and protect our national interest.

TCC's mission initially increased due to the BRAC in the 1990s and is further expanding due to the second BRAC in 2005. To reiterate, mission growth and numbers of contracting personnel with substantial years of contracting experience track in opposing directions. According to the TCC Warren's Business Management Office, the number of retirement-eligible personnel employed by the TCC has been estimated to reach approximately 40 percent of the total workforce size in the next four years. In addition to losing experienced procurement professionals due to retirements, TCC is experiencing a second form of attrition as experienced 1102s exit the contracting career field to work for one of TACOM's Program Executive Offices (PEO) as an analyst or a business manager, since the pay grades in these offices often are higher than the pay grades for journeyman buyers in the TCC. The confluence of these two forms of workforce attrition increases the need to hire new employees, with the result that fully 35 percent of TCC's current workforce has less than five years of government contracting experience, and that percentage will increase as approximately 340 new interns are expected to be hired through 2011. The estimated number of new interns depicts the urgency surrounding this topic.

TACOM Contracting Center (TCC) Warren has a structured local orientation and initial training program called Buyer Boot Camp (BBC, or Boot Camp) that new contracting professionals attend during their first six weeks at TACOM. Prior to establishing a Boot Camp each new intern was paired up with a trainer that was a seasoned buyer and was capable of providing on-the-job guidance and training to the intern. Given the huge number of new interns TACOM is hiring, coupled with the loss of experienced buyers, this one-to-one pairing is no longer possible in many areas of the TCC. BBC is designed to alleviate some of the training load placed on the existing workforce. The purposes of BBC are to (1) introduce new contracting professionals to federal and defense acquisition regulations and government contracting processes; (2)

create informal social networks among groups of interns who are hired at the same time; and (3) provide participants with conceptual tools and new-employee guidance.

The BBC training program consists of a structured series of lessons covering each of the acquisition phases (planning, solicitation, evaluation, award, and post-award administration). In addition, the training introduces students to the Federal Acquisition Regulation (FAR), and DoD rules and regulations (e.g. the Defense Acquisition Regulation System (DFARS); and contracting tools/resources. While in BBC, new contracting professionals are assigned to a small work-group and are given a research project to pursue, and a mentor to assist them in developing research, analytical, presentation, and teaming skills. During BBC each intern is provided with an Individual Development Plan (IDP) to guide them on the subsequent classroom training they are required to complete within their first two years. TCC Warren's training for contracting professionals is centered on Defense Acquisition Workforce Improvement Act (DAWIA) requirements. Other training opportunities to enhance the growth and development of all contracting professionals are acquisition classes offered through TCC Warren's Acquisition Education Center (AEC). The AEC offers a wide range of classes such as Market Research, Item Unique Identification (IUID), Synchronized Pre-Deployment and Operations (SPOT) and Writing It Right Workshop.

In FY09, TCC Warren conducted six boot camps involving 151 new contracting professionals (1102s). After successfully completing BBC, interns' accomplishments are recognized with a certificate of completion. The interns are then placed within a buying division for their first "rotation" (first work experience). The interns are assigned their own workload to manage with limited oversight by journeyman-level 1102s. Each intern's training and development is assessed every six months by the intern's supervisor, group chief, division chief, and Associate Director of Operations. During this meeting the intern's strengths, weaknesses and progress in completing training requirements are discussed, as

well as the supervisor's judgment concerning the need for a new rotational assignment. The interns are evaluated on their performance after six, 12, and 24 months. At TCC Warren, contracting professionals are interns for two years. They are hired as GS-1102-07s, and are assessed at the end of each anniversary year to determine if they are ready for increased responsibility. If so, they are promoted to the next grade level. After completing two years, the interns graduate from the program when they have (1)satisfied all training requirements as noted in their Individual Development Plans (IDPs); and (2)demonstrated successful progression relative to increased independence. In recognition of the intern's achievements, TACOM Warren holds a commemorative graduation ceremony for each group of interns that successfully complete their two-year internship.

F. JOINT MUNITIONS AND LETHALITY CONTRACTING CENTER (JM&L)

The Assistant Secretary of the Army for Acquisition, Logistics and Technology and the Commander, U.S. Army Materiel Command (AMC) implemented the Army's Life Cycle Management initiative in August 2004. This initiative focused on getting products to the Soldier faster, making good products better, minimizing life cycle costs and enhancing the synergy and effectiveness of the Army's acquisition, logistics, and technology communities. The initiative resulted in realigning several AMC system oriented Major Subordinate Commands (MSC) with the Program Executive Officers (PEO) they supported to form Life Cycle Management Commands (LCMC). As a result, the Joint Munitions and Lethality (JM&L) LCMC was established; its objective was to improve the effectiveness of life cycle management of conventional munitions for the warfighters by providing the best munitions in the right place, at the right time, at the right cost (JM&L website, 2010).

The JM&L contracting organization later became one of the nine contracting centers under ACC, which is now known as the JM&L Contracting Center. JM&L Contracting Center is responsible for helping its customers and suppliers provide operational superiority to Armed Forces for critical life

threatening situations on the battlefield or other deployment missions (Strategic Business Plan, 2010). JM&L's vision is to be "A world class Community of Business Professionals providing the best in quality Acquisition services." JM&L's organizational management structure consists of the PARCs Office, Mission Execution Office, Operations Office, and the Deputy Director of Contracting along with six contracting divisions as depicted in Figure 9.

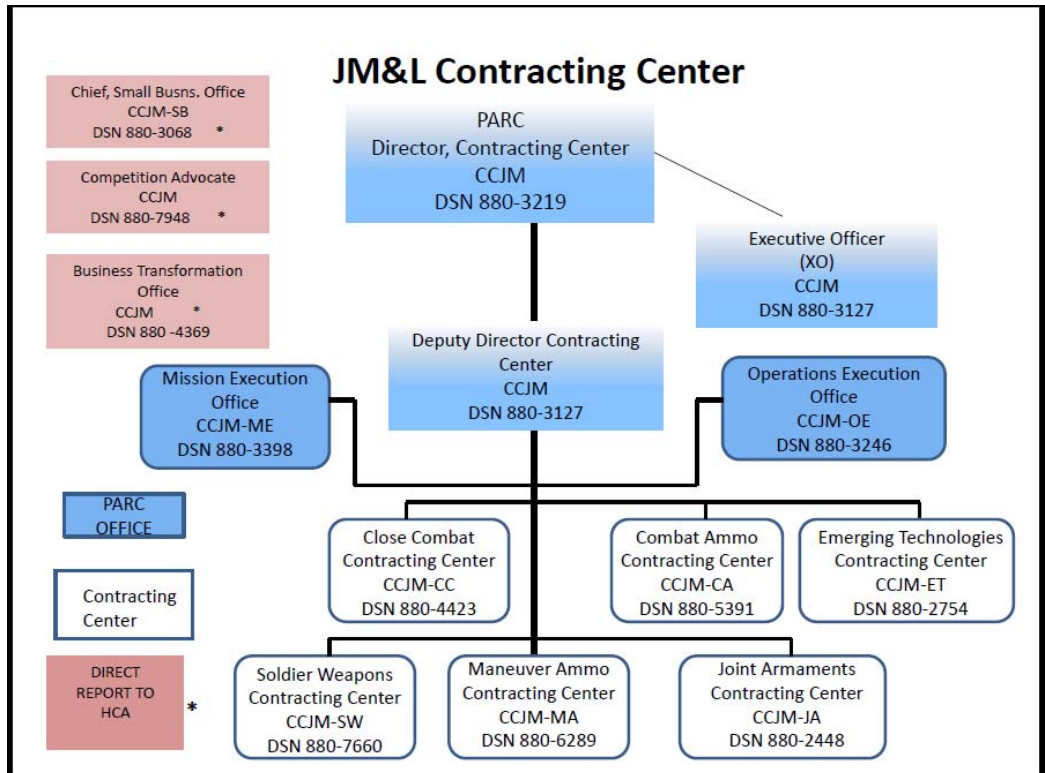


Figure 9. JM&L Organizational Chart (From JM&L, 2010)

JM&L has 199 1102s within its contracting organization (JM&L, 2010). The number of eligible retirees is 26 contracting professionals or 13 percent (JM&L, 2010). To continue to meet its mission, JM&L has hired 20 1102s (10 percent) in 2009, and 16 1102s for 2010. JM&L has 10 more planned selections for 2010 (JM&L, 2010), and intends to hire an additional 25 1102s in 2011 (JM&L, 2010).

In FY08, JM&L's contracting professionals were responsible for placing 3,842 actions on contract and obligating \$3.3 Billion (Army Sustainment Command's Advance Planning Briefing to Industry, 2009). Periodically JM&L has

urgent requirements that need to be executed expeditiously. In such an instance, the contracting professionals must have experience and advanced knowledge in contracting procedures and policies relating to safety, security and environmental that is unique to the procured commodities (Strategic Business Plan, 2010).

In furtherance of its goal of maintaining and improving its skilled workforce, JM&L has provided opportunities for professional growth and development as its primary organization enhancement objective. JM&L articulated in its Strategic Plan that their “strategy roadmap starts with learning and growth opportunities for our associates to develop the technical, interpersonal and leadership skills necessary to execute the mission” (Strategic Business Plan, 2010). JM&L contracting professionals are interns for two or three years, depending on the grade level for which they qualify when they are hired. If hired as a GS-5, they are an intern for three years; if hired as a GS-7, they are an intern for two years. Interns graduate from the program when they have (1)satisfied all training requirements as noted in their Individual Development Plans (IDPs); and (2)have demonstrated successful progression relative to increased independence (Crane 2010).

In developing its employees, JM&L depends on Federal and DoD education and development programs including the Army Tuition Assistance Program, the Competitive Development Group and Defense Acquisition University. JM&L’s training for contracting professionals is centered on Defense Acquisition Workforce Improvement Act (DAWIA) requirements. To ensure contracting professionals gain hands-on experience, JM&L provides opportunities for rotational assignments, along with leadership training at universities such as University of Virginia (Darden School of Business) and Penn State Smeal College of Business. JM&L encourages its employees to enhance their professional contracting expertise in other formal and informal ways. For example, some JM&L employees are active in the National Contract Management Association (NCMA), which has a local chapter at the location where JM&L is headquartered. JM&L management supports the local NCMA

chapter and sponsors or co-sponsors some of its professional development activities (Strategic Business Plan, 2010).

JM&L's new associates and journeymen contracting professionals receive a training guide to assist them in developing a road map for strengthening skills in contracting, interpersonal, team-building and leadership. To further the development of new associates, JM&L has a New Associates Development Group. This group meets regularly and is intended to facilitate the efficient and effective integration of new associates into the JM&L Contracting Center. The group's meetings are used to discuss training issues and to serve as another forum for training contracting professionals on the various aspects of the contracting process (Strategic Business Plan, 2010).

G. CHAPTER SUMMARY

ACC has an enormous responsibility in that its contracting professionals are direct links in ensuring warfighters have the equipment and supplies to fulfill their mission. Having this National responsibility requires ACC's contracting centers to be staffed with professionals that provide consistent, quality contracting on a globally changing scale. In order to meet current and future demands, contracting centers have put hiring, training and developing contracting professionals as their top strategic objective. As a result, ACC will have to work closely with DAU as it pursues achieving its objective to improve the quality of work done by contracting personnel. The next chapter in this study discusses the findings and results of the interviews and surveys conducted for this study.

THIS PAGE INTENTIONALLY LEFT BLANK

IV. SURVEY AND INTERVIEW METHODOLOGY AND RESULTS

A. CHAPTER OVERVIEW

This study assessed shortfalls and challenges associated with hiring, developing, and retaining defense procurement and acquisition interns and professionals. Two major Army Contracting Centers' training and development programs for 1102 contract specialists were examined to highlight an array of factors impacting the topic. This chapter describes the methodology that was used to evaluate the training programs in place at Tank-Automotive and Armaments Command (TACOM) and Joint Munitions and Lethality (JM&L) Contracting Centers. Survey and interview results are also presented. The survey and interview responses from the two contracting centers provides a more comprehensive understanding of the complexity surrounding the hiring, developing and retaining of intern and experienced 1102s. The chapter concludes with a discussion of the findings.

B. METHODOLOGY

1. Methods Utilized

The methodology used in this study consisted of web-based surveys as well as telephone and face-to-face interviews to collect data from interns, respective supervisors, and respective division chiefs. The sample was selected to attain perceptions up and down the hierarchy of relevant contract specialists and subject matter experts. Structured questions were used to assess perceptions of procurement employees at multiple levels of the organization. Face-to-face and telephone interviews were conducted with Workforce Development chiefs and a DAU professor to obtain an even wider set of relevant perceptions regarding the topic.

The web-based surveys were structured utilizing forced-choice and open-ended questions with answer boxes for comments. The surveys were set up to

allow only one response per participant. The face-to-face and telephone interviews were conducted by asking each interviewee structured, open-ended questions, to encourage unsolicited and/or personal viewpoints. The goal of this study was to describe the nature and extent of the 1102 shortfall, to evaluate 1102 training and development programs at two major contracting centers and based on those results, provide an analysis of what appears to be working well, what may not be working well, and what improvements may be possible to better close personnel gaps crucial for sustaining an 1102 community composed of junior *and* experienced professionals.

2. Participants

A total of five selected job-related groups were surveyed and interviewed. Interns and supervisors were sent web-based surveys. Division chiefs, workforce development, and DAU participants were interviewed by telephone or face-to-face.

A sample size of the intern workforce was chosen to participate. This was a convenience sample (given the amount of time to perform the study not every intern was given the opportunity to participate) of the current population, taken at the time the survey was generated by interns that fell within the following criteria.

The interns surveyed:

- Work for supervisors with more than one year of experience in a supervisory position (some TACOM supervisors were in newly appointed positions; they lacked the experience of a seasoned supervisor and would not have been able to provide an experienced view of their interns.)
- Had participated in the intern training and development program for at least six months to three years.
- Had not completed the requirements for Level II Certification.

The survey was sent to 35 interns at the TACOM Contracting Center, a total of 24 interns responded, resulting in a 69 percent response rate. The survey was sent to 22 interns at the JM&L Contracting Center. The response rate of those surveyed was 18 interns, resulting in an 82 percent response rate.

The direct supervisors of the interns surveyed were also sent web-based surveys. A total of 12 TACOM supervisors responded out of the 15 surveys sent, resulting in an 80 percent response rate. A total of eight JM&L supervisors responded out of 11 surveys sent, resulting in a 73 percent response rate.

Three other working groups that participated in the study were interviewed. A 100 percent participation rate was obtained from the individuals selected to be interviewed. The first group interviewed was division chiefs, including four division chiefs from TACOM and six division chiefs from JM&L. The second group interviewed was workforce development personnel consisting of, one individual from TACOM and two from JM&L. Lastly, an interview was conducted with a Defense Acquisition University (DAU) professor involved in training classes for 1102s.

3. Layout and Design

Five sets of questions were developed. There were two sets of questions for the web-based surveys, one for interns and one for supervisors (see Appendices A&B). Three sets of interview questions were developed for Division Chiefs (see Appendix L), Workforce Development personnel (see Appendix M), and a DAU professor (see Appendix N).

a. Surveys

The web-based survey questions sent to interns and supervisors were designed to provide forced-choice and open-ended answers. Two parts of the web-based surveys were developed and sent to the participants with the same message. Those parts were the introductions section and the closing remarks section. The introduction of the surveys introduced the administrators of the survey, the purpose, and the end date of the survey. It also emphasized that

the participant's identity would be kept anonymous. The other similarity in both surveys was the closing remarks section, where respondents were thanked for their participation. The following describes additional details regarding the surveys sent.

(1) Interns. Interns were sent web-based surveys consisting of 12 questions; eight forced-choice questions and four open-ended questions. The intern survey encompassed four areas of study: Background, Current Training Program, Perceptions/Attitudes about Training, and Recommendations for Training. The intern survey questions are located in Appendix A and the comments from the open-ended questions are in Appendices C, D, E, and F.

- *Background.* Questions 1 through 4 were forced-answer questions designed to obtain background information relating to the interns work experience, to include length of federal service, time in position, DAWIA certification, and previous related work. Current Training Program. Questions 5 through 8 were forced-answer questions designed to obtain information on the level of satisfaction of four types of training, if a trainer was assigned to the intern, the experience level of the trainer, and the intern's confidence level in performing the duties of a contract specialist.
- *Current Training Program.* Questions 5 through 8 were forced-answer questions designed to obtain information on the level of satisfaction of four types of training, if a trainer was assigned to the intern, the experience level of the trainer, and the intern's confidence level in performing the duties of a contract specialist.
- *Perceptions/Attitudes about Training.* Questions 9 and 10 were open-ended questions designed to obtain information on some of the benefits and drawbacks of the training interns received.

- *Recommendations for Training.* Questions 11 and 12 were open-ended questions designed to obtain comments and/or concerns regarding the training program, as well as any suggestions or recommendations for improvement of the training program.

(2) Supervisors. Supervisors were sent web-based surveys that consisted of a total of eight questions, including three forced-choice questions and five open-ended questions. The survey encompassed four areas of study: Perceptions/Attitudes about Training, Current Training Program, Tracking Performance of Interns, and Recommendations for Training. An example of those questions is located at Appendix B and the comments from the open-ended questions are found at Appendices G, H, I, J, and K.

- *Perceptions/Attitudes about Training.* Questions 1, 2, 3, and 5 were all forced-choice and open-ended questions designed to rate the quality and perceived benefits and/or drawbacks of the training program. Additionally, the survey queried the importance of a structured on-the-job training program.
- *Current Training Program.* Question 4 is an open-ended question designed to describe any on-the-job training being conducted in their area.
- *Tracking Performance of Interns.* Question 6 is a forced-choice question designed to rate the level of satisfaction with the graduated intern's job performance.
- *Recommendation for Training.* Questions 7 and 8 are open-ended questions designed to obtain recommendations for improving training and provide a means to supply comments or concerns regarding the training programs.

b. Interviews

Three sets of structured interview questions were used and interviews were conducted with Division Chiefs, Workforce Development personnel, and a DAU instructor. The interview questions were designed to provide forced-choice and open-ended answers. The following describes additional detail regarding the surveys sent.

