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Analysis of Contemporary Contingency Contracting Educational Resources

29 November 2010

by

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Disclaimer: The views represented in this report are those of the author and do not reflect the official policy position of the Navy, the Department of Defense, or the Federal Government.

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LIST OF ACRONYMS AND ABBREVIATIONS

1102	Federal service civilian contract specialist
51C	Military occupational specialty code—U.S. Army contracting officers
"A" Contract	Blanket purchase agreement order
ACC	Army Contracting Command
AFARS	Army Federal Acquisition Regulation Supplement
AFCESA	Air Force Civil Engineer Support Agency
AFIT	Air Force Institute of Technology
AKO	Army Knowledge Online
AMC	Army Materiel Command
ARFORGEN	Army force generation
AT&L	Acquisition, technology, and logistics
BCE	Base-level commercial equipment
BO	Billing official
BPA	Blanket purchase agreement
CAGO	Contractor-acquired government-owned
CAR	Contract action report
CAP	Civil Augmentation Program
CBO	Congressional Budget Office
CCO	Contingency contracting officer
CCR	Contractor Central Registration
CERP	Commander's Emergency Response Program
CICA	Competition in Contracting Act
CJCS	Chairman of the Joint Chiefs of Staff
CoCo	Chief of Contracting Office
COCOM	Combatant Command (or Combatant Commander)
CON 234	Joint Contingency Contracting course
CON 334	Advanced Contingency Contracting course
CONUS	Continental United States

COR	Contracting officer's representative
COTS	Commercial off-the-shelf
CRS	Congressional Research Service
CWC	Commission on Wartime Contracting
CSIP	Contract support integration plan
"D" Contract	Indefinite delivery, indefinite quantity order
DAU	Defense Acquisition University
DAWIA	Defense Acquisition Workforce Improvement Act
DCMA	Defense Contract Management Agency
DFARS	Defense Federal Acquisition Regulation Supplement
DHS	Department of Homeland Security
DLA	Defense Logistics Agency
DO	Delivery order
DoD	Department of Defense
DoS	Department of State
DPAP	Defense Procurement and Acquisition Policy
DSCA	Defense Security Cooperation Agency
ECC	Expeditionary Contracting Command
ELO	Enabling learning objective
ELOO	Economic lines of operation
EPLS	Excluded Parties List System
"F" Contract	General Services Administration order
FAR	Federal Acquisition Regulation
FEMA	Federal Emergency Management Agency
FOO	Field ordering officer
FRAGO	Fragmentary order
FY	Fiscal year
GAO	Government Accountability Office (or General Accounting Office before July 2004)
GFE	Government-furnished equipment
GPE	Government point of entry

GPC	Government purchase card
GS	General Schedule (Designator for federal service civilians)
GSA	General Services Administration
GSBPP	Graduate School of Business and Public Policy (Naval Postgraduate School)
GWOT	Global War on Terror
IDC	Indefinite delivery contract
IDIQ	Indefinite delivery, indefinite quantity
IPE	Integrated planner and executor
JARB	Joint Acquisition Review Board
JOPES	Joint Operation Planning and Execution System
JPME	Joint professional military education
JTF	Joint task force
JULLS	Joint Universal Lessons Learned System
LCO	Leveraging contracting officer
LOGCAP	Logistics Civil Augmentation Program
LPTA	Lowest priced technically acceptable
MDMP	Military decision-making process
MILCON	Military Construction (Appropriation fund)
MOOTW	Military operations other than war
MN 3318	Principles of Contingency Contracting course
NATO	North Atlantic Treaty Organization
NDAA	National Defense Authorization Act
NGO	Nongovernment organization
NPS	Naval Postgraduate School
OCONUS	Outside the Continental United States
OHDACA	Overseas humanitarian, disaster, and civic aid
OO	Ordering officer
OMA	Operations and Maintenance, Army (Appropriation fund)
OPA	Other Procurement, Army (Appropriation fund)
OPLAN	Operation plan

OPORD	Operation order
OPSEC	Operational security
OSD	Office of the Secretary of Defense
"P" Contract	Purchase order
PAT	Proficiency assessment test
PD2	Procurement Desktop Defense
PDD	Presidential Decision Directive
PIIN	Procurement instrument identification number
PR	Purchase request
PVO	Private voluntary organization
QAE	Quality assurance evaluator
RFP	Request for proposal
RFQ	Request for quotation
ROMO	Range of military operations
RSOI	Reception, staging, onward movement, and integration
SAP	Simplified acquisition procedures
SAT	Simplified acquisition threshold
SES	Senior Executive Service (Designator for senior federal service civilians)
SF	Standard form
SMCT	*Soldier's Manual of Common Tasks*
"T" Contract	Solicitation
TACSOP	Tactical standing operation order
TDY	Temporary duty
TEB	Technical evaluation board
TLO	Terminal learning objective
TO	Task order
UC	Unauthorized commitment
UMMC	Unspecified minor military construction
USACE	United States Army Corps of Engineers
USAID	United States Agency for International Development

U.S.C	*United States Code*
USCENTCOM	United States Central Command
YTTM	Yoder Three-tier Model

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I. INTRODUCTION

The aggressive outsourcing of support services during the last 15 years has created an increasingly complex environment for the contemporary contingency contracting officer. As of March 2009, contingency contracting officers deployed in Iraq and Afghanistan have administered more than $80 billion in service contracts despite being undermanned and inadequately trained, and despite the lack of vital managerial resources due to insufficient planning by senior leaders (Thibault et al., 2009). Contingency contracting officers and the Department of Defense's entire workforce of acquisition professionals now face tremendous challenges as the Pentagon attempts to re-balance its fiscal priorities in response to America's current economic turmoil while sustaining a military at war and continuing to prepare for future security threats. A broad cost-cutting initiative—first announced in May 2010 by Secretary of Defense Robert M. Gates (Gates, 2010a)—is now driving the defense department to gain efficiencies, reduce overhead, and improve effectiveness by reforming the way the military does business. While the initiative may prompt the military to sever some contractors from its force structure, the warfighters' inexorable reliance on contracted support services underlies the requirement for a sustainable corps of well-educated and capable contingency contracting officers.

In August 2010, Secretary Gates released the final phase of the Efficiencies Initiative and remarked, "The Department of Defense cannot expect America's elected representatives to approve budget increases each year unless we are doing a good job, indeed everything possible, to make every dollar count" (Gates, 2010b, para. 5). The plan's overarching purpose is not intended to decrease the department's top line budget, but rather to reduce overhead costs by $100 billion over five years, beginning with the fiscal 2012 defense budget, and apply those savings to force structure and modernization. At a June 2010 news conference, Ashton B. Carter, Under Secretary of Defense for Acquisition, Technology, and Logistics, said,

> The defense budget is more than $700 billion, but the focus of the initiative is on the $400 billion that is contracted out for goods and services. … The objective is to deliver the warfighting capabilities needed for the money available by getting better buying power for warfighters and taxpayers—in effect, doing more without more. … [Everyone] knows that we're entering a new era, that we're at an inflection point, and that…we need to adapt our management practices to that reality. … We're [still] going to enjoy some real growth in defense spending, but not the kind that we've enjoyed over the last decade. (Carter, 2010, para. 4–6, 11)

This research report examines the fundamental educational resources available to the contemporary contingency contracting officer. The U.S. military has grown considerably reliant on contracted services to support warfighters operating in contingency environments, yet it is only just beginning to develop a robust corps of well-educated and capable contingency contracting officers. In response to legislative mandates for acquisition and contracting reform, the military's contingency contracting education system has recently undergone an important modification. We comparatively analyzed four contingency contracting educational resources:[1] the Defense Acquisition University's CON 234 Joint Contingency Contracting and CON 334 Advanced Contingency Contracting; the Naval Postgraduate School's MN 3318 Principles of Contingency Contracting; and the U.S. Army's Soldier's *Manual of Common Tasks (51C)* for contingency contracting officers. We examined three factors: the relative similarities and differences among the four courses; the extent to which each course benefits contingency contracting officers of varying targeted levels of proficiency; and whether the intent of each course is met in relation to its course description and targeted audience. The analysis incorporated the use of a benchmark hierarchical model, the Yoder Three-tier Model. We categorized curricular learning objectives across the Yoder Three-tier Model's hierarchy and, by applying a quantitative rating scheme to the model, differentiated the four courses.

Contingency contracting—the act of directing contracted support to tactical and operational forces engaged in contingency operations—has been traditionally disregarded

[1] The report hereafter uses the terms *course* and *courses* when referring to CON 234, CON 334, MN 3318, and the *SMCT (51C)*.

as a discrete proficiency within the Department of Defense's (DoD) acquisition workforce. Until recently, contingency contracting was often done on an ad hoc basis and was inadequately incorporated into the doctrine and culture of the U.S. military. Even the DoD's sweeping acquisition reforms of the previous 50 years have largely failed to acknowledge the effect of contingency contracting on mission outcome, despite America's long history of contingency contracting operations. As such, the absence of clear contingency contracting doctrine and policies inhibited the creation of effective contingency contracting procedures. Therefore, the acquisition workforce management was compelled to improvise a benchmark training course in order to standardize knowledge across its contingency contracting officer (CCO) corps.

By 1997, the Defense Acquisition University (DAU) offered the first DoD-wide contingency contracting course—CON 234 Joint Contingency Contracting—in response to a growing demand for further education by acquisition specialists who were, at the time, engaged in contracting actions for military exercises, humanitarian operations, and the North Atlantic Treaty Organization (NATO) peacekeeping mission in the Balkans (Under Secretary of Defense [Acquisition, Technology, & Logistics] [USD (AT&L)], 2008). The CON 234 course emanated from lessons learned by these contemporary contingency contracting operations because there was little specific content in the Federal Acquisition Regulation (FAR) or in the Defense Federal Acquisition Regulation Supplement (DFARS) to otherwise guide the development of the course. The course was significantly updated and redeployed in late 2007 in response to congressionally mandated studies on the U.S. Army's failing contingency contracting practices in Iraq. CON 234 is presently offered to qualified acquisition professionals as a nine-day resident course at DAU training facilities approximately 20 times per year.

Other contingency contracting courses have also been developed in recent years, although not all are accessible or applicable to all functional levels of CCOs across the DoD. In 2003, the Naval Postgraduate School (NPS) in Monterey, CA, introduced MN 3318 Principles of Contingency Contracting. MN 3318, certified in 2004 by the DAU as an equivalent to CON 234, is a graduate-level course of more than 30 hours delivered in resident format to NPS students—typically those enrolled in the school's acquisition and

contract management curricula—twice per year, and via distance learning to other acquisition professionals at least once per year.

In September 2009, the U.S. Army released a draft version of the *Soldier's Manual of Common Tasks (SMCT)* for its 51C[2] contracting officers (Expeditionary Contracting Command [ECC], 2009). This manual was released in an effort to standardize skill sets required for contingency contracting officers. This resource is an independent study tool, but its content is typically reinforced at the unit level through a mentor program. The *SMCT (51C)*,[3] developed under the guidance of the Army Contracting Command (ACC), includes 36 key tasks comprising the fundamental body of knowledge essential to Army CCOs. The manual is accessible to all military and civilian personnel with Army Knowledge Online (AKO) user access.

Finally, the DAU recently added the course CON 334 Advanced Contingency Contracting to its curriculum. The course was developed as an advanced contingency contracting course, which would provide just-in-time training to senior-level contracting personnel deploying to contract management positions (USD [AT&L], 2008). Scheduled for launch in August 2010 as a four-day resident course, CON 334 is a follow-on course to CON 234 and will be offered approximately five times per year.

In December 2004, Professor E. Cory Yoder published a working paper at the Naval Postgraduate School, *The Yoder Three-tier Model for Optimal Planning and Execution of Contingency Contracting*, that introduced a credential-based hierarchical tool that can assist mission planners in maximizing the effectiveness and efficiency of contingency contracting operations. The personnel structure model is a conceptual framework that aligns theater-wide contracting support with a Combatant Commander's (COCOM) operational objectives through integrative planning and execution. Specifically, the model improves a planning staff's ability to determine the level of

[2] 51C is the military occupational specialty (MOS) code for U.S. Army contracting officers.

[3] The *SMCT* is a Soldier Training Publication (STP) published by the U.S. Army that provides a reference of individual skill sets for most MOS codes. It serves as a basic training tool for soldiers, instructors, and commanders. The term *SMCT (51C)* refers to the chapter that applies to Army CCOs, but the term is used interchangeably with *SMCT* throughout this report.

contracting resources needed to support a contingency operation. It does this by identifying the optimal combination of capabilities and expertise needed by a theater-wide corps of CCOs to accomplish the COCOM's mission. The tool can, and should, be applied throughout all phases of a contingency operation, including during the development of contract support integration plans (CSIP), which align with operation plans (OPLAN) and operation orders (OPORD).