(1) Division Chiefs. Division chiefs were asked 12 structured questions in the interview, including eight open-ended and four forced-choice questions. The interview was divided into six parts: Background and Experience, Current Training Program, Perceptions/Attitude about Training, Tracking Performance of Interns, Attrition, and Recommendations for Training. Examples of their questions are in Appendix L.

- *Background and Experience.* Question 12 was a forced-choice question designed to obtain background information on their group, specifically what percentage of their employees have master's degrees, Level III Certification in contracting, and more than three years of contract specialist work experience.
- *Current Training Program.* Questions 2 through 5 were open-ended questions designed to obtain information on how they are training interns to maintain high performance work products.
- *Perceptions/Attitude about Training.* Question 1 was an open-ended question designed to assess overall perceptions on how well the Army Contracting Command is performing, i.e., in terms of being a world class provider to soldiers. Questions 7 and 11 were forced-choice questions designed to solicit perceptions regarding current training programs.

- *Tracking Performance of Interns.* Question 4 was designed to provide an open-ended response and question 8 was a forced-choice response about rating intern performance.
- *Attrition.* Questions 2 and 9 are open-ended questions designed to provide information regarding incentivizing plans to retain experienced workers and maintaining high performance. Question 10 was a forced-choice question designed to describe the perceived success of offered incentives.
- *Recommendations for Training.* Questions 5 and 6 were open-ended questions designed to solicit recommendations for future challenges facing the training program.

(2) Workforce Development Personnel. Workforce Development personnel were asked ten open-ended questions. The questions were divided into six parts: Background and Experience, Current Training Program, Perceptions/Attitude about Training, Tracking Performance of Interns, Attrition, and Recommendations for Training. Examples of questions are in Appendix M.

- *Background and Experience.* Questions 6, 9, and 10 were designed to discover the primary factors used to select interns, including the percentage of respondents having Level III contracting certification and the percentage having master's degrees.
- *Current Training Program.* Questions 1, 5, and 7 were designed to provide information on how interns are being trained, developed, funded, and rotated through the divisions.
- *Perceptions/Attitudes about Training.* Question 2 was designed to attain perceptions on current and possible future issues facing the intern training program.

- *Tracking Performance of Interns.* Question 4 was designed to assess how respondent's organizations evaluated the intern training program.
- *Attrition.* Question 8 was designed to approximate how many interns leave the contracting center within the first three years.
- *Recommendations for Training.* Question 3 was designed to solicit recommendations for the next decade of training.

(3) Defense Acquisition University (DAU) Professor. A DAU professor was asked six questions, including five structured opened-ended questions and one unstructured question encompassing two areas of study. Four of the questions were about perception/attitudes about the training program. One question asked about recommendations for training, and the last question was unstructured to obtain any unsolicited responses not specifically covered in the interview. Question examples are in Appendix N.

- *Perception/Attitudes about the Training.* Questions 1 through 4 were designed to provide feedback on the perceptions and attitudes about the training program, such as what is working well, measures on training effectiveness, and training preferences.
- *Recommendations for Training.* Question 5 was designed to solicit feedback on the existence and/or progress of efforts to improve the training program.

4. Procedures

a. Surveys

Interns and their supervisors were asked to respond to the surveys utilizing a web-based survey tool, Kwik Surveys (www.kwiksurveys.com). The web-based surveys were prepared and all participants were notified by email and requested to complete the survey. The surveys were initially active for a period of two weeks: July 17, 2009 through July 31, 2009. However, to encourage a better response rate the survey period was extended until August 21, 2009. All participants asked to respond to the survey were promised anonymity.

b. Interviews

Contact was initially made by email, telephone call, or if co-located, a personal face-to-face visit was initiated to introduce ourselves and explain the purpose of the study. The interviewees' participation was requested and they were told that their identity would be kept anonymous. After receiving an agreement to participate, an interview was scheduled and the interview questions were sent in advance of the interview. The interviews that could be held face-to-face were conducted in a private office that only included the interviewee and the authors. The other interviews were conducted by telephone while the authors took notes. At the closing of the interviews, the authors again promised anonymity and thanked the interviewee for their participation.

C. SURVEY AND INTERVIEW RESULTS AND ANALYSIS

The objective for using surveys and interviews was to gather opinions to enable the authors to answer the following research questions.

- How can the Army Contracting Command accomplish its ongoing and expanding contracting mission, including training approximately 1,300 new contract specialists over the next two years, developing

existing employees with one to five years of experience, and mitigating contracting personnel attrition?

- How is the ACC currently training and developing interns, especially during a pervasive shortage of qualified trainers?
- How well are ACC Interns performing as a result of the current training?
- What is the status of succession planning in terms of ensuring sufficient numbers of qualified supervisors, managers, and senior executives?
- What is the nature of the real and/or perceived gap between the vision of becoming world-class contracting centers, and real-world contingencies and constraints?
- How can the contracting centers improve the training, education and certification process in developing new contracting personnel over the next few years?
- What is the role and trend of identifying and implementing relevant best-practices, including knowledge-sharing among Contracting Centers?

1. Intern Background Information

The background information collected from the surveys and interviews was useful in cross-referencing the importance of an intern's length of service and experience, interns' certification levels, education levels of the contracting workforce, and interns' previous contracting experience. This information was also helpful for determining the interns' job performance baseline and the education baseline of the workforce.

a. Length of Service and Experience

Of the 42 interns from JM&L and TACOM that participated in the study, 79 percent had one to three years of working experience in the federal government, while 12 percent had less than one year, and nine percent had three to five years in the federal government. No intern had more than five years of federal government experience. To illustrate the intern respondents' years of federal government experience by combined (JM&L and TACOM) command totals and by individual command, the results are summarized in Figure 10.

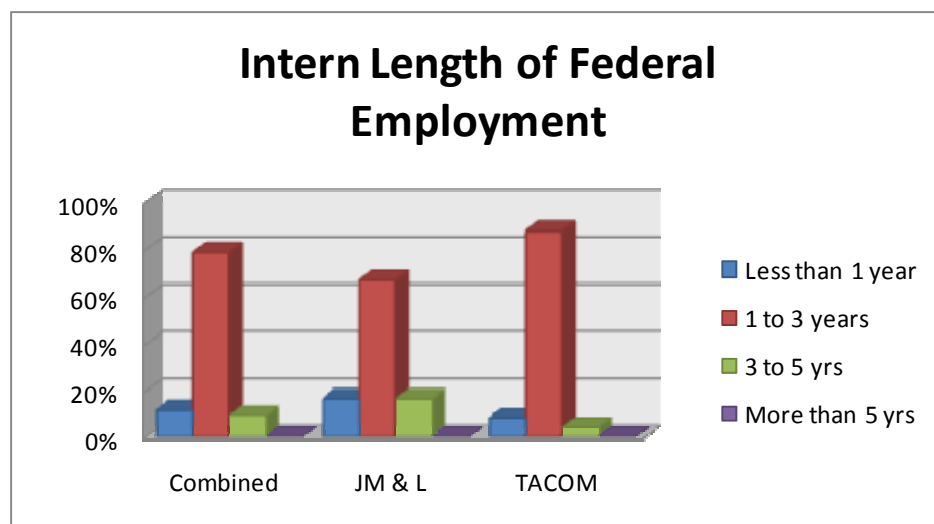


Figure 10. Intern Length of Federal Employment (data from surveys)

The interns surveyed had between six months to three years of contract specialist (1102) experience. Of the combined total of interns surveyed from JM&L and TACOM, 19 percent had between six months to one year experience, 60 percent had between one to two years of experience, and 21 percent had between two to three years of 1102 work experience. One difference between the commands is that TACOM had no intern respondents with one to two years of 1102 work experience while 50 percent of the JM&L interns had one to two years of 1102 work experience. The group of intern respondents from JM&L that participated in this study had more work experience than the TACOM

interns. Figure 11 illustrates intern respondents' length of contract specialist (1102) experience, by combined (JM&L and TACOM) command totals and by the individual command.

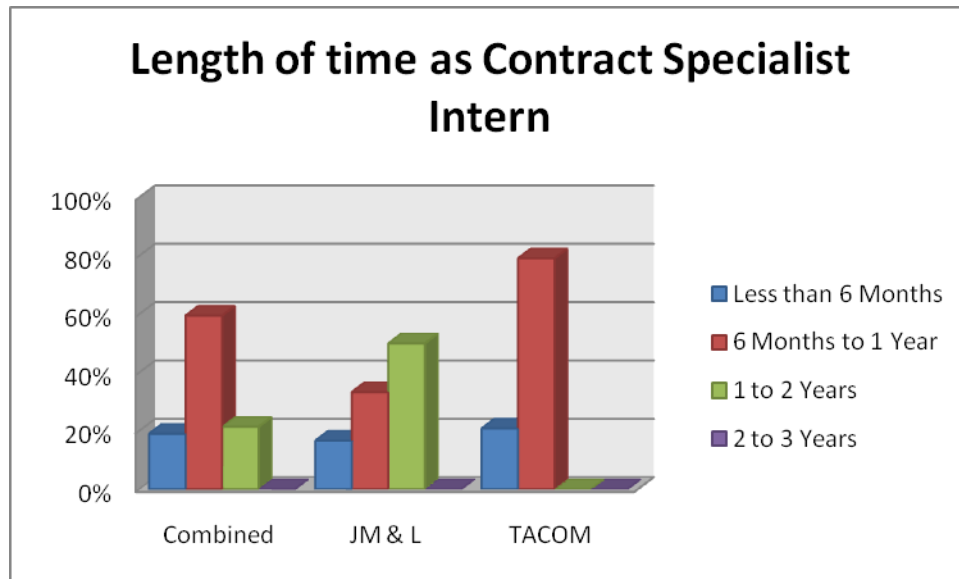


Figure 11. Length of Time as a Contract Specialist (data from surveys)

b. Certification and Education Level

The intern respondents were asked their current level of DAWIA contracting certification and the responses from both commands are as follows: 38 percent had not yet achieved any certifications, 45 percent had achieved Level I, and 17 percent had achieved Level II. The outlier in the intern survey was TACOM, which had no intern respondents with Level II certification. JM&L had their highest percentage of respondents achieve DAWIA contracting Level II certification at 39 percent. This outlier can be explained when Figure 4.2 and 4.3 are combined. Interns should have Level II certification after the second year of 1102 contracting experience. TACOM had no interns with more than three years of 1102 contracting experience, while JM&L had 50 percent of their interns with more than three years of 1102 contracting experience. To illustrate the current

level of DAWIA contracting certifications by combined (JM&L and TACOM) command totals and individual command totals, the results are summarized in Figure 12.

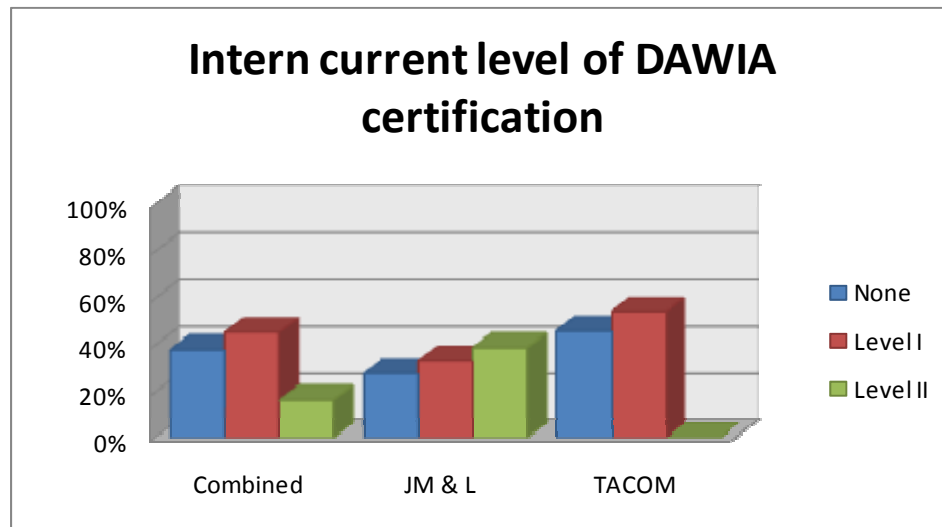


Figure 12. Intern Current Level of DAWIA Certification (data from surveys)

c. *Level of Education, Certification, and Years of 1102 Experience*

The Workforce Development interview respondents were asked: What percentages of employees in their command have Master's degrees? TACOM only identified their intern population and could not give a percentage for the entire command. Thirty percent of the TACOM intern population has master's degrees and 25 percent are currently pursuing Master's degrees. JM&L responded that of their entire workforce one person has a doctorate degree, 12 percent have Master's degrees, and three percent are pursuing Master's degrees.

The two commands were asked: What percentage of their contracting workforce is Level III contracting certified? The response from TACOM was 98 percent of the workforce is Level III certified and the individuals

that are not Level III certified are missing classes or have not applied for certification. Ninety-five percent of JM&L's contracting workforce is Level III certified. JM&L has two employees not certified at the appropriate level, one employee should be Level III certified for their position, and the other individual still has time to get certified before being considered late.

The division chiefs were asked: What percentages of their employees have more than three years of 1102 contracting experience? TACOM division chiefs did not respond to this question. Each division chief at JM&L stated that 70 to 75 percent of their workforce has more than three years of contracting experience, but a couple of the division chiefs stated that most of their division has less than five years of experience.

d. Previous Work Experience

Of the intern respondents' surveyed at both (JM&L and TACOM) commands, 62 percent had no previous work experience as a contract specialist or in any related field, 21 percent had very little experience, 17 percent had some experience, and none of the intern¹³ illustrates the previous level of work experience of the intern respondents by combined (JM&L and TACOM) command totals and individual command totals.

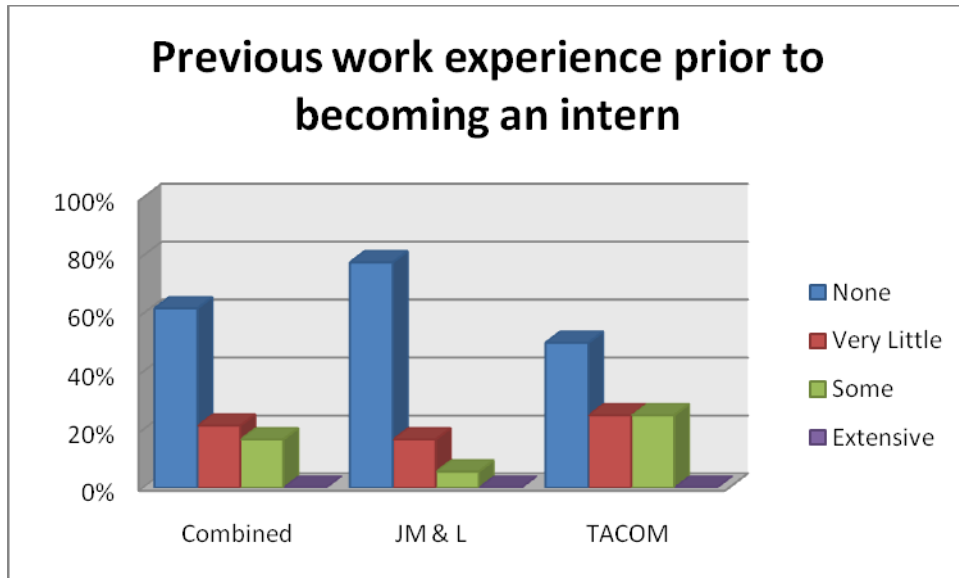


Figure 13. Previous Work Experience Prior to Becoming an Intern (data from surveys)

e. Hiring Attributes

When the workforce development respondents were asked to describe a key factor used to select individuals for hiring in the 1102 workforce, TACOM respondents often indicated that interpersonal skills were paramount. One respondent said TACOM is not looking for any particular technological skill because the center can mold the intern in the contracting field. JM&L looked at new hires' Grade Point Average (GPA) and how they spoke during the interview in relation to confidence, presentation, negotiation skills, and leadership qualities.

2. Current Training Program

This section summarizes information collected from the surveys and the interviews about on-the-job training that each command is undertaking. Additionally, this section helps answer how some of the ACCs are currently training and developing interns during a pervasive shortage of qualified trainers.

a. *Interns With Trainers*

Of the 42 interns from JM&L and TACOM that participated in the study, 52 percent had trainers. Sixty five percent of the trainers in that group had more than four years of contracting experience, while 26 percent had three to four years of contracting experience. Nine percent of the trainers had one to two years, and none of the trainers had less than a year of contracting experience. More TACOM interns had trainers while the JM&L interns were equally split between having a trainer and no trainer assigned. Table 7 illustrates the responses from both JM&L and TACOM as a combined total and by individual command.

	JM&L	TACOM	Combined
Do you have a trainer?			
Yes	50.0%	58.0%	52.0%
No	50.0%	42.0%	48.0%
What is the trainer's level of work experience			
less than 1 year	0.0%	0.0%	0.0%
1 -2 years	11.1%	7.1%	8.7%
3-4 years	22.2%	28.6%	26.1%
more than 4 years	66.7%	64.3%	65.2%

Table 7. Interns with Trainers (data from surveys)

b. *Intern On-the-Job Training Conducted*

The supervisors, division chiefs, and the workforce development personnel at both JM&L and TACOM were asked how they were training and developing their interns.

The supervisors' answers to question four of the web- based survey were electronically captured and can be found within Appendix I. No general theme appeared among the TACOM supervisor responses. Job training and developments included interns training interns, team participation, group training, developed handbooks, PCO's training interns, and seasoned contract specialists

being assigned as trainers. As for JM&L, the overall response was each intern is mentored by a seasoned contract specialist. JM&L supervisors said they get help from a new associates group that allows interns a place to go for information and have discussions to resolve work related issues.

The division chiefs have a broader training plan. Some of the TACOM division chiefs stated that interns are first exposed to work that has a minimum level of complexity. The interns are assessed between three to six months to determine if they can be progressed to a more complex workload. One TACOM division chief believes each division is able to grow their interns by internally rotating them through the division. If the intern is showing proficiency and progressing to the next level of difficulty, the intern is given larger complex buys. Division chiefs indicated that they are ensuring interns are getting the training and certification on time to meet their schedule. If the interns are having trouble finding the time, the PCO and trainers will help the intern manage their time to meet training schedule deadlines. Some of the JM&L division chiefs stated they have meetings to discuss lessons learned, also lunch and learning sessions are conducted. Rotational assignments are encouraged so interns can get a broad view of contracting and interns are encouraged to join groups such as NCMA to help them with learning.

The workforce development chiefs have a training plan for all the interns at their contracting center. Interns are hired as a GS-07 and advanced non-competitively to GS-11. The intern's first day of work begins with boot camp, which is held for six weeks, where buys are simulated from beginning to end and the intern is given a basic understanding of the center. Improvements to boot camps are attempted after each session based on intern feedback. After boot camp, the intern is placed into a position depending on TCC's need and the intern's ability. It was stated that they look for developmental assignments such as source selection opportunities. Previously, each intern was assigned a predetermined rotation. Predetermined rotations failed to provide the depth needed in contracting and were very disruptive to the mission. To improve the

depth of an intern's learning and development, they are now assigned to a division, where they are exposed to multiple types of contracting. The interns are rotated within their assigned division unless it is determined their current division cannot provide further opportunities for growth and development. Every six months the supervisor's review provides details about what type of work the intern has been doing, what other type of work is available, and what is the future plan for the intern. The six month review is followed by a meeting with the senior rater, workforce development chief, supervisor, group chief, and division chief. At the meeting the intern's progress is discussed to determine their developmental needs, if a rotation to a different area or different contracting experience is needed. A follow-up review is meant to ensure the intern is doing well in that area. Workforce development also follows up to ensure the supervisor provided the intern with the training experience discussed during the meeting, and if not, then the supervisor has to explain why. TCC's goal is to ensure Level I certification the first year and Level II certification the second year.

A JM&L workforce development interviewee responded that the interns may be considered interns for two or three years, depending on the hired grade level. Technically, they're interns until they reach a grade GS-11. If they started as a GS-05, they'll be considered an intern for 3 years. If they started as a GS-07, they'll be considered an intern for 2 years. Once an intern has satisfied all training requirements as noted in their Individual Development Plans (IDP) and demonstrated successful progression relative to increased independence, the intern should reach a GS-11 position in two or three years. JM&L does not have a contracting center structured program such as TACOM's boot camp. JM&L's training program comes from the structure of the divisions, supervisor's on-the-job-training approach, and DAU certification level classes.

c. Intern Training Funding Process

The workforce development chiefs at both JM&L and TACOM were asked how the funding process affects the contracting centers funding programs.

TACOM's workforce development chief responded that there are two separate pots of money, a local budget, and central funds. Two and a half percent is off of the salary in the local budget. The local budget is supplemented by central funds, i.e., Acquisition Tuition Assistance Program (ATAP) and training and development opportunities. Leadership training is also centrally funded. TCC's PARC meets annually with the workforce development chief, supervisor, group chief, and division chief to review each employee's individual IDP to ensure the continued training and development of each employee. The TCC's Business Management Office (BMO) also looks for ways to manage the training funds. One successful method of keeping costs down is taking advantage of alternate courses that are more cost effective and accomplish the same training objectives.

A JM&L workforce development interviewee stated that no funding issues are affecting training or certification. However, it has been challenging for interns to get certification training completed because DAU courses are already filled or unavailable. An increase in funding may then become necessary if DAU classes are not available because it is more expensive for JM&L to fund classes off-site.

d. Challenges With the Intern Training Program

The division chiefs at both TACOM and JM&L were asked in an interview what challenges they foresee with the intern training program.

The TACOM division chiefs commented, at the rate interns are being hired it has become a challenge to identify available space, as well as, having sufficient trainers to assign to each new intern. Also, without experienced people to help evaluate the interns and train the interns, we could be doing individuals a disservice by not giving them the attention they should get, i.e., having no one monitoring intern performance, having no one training them, and then two years down the road the intern hasn't reached their potential. Another

observation is that DAU training may be held as a higher priority than on-the-job training or experience.

The JM&L division chiefs commented that they are having problems finding qualified interns because of the high cost of living in the area, and not enough experienced personnel in-house. Unfortunately, interns may be expected to absorb the information quicker than in the past. Additionally, there is an insufficient number of level one training classes available. One unintended consequence is that when interns are gone for training, the rest of the workforce must pick-up the workload.

3. Perceptions/Attitude About Training

This section provides an overview of the perceptions and attitudes about the current intern training program in respect to how the training program is being rated, the benefits, and drawbacks of the training program, and the confidence levels associated with intern job performance.

a. Rating the Training Program

To help rate the current training program, both the supervisors and the division chiefs were asked about the importance of a structured on-the-job training program. Next, the interns were asked to rate the level of knowledge they received from the different types of training. To obtain a DAU instructor's perspective of training, the instructor was asked if students seemed to prefer online training or a traditional classroom setting. The instructor was also asked which type of training, classroom or on-line, is working and which is not. In closing, the supervisors were asked to rate the overall quality of the training program.

Out of the nine division chief's interviews from both JM&L and TACOM, all (100 percent) stated that a structured on-the-job training program is very important. Of the 20 supervisors that participated in the survey, 55 percent

identified a structured on-the-job training program as very important, 30 percent identified it as important, and five percent indicated was unimportant. Figure 14 illustrates the supervisors' responses from both JM&L and TACOM as a combined total and by individual command.

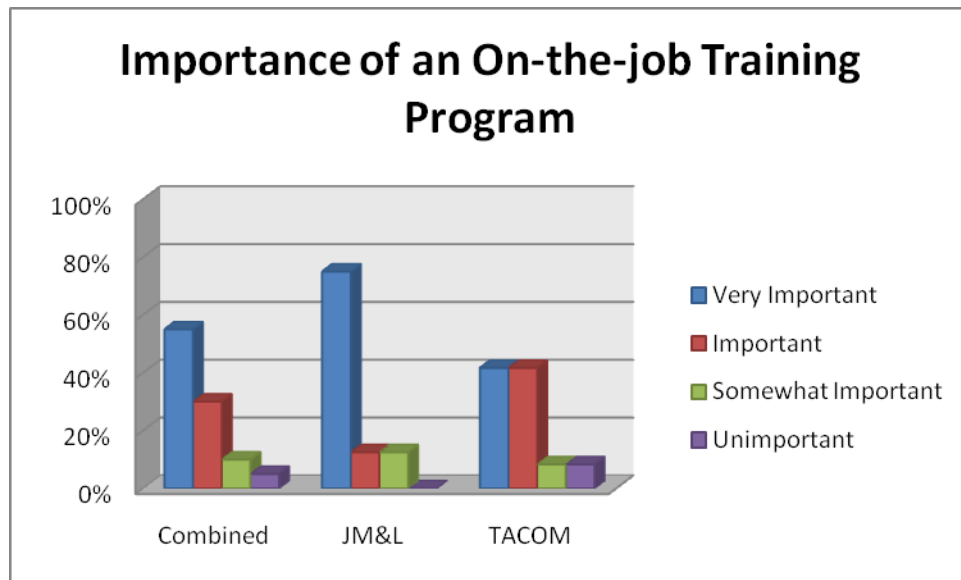


Figure 14. Importance of an On-The-Job Training Program (data from surveys)

Next, the interns were asked to rate each type of training by the level of knowledge received. The different types of training offered were: boot camp, DAU classroom and online courses, a range of command/in-house generated/or support classes, and on-the-job training. Of the 42 interns that participated in the study, 34 percent have never taken a boot camp class. Of the interns that took boot camp training, most of the ratings fell in the middle of the range with 24 percent rating the training as satisfactory and 21 percent rating it as good. All the interns surveyed have had DAU classes. Of the 42 interns surveyed 33 percent rated the DAU training as good, followed closely by 31 percent rating the training as satisfactory. The outliers were fairly equal, 19 percent rated the training as poor, while 17 percent rated it as excellent. When it came to rating the command classes, the largest percentages fell in the middle, with 29 percent rating the classes as satisfactory, while 45 percent rated the

classes as good. Twelve percent rated the classes as poor while seven percent rated them as excellent. JM&L interns were fairly split rating 28 percent as poor and 39 percent as good. Forty-two percent of the TACOM interns rated the training as satisfactory and 50 percent rated the training as good. The on-the-job training received high ratings by the interns at both commands with combined ratings of: 38 percent good, 34 percent excellent, 14 percent satisfactory, and 15 percent rating the on-the-job training as poor. The individual ratings were comparable to the combined totals. Figure 15 illustrates the interns' responses from both JM&L and TACOM as a combined total and by individual command.

Rating each type of training individually, how would you rate the level of knowledge you received

	Bootcamp	DAU Classroom and Online	Command/Inhouse Generated/Support Classes	On-the-job-training
JM&L				
Never taken	77.8%	0.0%	11.1%	0.0%
Poor	0.0%	22.2%	27.8%	16.7%
Satisfactory	0.0%	22.2%	11.1%	22.2%
Good	5.0%	33.3%	38.9%	27.8%
Excellent	16.7%	22.2%	11.1%	33.3%
TACOM				
Never taken	0.0%	0.0%	4.2%	0.0%
Poor	12.5%	16.7%	0.0%	12.5%
Satisfactory	41.7%	37.5%	41.7%	8.3%
Good	33.3%	33.3%	50.0%	45.8%
Excellent	12.5%	12.5%	4.2%	33.3%
Combined				
Never taken	33.3%	0.0%	7.1%	0.0%
Poor	7.1%	19.0%	11.9%	14.3%
Satisfactory	23.8%	31.0%	28.6%	14.3%
Good	21.4%	33.3%	45.2%	38.1%
Excellent	14.3%	16.7%	7.1%	34.0%

Figure 15. Rating each type of training individually; rating the level of knowledge received (data from surveys)

Next, the study solicited responses about whether students preferred online or a traditional classroom setting. A DAU instructor was asked from his perspective: Do students tend to prefer courses online or a traditional classroom setting, and, what is working well, and what is not working when it comes to the current training process? The DAU instructor stated that some

students prefer the flexibility of online courses, while some interns stated they struggle with online courses. As far as a percentage, 75 percent seem to prefer online and 25 percent prefer the classroom. The instructor also stated that classroom training is effective in teaching a few key learning objectives. From the students comments it would appear that the classroom setting helps the students get the big picture. From the instructor's perspective, the online training does not work well, i.e., students do not seem to retain the information.

The last topic in this section is the quality of the current overall intern training program from the supervisors' perspective. Out of the 20 supervisors surveyed, the largest combined percentage fell into the good rating. Sixty percent of the supervisors indicated that the quality of the current overall intern training program is good, while ten percent stated it was excellent, 20 percent rated it okay, ten percent rated it poor, and none of the supervisors thought the overall training program was fair. From the TACOM ratings, 80 percent of the supervisors indicated that the current overall intern training program was good. JM&L supervisors had mixed ratings. Figure16 illustrates the supervisor responses to the overall quality of the intern training program from both JM&L and TACOM as a combined total and by individual command.

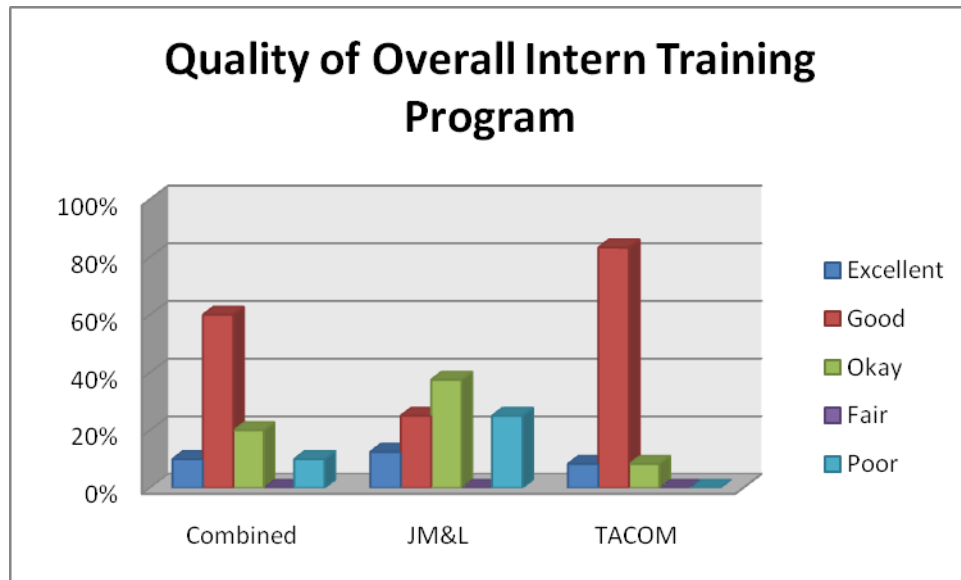


Figure 16. Quality of Overall Intern Training Program (data from surveys)

b. The Benefits of the Intern Training Program

To gain a better understanding of what is working well within the intern training program, we asked participants to share some of the benefits they have experienced. First, interns and supervisors were asked to share some of their perceived benefits from the intern training program. Division Chiefs were asked: What is the foremost “best practice” process currently being used in most Army Contracting Centers and how valuable is this “best practice”?

The interns had a lot of positive comments regarding the benefits of the intern training program. The interns commented on boot camp, DAU classes, and on-the-job-training. One of the interns commented: “The 6 week boot camp allowed for us to focus on getting acquainted with TACOM, getting access to important programs and databases, and meeting knowledgeable people” (anonymous intern questionnaire, July-August 2009, Appendix C). A comment regarding DAU training was: “DAU instructors have been very experienced and share their insight. In-class courses are great to understand issues in related fields or other locations/branches. I have found references & links provided are

very helpful on the job. Class material provided is also very good” (anonymous intern questionnaire, July-August 2009, Appendix C). Many interns indicated that on-the-job training had been the most valuable, and one intern said: “Out of all of the training I received, I feel that I have benefited the most from on-the-job training. It caters to my learning style and I have found it to be the most relevant” (anonymous intern questionnaire, July-August 2009, Appendix C).

The supervisors had a spectrum of comments, some revolved around boot camp and on-the-job training. One supervisor stated: “Interns are coming out of boot camp with a very good broad knowledge of what to expect when they enter the real working environment; gives us as trainers a little breathing room that we do not have to start from scratch. We can pick up where boot camp left off and expand on the training” (anonymous supervisor questionnaire, July-August 2009, Appendix G).

Many comments were received regarding on-the-job training. One supervisor said: “Instead of rotating the interns every six months, as previously done, we are now only rotating them once a year. That is good because they can get real in-depth experience” (anonymous supervisor questionnaire, July-August 2009, Appendix G). Another supervisor commented: “The current intern training program consists mostly of on-the-job training and taking their required DAU courses online. The benefits of this are working with a seasoned specialist to learn the details and requirements of the job” (anonymous supervisor questionnaire, July-August 2009, Appendix G).

The Division Chiefs provided feedback in their interviews on the foremost “best practice” process currently being used in most Army Contracting Centers and how valuable is this “best practice”. All the Division Chiefs at JM&L agreed that it is very valuable to have a “best practice” process. For JM&L that process would be the DA toolkit and their review processes, which includes peer, board, and quality. One JM&L Division Chief stated that the peer reviews are very important. Interns get to hear management talk through different options with the procurements and conversations about how they are planning to

proceed with the buy. This brings a lot of different ideas to the table and the interns get the value of hearing about all the different ways to procure items and the issues revolving around the procurements.

One of the four TACOM division chiefs stated that the peer review process and boot camp are the “best practice” processes. Two other division chiefs agreed that TCC’s “best practice” is their boot camp because it lays the foundation for interns to build upon and provides basic knowledge and understanding of the organization. One TACOM division chief stated that assessing interns every three months and moving them into different buying experiences around the division is the divisions’ “best practice”.

The next section helps identify some of the indicated drawbacks to the intern training.

c. Drawbacks of the Intern Training Program

To gain a better understanding of some of the drawbacks to the intern training program, we asked interns and supervisors to share drawbacks they may have experienced concerning the program. Workforce development representatives were asked what issues they perceived facing the intern training program over the next one to three years. Lastly, we asked the DAU instructor his concerns regarding online and classroom training.

The interns had many comments on the drawbacks of the intern training program that ranged from DAU classes to on-the-job training. One intern commented: “A drawback would be that all of the information can be a bit overwhelming. Additionally, you read so much material in the beginning, but at that time it’s difficult to decipher what all the information means, and by the time you can apply it you can’t remember where to find the information” (anonymous intern questionnaire, July-August 2009, Appendix D). Many of the interns had comments regarding the drawbacks to the on-the-job training, such as: “On-the-job training is the only training that works. However, most people who can train

interns are too busy to do so effectively (anonymous intern questionnaire, July-August 2009, Appendix D). "I had to "train" myself by asking a lot of questions. It seems that there is no consistency in how things are done. Each PCO has you perform the Contract Specialist functions somewhat differently. Some skip some functions. Classes were hard to get into on a timely basis" (anonymous intern questionnaire, July-August 2009, Appendix D). "The lack of veterans in the department, it is not all interns training interns" (anonymous intern questionnaire, July-August 2009, Appendix D).