A. PROBLEM STATEMENT

The Government Accountability Office (GAO) designated the DoD's contract management environment—particularly contingency contracting—a "high-risk area" (Government Accountability Office [GAO], 2010, p. 2). Since 9/11, the workload of contract actions[4] has risen considerably in quantity and complexity. The combination of a thinning acquisition workforce, limited contingency contracting training resources, and procurement policies that often conflict with the operational requirements of contingency environments, has exacerbated the DoD's inability to avoid substantial inefficiencies during nearly a decade of upswing in acquisition activity. The FY 2008 National Defense Authorization Act (2008) committed the DoD to rebuilding its acquisition workforce in size and competency in response to faulty planning and execution of contracting support for the U.S. military operations in Iraq and Afghanistan. Prior to the two wars, the convoluted and sluggish acquisition strategies inherent to large defense procurement programs shaped the acquisition workforce's training model, which proved ineffectual for the rapid response requirements of post-9/11 contingency contracting operations.

This research project examines the problem caused by an inefficient matriculation process for acquisition professionals that is more ad hoc than it is deliberate. The proliferation of contingency contracting courses and the standardization of contingency contracting practices across the DoD is still in its infancy. However, several important bodies of training, education, and literature were deployed and/or improved during the two wars: CON 234, CON 334, MN 3318, the *SMCT*, and the Yoder Three-tier Model.

[4] The term *contract action* means any oral or written action that results in the purchase, rent, or lease of supplies or equipment, services, or construction, or modifications to these actions.

The Yoder Three-tier Model effectively links theater contracting requirements to the skill sets of the supporting CCO workforce. The tiers are credential based at the strategic, operational, and tactical levels. In addition, by altering its intended application, the model's flexibility yields a tool to conduct a comparative analysis between contingency contracting courses through an examination of their respective learning objectives. CCOs, not unlike their counterparts who support large defense procurement programs, comprise various levels of capabilities depending on their formal training credentials and their experience. We used the Yoder Three-tier Model to accomplish the following analyses: summarily compare each course on a sliding scale; determine the extent to which each course would benefit CCOs of varying targeted levels of proficiency; and validate the relative intent of each of the four contingency contracting courses (i.e., did the learning objectives "deliver as advertised" based on the courses' descriptions and intended target audiences?).

B. PURPOSE

The business of contingency contracting is slowly leaving behind its untamed, ad hoc roots and is becoming recognized within the DoD as finally developing much-needed uniform processes; yet its processes must preserve a large degree of flexibility due to the nature of contingency operations. While acquisition policy and joint publications still lack comprehensive guidance on contingency contracting, the four courses (CON 234, CON 334, MN 3318, and the Army's *SMCT*) are the most progressive educational resources the DoD has to educate its CCOs. With the exception of the DAU's accreditation of MN 3318 as a CON 234 equivalency in 2004 (and subsequent re-assessment in 2007), this research report is the first to dissect the four courses by their learning objectives and conduct a comparative analysis. We applied an important tool, the Yoder Three-tier Model, to accomplish this analysis.

The overarching purpose of the research project is threefold. First, by rating curricular learning objectives against an academic benchmark, we determined how the course content for the four contingency contracting courses compared to each other and how each one "spanned" the Yoder Three-tier Model. The four courses are the most

prevalent contingency contracting educational resources for acquisition professionals in the DoD today. The recently published *Joint Contingency Contracting Handbook* is another. However, we did not include this document in the analysis because the updated CON 234, and to a large degree MN 3318, is based on its content. The *SMCT (51C)*, unlike the other three courses, is not certified by the DAU, nor does the Army intend for the *SMCT (51C)* to be certified as a CON 234 equivalent. However, the ACC desires a resource to augment its CCO workforce's knowledge base because the Army—as the DoD's primary ground combat maneuver force—must typically process significantly more contingency contracting actions than the other military services. The Army will continue to matriculate all of its CCOs into the DAU's core contracting courses, including CON 234.

Second, the research applied an important, yet largely underutilized, tool: the Yoder Three-tier Model (YTTM). The YTTM promotes integrative planning and execution to support contingency contracting operations for the COCOMs. Its intent is to maximize effectiveness and efficiency for processes that have been regrettably underutilized, if used at all, and hence have failed over the last decade to obviate excessive waste, fraud, and abuse caused by a lack of oversight and foresight. A planning and execution aid, such as the YTTM, is a powerful, yet simple, way to authenticate CSIPs, OPLANs, and OPORDs, as well as to assist advanced CCOs and logisticians on the battlefield or in the midst of a disaster relief effort. We sought to promote a broader appreciation of this model by demonstrating its efficacy through an analysis of the contingency contacting courses.

Third, we assisted the U.S. Army's Expeditionary Contracting Command (ECC), a subordinate unit to the ACC, in support of fielding a secure web-based proficiency assessment test (PAT) for its 51C personnel. Arzu, Castro, and Mack (2010) developed the draft PAT in accordance with the content of the *SMCT (51C)*. We completed the following tasks: conducted market research of web-based test-building platforms; built security and analysis parameters; input over 1,400 test questions to a test software program; coordinated two web-based testing events; and analyzed PAT results. The PAT, via the web-based test platform, was validated in June 2010 due to our research efforts.

C. BACKGROUND

Throughout history, the U.S. has utilized contractors to provide direct support to military forces engaged in contingencies spanning the range of military operations from major theater wars to humanitarian relief missions. For example, in the wake of the 7.0 magnitude earthquake that devastated the country of Haiti on January 12, 2010, the first U.S. Army CCO was on the ground within two days to coordinate contracting actions for life-saving logistical, medical, and engineering services (ECC, 2010). Contractor-provided services have also proven vital to U.S. troops involved in armed conflicts. For nearly a decade, contractors have supported U.S.-led military operations in Iraq and Afghanistan by providing base operations support (e.g., food and housing); communication services; tactical and nontactical vehicle maintenance; interpreters who accompany military patrols; weapons systems maintenance; intelligence analysis; port activities; ammunition accountability and control; parts and equipment distribution; and private security. These services are provided in environments that are often characterized by asymmetric enemy tactics; terrorist threats; social norms and customs that are markedly different from those practiced in western cultures; underdeveloped transportation infrastructures; immature industrial and economic bases; fractured governance; and corruption.

As of March 31, 2010, there were 250,335 contractor employees compared to approximately 272,000 uniformed personnel spanning the U.S. Central Command (USCENTCOM) theater providing logistics services in support of ongoing combat and stability operations (e.g., reconstruction and nation building) (Congressional Research Service [CRS], 2010b). In other words, contractor personnel make up approximately 48% of the DoD's combined contractor and uniformed personnel workforce in the USCENTCOM region, representing a 0.92:1 ratio between contractors and uniformed personnel. These estimates do not include non-U.S. coalition forces or the contractors managed by them, or the contractors managed by multinational interagencies, nongovernment organizations (NGO), or private voluntary organizations (PVO). Contractors, it seems, have become an indispensable part of the U.S. military's force structure in most contingency environments. This dependence will likely continue due to

the following factors: the U.S. military's scarce resources are unable to rapidly deploy everywhere at once in support of our domestic and foreign policies; the DoD relies heavily on commercial systems, components, and technologies to conduct disparate missions across the globe; military units deployed to austere environments often lack robust sustainment capabilities; and the current fiscal policy favors outsourcing of many non-combat services versus growing these "non value-added" capabilities within an increasingly expensive force of all-volunteer warfighters.

On December 1, 2009, President Obama announced that an additional 30,000 U.S. troops would be deployed to Afghanistan to assist ongoing operations in that country. Accordingly, the Congressional Research Service estimated that between 9,000 and 43,000 additional contractors would be needed to support these additional troops (CRS, 2010b). The Obama administration estimated the marginal cost to support the troop surge to be approximately $30 billion in the first year, although it is unclear how much, if any, would be spent on additional contractor support. The DoD has already spent billions of dollars on contractors supporting operations in Iraq and Afghanistan. According to the Congressional Budget Office (2008), between fiscal years (FY) 2003 and 2006 the DoD obligated almost $76 billion for contracts in Iraq. In FY 2007 and the first half of FY 2008, the DoD obligated approximately $30 billion on contractors for the conflicts in both countries (more than $5 billion for Afghanistan and approximately $25 billion for Iraq) (Congressional Budget Office [CBO], 2008).

Despite the drawdown of U.S. forces in Iraq—the combat mission there is scheduled to end in August 2010—and the current administration's policy to begin the withdrawal of U.S. troops from Afghanistan beginning in July 2011, there remains an enduring requirement for the DoD to facilitate contractor support so long as the U.S. remains committed to resolutely influencing the future of the two countries' security, economy, and government institutions. Consequently, as the U.S. reduces its military footprint and its role in direct combat operations in the region over the ensuing years, it is likely that contracts that formerly supported troops will be replaced by contracts providing reconstruction, security, and other diplomatic programs. Various governmental organizations, such as the Department of State (DoS) and its humanitarian arm, the U.S.

Agency for International Development (USAID), will administer many of the contracts as they do today. However, barring a radical shift from the current U.S. policy in Iraq and Afghanistan, the DoD will continue to maintain a diminished presence in the countries in an "advise and assist" function (e.g., training local police and military forces). Therefore, the DoD's acquisition workforce will remain in the region to manage contracts long after the U.S. terminates major combat and counterinsurgency operations there; the extent of their participation will be dictated by future defense appropriations.

Since 9/11, the DoD—and particularly the Army, as its principal ground combat maneuver force in Iraq and Afghanistan—has failed to effectively and efficiently administer contracting actions in the austere environments where it is required to conduct contingency operations. The DoD, in this respect, neglected to address its shrinking acquisition workforce, whose congressionally mandated downsize began with the FY 1996 Defense Authorization Act (1996). It also neglected to address the inadequacy of contracting skill sets across its atrophied workforce, despite the mounting number of increasingly complex contract actions borne from the global war on terror (GWOT). Moreover, the "Institutional Army," in its role to raise, train, equip, deploy, and ensure the readiness of its fighting forces, compromised its own logistics channels on the battlefield by not instituting sorely-needed changes to the organizational structure, culture, career development, training resources, doctrine development, and regulations driving its procurement processes (Gansler et al., 2007). However, the Army began correcting these deficiencies in response to *Urgent Reform Required: Army Expeditionary Contracting*, a 2007 report completed by the Commission on Army Acquisition and Program Management in Expeditionary Operations (Gansler et al., 2007), colloquially known as the "Gansler Commission." The independent commission, chaired by the Honorable Jacques Gansler, former Under Secretary of Defense (Acquisition, Technology, and Logistics), was commissioned by the Secretary of the Army in response to the FY 2007 John Warner National Defense Authorization Act (2006) to review lessons learned in recent contingency operations and make recommendations to improve effectiveness, efficiency, and transparency of procurement activities conducted in unfamiliar and hostile environments (Gansler et al., 2007). The

U.S. Army continues to pursue and instigate improvements, which will be discussed in Chapter II of this report. The combination of a diminishing acquisition workforce, deficient contracting knowledge, and procurement policies that conflict with operational requirements inherent to contingency environments has exacerbated the DoD's logistical support system, which profoundly relies on contingency contracting efforts to outfit and sustain the warfighters' requirements.

Contingency contracting, which shall be formally defined in Chapter II of this report, comprises the act of directing contracted support to tactical and operational forces engaged in contingency operations. Arzu et al. (2010) identified contingency contracting as "a niche subject area within the greater realm of defense contracting" (p. 15). The formulation of effective contingency contracting procedures, in this sense, has been historically disregarded in favor of ad hoc approaches. Large defense procurement programs and the deliberate, yet sluggish, acquisition strategies that steer them (i.e., phases of the Defense Acquisition Management System) have traditionally shaped policies that influence the acquisition workforce's training requirements, to the detriment of post-9/11 contingency contracting operations. It was not until 1997 that the first DoD-wide contingency contracting course was offered by the DAU (USD [AT&L], 2008). Known as CON 234 Joint Contingency Contracting, it was not significantly updated for relevancy until after the Gansler Commission completed its 2007 report. Other contingency contracting training resources exist; however, only CON 234 (and the *Joint Contingency Contracting Handbook* on which it is based) and CON 334, mentioned earlier, are widely accessible to all acquisition communities across the DoD. MN 3318 is exclusively taught through the NPS, and the *SMCT (51C)* is currently in draft format in limited distribution. Consequently, the proliferation of beneficial contingency contracting courses and the standardization of contingency contracting practices across the DoD is still in its infancy.