Supervisors stated that there were not enough seasoned employees to conduct training, there are too many DAU classes, and not enough time to conduct on-the-job training. The following comments reflect these prior themes: "The training focuses too much on formal classroom or online training. Interns are in training for such extended periods of time that they fail to receive the benefits of "on-the-job" training. The interns often become overloaded with classroom instruction and are unable to apply the lessons to their job function (anonymous supervisor questionnaire, July-August 2009, Appendix H). "We are getting so many new interns that we don't have enough seasoned people to help train, so interns have to train interns" (anonymous supervisor questionnaire, July-August 2009, Appendix H).

The workforce development chiefs were asked: What is the primary issue facing the intern training program over the next one to three years? A TACOM workforce development interviewee commented that the primary issue facing the intern training program over the next one to three years would be the loss of experienced journey-men and losing the expertise makes it more difficult to train the interns. Another paraphrased comment was that the perfect workforce would be five senior buyers to one intern. The JM&L workforce development personnel commented that they need to update the JM&L training facility because class space is hard to find for on-site classes. Another comment was

that JM&L is finding it hard to sponsor some of the classes on-site because of space issues and the result is that interns are challenged with getting their courses completed on time.

A DAU professor was asked: What are some of the concerns expressed about online and classroom training? The professor stated that his results show higher trends of poorer student performance within online classes. When assessing the student's memory of material from a pre-requisite online class, he estimated that about 18 percent of the material was retained. Professors may perceive some students taking the class to fulfill administrative requirements rather than fully participating in learning and mastering complexities in this field. Other responses included; most students don't want to be in the class, and they take the classes because of certification, bosses tell them to take the class, or the class is needed for their career field.

The next section addresses the confidence level interns and division chiefs indicated regarding intern performance.

d. Confidence Level of the Intern Training Program

This study asked the interns how confident they were that the intern training program prepared them to perform the duties of a contract specialist and the division chiefs were asked how close the Army Contracting Command is to providing world class contracting support to the warfighters.

Out of the 42 interns surveyed at JM&L and TACOM, 41 percent of the interns indicated they were confident that the intern training program prepared them to perform the duties of a contract specialist. The lowest rating was three percent of the interns expressed no confidence that they were prepared to perform their job duties. Out of the JM&L interns surveyed, 39 percent were confident and all the interns had some level of confidence they could perform on the job. Out of the TACOM interns surveyed, 42 percent were confident and the lowest ratings were four percent of the interns indicated no

confidence and another four percent had little confidence that they were prepared to perform contract specialist duties. Figure 17 illustrates the level of confidence interns have that the training program has prepared them to perform the duties of a contract specialist. The responses are viewed from both JM&L and TACOM as a combined total and by individual command.

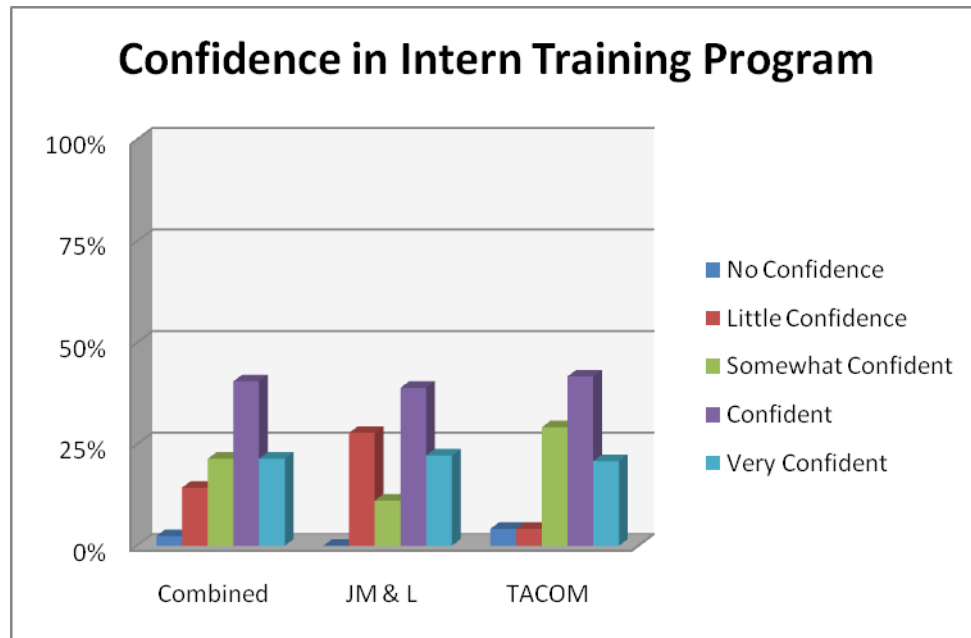


Figure 17. Confidence in Intern Training Program (data from surveys)

The division chiefs from both commands, JM&L and TACOM, were asked: How close the Army Contracting Centers are to being world class providers of contracting support to the warfighters? Both commands indicated that this outcome is probably five to ten years away. The following paraphrased responses have already been described in this study, i.e., we are trying to grow a workforce right now because there is a lack of experienced contract specialists to do the work. Another division chief commented that 50 percent of the workforce has less than five years of experience and experienced people are retiring at a faster rate. Some TACOM division chiefs indicated that the workforce is less than halfway there. The Army is focused on credentials not performance, so we are getting further away from being world class providers because the current system

is forcing the intern to take too many classes early in the training program. Another division chief stated three to four years away because 45 percent of their division is interns and 48 percent have five years or less working experience. Another division chief stated three to four years away because 45 percent of their division is interns and 48 percent have five years or less working experience. Another TACOM division chief had a particular view of TACOM and the Army, possibly based on a special assignment. The division chief stated that TACOM was more than halfway there, but the Army as a whole is less than halfway there in staffing needs. Looking across all of Army contracting, they are struggling because of attrition, a hiring freeze over the previous decade, people retiring and leaving the contracting center for other job opportunities, the increased demands of the war, and BRAC closings. TACOM appears to be fortunate in spite of the current, slow-growth state of the economy. TACOM has hired talented individuals because of the suppressed economy in the region, and as a result TACOM has done better at meeting the hiring demands due to rapid attrition rates and the increases in workload. TACOM is not competing with any other area command for talent.

4. Tracking Intern Performance

This section provides an overview of the interns' work performance in respect to how the interns are rated, the results from the current training program, and a gauge of the adequacy of the intern training program.

a. Rate the Performance of the Interns

To help identify the level of confidence in the intern's performance, the intern supervisors and division chiefs were asked how satisfied they were with the overall performance of the current interns in the training program and the interns graduating from the training program.

Of the 20 supervisors that participated in the survey from both JM&L and TACOM, 25 percent identified that they were very satisfied, 55 percent

were satisfied, while the remaining 20 percent were somewhat satisfied with the performance of the interns. JM&L supervisor respondents split their responses between satisfied and somewhat satisfied, while TACOM supervisors responded with 42 percent very satisfied and 58 percent satisfied with the intern's performance. Figure 18 illustrates the supervisors' responses from both JM&L and TACOM as a combined total and by individual command.

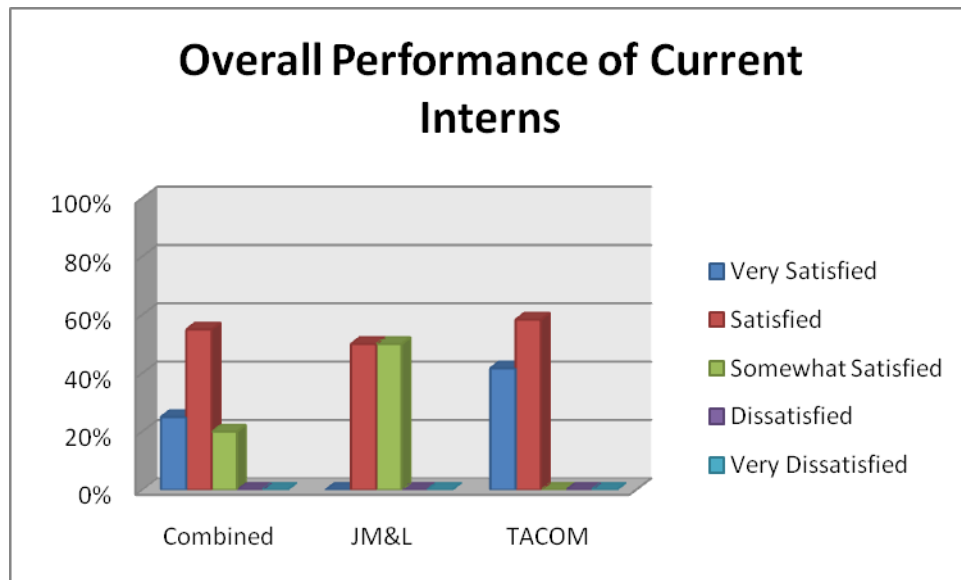


Figure 18. Overall Performance of Current Interns (data from surveys)

Of the nine division chiefs interviewed from both JM&L and TACOM, 56 percent identified the overall intern performance as excellent, while 33 percent stated it was good, and 11 percent rated intern performance as adequate. Out of the five JM&L division chiefs, 40 percent rated the interns as excellent and 60 percent rated the intern performance as good. The general consensus of the JM&L division chiefs is that the interns are getting good reviews from their customers. Out of the four TACOM division chiefs interviewed, 75 percent rated the interns as excellent while 25 percent rated intern performance as adequate. One TACOM division chief stated they are a hard grader with high standards rating some interns as excellent but most interns as adequate to below

average. Figure 19 illustrates the division chiefs' responses from both JM&L and TACOM as a combined total and by individual command.

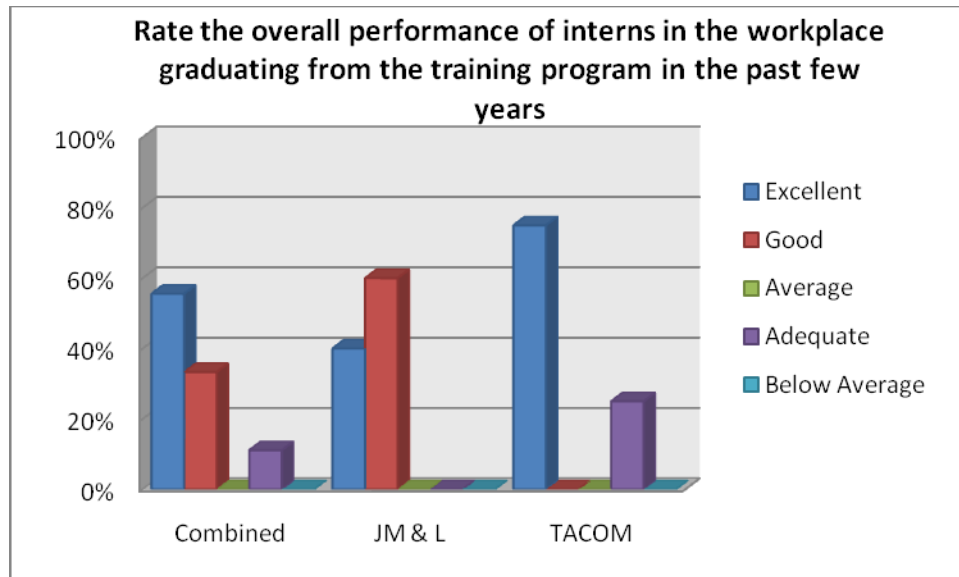


Figure 19. The Overall Performance Ratings of the Graduating Interns (data from surveys)

b. Results From the Training Program

To help identify the outcome of the current 1102 training program, the division chiefs from JM&L and TACOM were asked what results they have seen from the training program. In addition to the division chiefs input, the workforce development chiefs, and personnel from both commands, were asked to describe how the organization evaluates the results of the training program.

Overall, the TACOM division chiefs gave the interns positive comments on the results of the training program. One TACOM division chief said that one of the results is that more and more contracts are being executed every year with a less experienced workforce and the quality of the contracts, products, and customer satisfaction is wonderful. TACOM is doing well on file reviews, program management reviews, and customer assessments have remained steady. The JM&L division chiefs had all positive comments about the results of

the training program. The JM&L division chiefs seem to have the same comments that the interns are catching on faster and able to apply the regulations and guidance easier than in previous years. Interns are thrown into more complex buys than previous years. The trainers, mix of learning tools, and complex buys are very helpful to speed up the development process.

c. *Adequacy of Training*

To gauge how adequately interns are being trained, a DAU professor was asked what measures or types of feedback is being used to help track the training success. The professor does get student feedback from the questionnaire “metrics that matter survey” taken at the end of each class. That feedback doesn’t provide an accurate measurement in the professor’s opinion of how DAU training is impacting the student’s on-the-job performance. The professor also felt there was little impact or changes to the classes based on the student feedback.

5. **Attrition**

This section seeks to gain a better understanding of the affects from losing experienced personnel, the steps division chiefs are using to provide retention incentives for top performers, and the percentage of interns that attrite within their first three years of employment.

a. *Loss of Experience*

The division chiefs from JM&L and TACOM were asked: As you lose your experienced personnel through attrition, what plans do you have in place to keep job performance at a high level?

The JM&L division chiefs had many comments to this question. One division chief stated that they hire as many experienced people from private industry as they can and they use senior contract specialists to mentor and train

all interns. Another division chief stated that interns are mentored by on-the-job trainers, self development work groups, and the peer review process. A milestone chart and an award checklist helps to ensure interns see the big picture and all the right documents are in the contract file. Another JM&L division chief stated that expedited hiring practices have been implemented and enhanced training opportunities are offered for developmental assignments.

Most of the TACOM division chiefs seem to echo the same comments. Some of the comments were that TACOM is hiring in advance of the attrition with 120 interns hired in FY09. TACOM has tried to mitigate the risk by ensuring interns have experienced leadership watching and supporting them. One division chief has their high performing interns shadow retiring senior contract specialists so they will be capable of handling a senior workload when the senior contract specialist retires. Another division chief felt they had no control over the retention efforts of their experienced contract specialists. This division chief went on to state that the contracting center moves around the experienced personnel and leaves their division staffed with more interns than experienced personnel.

b. Retention Incentives

The JM&L and TACOM division chiefs were asked two questions. The first question was to describe the current incentives to retain and/or reward 1102 top performers. The second was to describe the success of their incentives in retaining 1102 top performers. Out of the nine division chiefs from JM&L and TACOM, 44 percent stated that the incentives to retain top performers was very successful, while 22 percent stated that the incentives were successful, 11 percent stated they were unsure of the success of the incentives, and the other 22 percent stated that the incentives were somewhat successful in retaining top performers. Figure 20 illustrates the division chiefs' responses from both JM&L and TACOM as a combined total and by individual command.

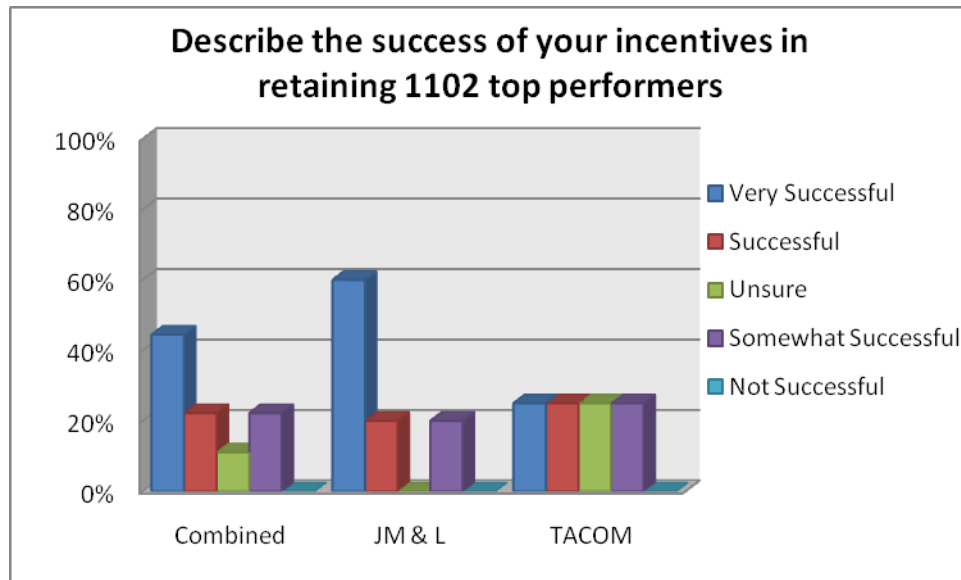


Figure 20. The Success of Retaining Top Performer Incentives
(data from surveys)

Three of the five JM&L division chiefs stated that the retention incentives for the top performers were very successful, see Figure 4.12 above. These division chiefs stated the in-house rewards offered are: graduate studies, developmental assignments, annual time off awards, on-the-spot awards, quality step increases, satellite offices, and research and development rotations. Customers also reward the interns. One of the division chiefs that stated that the retention incentives were somewhat successful stated that they have lost some people because they won't wait for the grade and will jump somewhere else for the promotion they can get now.

The TACOM division chiefs were completely divided, 25 percent for each category from very successful to somewhat successful, see Figure 4.12 above. One division chief stated they are very successful because TACOM doesn't have other buying commands stealing workers. Another division chief stated they are successful but have limited ways to incentivize workers, such as monetary awards, bigger volume programs, telling them you care and will support them. Another division chief stated that the retention incentives are

somewhat successful; however, they would like some additional ways to reward their workers. The Contracting Center's Business Management Office handles the budget; therefore, the division chiefs are limited to acknowledging good performance through performance appraisals and awards. More GS-13 positions would be welcomed to help retain high performing senior contract specialists that are currently GS-12's. The last TACOM division chief stated that they were unsure how successful the retention incentives are in rewarding top performers. Program management offices seem to be able to offer workers much more.

c. *Attrite Interns*

Workforce development chiefs and personnel from both JM&L and TACOM were asked: What percentages of interns attrite within their first three years of employment? The JM&L workforce development staff stated they have a 97 percent retention rate. The only interns that leave are summer hires. A TACOM workforce development staff member stated they also have a 97 percent retention rate. Three percent of attrition is due to interns leaving to go to another command, another department at TACOM, or for personal reasons.

6. *Recommendations for Training*

This section will provide an overview of the recommendations for improving the interns training and development program and provide any additional comments received. The feedback was received from the interns and supervisors surveys, and interviews from the workforce development chiefs and personnel, and a DAU professor.

a. *Recommended Improvements*

The interns and supervisors both from JM&L and TACOM were asked in a survey to provide recommendations for improving the intern training program. The interns and supervisors were also invited to provide any additional

comments on the training. Additionally, in an interview, a DAU professor was invited to provide additional recommendations for the training program.

Some recommendations from the JM&L interns were to “Focus on On-The-Job Training, do not rely on DAU Classes to teach the specifics” (anonymous intern questionnaire, July–August 2009, Appendix E). A couple of interns recommended having rotational positions focusing on specific contract actions. This method will help bring diversity into the workload, for example, to experience different contract types and areas of contracting, i.e., services, construction, major systems, and research and development. A couple comments suggested boot camp training courses be available to ALL contract specialist interns regardless of duty station. Another recommendation was to have more training on the use of PD2 and PC3. Another comment suggested less emphasis on online and DAU classes and more on-site program based training.

One JM&L supervisor seemed to capture most of the recommendations in one comment, “Appoint an Intern Coordinator who is responsible for creating a program and ensuring that the interns are receiving adequate training. Rotate the interns among different centers, and exposing them not only to contracting but to the SADB (Small and Disadvantaged Business Utilization) office, policy, pricing, etc. Solicit on a regular basis feedback from the interns about the quality of their training. Start a “boot camp” where an organized approach to training new interns is available” (anonymous supervisor questionnaire, July–August 2009, Appendix J). One of the comments received from a supervisor was to lengthen the intern training program to three years. Another comment mentioned: “It is difficult for someone with less than 5 years of contracting experience to be able to answer all of the questions that arise while training an intern” (anonymous supervisor questionnaire, July–August 2009, Appendix K).

The TACOM interns seem to echo the same type of comments. The interns wanted seasoned trainers with a minimum of 4 to 5 years of

experience and more hands-on-training. One intern writes, “1. Give interns a trainer that wants to train. 2. Eliminate the workload off the trainer and allow them to train 1-3 interns. 3. Provide training in a systematic fashion, start with the easier stuff and work your way to the more difficult procurements. 4. Provide work samples or training manual. 5. Keep your seasoned buyers to do the training and eliminate interns training interns; it’s not fair to anyone” (anonymous intern questionnaire, July–August 2009, Appendix E). One comment on boot camp was that the presentations are too long and more interactive activities need to be added into the class.

The TACOM supervisors’ recommendations ranged from comments on classroom training, rotations, to on-the-job training. One supervisor recommended that “interns get some on the job training before going to boot camp” (anonymous supervisor questionnaire, July–August 2009, Appendix J). Another supervisor recommended less classroom training or add more case studies in the classroom training. Another supervisor recommended providing more group training with seasoned trainers. One supervisor recommended “1) Rotate the facilitators for Boot Camp with people from different divisions each week or every other week. All divisions should participate. This helps the interns (as well as the facilitator) to get great exposure and experience with all of the basics necessary for contracting” (anonymous supervisor questionnaire, July–August 2009, Appendix J). Another supervisor recommended that “interns be put in one area for at least 2–3 years so they get a good working knowledge of how that area operates” (anonymous supervisor questionnaire, July–August 2009, Appendix K). Having subject matter experts would be a nice change. A supervisor also indicated that future leaders are created that are not experienced and don’t have the time to learn the area from the ground up because they are too busy putting out the fires.

From a DAU perspective, a professor recommended that the best learning environment for students appears to be when there is a lot of diversity in the classroom. Expose students to as many different types of material in the

workplace or they will not retain what is learned in the classroom. The material has to be relevant to the students. Having more classroom diversity in the student base also helps the learning process.

b. Next Decade Recommended Improvements

The workforce development chiefs and personnel from both JM&L and TACOM were asked if they foresaw any training improvements in the next decade for the commands.

The JM&L workforce development personnel stated that they would like to retain the senior people to help mentor the interns until they are up to speed. They would also like to set up a boot camp like TACOM's. The TACOM workforce development personnel echoed the same sentiments as JM&L and stated that TACOM would like to rehire retirees to exclusively train and serve as subject matter experts and mentors to interns.

D. DISCUSSION OF RESULTS

This section discusses how the survey and interview results and analysis section above enables the authors to answer this study's research questions. The research questions are below.

- How can the Army Contracting Command accomplish its ongoing and expanding mission, including training approximately 1,300 new contract specialists over the next two years, developing existing employees with one to five years of experience, and mitigating contracting personnel attrition?
- How is the ACC currently training and developing interns, especially during a pervasive shortage of qualified trainers?

- What is the status of succession planning in terms of ensuring sufficient numbers of qualified supervisors, managers, and senior executives?
- What is the nature of the real and/or perceived gap between the vision of becoming world-class contracting centers, and real-world contingencies and constraints?
- How can the contracting centers improve the training, education, and certification process in development new contracting personnel over the next few years?
- What is the role and trend of identifying and implementing relevant best practices, including knowledge sharing among Army Contracting Centers?

1. The primary research question is discussed first. The Army can accomplish its mission to help train 1,300 new contract specialists and develop their inexperienced workforce (with one to five years experience) by rehiring retired PCO's/contract specialists, increase the retention incentives, place more importance on a structured OJT training program, and lengthen the years for certification level completion. The Army can mitigate some of the attrition risk by increasing their contract specialist hiring practices.

1) The Army should rehire PCO's/contract specialists and dedicate their workload to training and developing new interns and inexperienced contract specialists with less than five years of experience. The TACOM division chiefs said, at the rate interns are being hired it is difficult to have sufficient trainers to assign to each new intern. Without experienced people to help evaluate and train the interns it is less likely that they will have reached their potential after two years (see section 2.d.). Another TACOM workforce development employee stated that the loss of experienced journeymen makes it difficult to train the interns. The perfect workforce would be five senior buyers to one intern (see section 3.c.). TACOM would like to hire retirees to exclusively train and serve as

subject matter experts and mentors to interns (see section 6.b.). The JM&L workforce development personnel echoed the same comments and stated they would like to retain the senior people to help mentor the interns until they are up to speed (see section 6.b.).

The division chiefs from both commands commented they would like additional ways to provide incentives to help retain their experienced workforce. If the commands were successful in retaining more of their experienced workforce it would lessen the effects of attrition by having more experienced trainers to train newer employees. Though some of the division chiefs stated the retention incentives have been successful, they are limited in the way to incentivize. One TACOM division chief stated that more GS-13 positions would be welcomed to help retain high-performing senior contract specialists.

The Army should place more importance on a structured on-the-job training program and lengthen the years for completion of certification levels. A TACOM division chief commented that DAU training may be held as a higher priority than on-the-job training or experience. A JM&L division chief said interns are expected to absorb the information quicker than in the past. Interns are struggling to complete Level I training classes in the first year due to an insufficient number of Level I training classes available (see section 2.d.). One JM&L supervisor commented that the intern training program should be lengthened to three years. This would provide more time for on-the-job training, where interns have the time to absorb the information taught in class and apply the lessons to their job function without all the focus being on class schedules. One intern stated that the DAU information can be overwhelming and by the time you can apply it, you can't remember where to find the information. If the length of time for completing contracting certifications was increased, DAU classes would not be competing with on-the-job training and the DAU would have a better opportunity to meet the class demand.

2) The Army should increase their hiring practices to help mitigate the attrition risk. One JM&L division chief stated this can be done by using expedited

hiring practices and hiring as many experienced people from private industry as possible. A TACOM division chief commented that TACOM is hiring in advance of the attrition with 120 interns hired in FY09 (see section 5.a.). When the Workforce Development respondents were asked to describe a key factor used to select individuals for hiring in the 1102 workforce, TACOM responded that interpersonal skills were paramount. TACOM is not looking for any particular technological skill because the center can mold the intern in the contracting field. JM&L looked at new hires' grade point average (GPA) and how they spoke during the interview in relation to confidence, presentation, negotiation skills, and leadership qualities (see section 1.e.).

2. The second research question is: How is the ACC currently training and developing interns, especially during a pervasive shortage of qualified trainers?

The ACC's are using various methods to train interns; i.e., TACOM intern boot camp (not offered at JM&L), DAU classroom/online, command/in-house classes, and on-the-job training. The interns were asked to rate the level of knowledge received from each type of training, see Figure 4.7. Interns at both commands gave the highest rating to on-the job training over the other types of training see Figure 4.7. The interns were also asked in the survey if they had a trainer and about the trainer's years of experience. Half of JM&L interns had trainers and 67 percent of the trainers had more than four years of experience. Fifty-eight percent of TACOM interns had trainers, with 64 percent of trainers having more than four years of experience, see Figure 4.5.

The supervisors were asked how they were conducting on-the-job training. The TACOM supervisors' had a variety of responses including interns training interns, team participation, group training, developed handbooks, Procurement Contracting Officer's (PCO) training interns, and seasoned contract specialists being assigned as trainers. As for JM&L, the overall response was each intern is mentored by a seasoned contract specialist.

In regards to the division chiefs' perspective on training and developing interns, one recommendation was as interns increase in proficiency they are given larger complex buys. Another division chief commented rotational assignments are encouraged so interns can get a broader view of contracting and developmental assignments providing the needed experience in source selections, and interns are exposed to multiple types of contracting.

The workforce development personnel were asked how they were training and developing interns. One stated they used an intern coordinator to help monitor certification requirements and divisional rotations. Other comments included, in-house training courses and new employee work groups, which enables networking and provides a forum for discussion on lessons learned. One final statement was to promote a boot camp to stimulate cross-organizational networking within the contract specialist community.

3. The third research question to be discussed is: How well are ACC interns performing as a result of the current training?

The following statements illustrate the intern's hired level of experience and background. Of the interns surveyed from JM&L and TACOM, none of TACOM interns had more than one year of 1102 work experience, prior to being hired; while 50 percent of the JM&L interns surveyed had more than one year of 1102 work experience (Figure 4.2). Even though JM&L interns have more 1102 experience than TACOM interns, more of the TACOM interns had previous contract specialist or related work experience prior to becoming an 1102 intern; see Figure 4.4. These statements identify that the interns surveyed at JM&L and TACOM, can be considered to have equal levels of 1102 work experience when hired.

The interns from both commands have received high performance ratings from the division chiefs (see Figure 4.11) as a result of the current training program. A division chief at TACOM states that interns have done well on file and program management reviews and customer assessments. A JM&L division

chief states that interns are catching on faster and are able to apply the regulations and guidance easier than in previous years. Although the division chiefs at both commands have given the interns high performance ratings; it appears that TACOM supervisors are more satisfied with their interns performance than JM&L supervisors, see Figure 4.10.

The interns at JM&L and TACOM were asked; to rate their level of confidence that the training program had prepared them to perform the duties of a contract specialist. When comparing the interns at both commands, the TACOM interns had a higher level of confidence that the intern training program had prepared them to perform duties of a contract specialist, see Figure 4.9.

4. The fourth research question to be discussed is: What is the status of succession planning in terms of ensuring sufficient numbers of qualified supervisors, managers, and senior executives?

The division chief from both commands stated that the commands are probably five to ten years away from being world class contracting support providers to the warfighters. This is due to a continual struggle in growing an inexperienced workforce with 50 percent having less than five years of experience (see section 3.d.). One JM&L division chief stated that expedited hiring practices, hiring as many experienced people from private industry, and enhanced training opportunities for developmental assignments is helping ensure sufficient numbers of qualified supervisors, managers, and senior executives are grown. A TACOM division chief stated that TACOM is hiring in advance of the attrition with 120 interns hired in FY09 to help mitigate the attrition risk. TACOM has also tried to mitigate the succession planning risk by ensuring interns have experienced leadership watching and supporting them. Another division chief stated that they are having their high performing interns shadow retiring senior contract specialists so they will be capable of handling a senior workload when the senior contract specialist retires (see section 5.a.).

To ensure succession planning strategies are working, the division chiefs have struggled with how to retain their top performers. JM&L division chiefs stated 60 percent of their retention incentives have been very successful. TACOM is across the board in responses about the effectiveness of their retention incentives, from 25 percent very successful to 25 percent somewhat successful, see Figure 4.12. More GS-13 positions would be welcomed to help retain high performing senior contract specialists to help train the new interns and inexperienced workforce with less than five years of experience (see section 5.b.).

5. The fifth research question is: What is the nature of the real and/or perceived gap between the vision of becoming world-class contracting centers, and real-world contingencies and constraints?

JM&L and TACOM division chiefs were asked: How close are their contracting centers to becoming world-class providers of contracting support to the warfighters? Both commands indicated that they are probably five to ten years away. The first identified gap is growing the workforce. The current effort is going toward growing the workforce due to the lack of experienced contract specialists. Fifty percent of the workforce has less than five years of experience and experienced people are retiring at a fast rate. Another gap is too much focus on certifications and not on on-the-job training. One TACOM division chief stated that the Army is focused on credentials, not performance, so we are getting further away from being world-class providers because the current system is forcing the interns to take too many classes early in the training program. Another TACOM division chief stated the commands are struggling because of attrition, a hiring freeze over the previous decade, people retiring and leaving the contracting center for other job opportunities, the increased demands of the war, and BRAC closings.

6. The sixth research question to be discussed is: How can the contracting centers improve the training, education, and certification process in developing new contracting personnel over the next few years?

The supervisors were asked to rate the overall quality of the current interns training program. Only 10 percent of the TACOM supervisors felt the quality was excellent and 80 percent rated it as good. JM&L had mixed ratings from excellent to poor, see Figure 4.8. Below are some of the recommendations for improving the training program.

1) OJT – More than 75 percent of supervisors and all the division chiefs rated a structured OJT training program as very important or important, see Figure 4.6. However, no structured OJT training program has been created, so each area is performing OJT differently. Many interns stated that OJT training is the only training that works and rated the benefits of OJT training higher than other forms of training, see Figure 4.7. There should be some consistency in how things are done, instead of each PCO having the contract specialist perform functions differently and skipping steps in the process. Having more veteran contract specialists train would be a great help. One supervisor commented that interns should rotate division at the most once a year. This helps the interns gain depth of experience. Another supervisor suggested keeping interns in the same position for two to three years to develop some subject matter experts. Another supervisor commented that more group training is needed with seasoned trainers.

2) Rehire seasoned contract specialists/PCO's – a TACOM division chief's recommendation for improving the intern training and development program is to rehire experienced contract specialists. There is a need to help evaluate, monitor, and train interns so the intern reaches their potential after two year (see section 2.d.). A JM&L workforce development stated that they would like to (see the retention of experienced journeymen to help train and mentor the interns until the interns are up to speed.

3) Lengthen the time limits for completing contracting certifications – A TACOM division chief commented that DAU classes should not be held to a higher standard than on-the-job training (see section 2.d.). Supervisors also said there are too many DAU classes and not enough time to conduct on-the job

training. Interns are in training for such extended periods of time that they fail to receive the benefits of on-the-job training, as they are overloaded with classroom instruction and therefore are unable to apply the lessons learned to their job. A JM&L intern recommended that the focus should be on-the-job training and not on DAU classes to teach the specifics.

Currently, TCC's goal is to ensure Level I certification the first year and Level II the second year (see section 2.b.). Interns are having problems scheduling classes because of the insufficient number of DAU Level I classes being offered. More space is needed to hold more on-site classes so interns can complete their certifications on time. A DAU professor supports more classrooms, stating that students tend to learn better in a classroom, but students seem to prefer the convenience of on-line classes. If the length of time for completing contracting certifications was increased, DAU classes would not be competing with OJT and DAU would have a better opportunity to meet the class demand,

4) Boot Camp and Intern Coordinator – A JM&L workforce development personnel stated that a boot camp training program should be available to all contract specialists regardless of duty station, where an organized approach to training interns is available. Another suggestion from a JM&L supervisor was to appoint an intern coordinator who is responsible for creating a program, and ensure that all interns are receiving adequate training opportunities. A TACOM intern commented that the six week boot camp allowed interns to focus on getting acquainted with TACOM, as well as gaining access to important programs and databases, and meet knowledgeable people.

7. The seventh and last research question to be discussed is: What is the role and trend of identifying and implementing relevant best practices, including knowledge sharing among Army Contract Centers?

The division chiefs from both commands were asked: What is the foremost best-practice process currently being used in most Army Contracting

Centers? All JM&L division chiefs stated their best-practice process would be the Department of the Army (DA) Toolkit, combined with their review processes, including peer, board, and quality reviews. Interns receive greater benefit when they get to hear management talk through different options, ideas, and issues around procurements. TACOM division chiefs agreed that the peer review process and TACOM's boot camp are TACOM's best-practice process. Boot camp lays the foundation for interns to build upon and provides a basic knowledge and understanding of the organization (see section 3.b.). Interns are coming out of boot camp with a very good broad knowledge of what to expect when they enter the working environment. This gives trainers a little breathing room so they don't have to start from scratch and trainers can pick up where boot camp leaves off.

Both commands have an opportunity to use the DA toolkit, and have similar review processes, but it would be helpful if TACOM would share their boot camp training program. The JM&L workforce development staff has expressed an interest in establishing a structured boot camp program.

E. CHAPTER SUMMARY

This chapter first explained the methodology, which included indentifying the participants, the layout and design practices, and the procedures used to execute the survey and interview questionnaires. The next section presented the results and analysis of all the questions asked in the study. The last section discusses how the results and analysis of the survey and interview questions answer this study's research questions. Chapter V provides the conclusion and recommendations to the study's primary and secondary research questions.