D. RESEARCH OBJECTIVES

The primary objective of this research was to summarily compare the following four courses: CON 234, CON 334, MN 3318, and the *SMCT*. To this end, we examined

three factors: the relative similarities and differences between the four courses; the extent to which each course benefits CCOs of varying targeted levels of proficiency and credentials; and whether the intent of each course is met in relation to its course description and target audience. The analysis incorporated the use of a benchmark hierarchical model, the YTTM. We categorized curricular learning objectives across the YTTM hierarchy and, by applying a quantitative rating scheme to the model, differentiated the four courses.

A secondary objective of this research was to determine the efficacy of the YTTM as an optimization tool for senior planners and commanders to use to align contracting resources with mission requirements. Its credibility as a personnel structure model has increased since it was conceptually introduced by Yoder in a 2004 working paper; we noted frequent references to the model by academic reports on contract management topics published by the NPS and the Air Force Institute of Technology (AFIT). Additionally, "continued interest in the YTTM [has been] expressed by academics, force planners, and contracting offices from several agencies" (Yoder, 2004, p. 1). The YTTM was used by the Gansler Commission as the conceptual framework to help reshape the Army's organizational structure for acquisition and contracting commands. Nevertheless, little empirical evidence exists to validate the efficacy of the YTTM. However, the objective of this report was not to examine empirical evidence of the model's intended application (i.e., from CSIP to OPLAN to OPORD to execution of a contingency contracting operation). The objective was to demonstrate that, when applied correctly and consistently, the YTTM is an effective tool for differentiating contingency contracting courses and, by extension, resource criteria for authentic contingency contracting operations.

A tertiary objective of this research was to assist the ECC in the fielding and validation of the PAT via a secure web-based platform. Our research efforts in this regard were time-intensive and included conducting market research of web-based test software, designing the user interface, inputting over 1,400 test questions, and analyzing examinee

results from two testing events. The methodology pertaining to this effort and the results of the testing events are presented in Chapter V.

E. RESEARCH QUESTIONS

The primary research question is as follows:

1. How do CON 234, CON 334, MN 3318, and the *SMCT* compare?

While our primary research question directly addresses the overarching theme of the primary research objective described in the previous section, three subsidiary research questions were also considered to better examine the primary research objective. In each case, the YTTM was used to answer the questions. The subsidiary research questions are as follows:

2. To what extent does each course benefit CCOs of varying targeted levels of proficiency?

3. Is the intent of each course met in relation to its course description and targeted audience?

The secondary research objective—to determine the efficacy of the YTTM as a suitable conceptual framework for senior planners and commanders—is not easily measurable because little empirical data exist from its genuine application of planning for contingency contracting operations. However, we attempted to demonstrate that the YTTM is an effective tool for differentiating contingency contracting courses. Accordingly, an additional subsidiary research question is as follows:

4. Is the YTTM, although originally designed as a personnel structure model, an effective tool for comparing contingency contracting educational resources?

Finally, we addressed the tertiary research objective by answering the following two subsidiary questions:

5. How effective is the recommended web-based testing platform in validating the PAT?

6. Is this product a sustainable solution for the ECC?

F. SCOPE AND DELIVERABLES

The scope of the report comprises the following research activities and is described below by chapter.

- In Chapter I, we define the problem statement and research objectives, identify research questions, and develop methodologies that frame our research efforts.

- In Chapter II, we conduct a literature review of relevant doctrine, policies, studies, and academic reports influencing training courses for CCOs.

- In Chapter III, we identify primary and supporting learning objectives for CON 234, CON 334, MN 3318, and the *SMCT*.

- In Chapter IV, we comparatively analyze CON 234, CON 334, MN 3318, and the *SMCT* by utilizing the Yoder Three-tier Model as a tool to differentiate the primary and supporting learning objectives of the courses.

- In Chapter V, we examine the results of our market research for the web-based test software, describe the development of 36 full-length digital exams comprising the PATs developed by Arzu et al. (2010), and conduct a cursory analysis of examinee results and demographic data.

- In Chapter VI, we answer the research questions, propose relevant recommendations, and discuss possible areas for future research.

The work described in Chapter V additionally represents a "deliverable product" that we provided to the ECC. Our efforts facilitated the ECC's ability to validate the draft PAT, thereby improving the effectiveness of the *SMCT*. The work also presented a viable commercial off-the-shelf (COTS) test delivery solution to the ECC that incorporates security, ease of content revision, and myriad analysis tools.

G. LIMITATIONS AND ASSUMPTIONS

We recognized the following limitations:

- The course review does not consider contingency contracting resources other than the four courses (CON 234, CON 334, MN 3318, and the *SMCT*). We recognize that other resources exist (e.g., the *Joint Contingency Contracting Handbook)*; however, the study is limited to the four predominant formal training and educational courses;

- The research does not include surveys or interviews to examine the perceptions of CCOs, DAU faculty, administrators, acquisition professionals, commanders, or other subject matter experts in the contingency contracting field;

- The research does not consider relevant lessons learned identified by CCOs recently deployed to contingency operations;

- No empirical evidence exists from the practical application of the YTTM;

- The administrative and security functions incorporated in the test software for the PAT are limited by the capabilities of the COTS test software; and

- We cannot conduct a sound statistical analysis of the PAT examinee results due to the statistically insignificant number of examinees.

We made the following assumptions:

- The reader of this report understands fundamental contract management practices and processes intrinsic to DoD acquisition;

- CON 234, CON 334, MN 3318, and the *SMCT* incorporate the most relevant contingency contracting learning objectives available;

- CON 234, CON 334, MN 3318, and the *SMCT* learning objectives are unique and, therefore, may overlap each other's course content on the YTTM;

- CON 234, CON 334, MN 3318, and the *SMCT*, as distinct entities, will likely "straddle" the hierarchical tiers of the YTTM;

- Some subjectivity is inherent to the course analysis. We incorporated measures to minimize the nature of subjectivity and considered its influence in its conclusions and recommendations; and

- The COTS test software used by the researchers is a temporary solution for the PAT validation. This premise guided our market research towards a lowest priced technically acceptable (LPTA) approach.

H. RESEARCH METHODOLOGY

The research was conducted in four distinct, yet continuous, phases: literature review, course review, course analysis, and PAT validation. The PAT validation, presented in Chapter V of the report, was the first effort that we completed because it was driven by the requirements and schedule of the ECC. However, it is presented last in the

report because it was not our primary research objective. The course review logically preceded the course analysis, but the PAT validation spanned the other phases as a largely unrelated body of work. The methodology for the four phases of research is described below by section.

Phase I: We conducted a literature review of relevant policy, regulations, joint doctrine, and studies in order to examine the contingency contracting environment and its impact on relevant training courses. The literature review included reports (GAO, CRS, CBO, RAND Corporation), joint publications, the FAR, academic reports, and commissioned studies, such as the Gansler Commission. Our intent during this phase was to develop the requisite knowledge of the current contingency contracting environment in order to determine the effectiveness of each course's content for today's practicing CCOs.

Phase II: We reviewed the content for CON 234, CON 334, MN 3318, and the *SMCT*. Specifically, we identified and defined the primary and supporting learning objectives for each course. This phase was necessary in order to prepare the material for analysis using the YTTM.

Phase III: We applied the YTTM to the four courses. Specifically, we employed a quantitative rating scheme that represents the model's hierarchical nature with respect to function, education, proficiency, and management level. The supporting learning objectives for each course were assigned a numerical value; each primary learning objective's rating was determined as an average value of its supporting learning objectives. Each course was then "positioned" along the YTTM according to the composite results of its primary learning objectives. We nominally expanded the YTTM to four tiers in order to provide a greater degree of flexibility for rating the learning objectives. We considered the nature of subjectivity in rating the learning objectives; our measures to minimize subjectivity are described in Chapter IV.

Phase IV: We conducted market research of web-based test building platforms, built security and analysis parameters within the selected platform, input questions into the software, coordinated two web-based testing events, and analyzed examinee results.

The market research for the COTS solution comprised a robust search of Internet sites, solicitation of expertise from information technology and testing administration personnel throughout the NPS and the DoD, and interviews with test software vendors. We selected the product in accordance with a LPTA acquisition strategy. Following acquisition, we completed administrative requirements and data entry in accordance with guidance from the ECC. The ECC proctored two testing events in June 2010. Subsequently, we conducted a cursory analysis of the examinees' results and demographic data.

I. RESEARCH BENEFITS

We recognized the following consequential benefits that this body of work may yield.

- This body of work may provide senior planners and operational commanders with an academic assessment of the four most prevalent and relevant contingency contracting courses. The analysis presented in Chapter IV may provide leaders with the objective guidance to assist them in developing individual and unit training plans. Specifically, training needs could be aligned with our course assessment with respect to a CCO's level of targeted proficiency, experience, and functional requirements, thereby optimizing the training resources available to a unit's training department or the individual's mentor. The course analysis additionally validates that the prescribed learning objectives meet the intent for which a particular course was designed.

- Our application of the YTTM in this research may broaden its recognition as an effective contingency contracting operational planning and execution tool. The research, through demonstration that the YTTM is an effective tool for differentiating contingency contracting courses, may improve the model's recognition as a robust instrument that should be applied before and during joint contingency contracting operations involving military and nonmilitary agencies. The research may also establish the YTTM as an integrative planning and execution tool for exclusively assessing an organization's contracting skill sets and targeted resources.

- Our research and administrative efforts will provide the ECC with a secure web-based testing platform that will facilitate the validation of the PAT. This COTS product, a temporary approach that we proposed to the ECC following extensive market research, provides an economical test-proctoring service for the ECC until the command can conduct a detailed

analysis of alternatives to procure a more permanent solution. The low-cost testing software will allow the ECC to immediately disseminate and analyze the validity of the initial PAT to determine if it fairly assesses the knowledge base of examinees who have studied the *SMCT (51C)*. Additionally, feedback from the initial PAT results may reshape the content and structure of the *SMCT (51C)*, which is still in draft format.

- This research project may advance the joint partnership between the NPS and the ECC. This undertaking is the second joint venture between the ECC and the NPS—the first produced the initial PAT (Arzu et al., 2010). We anticipate future joint projects between NPS military students who are assigned to the acquisition and contracting curricula (particularly Army officers) and the rapidly expanding, but under-resourced, ECC. Mutually beneficial research may propagate from the two research projects, specifically from their suggested areas for further research.

J. ORGANIZATION OF THE REPORT

Chapter I, Introduction, provides a background for the four contingency contracting training courses that are examined in the report. This chapter presents the research questions and the methodology for conducting the research and identifies limitations and assumptions that affect the research conclusions. Additionally, it describes the purpose, objectives, scope, and benefits of the research. Chapter II, Contingency Contracting, is a literature review that provides a brief history of contingency contracting operations and examines current regulations, joint doctrine, and legislation. This chapter additionally describes problems and challenges within the contingency contracting environment, presents more detailed background of the four courses and the institutions that manage them, and discusses the YTTM in greater detail. This chapter reviews commissioned studies, joint publications, academic reports, and federal regulations to describe the relevant information. Chapter III, Course Review, presents course content, by primary and supporting learning objectives, for CON 234, CON 334, MN 3318, and the *SMCT*. Chapter IV, Course Analysis, describes in greater detail the methodology that we used for the analysis, and it reports the results of the course analysis. Chapter V, PAT Validation, describes our support efforts to the ECC including market research, test construction, administrative oversight, and examinee test result analysis. Chapter VI, Conclusion and Recommendations, presents our responses to

the research questions introduced in Chapter I, provides recommendations, and proposes areas for further research.

K. SUMMARY

Chapter I provided a background for the four contingency contracting training courses that will be examined in the report. It presented the research questions, the methodology for conducting the research, and identified the limitations and assumptions that may potentially affect our conclusions. Additionally, it described the purpose, objectives, scope, and benefits of the research. Chapter II provides a brief history of contingency contracting operations and examines current regulations, joint doctrine, and legislative enactments. This chapter additionally describes challenges in modern contingency contracting, discusses the organizations that created and manage the four educational courses, and presents the YTTM in greater detail.

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II. CONTINGENCY CONTRACTING

Barring a complete overhaul of the DoD's present human capital strategy, warfighters will inevitably depend on contractors to conduct future missions across the range of military operations. This dependence has been particularly manifested in post-9/11 combat operations. The DoD reported to Congress in April 2008 that the missions in Iraq and Afghanistan were the first major contingency operations to reflect the full impact of the shift to heavy reliance on contractor personnel for critical support functions in forward operating areas (Office of the Secretary of Defense [OSD], 2008). Yet despite America's long history of contingency contracting operations and its ever-increasing reliance on contracted support services in recent wars, the DoD has been slow to enact standardized contingency contracting processes and the training resources to champion them on behalf of its acquisition professionals. The Gansler Commission of 2007, and recent complementary initiatives across the DoD, finally brought to light the undesirable consequences of managing contingency contracting operations as a "pick-up game," so labeled by one Army general to the Gansler Commission (Gansler et al., 2007, p. 41). As the U.S. military completes its combat missions in Iraq and Afghanistan on a timetable predicated by the current administration, it may be prudent to exploit lessons learned from modern contract management debacles to enable success in future contingency contracting operations.