V. CONCLUSIONS AND RECOMMENDATIONS

A. CHAPTER OVERVIEW

This chapter provides a summary of the primary and secondary research questions posed in this study concerning how 1102 contract specialists are trained and developed and offers conclusions and recommendations to answer the research questions.

B. SUMMARY

This study analyzed two major Army Contracting Centers in terms of their training and development programs of 1102 contract specialists. Surveys and interviews were conducted with 1102 contract specialist interns, supervisors, division chiefs, workforce development chiefs and personnel, and a Defense Acquisition University (DAU) instructor to assess their perceptions surrounding intern training, particularly concerning contract specialists with one to three years of experience.

PRIMARY RESEARCH QUESTION

1) How can the Army Contracting Command accomplish its ongoing and expanding contracting mission, including training approximately 1,300 new contract specialists over the next two years, developing existing employees with one to five years of experience and mitigating contracting personnel attrition?

Conclusion: The Army Contracting Command can best accomplish its ongoing and expanding contracting missions by closing the gaps associated with high attrition, training and developing new interns, and a workforce with less than five years of experience. Our research and study indicated that the gap can be narrowed by hiring, training, and retention incentives as outlined in the recommendations below.

Recommendations: 1) Rehire retired PCO's/contract specialists and offer more GS-13 senior contract specialist positions that are dedicated to train and develop interns and inexperienced contract specialists with less than five years of experience. 2) Place more importance on a structured on-the-job training (OJT) program. Some OJT recommendations include, retain/implement a structured training program (i.e., boot camp) with a coordinator to monitor new hires, set up self-development work groups, provide opportunities for participation in the peer review process, and develop individual growth assignments. 3) Lengthen the years for certification level completion as this will provide more time for OJT. 4) Increase hiring practices by hiring as many experienced people from private industry as needed to mitigate attrition risk.

SECONDARY RESEARCH QUESTION

2) How is the ACC currently training and developing interns, especially during a pervasive shortage of qualified trainers?

Conclusion: ACC is training and developing interns by utilizing DAU classroom and online classes, and command/in-house training classes. Due to the shortage of qualified trainers, JM&L and TACOM Contracting Commands are training interns using various methods of OJT training. The OJT methods include using developed handbooks, team participation, and group training. The OJT trainers have included interns, PCO's, contract specialists with less than five years of experience, and seasoned contract specialists. Some additional training methods used include a TACOM boot camp training program, a new employee work group, intern coordinators, and development assignments.

Recommendations: Below are four current successful methods of how the ACC is developing the intern training program with a shortage of qualified trainers. 1) On-the-job training methods include PCO's training interns, senior contract specialists training interns, group training, and developed handbooks. 2) A new employee work group provides an opportunity to network. It also provides a forum for discussions on lessons learned and lunch and learn sessions. 3) A

boot camp training program run by an intern coordinator helps interns to acclimate to the role of a contract specialist and the contracting center. 4) Developmental assignments provide needed experience in source selections or rotations through different buying groups (i.e., research and development or major weapon systems).

3. How well are ACC Interns performing as a result of the current training?

Conclusion: The interns that participated in this study, from both TACOM and JM&L, can be considered equal in terms of the level of 1102 work experience. However, the TACOM interns have more confidence that they are prepared to perform the duties of a contract specialist than the JM&L interns. As far as performance ratings, the division chiefs from both commands stated that the interns are performing well. However, the TACOM supervisors are more satisfied with their interns' performance than the JM&L supervisors (see Figure 4.10).

Recommendations: TACOM interns rated somewhat higher in overall performance than did the JM&L interns. The difference in the performance ratings between the two commands may be TACOM having an intern coordinator and a boot camp program for training interns. Within Appendix J, the JM&L supervisors' comments nine through 13 provided intern training recommendations, i.e., an intern coordinator responsible for a formal training program, experienced trainers (GS-13 or contracting officers), and creation of a boot camp as an organized approach to train interns.

4. What is the status of succession planning in terms of ensuring sufficient numbers of qualified supervisors, managers, and senior executives?

Conclusion: The next supervisors, managers, and senior executives may be the current top performing contract specialists at the commands. The JM&L division chiefs had a higher confidence level than TACOM when describing their successful retention incentives for top performance. Both commands indicated

they are short of experienced/seasoned people to train the interns and inexperienced workers, so it is important to find ways to keep the top performers. One supervisor stated, “What we have created is our future leaders who are not very experienced and once you are a leader, you don’t have time to really learn that area from the ground up because you are too busy putting out fires” (anonymous supervisor questionnaire, July-August 2009, Appendix J and K). Both commands expressed agreement that becoming world class providers is still five to 10 years out.

Recommendation: Additional successful retention incentives are needed to help retain top performers such as more GS-13 positions for senior contract specialists.

5. What is the nature of the real and/or perceived gap between the vision of becoming world-class contracting centers, and real-world contingencies and constraints?

Conclusion: The vision and goal of becoming a world-class contracting center will remain a work in progress for five to 10 years in the future. One reason for this gap is the Army may be more focused on certifications than overall performance outcomes. Interns have expressed being overwhelmed with classes and not having sufficient time spent on OJT. Another plausible reason for the gaps may be the inexperienced workforce. Approximately 50 percent of the workforce has less than five years of experience, and experienced people are retiring at a faster rate than the Army is hiring. The gap remains stubbornly open as more interns are being hired than there are experienced trainers to conduct on-the-job training.

Recommendations: To close the gaps between an inexperienced workforce and stringent timeframes to meet certification level requirements, it may be helpful to rehire retired contract specialists/PCO’s and hire an intern coordinator to help perform a more structured (OJT) program. A boot camp training program may also be helpful for training new interns. Also, decreasing

the focus on training classes may close the gap by lengthening the time limits for completing contracting certifications.

6. How can the contracting centers improve the training, education, and certification process in developing new contracting personnel over the next few years?

Conclusion: TACOM supervisors give the intern training program higher ratings than the JM&L supervisors (see Figure 4.8). Most of the individuals surveyed and interviewed echoed the same recommendations; create a structured OJT program with an intern coordinator, rehire retired PCO's/contract specialists, and lengthen the time limits for completing contracting certifications.

Recommendations: The contracting center can improve training, education and certification programs substantially by increasing the OJT training opportunities aligned with training objectives. Additional training recommendations would be to appoint an OJT training (or intern) coordinator and offer well-structured training programs containing individual developmental assignments. This would involve rehiring retired PCO's/contract specialists and improve senior contract specialist retention incentives.

7. What is the role and trend of identifying and implementing relevant best-practices, including knowledge-sharing among Contracting Centers?

Conclusion: Some of the best practices currently being implemented on JM&L would be the DA toolkit and their review processes which include: peer board, and quality reviews. The best practices being implemented at TACOM would be their peer review process and boot camp.

Recommendation: The best practices recommended for all contracting commands would be TACOM's boot camp to help create an on-the-job training program. Also, use of all the review processes (peer, board, and quality) is very helpful.

C. CHAPTER SUMMARY

This chapter summarized this study's findings by providing the conclusions and recommendations for the primary and secondary research questions.

APPENDIX A. CONTRACT SPECIALIST ASSESSMENT QUESTIONNAIRE

APPENDIX A. CONTRACT SPECIALIST ASSESSMENT QUESTIONNAIRE

TACOM Contract Specialist Assessment Questionnaire

We would greatly appreciate your feedback on the current intern training program in this short, 10 - 15 minute survey. Your participation is valuable to our leadership in ensuring you are getting the most benefit from training. This survey is confidential and your responses are anonymous.

Please complete our survey by 21 August 2009.

Thank you for your time.

*

1) How long have worked for the Federal Government?

☐

Less than 1 year

☐

1 to 3 years

☐

3 to 5 years

☐

More than 5 years

*

2) How long have you been a Contract Specialist?

☐

Less than 6 months

☐

6 months to 1 year

☐

1 to 2 years

☐

2 to 3 years

*

3) What is your current level of DAWIA Contracting Certification?

☐ None

☐ I

☐ II

*

4) Prior to becoming a Contract Specialist intern, how much previous work experience did you have as a Contract Specialist or in a related position?

☐ None

☐ Very Little

☐ Some

☐ Extensive

*

5) Rating each type of training individually, how would you rate the level of knowledge you received:

	Never Taken	Poor	Satisfactory	Good	Excellent
Boot Camp Training Program	☐	☐	☐	☐	☐
DAU Classroom and On-Line Classes	☐	☐	☐	☐	☐
Command/In-House generated/Support classes	☐	☐	☐	☐	☐
On-the-job Training	☐	☐	☐	☐	☐

*

6) Do you have a trainer? If no (skip question 7)

☐ Yes

☐ No

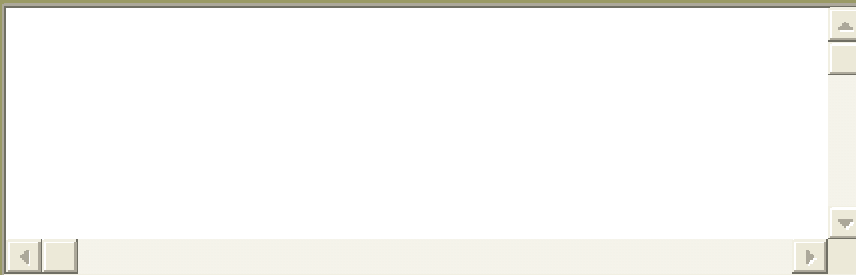
7) If you answered "yes" for question 6 -
What is the trainer's level of work experience?

- ☐ less than one year
- ☐ 1-2 years
- ☐ 3-4 years
- ☐ more than 4 years

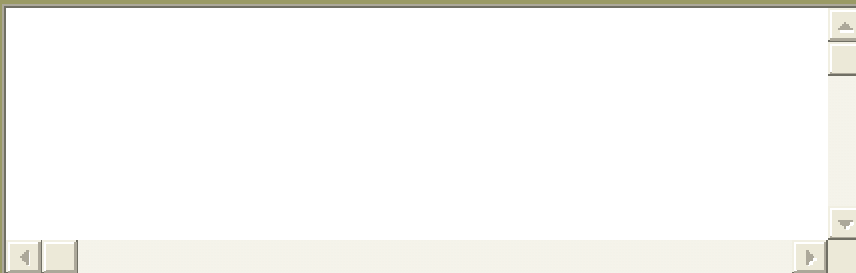
8) How confident are you that the intern training program will prepare you to perform as a Contract Specialist?

- ☐ No confidence
- ☐ Little confidence
- ☐ Somewhat confident
- ☐ Confident
- ☐ Very confident

9) What are some of the benefits you would like to share with us regarding the training you have received?

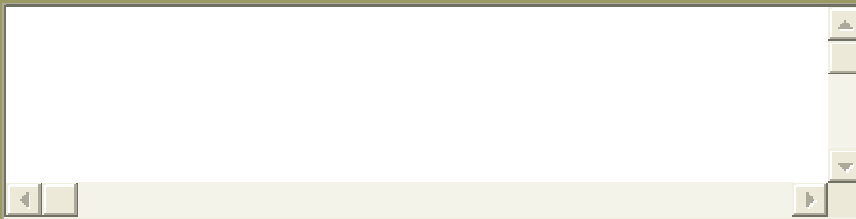
A large, empty rectangular text input area with a light beige background. On the right side, there are three small, stacked square buttons. At the bottom left, there are two small square buttons, and at the bottom right, there is a small square button with a downward-pointing arrow.

10) What are some of the drawbacks you would like to share with us regarding the training you have received?

A large, empty rectangular text input area with a light beige background. On the right side, there are three small, stacked square buttons. At the bottom left, there are two small square buttons, and at the bottom right, there is a small square button with a downward-pointing arrow.

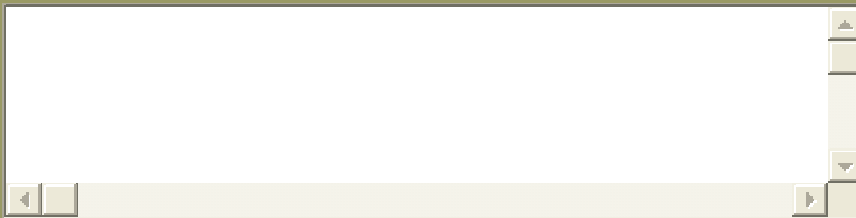
*

11) What recommendations do you have for improving the intern training program?



*

12) Please provide any additional comments or concerns regarding the intern training program or write "none".



APPENDIX B. SUPERVISOR QUESTIONNAIRE

Supervisors/Trainers Survey Assessing 1102 Training Program

We would greatly appreciate your feedback on the current intern training program in this short, 10 - 15 minute survey. Your participation is valuable to our leadership in ensuring interns are getting the most benefit from training. This survey is confidential and your responses are anonymous.

Please complete our survey by 31 July 2009.

Thank you for your time.

*

1) How would you rate the quality of the current overall intern training program?

☐

Excellent

☐

Good

☐

Okay

☐

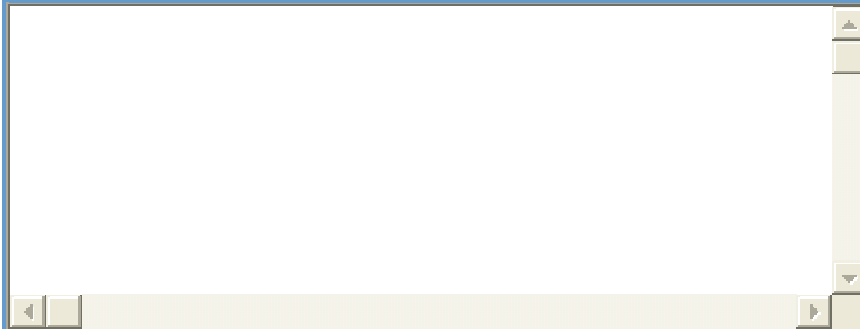
Fair

☐

Poor

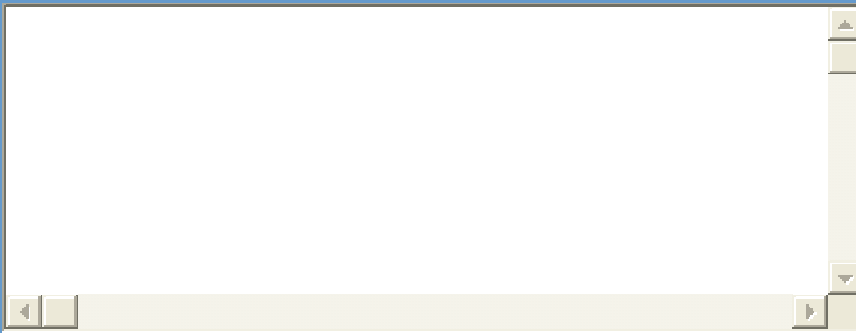
*

2) What do you believe are the benefits of the current intern training program?



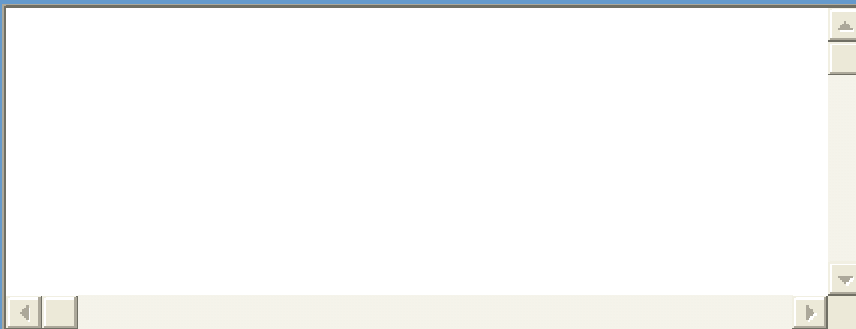
*

3) What do you believe are the drawbacks of the current intern training program?



*

4) Briefly describe how your area is conducting on-the-job training? (e.g. interns training interns, group training, trainers(GS-12) training interns, or another specific way you are training).



*

5) How important is a structured (e.g. procedures or process set-up) on-the-job training program?

☐

Very Important

☐

Important

☐

Somewhat Important

☐

Unimportant

*

6) How satisfied are you with the overall performance of the current interns who have graduated from the intern training program?



Very Satisfied



Satisfied



Somewhat Satisfied



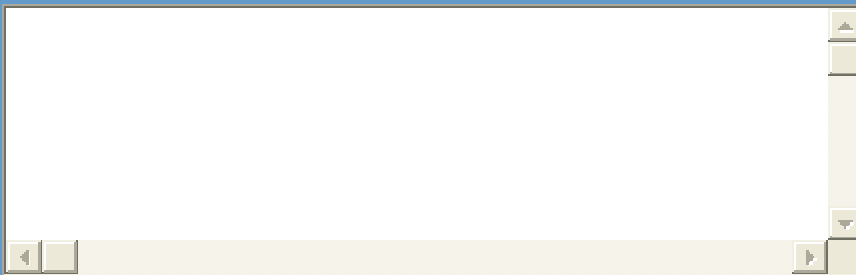
Dissatisfied



Very Dissatisfied

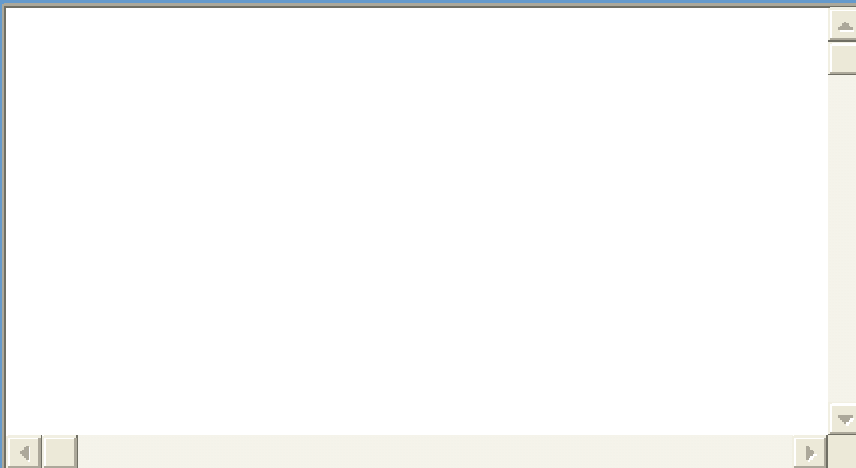
*

7) What recommendations do you have for improving intern training program?