The Deputy Under Secretary of Defense for Logistics and Materiel Readiness testified to Congress in 2008 that the structure of the U.S. military has been adapted to an environment in which contractors are an indispensable part of the force (GAO, 2010). The preceding statement points to contingency operations in Iraq, Afghanistan, and the Balkans—the three largest operations of the past 15 years—where contractors comprised approximately 50% of the DoD's combined contractor and uniformed personnel workforce. (Figure 1 shows the relevant percentages, as of August 2008.) The DoD's civilian personnel are excluded from the count because, as of September 8, 2009, their figures represented less than 1% of the total force in each of the three operations (CRS,

2010b). Additionally, Figure 2 illustrates the number of contractor personnel and troops in the USCENTCOM theater between March 2008 and September 2009.

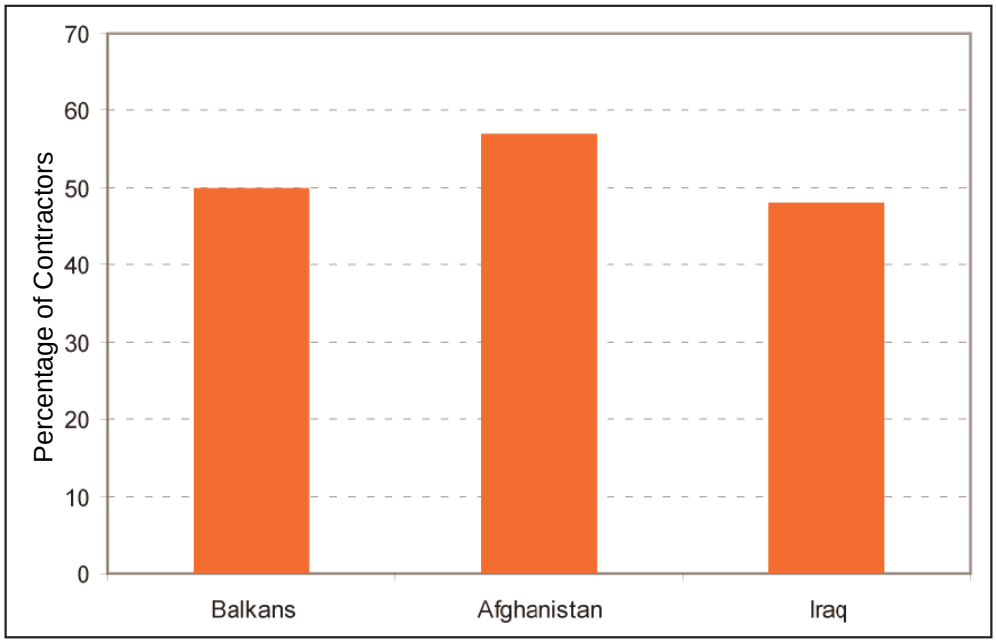

Figure 1. ***Contractors as Percentage of Workforce in Recent Operations (CBO, 2008, p. 13)***

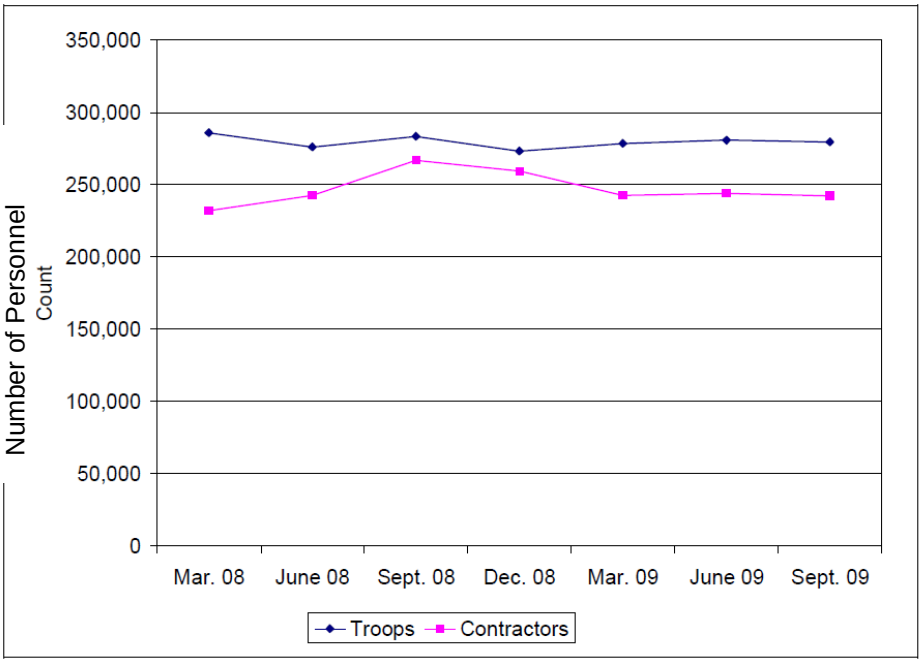

Figure 2. ***Number of Contractors in USCENTCOM vs. Troop Levels (CRS, 2010b, p. 6)***

The incorporation of contractors within the U.S. military's force structure during conflicts of the previous 15 years, and throughout the history of contingency operations, has proven operationally beneficial. Specifically, the contractor workforce has bridged the widening gap between the dynamic requirements of the military's operational commitments and the DoD's limited capacity to execute contingency missions under an archaic human capital strategy. The U.S. military, in its effort to augment mission readiness through contractor support, exploits several enabling attributes that are inherent to the private sector, including rapid deployment of capabilities by leveraging existing service industries and their large pools of human resources, realizing efficiencies through market competition and economies of scale, and tapping existing technologies and corporate knowledge.

The CRS (2010a) contends that hiring contractors only as needed may be cheaper in the long run than maintaining a permanent in-house capability. The true financial implications of hiring contractors versus resourcing capabilities from within are still unclear; various agencies continue to examine available data from the last decade. When considering overhead costs, training, employee benefits, technological and economic assumptions, and risk factors between the public and private labor pools, the conclusions become ambiguous. However, the affiliation between warfighter and contractor will likely continue due to several factors: contractors can be used to perform noncombat activities, which frees uniformed personnel to perform combat missions; contractors can be quickly deployed to provide critical support capabilities when necessary because they can be hired faster than the DoD can develop an internal capability; contractors can provide expertise in specialized fields that the DoD may not possess; and contractors can be hired when a particular need arises and subsequently let go when their services are no longer needed. For example, in 2008, the Army had a contract for 11,000 linguists because the DoD did not have the number of linguists needed (GAO, 2008b).

A. BRIEF HISTORY OF CONTINGENCY CONTRACTING OPERATIONS

Throughout history, the U.S. military has utilized contractors to provide direct support to military forces engaged in contingencies spanning the range of military operations from major theater wars to humanitarian relief missions. During the Revolutionary War, for example, the Continental Army hired wagon drivers and contracted with beef suppliers; the support also included clothing, weapons, and basic engineering services (Thibault et al., 2009). Contracted services also sustained operations during the Civil War when contracting officers, then called quartermasters, were directly assigned to Army divisions conducting combat operations (Arzu et al., 2010). During World Wars I and II, forward-deployed contractor personnel played a diminished role because supplies and provisions were primarily shipped from the U.S. mainland to the respective theaters of war by contracting officers who remained stateside (Kirstein, 2003). This arrangement proved both slow and inflexible in supporting the warfighter because goods often arrived long after the need for them had passed, resulting in severe shortages, or surpluses in some cases, while services were often limited to the innate capabilities of the military's fielded units.

Contingency contracting operations matured appreciably during the Korean War. CCOs leveraged local Korean and Japanese vendors to provide extensive support to the war effort, thereby reducing the need for supply shipments from the U.S. and improving base operations support by utilizing host nation resources and labor. The Korean War marked the first time that the U.S. launched an ambitious local procurement agenda to support a contingency operation, and the effort yielded a flexible supply chain that was responsive to the warfighters' needs (Kirstein, 2003). Conversely, contingency contracting actions during the Vietnam conflict were largely subdued. Arzu et al. (2010) attribute the dismal contracting circumstances to the fact that the U.S. Congress declined to declare the Vietnam situation a formal war, resulting in inadequate political and fiscal resources to broaden the contracting landscape. However, contracted support did play an indispensable role in the Vietnam conflict, albeit not akin to the magnitude of local procurement programs seen in the Korean War.

During the post-Cold War 1990s, the DoD implemented substantial logistics and support personnel reductions, leading to increased reliance on contractor support. By this time, contractor-supported services had become a mainstay in U.S. military contingency operations. The decade observed a remarkable increase in contract actions, which collectively grew more complex despite a decreasing number of acquisition personnel to manage the workload. Operations Desert Storm and Desert Shield, which occurred at the precipice of the DoD cuts, were augmented by unprecedented contracting support to the warfighters (Kirstein, 2003). The CRS (2010a) notes that the DoD disposed of many in-house capabilities prior to the U.S. engagement in the NATO peacekeeping mission in the Balkans, forcing the DoD to hire more contractors to fulfill the new shortfalls. By any measure, the dawn of the U.S. military's inordinate dependence on contractor-provided services for contingency operations was observed during these nascent years of the 1990s.

Today, over 250,000 contractor employees span the Middle East and Southwest Asia, providing logistics services to U.S. forces in support of combat missions, stability operations, peacekeeping missions, and humanitarian relief efforts. The services provided include base operations support (e.g., food and housing), communication services, tactical and nontactical vehicle maintenance, interpreters who accompany military patrols, weapons systems maintenance, intelligence analysis, port activities, ammunition accountability and control, parts and equipment distribution, and private security. For example, in Kuwait, Iraq, Qatar, and Afghanistan, the U.S. Army uses multiple contractor firms to refurbish and repair a variety of military vehicles for its warfighters (GAO, 2010). Figure 3 illustrates the types of contracted services (by relative share) supporting U.S. military operations, for instance, in Iraq.

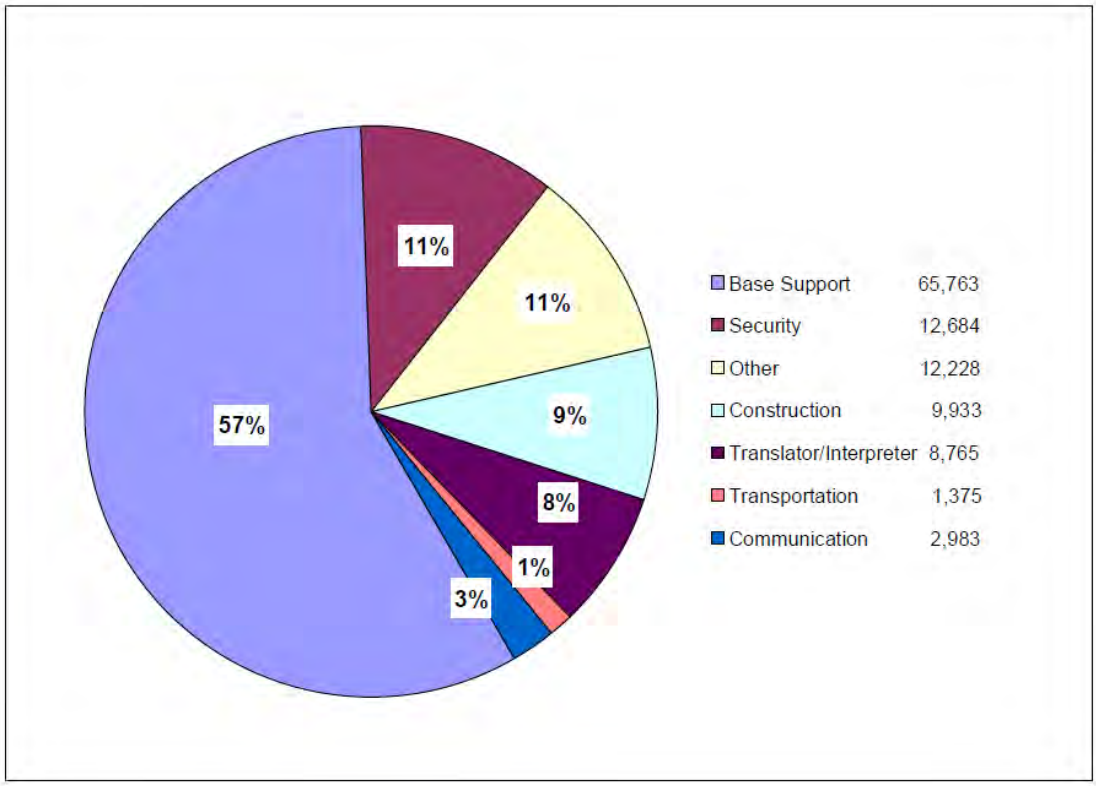

Figure 3. ***DoD Contractor Personell by Type of Service Provided in Iraq (CRS, 2010a, p. 8)***

The DoD's contingency contractor workforce is comprised largely of non-U.S. citizens. Tables 1 and 2, for example, report international profile distributions for the DoD's contractor employees in Iraq and Afghanistan as of March 2010. By design, contingency contracting operations should leverage local and regional labor sources to the most practical extent possible, while weighing security issues, diplomacy, feasibility, and overall responsiveness to the warfighters' needs.

Table 1. ***DoD Contractor Personnel in Iraq (CRS, 2010b, p. 9)***

	Total Contractors	U.S. Citizens	Third-Country Nationals	Local Nationals
Number	95,461	24,719	53,549	17,193
Percent of Total	100%	26%	56%	18%

Table 2. ***DoD Contractor Personnel in Afghanistan (CRS, 2010b, p. 12)***

	Total Contractors	U.S. Citizens	Third-Country Nationals	Local Nationals
Number	112,092	16,081	17,512	78,499
Percent of Total	100%	14%	16%	70%

The ratio of contractors to military personnel in the USCENTCOM theater is roughly 0.92:1 effective March 2010, as shown in Table 3. Table 3 neither specifies the number of contractors and troops located outside of Iraq and Afghanistan, nor USCENTCOM personnel deployed to non-USCENTCOM locations (e.g., Philippines, Djibouti, Egypt).

Table 3. ***USCENTCOM Contractor Personnel to Troops Comparison (CRS, 2010b, p. 5)***

	Contractors	Troops	Ratio
Iraq Only	95,461	95,900	1:1
Afghanistan Only	112,092	79,100	1.42:1
CENTCOM AOR*	250,335	272,260	.92:1

*Refers to USCENTCOM area of responsibility

The evolution of contingency contracting since the Revolutionary War is a chronological reflection of the types of operations in which the U.S. has participated; its military's force structure; and the operating environments' local and regional political, economic, and security circumstances. Additionally, the prevailing contingency contracting practices during each operation were steered by America's overarching legislative, regulatory, and fiscal boundaries of the time. Figure 4 identifies the evolution of contractor-provided services on which U.S. combat forces have grown to rely. Figure 4 also demonstrates the increasing complexity of contracted services over time and the ratio of contractors to military personnel during each conflict.

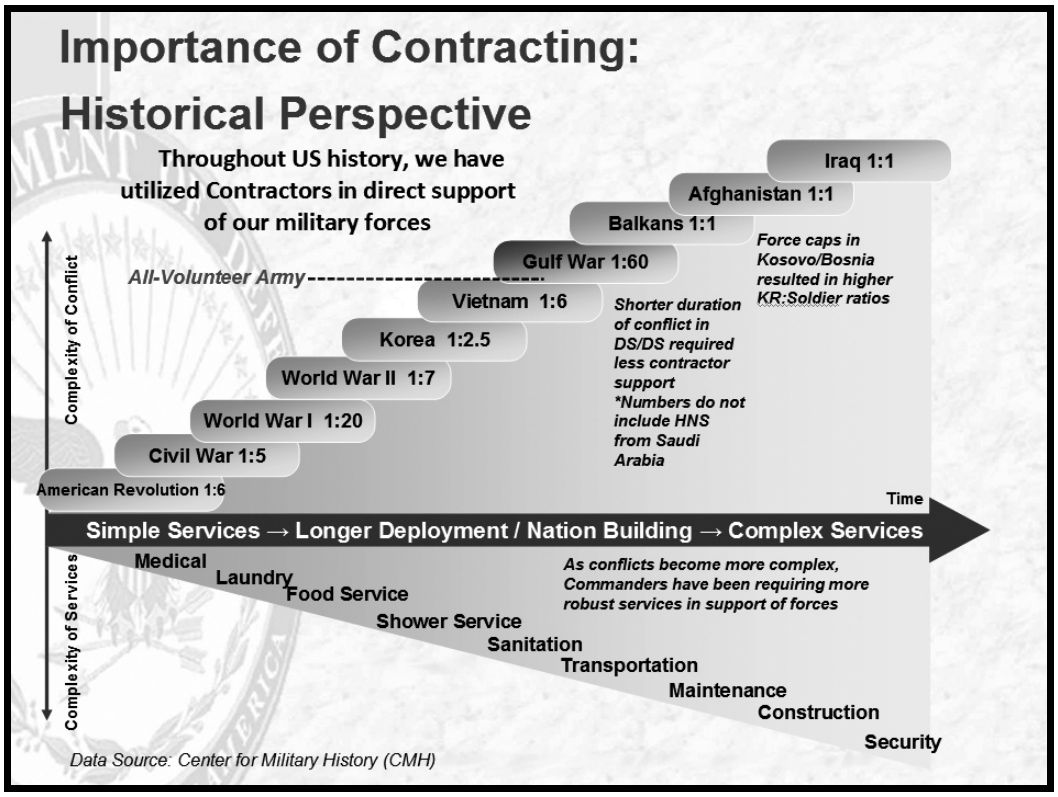

Figure 4. ***Evolution of Contracted Support in U.S. Military Operations (Thibault et al., 2009, p. 21)***

To be sure, advances in warfare and technology have expanded the functions and responsibilities of contractors in contingency operations and the U.S. military's reliance on these contracted services. However, the DoD's ability to manage contracts for these contemporary requirements has been historically inadequate. Barbaris and Callanan (2008) identified four key areas that shaped (during the previous 15 years) the present contingency contracting environment. These areas are (a) the changing war environment, (b) the increased contracting workload and complexity of contract actions, (c) the increased responsibility of acquisition professionals, and (d) the declining capability of the acquisition workforce. History demonstrates that these key areas will change as a function of warfare type, technology, force structure, global economic climate, diplomatic policies, and regulatory contracting parameters.

The Commission on Wartime Contracting in Iraq and Afghanistan identified a number of institutional factors that led the government to its current situation, in which contractor support has become critical to contingency mission success. These factors include

- lack of adequate contingency planning in advance of operations,
- lack of federal employees with the appropriate skills to perform the services,
- reduction of the military force structure and limits on the total number of military personnel authorized by Congress,
- requirements process for deciding the number of positions needed in the force structure, and
- relative ease of contracting for a service compared to the lengthy process of hiring civilian personnel. (Thibault et al., 2009, p. 21)

Given these factors, it is extraordinary that until recently, contingency contracting was done on an ad hoc basis and was inadequately incorporated into the doctrine and culture of the U.S. military. The combination of these observations and a regulatory environment that often conflicted with contracting requirements inherent to contingency operations exacerbated the DoD's logistical support system, which implicitly relied on contingency contracting actions to outfit the warfighters' requirements. Consequently, contingency contracting has been disregarded as a discrete proficiency within the DoD's acquisition workforce. The standardization of contingency contracting processes across the DoD and effective courses to inculcate best practices among the CCO corps is still in its infancy.

B. THE CONTINGENCY CONTRACTING ENVIRONMENT

The contingency environments in which contracted services are required are typically characterized by some of the following conditions: enemy warfare (regular and irregular tactics), terrorist threats, social norms and customs that are markedly different from those practiced in western cultures, underdeveloped transportation infrastructures, immature industrial and economic bases, fractured governance, and corruption.

Moreover, hostilities and security threats may break out at any time during contingency operations. Therefore, the CCO is obliged to rapidly develop and preserve a robust contracting environment to neutralize the adverse effects of hostilities when they do occur.

The *Joint Contingency Contracting Handbook* (Director, Defense Procurement and Acquisition Policy [DPAP], 2008) identifies the following unavoidable problems that occur when hostilities break out during contingency operations:

- Contractor employees may not report for work, may abandon the job site, or may refuse to drive vehicles in certain areas.
- Vendors and shops may close during hours of darkness or cease operations.
- The threat of snipers, terrorists, and enemy action against the CCO while traveling in the local community increases significantly (p. 107).

The more mature the contingency contracting operation, the better support the CCO will be able to provide the warfighter. Accordingly, CCOs must consider the expected level of maturity when planning for contingency contracting operations and bring with them the appropriate contracting "tools" based on that assessment.

The *Joint Contingency Contracting Handbook* defined an immature contracting environment as "an area with little or no built-up infrastructure and few vendors. Of the available vendors few, if any, have previous experience contracting with the U.S." (DPAP, 2008, p. 107). For example, in the wake of the massive January 2010 earthquake that devastated Haiti, Army CCOs were tasked with coordinating contracting actions for life-saving logistical, medical, and engineering services in a country already plagued by an underdeveloped infrastructure, despondent industrial and economic bases, and a fractured government. Yoder (2004) stated that "underground networks for food, shelter, safety and security, and a loss of traditional motivators to which many domestic businesses are accustomed may create a potentially difficult situation" (p. 8). Another example of an immature contracting environment is the Horn of Africa in countries such as Djibouti, where the U.S. military's continuous presence since 2002 has supported counterterrorism operations and diplomatic missions.

The *Joint Contingency Contracting Handbook* defines a mature contracting environment as one characterized by

> A sophisticated distribution system that can rapidly respond to changing requirements and priorities; sufficient vendors who can comply with FAR requirements in order to meet contingency contracting demands and have previous experience contracting with the US government; and, in the best case, where there is an existing DoD contracting office or structure in place. Examples of mature contracting environments include Kuwait, Saudi Arabia, Qatar, Korea, and Western Europe. (DPAP, 2008, pp. 106–107)

Yoder (2003) added that "mature [contingency contracting] environments likely have several, or all, of the following: host-nation support agreements; financial systems able to support complex transactions; robust transportation networks; and business capacity, capability, and willingness" (p. 9).

Recognition of, and adherence to, a contract "rule of law" by local and regional vendors also influences the contingency contracting environment. To be binding, a contract must have six elements: offer, acceptance, consideration, execution by competent parties, legality of purpose, and clear terms and conditions (Cibinic & Nash, 1998). "The CCO may find that these [six] universal parameters are subject to varied interpretation; therefore, they may be valued as tenets in a significantly different manner than what may be considered customary by domestic and developed international standards" (Yoder, 2004, p. 4). Therefore, the lack of credible contractors in some contingency environments may exacerbate circumstances in an already challenging, and often austere, situation.

1. Contingency Contracting Defined

Joint Publication 4-10, *Operational Contract Support* (Chairman of the Joint Chiefs of Staff [CJCS], 2008) defines contingency contracting as the following:

> Contingency contracting is the process of obtaining goods, services, and construction from commercial sources via contracting means in support of contingency operations. Contingency contracting is a subset of contract

> support integration and does not include the requirements development, prioritization, and budgeting processes. … Contracts used in a contingency include theater support, systems support, and external support contracts. (CJCS, 2008, pp. I-2, I-3)

The *Joint Contingency Contracting Handbook* (DPAP, 2008) defined contingency contracting as "direct contracting support to tactical and operational forces engaged in the full spectrum of armed conflict and noncombat contingency operations, both domestic and overseas" (p. 99).

There are some nuances in each definition. Joint Publication 4-10 suggests that requirements determination and prioritization are not elements of contingency contracting. This contradicts the significance of integrative contract support planning in advance of contingency operations, which is advocated by the YTTM, the Commission on Wartime Contracting in Iraq and Afghanistan, and Presidential Decision Directive (PDD) 56. The *Joint Contingency Contracting Handbook* limited its definition to "direct contracting support," which does not clearly describe what constitutes the entire contingency operation's supply chain (i.e., which contracting actions and personnel are "directly" contributing to the logistical support at the local, theater, or multi-theater levels). To complicate matters, the Gansler Commission (Gansler et al., 2007) uses the term *expeditionary* rather than *contingency* throughout its report because it believes the term better defines national defense and national security missions in a broader sense.

However, in most cases, the contingency contracting definitions that we encountered during the literature review are generally congruent with respect to the fundamental act of directing contracted support for contingency operations. The semantic distinctions above are less important to the warfighter than the assurance of mission success through implementation of standardized, effective, and flexible contingency contracting processes. Contingency operations, and their phases, are described in the next two sections.

2. Types of Contingency Operations

Likewise noted in the previous section on contingency contracting definitions, we observed nuances between literature describing types of military contingency operations.