A text input area with a light beige background and a thin border. It contains several small, faint, illegible text fragments. The area is rectangular and occupies the upper portion of the response section.

*

8) Please provide any additional comments or concerns about the intern training program or write "none".

A text input area with a light beige background and a thin border. It contains several small, faint, illegible text fragments. The area is rectangular and occupies the lower portion of the response section.

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX C. INTERN COMMENTS FROM SURVEY QUESTION 9

Question 9 *

What are some of the benefits you would like to share with us regarding the training you have received?

1	DAU instructors have been very experienced and share their insight. In-class courses are great to understand issues in related fields or other locations/branches. I have found references & links provided are very helpful on the job. Class material provided is also very good.
2	I prefer the online training - gives you ample time and flexibility to complete the training at our desks rather than traveling.
3	A benefit of the training I have received is the ability to interact with and learn from an assortment of people from all of the united states.
4	I enjoyed CON 120. It gave me a chance to take the knowledge learned in previous CON courses and use it in different scenarios presented to the class as group assignments.
5	I have learned different things from a lot of different people and have also learned how to do the same task from different people so now I know more than one way to do certain tasks. This allowed me a chance to see multiple ways of completing tasks and I can now use the methods that fit best with my style.
6	The on-the-job training that I am currently receiving is the most helpful. I am able to tie in what I learned at DAU with the experience I am developing by doing real time work. The contract specialist that is training me on the job is experienced and gives me different tasks each time a new opportunity arises to show me a broad spectrum of scenarios. I have been learning surprisingly fast through this method.
7	Increased efficiency and greater productivity in completing the mission at hand.
8	Most of the training has been a good overview of the contracting process and regulations that apply.
9	The boot camp training has benefited me in any questions or assistance I need. I have a designated trainer for help if need be.
10	Out of all of the training I received, I feel that I have benefited the most from On The Job Training. It caters to my learning style and I have found it to be the most relevant.
11	The biggest benefit I had was that my PCO became my trainer. My trainer went on rotation after I was here for only 7 months so my PCO became my trainer. He was willing to sit down and explain everything and I learned from an extremely knowledgeable source.
12	I thought that CON 217 provided worksheets that are very usable on the job.

13	Sometimes, topics that are not at all useful at the time come into play at work much later.
14	Seems like you continually are training. I learn something new almost each day.
15	Benefits include: 1. Buyer Bootcamp training provided tremendous amount of information on contracting and procurement to facilitate Intern in understanding the generalities. 2. The Division Chief, Group Chief and PCO were exceptional in providing guidance in a comfortable environment. 3. The ERC is an invaluable tool that a new Intern should rely upon. It gives an Intern help in a variety of areas related to contracting and procurement.
16	I was fortunate to be placed on a good team with good trainers.
17	Boot camp did a very good job acclimating us with the specifics of the job and our first training assignment is doing a great job showing us the proper way for us to conduct business as a contract specialist. Now that I know what a contract specialist does and who the contract specialist interacts with in the course of a business day, in my next rotation I assume that I will learn the specifics of being a good contract specialist.
18	Good on the job training, many team players willing to help you. Good exposure to different types of service contract.
19	Very important to have a dedicated trainer and to rotate so that you learn a broad spectrum of issues in contracting.
20	Having a personal trainer at my desk has been very helpful. In both of the areas I've been, my trainers have been the most beneficial thing in helping me learn my job.
21	Gained a lot overall but it has been a more teach yourself approach.
22	I learned how to do delivery orders.
23	I had a trainer for about 6 months before he went to a new department. The trainer took his time to discuss in great detail, and also offer up scenarios to help me better understand the work involved. Also, even after being rotated elsewhere, he has made himself available to meet face to face, or by email/phone to answer questions.
24	I've been able to work with trainers who have a great deal of experience and are who have been here at least 8 years and more.
25	The training is very good however I think it would be more beneficial to receive classroom instructions instead of the on-line training for some of the DAU courses like CON 214.
26	The guidance that I have received from experienced employees has been great. I have a large knowledge base to tap for information so I always have someone to turn to for help and never feel lost.
27	Great opportunities and managers are willing to get us interns experience we need.
28	I was fortunate enough to have a trainer that was extremely knowledgeable and

	willing to share her time and expertise with me. This brought me further along than some of the other individuals from my boot camp.
29	The 6 week bootcamp allowed for us to focus on getting acquainted with TACOM, getting access to important programs and databases and meeting knowledgeable people.

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX D. INTERN COMMENTS FROM SURVEY QUESTION 10

Question 10 *

**What are some of the drawbacks you would like to share with us
regarding the training you have received?**

1	Classroom courses require a large volume of assignments with little time allotted to complete them. As a result, in class review and reinforcement of much of the material is not possible. For instance, CON 215 became a cut and paste challenges more than a learning experience.
2	I believe that all the classes need to be classroom classes. The online training doesn't work because most of the time you are not given enough time to work on them and then you find yourself just surfing through the answers.
3	Not all training is applicable to the position. Not able to utilize some of the knowledge obtained via training due to not having the opportunity to apply it to my job. There is a lack of diversity in the workload.
4	A drawback would be that all of the information can be a bit overwhelming. Additionally, you read so much material in the beginning, but at that time it's difficult to decipher what all the information means, and by the time you can apply it you can't remember where to find the information.
5	On the job training is the only training that works. However, most people who can train interns are too busy to do so effectively.
6	Other than the DAU courses, there is no formal training for Interns. The on the job training depends on what group you are in and who is training you. Every Intern does not experience the same type of training.
7	Sometimes the training is too far apart. For instance, you might take a course online and then the follow up course comes 3-4 months later.
8	One drawback of the training I have received is the few opportunities for contract specialist interns to participate in rotations during the course of the internship.
9	I have no drawbacks regarding the training I received.
10	Some of the online classes are too brief or just scratch the surface of important topics.
11	The DAU classroom and online classes have not benefited me. Most of what I learned I never do at my job. I would rather be trained one on one on the job.
12	Some of the DAU training, both online and in class, was difficult to relate to as well as retain do to the fact that it did not pertain to the type of work that I do on a daily basis.

13	Signing up and getting enrolled into DAU courses were a problem with my training. I wasn't able to take my courses until the end of my first year and second year, generally after I already had "on the job" training so they classes themselves weren't advantages at the time.
14	I had to "train" myself by asking a lot of questions. It seems that there is no consistency in how things are done. Each PCO has you perform the Contract Specialist functions somewhat differently. Some skip some functions. Classes were hard to get into on a timely basis.
15	The DAU classes sometimes come before you have learned to do the work and they are spaced out over two very long weeks.
16	If you rotate only once or twice during your internship, I don't believe that gives you full experience for all of the areas we have.
17	Drawbacks include: 1. Briefings were sometimes too long. 2. Training room was too small for the number of Interns in the training class. 3. PADDS training/system needs re-vamping. PADDS oftentimes was not working.
18	Not enough experience with different contracting actions. When an intern begins their training they need to start with the basics before moving on to larger systems buys.
19	As a former Marine I understand what the words Boot Camp entail but in this circumstance I believe that at times the blitz of information and important people we had to absorb and hope to reiterate may have prevented us from really learning the basics of contracting.
20	I had a trainer for a short time, 3 weeks. There is a lot of ambiguity in on-site training.
21	Being stuck in one group, only learning what the group has to offer.
22	There is way too many classes that have to be taken the first two years of the internship. Especially the CES foundations course. That class is just plain awful. I feel sometimes like the training is going to be never-ending.
23	Not enough one on-one training. Trainers don't have time.
24	My first seven months I had a trainer who was a very nice person but had no desire to train. Part of the problem was that this person had a very large workload and was behind in her work. The other problem was that they left early every day so naturally she would only show me the easiest work so I wouldn't have many questions. For examples in the first six months I did 36 delivery orders.
25	The lack of veterans in the department. It is now all interns training interns.
26	I believe that every intern should be rotated, however, I feel like once I get comfortable, I get moved. Changing job duties 3x in less than a year is a little excessive.
27	Right now everything is so new so it's not just one specific issue that I can point

	out.
28	If you have a trainer the level or quality of training we receive is contingent on the experience and knowledge of your trainer. Some individuals are better trainers than others so the quality of guidance we receive somewhat rests on the shoulders of the individuals assigned the task of helping us interns.
29	It is difficult to get into some of the mandatory classes.
30	There is an excessive amount of information presented in boot camp. Not having experienced Government contracting prior to boot camp; it is difficult to grasp what is being presented. Too many PowerPoint presentations. Should be more hands on training; i.e.,PADDs.
31	The 6 week bootcamp was very long. It is VERY hard to sit through PowerPoint's for 8 hours a day. Lots of information was forgotten because it was too much to indulge in such a long sitting.

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX E. INTERN COMMENTS FROM SURVEY QUESTION 11

Question 11 *

What recommendations do you have for improving the intern training program?

1	Provide more on-line modules or pre-course material to allow maximum interaction in class. Perhaps, then, 2 week classes would not be necessary. That is too much time away from the job during the 2nd year. There need to be more required classes available locally.
2	Go to all classroom environments and make CON 217 a full classroom class and not the split that it currently is with online.
3	To have rotational positions every month focusing on a specific contract and actions. This method will help bring diversity in the workload. For example: Experience the topics below. TYPES OF CONTRACTS • Fixed-Price • Cost Reimbursement/ Time and Material • Incentive • Award Fee/Term TYPES OF CATEGORIES OF CONTRTRACTS • Supply • Service • Construction • Research & Development • Major System • A&E
4	A recommendation I have is to ensure that there are rotational throughout all the organizations. That would allow everyone to familiarize themselves with all the different types of contracting. It is easy to read through all of the classes, but it is difficult to apply what you have learned, especially if it is not something you will utilize for 2-3 years.
5	Online DAU classes are worthless. Interns cannot apply the information these classes try to teach.
6	At Picatinny Arsenal, we do not have a Boot Camp Training Course, like they have in Fort Monmouth and other Army bases. From what I have heard, the training course is extremely helpful in teaching the ins and outs of contracts.
7	Even though it would be virtually impossible, having more resident courses through DAU would help to keep training flowing a little bit better. It would also be beneficial to have more than one trainer/mentor per intern if possible. I was only given 1 official mentor, but multiple people have acted in that role giving me more chances to learn. However, in other groups it seems that interns have only their mentor to teach them.
8	My recommendation would be to add opportunities for contract specialist interns to go on rotational assignments in different teams, or even on several installations to gain experience in different contracting environments. This would allow for better development in working with different teams and also present the opportunity to work on several types of contract actions. This experience would make for a more well-rounded specialist when the internship period comes to an end.

9	The training program is very efficient. I have no recommendations at this time.
10	for our organization (might not apply elsewhere), I would like to see more training in how to use PD2 and PC3 (where we post contracts). I mostly have had to learn these on my own. I think the each organization should have classes for their individual systems for interns to learn the ropes because every command is different.
11	More on the job training. Less DAU classes.
12	Focus on On-The-Job Training; do not rely on DAU Classes to teach the specifics.
13	Putting all the new hires in a classroom and explaining what you will be doing and how to do it would be helpful. When I started I was completely unaware of what I'd be doing so it took a couple months to figure it out.
14	Standardize the training and ensure that interns get the classes they need for certification when they need them. If possible, have more "local" classes which may make it easier for interns to get to.
15	Much of the training that is in class could be significantly shortened. Also, there should be less emphasis on the on-line classes and DAU classes and much more weight placed on putting together programs here on base. I think we all would have benefitted 10 fold if there was an intern training program if specific specialists or PCO's were made available for guidance.
16	If you rotate only once or twice during your internship, I don't believe that gives you full experience for all of the areas we have.
17	Drawbacks include: 1. Briefings were sometimes too long. 2. Training room was too small for the number of Interns in the training class. 3. PADDS training/system needs re-vamping. PADDS oftentimes was not working.
18	DAU and On-the-Job training have been the best sources of my training. CES Foundations is of no value. Provide the new interns with a greater view of where the requirements come from and various different types of contracts to be used for the procurement. When to use the different types of contracts and examples of how each contract is built. Greater understanding of the Checklist, and how to establish and route each document through their respective chain of command.
19	So far there has not been a significant event that would warrant any changes to the intern training schedule. I feel like the program is putting me in the best position to succeed in this line of work.
20	Trainers should work closely with Interns to ensure they understand what they are doing and why they are doing it.
21	Remove some/any of the training classes you can.
22	Set aside a person to train in each area so everybody is getting the same training. These trainers should not have work assigned to them, but are co-workers on the buys that they are assisting the trainees with.
23	1. Give interns a trainer that wants to train. 2. Eliminate the workload off the trainer and allow them train 1-3 interns. 3. Provide training in a systematic fashion, start

	with the easier stuff and work your way to the more difficult procurements. 4. Provide work samples or training manual. 5. Keep your seasoned buyers to do the training and eliminate interns training interns; it's not fair to anyone.
24	Every area should have two/three veterans 8-10 years of experience for interns to ask questions.
25	Make sure that every intern has a designated trainer. A trainer who doesn't mind taking the time to explain the reasons why we do certain things one way versus another way.
26	Ensure that all interns are placed with trainers who have been here for a minimum of 4-5 years.
27	I think that there should be specific training for trainers and not everyone should be allowed to train just because they are available.
28	The training program seems to be working so far. I would recommend that the training coordinators keep us informed, on a regular basis, on all changes that occur.
29	As indicated above; more hands on training.
30	The intern training program should begin by training you in the position and division you will initially end up in. We spent six weeks learning the basics of almost everything that it did not give us a chance to go in depth about anything. From this, little was retained. By the time we got on the floor we were "fresh" meaning we (I) really had nothing/little to bring to the table. I think if we spent more time being trained in what exactly we would be doing, learning what we ultimately would need to produce, that would be more effective in our futures of being GREAT contract Specialist.

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX F. INTERN COMMENTS FROM SURVEY QUESTION 12

Question 12 *

Please provide any additional comments or concerns regarding the intern training program or write "none".

1	The DAU Resident courses are very beneficial.
2	Bootcamp presentation is way too long, need to integrate more interactive activities into the mix.
3	It's a good, demanding program.
4	There is a lack of diversity in the workload. By the time the internship (3 years) is completed, one may think that you have significant experience and knowledge, knowing how to handle all different types of contracts, when in fact all you learned is to do modifications.
5	The only way I learned anything about my job was through hands on experience and a desire to learn outside DAU online classes. Students should either be sent to a classroom or receive hands on training in their office.
6	The Boot Camp Training Course should be available to ALL Contract Specialist Interns, whether or not it is offered at their Army base.
7	When I first started working here the only training I received were the DAU classes and that did not help me understand my job. I constantly had to bother co-workers on getting my work done. After working for a year, the boot camp training was introduced and finally started understanding my job.
8	I have learned a great deal in the 3+ years I have been a Contract Specialist through working side by side with my mentors on actual contract. Hands On Training is definitely where to focus. It is the best return on investment.

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX G. SUPERVISOR COMMENTS FROM SURVEY QUESTION 2

Question 2 *

What do you believe are the benefits of the current intern training program?

1	The participants bond with their intern group (for the most part) and establish networks with the other interns which will benefit them throughout their careers. They get an overview of the procurement process (but I don't know how much of a basis this gives them once they actually are doing buying).
2	Professional training that is a combination of class room and on the job.
3	The training program provides a broad overview and builds a cohesive cohort of interns. The training highlights many of the regulations and procedures that are needed to complete the job duties the interns are expected to perform. The training coordinators do an excellent job of meeting the interns' needs.
4	The Boot Camps are helpful when the interns get out on the floor to do the buying.
5	The current intern training program provides wealth of knowledge to the interns upon graduation.
6	Boot camp and on-the job training.
7	Instead of rotating the interns every six months, as previously done, we are now only rotating them once a year. That is good because they can get real in depth experience.
8	They come to the floor with a basic understanding that allows them to contribute immediately.
9	Covers a variety of topics, but don't know enough about it to know just how much.
10	Interns are coming out of boot camp with a very good broad knowledge of what to expect when they enter the real working environment. Gives us as trainers a little breathing room that we do not have to start from scratch. We can pick up where boot camp left off and expand on the training.
11	Boot Camp helps jump start the interns with a great orientation. Interns receive great experience on the job right away.
12	Interns are provided with a wealth of knowledge for the first 6 weeks which helps them have an idea of what TACOM is all about and what to expect when they are actually placed in the work place. Some areas provide the interns with great training experience and in other areas the interns are

	floundering because there is no trainer and there is no guidance on how they should do their job.
13	Access to the most current initiatives.
14	I don't know I don't train interns. all my employees are journeymen
15	Lays the groundwork for basic knowledge.
16	The current intern training program consists mostly of on the job training and taking their required DAU courses on-line. The benefits of this are working with a seasoned Specialist to learn the details and requirements of the job.
17	All the trainings, on site or on line courses that bring the insight of what Government contracting are and enhance the knowledge of it.
18	Interns have the advantage of taking online courses while able to participate in on the job training at the same time. Receiving some on the job training prior to going away for some of the DAU courses gives them a better frame of reference for their courses.
19	Since there seems to be no organized approach to the training of interns in the Directorate I don't think we have a "program". There is no communication from the top as to what is expected in the way of training; no sharing of information between centers as to how they are training their interns; no consistent method of training; no rotation of interns among different centers; no follow-up with the interns to see if they are receiving proper training; no "intern coordinator" has been appointed to be responsible for ensuring there is a consistent organized approach. In other words, each intern is on their own.
20	Job Security via fully funded positions. OJT and formal instruction opportunities. Selection of quality personnel.