Yoder (2004) described a contingency operation as "an event which requires the deployment of military forces in response to natural disasters, terrorist or subversive activities, collapse of law and order, political instability, or other military operations" (p. 5).

The *Joint Contingency Contracting Handbook* identified the following four types of contingency operations that contracted services may directly support: "major theater wars, smaller-scale contingencies, noncombat contingency operations, and domestic disasters or emergency relief" (DPAP, 2008, p. 99). The handbook additionally states that contingency operations may include military training exercises, routine installation and base operations, and systems or inventory control point contracting within the continental U.S. (CONUS) and outside the continental U.S. (OCONUS). Yoder (2003) added that "[contingency operations] may exist across the full spectrum of war and during military operations other than war (MOOTW)…including nation building, stability operations, extraction and/or evacuation operations, and peace-keeping operations" (p. 8). Joint doctrine has since disregarded the term *MOOTW* and has encompassed the concept within a range of military operations, or *ROMO* (i.e., spanning major theater wars to humanitarian relief missions). However, Yoder's treatment of contingency operations throughout his publications and his application of contingency contracting principles remains applicable.

Joint Publication 3-0 Joint Operations (CJCS, 2010) refered to contingencies in the context of "crisis response and limited contingency operations" (p. VI-1). Within the section of the document about ROMO, it describes crisis response and limited contingency operations in the following way:

> Typical crisis response and limited contingency operations include noncombatant evacuation operations, peace operations, foreign humanitarian assistance, recovery operations, consequence management, strikes, raids, homeland defense operations, and civil support operations. (CJCS, 2010, p. xxiv)

The publication continues its discussion on crisis response and limited contingency operations in Chapter I, Strategic Context, as follows:

> A crisis response or limited contingency operation can be a single small-scale, limited-duration operation or a significant part of a major operation of extended duration involving combat. … A limited contingency operation in response to a crisis includes all of those operations for which joint operation planning is required and an OPLAN or OPORD is developed. The level of complexity, duration, and resources depends on the circumstances. Included are operations to ensure the safety of American citizens and U.S. interests while maintaining and improving U.S. ability to operate with multinational partners to deter the hostile ambitions of potential aggressors. (CJCS, 2010, p. I-9)

The publication neither expands on, nor further defines, its description of contingency operations beyond the above text. The document simply presents the concept of a contingency operation as one of many possible military events that may occur within the overarching framework of the ROMO.[5] This restrained reference to contingency operations obfuscates the fundamental notions that most military operations are comprised of contingency operations and that effective contingency contracting is vital to the success of contingency operations. Joint Publication 3-0 often speaks to advance planning for OPLANs and OPORDs across the full ROMO; yet, the document seldom discusses contracted logistic support and does not reference CSIPs (CJCS, 2010). Conversely, the Joint Publication 4-10, *Operational Contract Support*, extols CSIPs as an integral contribution to OPLANs and OPORDs (CJCS, 2008). Therefore, we conclude that contingency operations are pervasive across the entire ROMO, from major theater wars to humanitarian relief missions, and that contingency contracting is a fundamental, but often neglected, element of U.S. military operations.

3. Declared vs. Nondeclared Contingency Operations

The *Joint Contingency Contracting Handbook* states that in accordance with Title 10 U.S. Code (U.S.C.) §101(a)(13), a declared contingency operation of the DoD may be

- designated by the Secretary of Defense when members of the armed forces become involved in military actions against an enemy of the U.S., or

[5] Joint Publication 3-0 contends that "military operations vary in size, purpose, and combat intensity within a range that extends from military engagement, security cooperation, and deterrence activities to crisis response and limited contingency operations and, if necessary, major operations and campaigns" (CJCS, 2010, p. I-7).

- declared by the President or the Congress when members of the uniformed forces are called to active duty (a reserve component mobilization) under title 10 U.S.C., or any provision of law during a declared war or national emergency. (DPAP, 2008, p. 103)

The formal declaration of a contingency operation is significant for a CCO. It triggers title 10 U.S.C. §2302(7) which, among other actions, modifies the following regulations:

- Increases the micro purchase threshold from $3,000 to CONUS = $15,000, OCONUS = $25,000;
- Increases the Simplified Acquisition Threshold (SAT) from $100,000 to CONUS = $250,000, OCONUS = $1,000,000;
- Removes the requirement to synopsize contract requirements in accordance with FAR 5.2; and
- Eases provisions to waive the Competition in Contracting Act (CICA). (DPAP, 2008, pp. 99–100)

Under officially declared contingencies, many provisions of the FAR and most service regulations and policies are relaxed, streamlined, or even eliminated, potentially making the contracting processes of supporting operations in contingent environments more efficient and effective (Yoder, 2004). The FAR provides little specific guidance for operating under declared contingencies; however, it includes some general provisions as stated in Subpart 18.2—Emergency Acquisition Flexibilities:

> (b) Micro-purchase threshold. The threshold increases when the head of the agency determines the supplies or services are to be used to support a contingency operation.
>
> (c) Simplified acquisition threshold. The threshold increases when the head of the agency determines the supplies or services are to be used to support a contingency operation.
>
> (d) SF 44, Purchase Order-Invoice-Voucher. The normal threshold for the use of the SF 44 is at or below the micro-purchase threshold. Agencies may, however, establish higher dollar limitations for purchases made to support a contingency operation.

(e) Test program for certain commercial items. The threshold limits authorized for use of the test program may be increased for acquisitions to support a contingency operation. (FAR, 2005, p. 18.2-1)

Nondeclared contingency operations comprise all contingency operations not previously described. The *Joint Contingency Contracting Handbook* stated that "in a nondeclared contingency operation, the SAT threshold is $100,000, except for acquisitions of supplies or services that, as determined by the head of the agency, are to be used to support a contingency operation or to facilitate defense against or recovery from nuclear, biological, chemical, or radiological attack" (DPAP, 2008, p. 104).

4. Operational Phases

Joint Publication 4-10, *Operational Contract Support* (CJCS, 2008) describes the manner in which contracting support generally shifts within each operational phase. The phases include mobilization and initial deployment; joint reception, staging, onward movement, and integration (RSOI) and employment of forces; sustainment; and, finally, redeployment. Contracting support within these four stages, according to the publication, are generally characterized by the types of services and items purchased and the types of contracting mechanisms used to support specific force requirements. The phases described in the publication are analogous to the processes discussed in Joint Publication 3-35, *Deployment and Redeployment Operations* (CJCS, 2007b), which are identified as deployment, employment, sustainment, and redeployment.

a. Mobilization and Initial Deployment

This is normally the first 30-45 days of a deployment and is characterized by an extremely high operating tempo, confusion and controlled chaos. The CCO's first priority is to respond to basic life support requirements. … During this phase, CCOs may find themselves in the undesirable position of being the requestor, approving official, certifying officer, and transportation office for deliveries. Detailed planning may preclude some of these additional duties; however, physical limitations on the number of support personnel deployed in the early stages of a contingency will require a high degree of flexibility on the part of the CCO. … The actual mix of contracting or other support mechanisms…will be based on risk, reliability, and availability of these various sources of support. … It is imperative that prior to the main body deployment, the supported

> [COCOM] should ensure that theater support contracting and civil augmentation program (CAP) management organizations are deployed as part of the advanced echelon so that the CCO may [rapidly] set up [initial] required life support functions. Contracting at this time of the operation is generally focused on expediting contract award. (CJCS, 2008, p. III–19)

b. Joint RSOI and Employment of Forces

> During this phase, contracting personnel (military and civilian) and contractor personnel will continue to arrive, though not necessarily at a rate commensurate with the number of troops to be supported. In major operations, a mix of theater support and external support contracts, including [CAP] and Defense Logistics Agency (DLA) prime vendor contracts may be extensively utilized. (CJCS, 2008, pp. III–19, 20)

Yoder (2003) gave the following examples as likely contracting activities that may occur within this phase: "construction and infrastructure, habitability, quality of life improvements, establishing a solid and reliable vendor base, and ensuring contracting control and administration" (p. 12). Joint Publication 4-10 continues its description of this phase, noting that acquisition professionals should develop their contracting processes commensurate with a more mature contingency environment.

> During this period, a requirements requisitioning controls process will be established. Theater support contracting efforts will still be heavily involved with the acquisition of basic troop support requirements that are not covered by CAP task orders or other means of support. Contracting should move [towards] more long-term contracting arrangements such as…Solicitation/Contract/Order for Commercial Items or blanket purchase agreements. (CJCS, 2008, p. III–20)

c. Sustainment

> This stage is characterized by a focus on file documentation, cost reduction, and establishing business efficiencies. The CCO's role may change from a strict focus on requirements fulfillment to [that of a] business advisor. [The COCOM] should…move away from cost-plus award-fee CAP task orders and emergency procurement towards long-term contracts, such as indefinite delivery/indefinite quantity or requirements contracts. Requirements will become more defined and consolidated and the use of performance based contracting methods will be maximized when possible. The transition of CAP task orders to long-term theater support contracts is dependent on specific mission factors such as threat-level and the availability of a reliable, local commercial

> vendor base. [CCOs] should have formal processes and controls in place to ensure accountability for all contractor acquired government owned (CAGO) equipment and government furnished equipment (GFE); begin settling contractor claims; make arrangements to ensure final payments are made; and develop contract termination procedures. (CJCS, 2008, p. III–20)

Yoder (2003) added that "at this phase, some initially immature environments may exhibit attributes of a mature environment—but not always" (p. 13). He also suggests that the following improvements be put into effect during the sustainment phase: increase competition in the vendor base, shift from "push" to "pull" contracts for items and services not supplied from within the theater, and enhance and refine internal controls.

The final operational phase identified in Joint Publication 4-10, redeployment, is often the most neglected. Senior planners and operational commanders, driven by the necessity to rapidly prepare for new military operations, have historically eschewed the consequences of downgrading acquisition resources in support of dwindling troop requirements.

d. Redeployment

> This phase is characterized by significant pressure and urgency to send the troops home. … The CCO will be required to terminate and close out existing contracts and orders. Ratifications and claims must be processed to completion. Contracting for life support services and base operations must continue until the last troop leaves. During this stage, [CCOs] should ensure accountability and begin disposition of CAGO equipment and GFE. When a follow-on force is required, the CCO must prepare contracts and files for delegation or assignment to the incoming contracting agency. … To the extent any contracts remain open, …arrangements should be made to transition them to successor organizations such as permanent organizational elements. (CJCS, 2008, pp. III–20, 21)

Yoder (2003) advised that contracting operations supporting this phase "should complement the overall exit strategy…while [sustaining] continued priority for basic life support and security" (p. 14). The level of effort required for this phase is often underestimated because the disposition of material and closeout of contracts—like those

comparable actions required during the disposal phase of large defense procurement programs—represent a trivial percentage (in cost and time) of the entire contingency contracting operation. Yet, the rigorous execution of redeployment contracting actions should be no less significant than the contracting responsibilities that comprise the prior three operational phases.

5. Advance Planning

The literature review conducted for this report uncovered an overarching theme that, until recently, was largely absent from the contingency contracting environment: advance planning. The lack of integrative planning was identified by the Gansler Commission's report, and similar studies, as a fundamental reason that the DoD has failed to effectively and efficiently administer contracting actions in the austere environments where U.S. forces conduct contingency operations. The previous three sections discussed the types of contingency operations that contracting supports, declared vs. nondeclared contingencies, and the doctrinal phases of military operations. Advance planning, as the term suggests, should precede the commencement of contingency contracting operations to the greatest extent practicable (i.e., before initial deployment of military forces). The topic of advance planning is briefly addressed here to emphasize its significance in joint policy and its significance in the application of the YTTM.

Joint Publication 4-10, *Operational Contract Support* (CJCS, 2008), called for the DoD to "identify contract support requirements as early as possible, to ensure that the military receives contract support at the right place, at the right time, and for the right price" (CJCS, 2008, p. III–11). *Joint Publication 3-33, Joint Task Force Headquarters* (CJCS, 2007a), directed the COCOM "to identify operational contract support requirements as well as develop plans to obtain and manage contract support and include them in OPLANs, OPORDs, or fragmentary orders (FRAGO)" (p. C-7). Finally, Joint Publication 3-35, *Deployment and Redeployment Operations* (CJCS, 2007a), stated that "contracting support is another force multiplier and…should be planned and coordinated in advance of an actual deployment" (p. VI-9). It is clear from these three sources that advance planning for contingency contracting operations is not only essential, but also

directed. While joint publications do not supersede service-specific doctrine, they provide overarching guidance that influences the interoperability of multi-service and multi-agency missions, and presently most military operations are joint in nature.

Considering the monumental reforms that have recently affected the joint contracting environment, mission planners should consider the YTTM, which is a hierarchical tool that can assist joint staffs in aligning theater-wide contracting support with a COCOM's operational objectives. The model enables integrative planning in support of contingency contracting operations. The YTTM can facilitate the development of CSIPs, and it can authenticate proposed contract support for OPLANs and OPORDs. However, its premise is that it is most effective when joint staffs (i.e., logisticians and contracting professionals) utilize it prior to initial deployment, which is the essence of advance planning.

Given the above discussion on advance planning, we recognize that these joint publications do not incorporate a *planning* operational phase that precedes the *mobilization and initial deployment* phase. While the three joint publications cited in this section mandate advance planning prior to contingency contracting operations, the requisite assurances of its implementation are merely implied without designating these responsibilities within a formal operational phase. The lack of a prescribed planning agenda increases the risk of failing to deliver effective contract support to the warfighters. Joint doctrine should enhance its treatment of the planning element for contingency contracting operations because contracted services have become an indispensable element of the U.S. military's capability in most contingency environments.

C. PROBLEMS IN MODERN CONTINGENCY CONTRACTING ENVIRONMENTS

This section identifies several problems and challenges within modern contingency contracting environments. Although the issues that we discuss here have all been brought to light in the findings and recommendations of the Gansler Commission, none of the research is exclusive to that report; the topics have been critically examined in other studies as well, including GAO, CRS, and academic reports (e.g., GAO, 2007;

CRS, 2010a; Luse, Madeline, Smith, & Starr, 2005). Our intent in presenting these issues is to develop the requisite background knowledge of the current contingency contracting environment in order to determine the effectiveness of available training resources for today's practicing CCOs.

1. Downsized Acquisition Workforce

A recent GAO report (2010) stated that "having the right people with the right skills to oversee contractor performance is crucial to ensuring that the DoD receives the best value for the billions of dollars it spends annually on contractor-provided services that support contingency operations" (p. 6). However, numerous studies confirm that the DoD does not have a sufficient number of acquisition professionals, particularly at deployed locations, to ensure that taxpayer dollars are spent in a judicious manner (CRS, 2010a). For example, in her testimony before Congress, the GAO's managing director of Acquisition and Sourcing Management reported that if adequate staffing had been in place, the U.S. Army could have realized substantial savings on service and procurement contracts in Iraq (GAO, 2007).

The Gansler Commission (Gansler et al., 2007) reported that the U.S. Army's acquisition professionals comprise approximately 5,500 people. Although the level has remained relatively stable since 1996, the year Congress mandated a 25% DoD-wide acquisition workforce reduction over five years, it provides the Army a dangerously insufficient capacity to direct contracted support to its forces engaged in contingency operations. This shortfall has been pervasive across the military branches during the wars in Iraq and Afghanistan, and it remains a problem in 2010. While the GAO has found no DoD guidelines regarding the appropriate number of personnel needed to oversee and manage DoD contracts at deployed locations, reviews by the GAO and the DoD consistently encounter significant deficiencies in contract management due to the inadequate number of acquisition professionals available to carry out planning, administration, and oversight duties (GAO, 2010). For example, relevant GAO reports have consistently reported on the DoD's inability to provide an adequate number of contract management and oversight personnel in USCENTCOM's theater of operation

(GAO, 2004; 2006; 2008b). Moreover, the GAO's ongoing study in Iraq and Afghanistan demonstrates that this problem has not been resolved (GAO, 2010).

In May 2009, the Secretary of Defense announced a plan to bolster the acquisition workforce with the objective of growing the community by about 20,000 personnel by 2015. This initiative symbolizes a fundamental overhaul of the DoD's approach to contract management, aiming to reduce personnel shortages in order to improve support to the contingency contracting mission (Thibault et al., 2009). In a speech introducing the plan, Secretary Gates stated, "[The DoD must] adequately staff the government acquisition team and provide disciplined and constant oversight. … This [plan] will support these goals by increasing the size of the defense acquisition workforce, converting 11,000 contractors and hiring an additional 9,000 government acquisition professionals by 2015—beginning with 4,100 in FY 2010" (Gates, 2009, para. 19, 22).

The initiative is not without challenges. The DoD's acquisition workforce was downsized by more than 50% between 1994 and 2005 (CRS, 2010a). During that period, Congress and the DoD were at odds over the need for further reductions in the defense acquisition workforce. Congress viewed the cutbacks as a necessary requirement for eliminating wasteful spending and providing the DoD with increased funding for other priorities (CRS, 2010a). This setting stressed the acquisition profession's human resources, culture, and career path; the profession is mending slowly and still needs repair from the resulting damage. Presently, there remains an acute shortage of federal procurement professionals with 5 to 15 years of experience (GAO, 2008a). This shortage may become even more pronounced in the near term; by 2010, half of the federal acquisition workforce will be eligible to retire (*Prepared testimony*, 2006).

Figure 5 illustrates the growing disparity between the acquisition workforce and its workload. The reduction in contracting personnel accelerated in response to the FY 1996 Defense Authorization Act requirement at the same time that procurement actions began to increase. The figure concludes with 2004 data; however, as of 2010, the gap has grown wider.

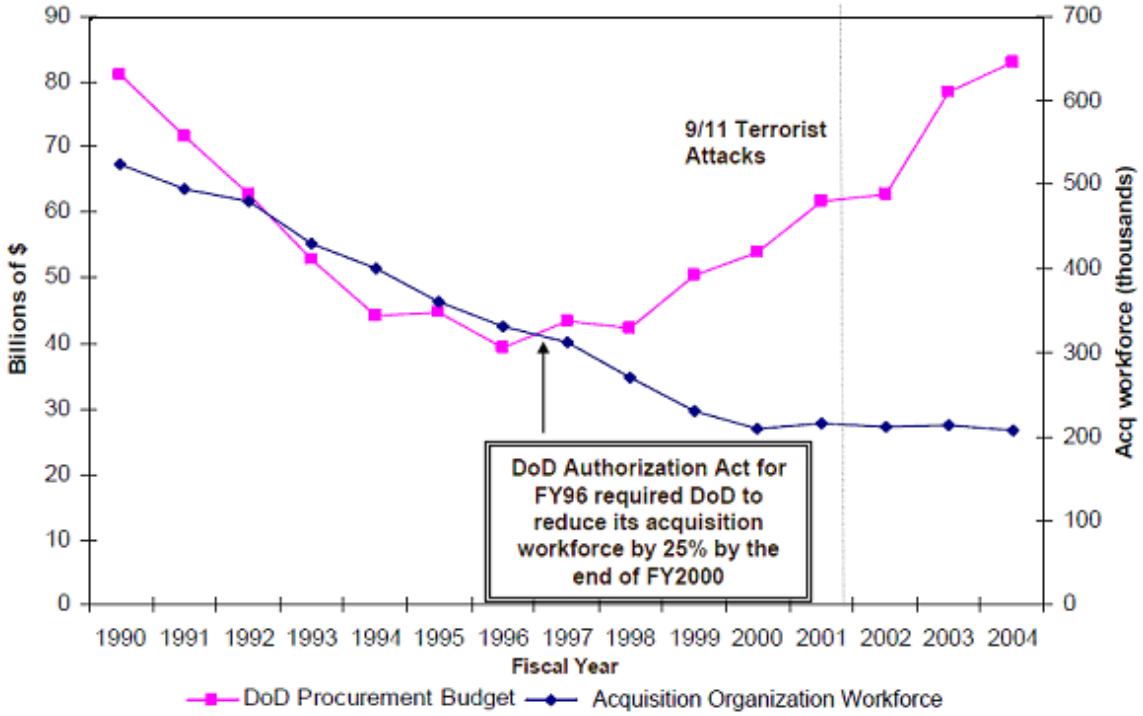

Figure 5. ***DoD Acquisition Workforce and Workload Trends (Gansler et al., 2007, p. 30)***

2. Escalating Quantity of Contract Actions

The personnel shortages described in the previous section have become just part of a larger, systemic problem within the DoD. The post-Cold War cutbacks that reduced the size and shape of the entire DoD in the 1990s, including its acquisition workforce, triggered the unanticipated consequence of increasing the number of service contracts required to sustain the fighting capabilities of the U.S. military. It was generally assumed that, in an environment of decreased spending, outsourcing would efficiently replace subsidiary elements of the force structure, and that the number of individuals required to manage those contracts could be significantly reduced as a result of perceived improvements in management processes, training, and technology (Gansler et al., 2007). However, the unforeseen spending increase that began in FY 1996, which overlapped contingency operations in the Balkans, and later in Afghanistan and Iraq, upset a fiscal

strategy based on resource management decisions meant for an otherwise static environment.

The effects of the 1990s' outsourcing strategy spilled over into the wars in Afghanistan and Iraq. Some officials have asserted that there were not enough experienced DoD contracting officials available to manage the deluge of service contracts in Iraq and Afghanistan or to oversee the private sector contractors who were paid billions of dollars each year (CRS, 2010a). Between FYs 2001 and 2008, the DoD's reported obligations on all service contracts, measured in real-dollar terms, more than doubled, from approximately $92 billion to $210 billion. In FY 2008, the obligation included more than $25 billion for services to support contingency operations in Iraq and Afghanistan (GAO, 2009). The U.S. Army, the DoD's primary ground combat maneuver force, typically managed more contingency contracting actions than any other military service. Figure 6 demonstrates that the dollar value for the U.S. Army's service contracts increased from $23.3 billion in 1992 to $100.6 billion in 2006; the corresponding contract actions increased 654%, from approximately 52,900 to 398,700.

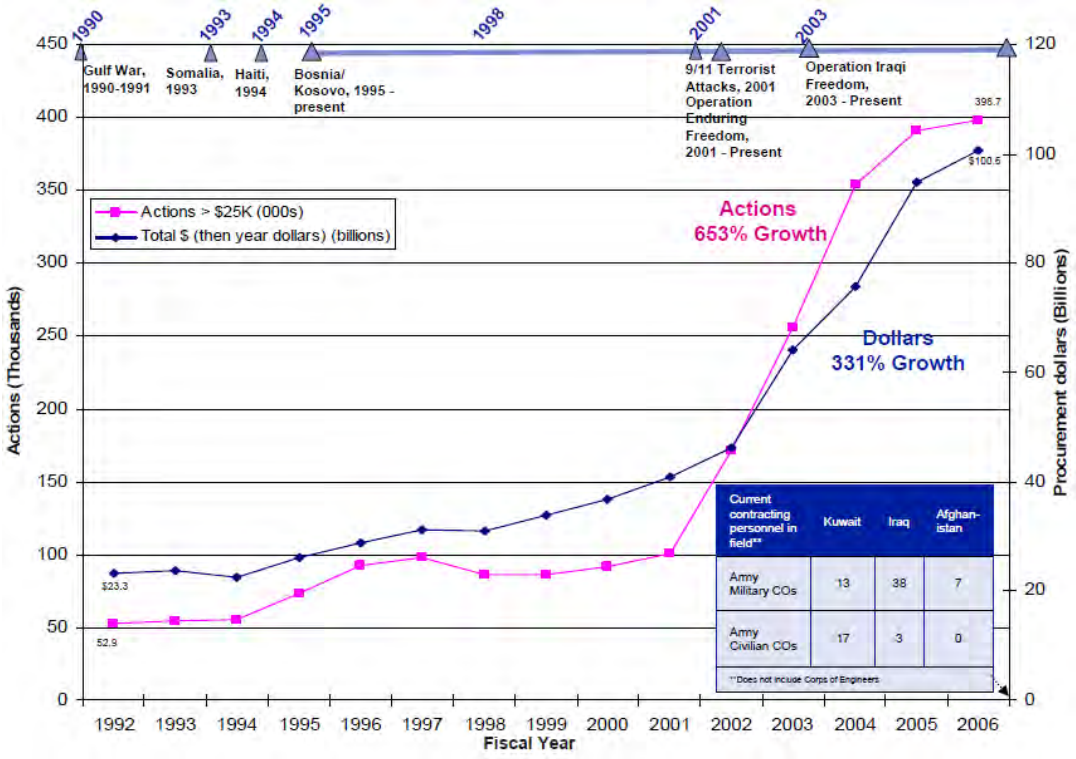

Figure 6. ***U.S. Army Contracting Workload***

(Gansler et al., 2007, p. 31)

3. Increasingly Complex Service Contracts

Aggressive outsourcing of support services during the last 15 years has created an increasingly complex environment for acquisition professionals. The Gansler Commission (Gansler et al., 2007) provides a case in point demonstrating this rationale. For example, a service contract that provides food to warfighters in a remote and dangerous location must often be administered with very little time, information, or local resources to support the requirement. The CCO does not have the luxury, in this case, to wait on a staff of engineers that will define warfighters' requirements over the course of many years, to consult with industry experts, or to rapidly deploy a COTS solution downrange. Furthermore, a food service contract in Fallujah, Iraq, may not look the same as a food service contract in Mosul, Iraq, or Kandahar, Afghanistan, or Zamboanga, Philippines. Conversely, a typical defense procurement program, such as for the production of a tank, is based on deliberate criteria for detailed design and performance specifications, which are just a few of the elements that are formally regulated by the Defense Acquisition Management System over the tank's entire life-cycle, from concept development to the tank's disposal. The total investment in the tank project comprises relatively vast resources: personnel (DoD and private sector); design, testing, and production facilities; myriad acquisition strategies; operational training and support; and time. Although the design criteria that influence the tank's work breakdown structure far exceed the number of parameters that shape the aforementioned food contract, the constraints inherent in a contingency operation make the delivery of food services a considerably more challenging feat than the delivery of a tank.