APPENDIX H. SUPERVISOR COMMENTS FROM SURVEY QUESTION 3

Question 3 *

What do you believe are the drawbacks of the current intern training program?

1	With only a few exceptions, the interns come in off the street with NO familiarity with Government terminology or how the Government does business. They are the put into a six week bootcamp. While many of the current interns coming in are older and have business experience, I think the interns should report to an office first and then do some small purchases with their trainers and become familiar with terminology before going to bootcamp. This would, however, constrict management's ability to judge bootcamp participants' capabilities before they are assigned to a team.
2	Intern's progress at different rates and some additional training might be required for some individuals. On line classes are a good alternative, however if the training is not coordinated with on the job, I'm not certain if it is as useful.
3	The training focuses too much on formal classroom or online training. Interns are in training for such extended periods of time that they fail to receive the benefits of "on the job" training. The interns often become overloaded with classroom instruction and are unable to apply the lessons to their job function.
4	We are getting so many new interns that we don't have enough seasoned people to help train, so interns are having to train interns.
5	The drawbacks in the current intern training program are the amount of time they are kept away from the office. They spend their first phase of the program (approximately 5 weeks) in the classroom.
6	I can't think of any.
7	DAU Too many classes, too much non relevant information to absorb. Every intern that I have talked to has expressed the same concern. They all state that they learn AND RETAIN more by doing as opposed to taking classes.
8	Can't think of anything
9	Can't think of any off hand.
10	The problem is when the interns are assigned to a team and there may not be experienced people on the team to train them. Some of the mandatory computerized training is too rigid with completion dates. The timeframe doesn't account for a workload. ERC is geared more toward spares and not systems.
11	Lack of qualified trainers in certain areas and lack of guidance to provide interns.

12	The biggest drawback is not enough seasoned specialist to train the work force.
13	From what i see not enough hands on. Too many training classes up front and no skill level.
14	No training program will ever measure up to on the job experience.
15	There does not appear to be any overarching structure for the entire intern program. Intern training varies from group to group and team to team and there is no central point of contact for them to go to regarding career/training advice.
16	Most of courses offered are well structured and objective oriented, however, the practicality that applies varies. Folks, most likely all of them, tend to learn faster and more by hands on experience.
17	Some of the DAU courses are very difficult to get into. The need to take courses in specific numerical order sometimes throws the associates behind in certification requirements.

APPENDIX I. SUPERVISOR COMMENTS FROM SURVEY QUESTION 4

Question 4 *

Briefly describe how your area is conducting on-the-job training? (e.g. interns training interns, group training, trainers(GS-12) training interns, or another specific way you are training).

1	All of the above - Training varies with work. If something unusual develops then a group may be trained because this type of situation may not be presented again for some time to come. Sharing ideas, knowledge, and samples are big here.
2	don't have interns under my supervision
3	Mentoring of new hires by GS11s and 12s. In class and on-line DAU courses.
4	I have tried to pair my interns up with experienced GS-12's so they have a "go-to" person for all of their questions. Additionally, I have my interns work with other Specialists if they have actions that would provide a good learning experience for the intern.
5	Interns are usually assigned with mentors/trainers to accommodate their on-the-job training. Mentors/trainers are identified by group managers. They are individuals who have recently completed the internships or seasoned specialists with both certified qualification and experience. NADG (New Associates Development Group) and ADG (Advanced Development Group) meetings accommodate and fulfill the new hired interns' immediate needs and share common experience.
6	We have a new associates group which allows the new employees to have a place to go for information and discussions among themselves about issues they have come across. We also assign mentors to new associates to help with day to day issues in the workplace as well as getting into the procurement systems and starting off with basic procurements. There are checklists and guides for reference. We also encourage shadowing where a new associate will go with a more seasoned specialist to meetings and review documents as they are being prepared. This gives the opportunity for questions.
7	It varied in the center I'm in. the greatest advantage we have is high volume of work and tremendous variety of acquisitions (small purchases; BPA's; credit cards; contracts; SBIR's; etc). In some cases GS12 mentors have been assigned as specific trainers, but with the shortage of GS12 specialists many interns have no mentor that's been appointed to train them.

8	We assign an individual to help orientate and acclimate the individual to the community and working environment. As we assign work to the intern, we typically match them with a senior level specialist or subject matter expert. As they develop competence, the assignments evolve for the person to exercise independence and judgment.
9	I try not to have interns training interns but it does come up on some of the AWCF procurements (usually a one year intern training an off-the-street intern). Even if this occurs, my interns are assigned a GS-II or GS-12 senior buyer who is formally responsible for training the intern. However, in order to do this training (FYI - I have 1 II w/3 years with the Gov't and 3 12s (two w/plus 30 years and one with less than 4 years with the Gov't) and 6 interns (total of 10 employees) - so some II's and 12's have two interns assigned), my 11's and 12's are not spending all their time on their own buys - they are training the interns (don't see a solution for this - that's just the current environment when we don't hire for 15 years and then bring in large numbers of interns). We do conduct group training where it makes sense and sometimes take advantage of other Team's subject matter experts (i.e., on CPARS, an intern on another team has a pretty good process in place and he has passed on his knowledge to one of my interns)
10	On my team, I assign my interns to a Senior Buyer that acts as their trainer. I also try to make certain that they given meaningful assignments to include negotiations, contract administration and exposure to different contract types (FFP, Cost, and T&M). I also make certain that if possible that they get an opportunity to visit a contractor's manufacturing facility; work with a PM Office and ILSC.
11	My team's main method is to have a combination of training methods. My interns are paired with a designated trainer (usually a GS-12 but sometimes a GS-11) but they routinely work with all of the buyers on my team. The purpose of the group training approach (interns sitting with multiple buyers) is to allow them to learn different styles and be involved with different projects.
12	Interns training interns. One GS-12 training a couple at a time. We are also doing group training. As a Team Chief/PCO, I have to mentor and train also because most of the team members are interns, so a lot of my time is spent training and teaching.
13	As you know, so many hands spoil the soup so interns are given a trainer typically a GS-12.
14	Mostly GS11s and GS12 provide training. However, there are many cases where 6 months to a year interns are training recent boot camp graduates of various of thing. They are sharing what they learned.
15	Mentors and team participation.
16	Over half of my team are interns so I have interns training interns and

	Journeyman buyers training as well.
--	-------------------------------------

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX J. SUPERVISOR COMMENTS FROM SURVEY QUESTION 7

Question 7 *

What recommendations do you have for improving intern training program?

1	Shorten it up even more and have the interns get some on the job training before going to bootcamp. The interns coming in seem to think that it is important to get assigned to one of the high visibility programs (like MRAP) but they need to be told that 1) they will get much better training going to less visible programs where there is not a sense of urgency to everything - i.e., flying by the seat of their pants; 2) They need to be told that even if they are not working on a high visibility program, their contributions are being noticed and they will achieve their goals (if their goal is to work on the high visibility programs) by working hard and learning the processes in their current positions; 3) the interns need to know that wherever they work, they are an important part of the process (i.e., getting soldiers what they need, when they need them) and 4) the interns seem to feel like they have to compete with their fellow interns - this does not encourage information sharing but rather the interns keep info to themselves so as to have a competitive edge over the other interns.
2	Overall the "Boot Camp" process seems to be structured very well and the interns learn a lot in a relatively short period of time. This process is 1000% improvement from my days as an intern.
3	I would recommend less classroom training or expand the time horizon. The interns need more realistic on the job training. If formal classroom training is required then I would recommend increasing the amount of case study based training (utilizing real TACOM examples).
4	Provide more group training and have more seasoned people to train.
5	There is no need to mess with the current structure because what we currently have is excellent.
6	provide training on peer reviews and new procedures that have been introduced
7	1) Rotate the facilitators for Boot Camp with people from different divisions each week or every other week. ALL divisions should participate. This helps the interns (as well as the facilitator) to get great exposure and experience with all of the basics necessary for contracting. 2) Ask for non-interns to mentor interns throughout their internship. It would help non-interns to develop their leadership skills. They do not have to be from the same division. 3) Give interns some more hands on experience with actual

	hardware.
8	Having them stay longer in one area so that they can really learn the job. I don't know where it is written that in order to be a good buyer you have to continually rotate and become well rounded. We have been doing this for at least 10 to 15 years and I have not seen and real benefit. Having subject matter experts available again would be a nice change.
9	I would recommend that our Center appoint an Intern coordinator that would be responsible for developing a formal training program for interns and act as SME on the Intern Program for both training and career development. Upon their hiring, I believe that some form of orientation would assist interns in adapting to the work environment. As part of the orientation, I would recommend that contracting training briefs be provided to provide perspective and to be used as reference material as they progress through the program.
10	Interns can lead other interns but I often witness the downfall of it as they are both lack of experiences and knowledge. Also training interns by GS-12s can also be watched out for due to the same or similar reasons above. Should be trained by GS-13s or PCO's who can properly and precisely train them to the right directions even though we are currently lack of 13s and PCO's. Also more intern trainings in group by the policy/pricing/competition adv office to phase in the practicality to the text book training.
11	Encourage more shadowing and assignment of mentors. This is difficult sometimes based on center to center assignments and the number of more seasoned specialists in each center. Mentors are very important.
12	Appoint an Intern Coordinator who is responsible for creating a program and ensuring that the interns are receiving adequate training. Rotate the interns among different centers, and exposing them not only to contracting but to the SADBUE office, policy, pricing, etc. Solicit on a regular basis feedback from the interns on the quality of their training. Start a "boot camp" where an organized approach to training new interns is available.
13	Typically takes three years to properly train someone in contracting to be truly competitive at the journeyman level. The two year program needs to be lengthened.

APPENDIX K. SUPERVISOR COMMENTS FROM SURVEY QUESTION 8

Question 8 *

Please provide any additional comments or concerns about the intern training program or write "none".

1	My response to question #5 above "How important is a structured (e.g. procedures or process set-up) on-the-job training program?" my Somewhat important response is based on the fact that there are many different types of buying - spares, systems, R&D, services, etc. and some require a more creative thinker (R&D services and systems buying come to mind)- you don't want a structured process to impede the creativity of the buyer in those offices. The checklists for the different types of buys is good and keeps everything organized but for writing scopes of work for R&D and systems, you want to give the buyers some level of autonomy/creative license.
2	I think as managers we have to be aware of each intern's skill level, to make certain they are learning the correct skill sets during rotations.
3	Simplify the paperwork for intern evaluations.
4	Just suggest keeping the number of interns per class to a reasonable level to allow active participation by all participants. Other than that, no additional comments.
5	I feel that interns should be put in one area for at least 2-3 years so that get a very good working knowledge of how that area operates. If after 3 years they want to expand their knowledge than they should request a developmental assignment. Having interns do less time provide many employees who only know very little about any one place and therefore never really understand what they are doing. I don't feel having interns rotate as much as they do provides any real benefit to the command or to the individual themselves. Most interns take a while to really understand what they are doing. Very few can pick up the concept right away. What we have created is our future leaders who are not very experienced and once you are a leader you don't have time to really learn that area from the ground up because you are too busy putting out fires.
6	The current problem with on the job training is our lack of experience at the GS-12 level. It is difficult for someone with less than 5 years contracting experience to be able to answer all of the questions that arise while training an intern.

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX L. DIVISION CHIEF INTERVIEW QUESTIONS

1. How are you training and developing your interns?
2. What results have you seen from your training program?
3. What are the challenges you are facing with the intern training program?
4. Do you foresee any future challenges with the intern training program? If so, explain.
5. How important is a structured (procedures/process set-up) on-the-job training program? Very Important, Important, Neutral, Unimportant, Very Unimportant
6. As you lose your experience personnel through attrition, what plans do you have in place to keep job performance at a high level?
 - a. If so, briefly describe your plans?
 - b. If not, then please explain.
7. In your opinion, how would you rate the overall performance of the graduated interns from the training program? Very Satisfied, Satisfied, Neutral, Dissatisfied, Very Dissatisfied
8. The Army stated that they want their contracting centers to be world class providers of contracting support to the warfighter. How well do you think we're accomplishing that goal?
9. How can practical and best practice knowledge be shared across Contracting Centers?
10. What incentives do you use to retain or reward your 1102 top performers?
11. How successful are your incentives working to retain your 1102 top performers?
12. Within your division what % of your employees have already obtained their master degrees?
13. What % of your division has their level III contracting certification?
14. What % of your division has more than 3 years of 1102 contracting experience?

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX M. WORKFORCE DEVELOPMENT INTERVIEW QUESTIONS

1. As you lose your experience personnel through attrition, what plans do you have in place to keep job performance at a high level?
 - a. If so, briefly describe your plans?
 - b. If not, then please explain.
2. How are you training and developing your interns? Briefly describe the intern training program you have in place.
3. What would you like to see happen over the next decade to allow you to effectively train and develop the 1102 workforce?
4. What results have you seen from your training program?
5. What are the challenges you facing with the intern training program?
6. Do you foresee any future challenges with the intern training program? If so, explain.
7. How well does your funding enable you to conduct effective training programs?
8. How do we select individuals for hiring within the 1102 workforce?
9. Do you rotate your interns? If so, what criterion is used to determine when an intern is rotated?
10. What percentages of the new hired interns are terminated within the three years?

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX N. DEFENSE ACQUISITION UNIVERSITY (DAU) INSTRUCTOR INTERVIEW QUESTIONS

1. In the feedback that you receive, do students tend to prefer courses online or in traditional classrooms?
2. What are some of the concerns expressed for both types of training?
3. What measures or form of feedback is being used to gauge how adequately interns are being trained?
4. In your opinion what is working well in the current training process? What is not working?
5. Beyond what is already being done, what recommendations do you have for improving interns' training and development?
6. Do you have anything you would like to add?

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF REFERENCES

- Army Contracting Command to Hire Mid Career Employees, Interns.* (2008, April 21). Retrieved from National Contract Management Association:
<http://www.ncmahq.org/News/CMNewsDetail.cfm?itemnumber=3958>.
- Army Sustainment Command's Advance Planning Briefing to Industry.* (August 13, 2009). Retrieved from NDIA:
http://www.ndia-ia-il.org/APBI_Briefings%5CParsons.pdf
- Bokinsky, D. (October 2008). *ACCP-TF Creates New Vision for Worldwide Army Contracting Operations.* Retrieved from United States Army Acquisition Support Center (USAASC) Army AL&T:
http://www.usaasc.info/alt_online/article.cfm?iID=0811&aid=13
- DAU, (June 2009). *Accelerating Our Second Transformation.* Retrieved from Defense Acquisition University:
http://www.dau.mil/aboutDAU/AboutDocs/StrategicPlan_2010-2015.pdf
- Defense Acquisition Workforce Strategy.* (2010). Retrieved from Defense Acquisition University:
<https://acc.dau.mil/CommunityBrowser.aspx?id=340759>
- DoD, Department of Defense.
<https://dap.dau.mil/policy/Documents/Policy/DAW%20Report%20To%20Congress%202010.pdf>. (15 Jun 2010).
- Gansler Commission Report. (2007). *Urgent Reform Required: Army Expeditionary Contracting. Report of the Commission on Army Acquisition and Program Management in Expeditionary Operations.* Retrieved from
http://www.army.mil/docs/Gansler_Commission_Report_Final_071031.pdf
- Government Accountability Office (GAO). (May 1996). *Federal Downsizing. The Status of Agencies' Workforce Reduction Efforts.* Washington, DC: Author, GAO-T-GGD-96-124.
- Government Accountability Office (GAO). (April 2002). *Acquisition Workforce DoD's Plans to Address Workforce Size and Structure Challenges.* Washington, DC: Author, GAO-02-630.
- Government Accountability Office (GAO). (July 17, 2007). *Federal Acquisitions and Contracting: Systemic Challenges Need Attention.* Washington, DC: Author, GAO-07-1098T.

- JM&L. (n.d.). Retrieved from JM&L.<http://www.pics.army.mil/JML/>
- Lorge, E. M. (February 29, 2008). *Army Forms Contracting Command, Campaign Plan*. Retrieved from Army.Mil News: <http://www.army.mil/news/2008/02/29/7685-army-forms-contracting-campaign-plan/>
- McCaskill, L. D. (October 15, 2009). *Command confronts challenges in filling contracting positions*. Retrieved from U.S. Army: <http://www.army.mil/news/2009/10/15/28827-command-confronts-challenges-in-filling-contracting-positions/>
- OMB, Office of Management and Budget. *Office of Management and Budget*. (27 Oct 2009). http://www.whitehouse.gov/omb/assets/procurement_workforce/AWF_Plan_10272009
- Relyea, Harold C., (January 2001), *Government at the Dawn of the 21st Century: A Status Report*, Retrieved from www.congressionalresearch.com
- Strategic Business Plan – STRATEGIC PLAN*: (n.d.). Retrieved from procnet.pica.army.mil/intro/BusinessPlan/StrategicBusinessPlan.doc
- The U.S. AMC*. (n.d.). Retrieved from U.S. Army Materiel Command: <http://www.amc.army.mil/pa/about/asp>

INITIAL DISTRIBUTION LIST

1. Defense Technical Information Center
Ft. Belvoir, Virginia
2. Dudley Knox Library
Naval Postgraduate School
Monterey, California
3. Cary A. Simon
Graduate School of Business and Public Policy
Monterey, California
4. Cynthia L. King
Graduate School of Business and Public Policy
Monterey, California
5. Harry Hallock
Tank Automotive and Armaments Command
Warren, Michigan
6. Bruce B. Berinato
Joint Munitions & Lethality Contracting Command
Picatinny, New Jersey