Service contracts that support contingency operations, as established in the previous example, tend to be more complex than is widely appreciated. Disparate contracting coordination within and across theaters, lack of integrative planning, and inadequate training resources have further exacerbated the complexity. For example, between FYs 2003 and 2005, a RAND Corporation study indicated that CCOs in 15 different organizations across the USCENTCOM theater purchased bottled water through

38 contracts from more than 30 suppliers (RAND, 2008). While local circumstances may have driven unique contracting requirements for each of these contracts, the report concludes that some consolidation of resources could have been realized through better planning and coordination among the responsible CCOs. Regardless, it is clear that CCOs operate in a complex and demanding realm where service contracts, deemed simple in any other environment, become daunting.

Despite the drawdown of U.S. forces in Iraq, where the U.S. combat mission is scheduled to end in August 2010, and the current administration's policy to begin withdrawal of U.S. troops from Afghanistan beginning in July 2011, there remains an enduring requirement for the DoD to facilitate contractor support so long as the U.S. remains committed to resolutely influencing the future of the two countries' security, economy, and government institutions. CCOs will likely manage some stability and reconstruction programs in the two countries for several more years. These contingency operations are wide-ranging, difficult to execute, and expensive. They encompass infrastructure repair and construction, governance and institution building, development of civil society and the rule of law, and the training of local police and security forces. As of March 2009, the U.S. Congress had appropriated over $80 billion for stability and reconstruction programs in Iraq and Afghanistan since 2001 ($51 billion for Iraq and $33 billion for Afghanistan). The second FY 2009 supplemental spending bill provided $980 million for economic development programs and for strengthening governance and rule of law in Afghanistan, as well as $3.6 billion to train and equip the Afghan security forces (Thibault et al., 2009). The nature of stability and reconstruction operations, during and immediately following combat missions, presents additional complexities for the CCO in today's contingency operations.

The combination of an escalating number of increasingly complex service contracts and an acquisition labor force that is ill-equipped to manage the workload due to its decreasing size and competency levels has severely diminished the DoD's ability to facilitate contracted support to forces fighting in contingency operations. The Gansler Commission (Gansler et al., 2007) described the combination as a "perfect storm" (p. 17). Barbaris and Callanan (2008) added that the DoD's acquisition workforce risks falling

into a "death spiral" (p. 17). The aggressive outsourcing of support services that began 15 years ago is unlikely to wane, thereby intensifying the complexity of service contract requirements for an acquisition workforce that has only a moderate capacity to deal with the workload.

4. Inadequately Trained Contingency Contracting Officers

Throughout the U.S. military's history, the absence of clear contingency contracting policies and procedures has inhibited the development of a benchmark training curriculum that would serve to standardize knowledge across its CCO corps. Luse, Madeline, Smith, and Starr (2005) concluded that the training and education system for CCOs was in desperate need of an overhaul based on their research of 96 distinct overseas contingency operations, to which the U.S. deployed its forces, occurring between 1975 and 2005. The majority of these events indicated the need for qualified CCOs and contractors that could be ready to deploy on short notice. Their research particularly noted the following deficiencies:

- Lack of or inconsistent Defense Acquisition Workforce Improvement Act (DAWIA) certification level attainments among CCOs;
- Lack of a joint CCO curriculum;
- Preclusion from enrollment because of CON 234 prerequisites for students who needed it most—those who were imminently deploying to a contingency contracting operation or had already completed a CCO deployment—and
- Failure to integrate lessons learned by CCOs returning from recent deployments. (Luse et al., 2005)

In 2008, the Under Secretary of Defense for Acquisition, Technology, and Logistics released a status report on the DoD's implementation of recommendations from the Gansler Commission (USD [AT&L], 2008). The report indicated that there remained a significant gap between the level of contracting knowledge required on the ground versus that which could be obtained from service-specific training or from the DAU's curriculum. The report also asserted that the DoD had neither initiated a standard contingency contracting certification program nor had it ensured that all deployed

contracting personnel had completed CON 234. Furthermore, the lack of a standard baseline of contracting knowledge across the military branches created confusion among deployed CCOs working in joint environments. The report proposed the following competencies for deployed contracting personnel:

- A joint perspective on contingency contracting;
- Practical knowledge in pre-deployment planning;
- More hands-on practical experience in writing contingency contracts;
- Special emphasis on ethics and fraud indicators with respect to contingency contracting;
- Participation in military exercises (both service-specific and joint) to practice contingency contracting through scenario-based exercises;
- A greater level of cultural awareness; and
- Ready access to guidance specific to contracting in support of contingency operations. (USD [AT&L], 2008, p. 47)

5. Inadequately Trained Non-Acquisition Personnel

Although not within the scope of this research, it is worth noting that the lack of rudimentary contracting education for deployed non-acquisition "first-tier customers" (i.e., operational commanders and their non-acquisition personnel directly engaged in contractor oversight) has exacerbated contingency contracting management. The wars of the last decade have stressed the DoD's acquisition workforce and have frequently necessitated the use of non-acquisition personnel who have limited experience in the execution of contracts in contingency environments. Similarly, senior planners and operational leaders deployed to the USCENTCOM theater have possessed limited experience in managing the large number of contractors accompanying their forces (USD [AT&L], 2008).

Oversight of contracts in a contingency operation—which includes contract administration functions, quality assurance surveillance, corrective action, property administration, and past performance evaluation—ultimately rests with the CCO, who

has the responsibility for ensuring that contractors meet the requirements set forth in the contract. CCOs, however, are often not located in the areas where contracted services are being provided. As a result, CCOs (or the responsible contracting officers) must appoint non-acquisition personnel to be responsible for monitoring contractor performance. Called CORs, or contracting officer's representatives, they act as the eyes and ears of the contracting officer and serve as the liaison between the contractor and the contracting officer. CORs cannot, in their duties, direct the contractor by making commitments or changes that affect price, quality, quantity, delivery, or other terms and conditions of the contract (GAO, 2010). Ideally, CORs are technical subject matter experts for the contracted service and, in effect, provide much of the day-to-day oversight of the contract. Yet, CORs are generally not contracting specialists, so they rarely receive adequate formal training in contract management before assuming that role. Moreover, their service as CORs is often not their primary military duty.

While inadequately trained CORs represent a significant problem in contingency environments, the operational commanders who rely on contracted support for their warfighters have likewise been ill-equipped to engage in effective contract planning. A recent report concluded that leaders lacked the fundamental, but essential, contracting education required to determine requirements, translate them into statements of work, and then oversee that work (USD [AT&L], 2008). Although it is the CCO's job to facilitate these milestones, the ultimate effectiveness of contracted support delivered in the battlefield is a function of senior leaders' contributions during the planning phase. The Gansler Commission maintains that "since contractors on the battlefield are a reality for future expeditionary operations, leaders and operators outside the acquisition community must be trained on the role and importance of contracting and contractors in expeditionary operations" (Gansler et al., 2007, p. 47).

6. Inadequate Resource Planning

Several analyses assert that the DoD does not adequately plan for the use of contractors, lacks contingency contracting experience, and does not sufficiently coordinate contracts across military services (CRS, 2010b). For example, the Gansler

Commission (Gansler et al., 2007) identified a lack of integrative planning as a fundamental reason that the DoD has failed to effectively and efficiently administer contracting actions in the austere environments where U.S. forces conduct contingency operations. The paucity of advance resource planning for contingency contracting operations still exists despite the abundance of myriad policies to the contrary. Even doctrine that preceded the wars in Iraq and Afghanistan had little effect on improving integrative contract planning. For instance, *PDD 56* on managing complex contingency operations stated that

> Military and civilian agencies should operate in a synchronized manner through effective interagency management and the use of special mechanisms to coordinate agency efforts. Integrated planning and effective management of agency operations early on in an operation can avoid delays, reduce pressure on the military to expand its involvement in unplanned ways, and create unity of effort within an operation that is essential for success of the mission. (Office of the President of the United States [POTUS], 1997, para. 8)

The GAO continues to report that the DoD fails to plan for the use of contractors in support of ongoing contingency operations in Iraq and Afghanistan. For example, during the GAO's December 2009 trip to Afghanistan, it found that only limited planning had been done with regard to contracts or contractors. Specifically, they determined that, with the exception of planning for the Logistics Civil Augmentation Program (LOGCAP), the U.S. Army had not begun to consider the full range of contractor services that might be needed to support the planned increase of U.S. forces in that country. More important, the Army's senior planners in Afghanistan appeared to be unaware of their responsibility, as defined by DoD guidance, to identify contracted support requirements or to develop contract management and support plans (GAO, 2010).

D. PUBLIC LAWS AFFECTING CONTINGENCY CONTRACTING OPERATIONS

This section indentifies several congressional enactments meant to improve the contingency contracting environment. Although the following list is not all-inclusive in regard to laws affecting the DoD's contract management practices, these initiatives

represent the most recent and significant laws to be passed that address the six problems introduced in the previous section.

- *John Warner National Defense Authorization Act for FY 2007, Sec. 854, Joint policies on requirements definition, contingency program management, and contingency contracting* (2006). This law elevated the responsibility for defining contract requirements to more senior levels and forced the DoD to assess the efficacy of its contracting and noncontracting officer education system at all levels (basic, intermediate, and senior).

- *National Defense Authorization Act for FY 2008, Sec. 852, Department of Defense acquisition workforce development fund* (2008). This law established a fund to ensure that the DoD's acquisition workforce achieves the capacity, in both personnel and skills, to properly perform its mission, oversee contractor performance, and ensure that the DoD receives the best value for the funds expended.

- *Duncan Hunter National Defense Authorization Act for FY 2009, Sec. 833, Acquisition workforce expedited hiring authority* (2008). This law gave the Secretary of Defense the authority to designate any category of acquisition positions as a shortage category in order to improve recruiting rates for critical acquisition workforce vacancies through September 30, 2012.

- *Duncan Hunter National Defense Authorization Act for FY 2009, Sec. 834, Career path and other requirements for military personnel in the acquisition field* (2008b). This law increased the number of general and flag officer billets in the acquisition fields.

- *Duncan Hunter National Defense Authorization Act for FY 2009, Sec. 869, Acquisition workforce development strategic plan* (2008). This law authorized the preparation and completion of an actionable five-year plan in coordination with other federal agencies to increase the size of the acquisition workforce, and to operate a government-wide acquisition intern program. The law included the development of a sustainable funding model to support efforts to hire, retain, and train an acquisition workforce of appropriate size and skill to effectively carry out the acquisition programs of all federal agencies.

- *Duncan Hunter National Defense Authorization Act for FY 2009, Sec. 870, Contingency Contracting Corps* (2008). This law authorized the establishment of a government-wide Contingency Contracting Corps for deployment in response to an emergency or major disaster or to a contingency operation.

- *National Defense Authorization Act for FY 2010, Sec. 832, Funding of Department of Defense acquisition workforce development fund* (2009). This law authorized the Secretary of Defense to supplement the fund enacted in Sec. 852, Public Law Number 110-181, with unobligated balances from any appropriations for procurement, research, development, test and evaluation, or operation and maintenance during the 24-month period following the expiration of availability for those funds.

E. DEFENSE ACQUISITION UNIVERSITY

The DAU was established on August 1, 1992, in response to the DAWIA initiative, which called for a joint venture between the existing Army, Navy, Air Force, Marine, and DoD acquisition training programs. One of the DAU's primary objectives was to standardize training among the different DoD acquisition communities. Through the DAU consortium, the Service-specific schools would remain separate and distinct institutions, but certain mandatory courses would be centrally managed through the DAU (Luse et al., 2005). The DAU has adapted over the years to accommodate information technology and the increasing demand for acquisition education by the DoD's contracting workforce. For example, in an effort to expand the reach of many mandatory courses, the DAU began teaching some courses at satellite facilities and delivering other modules via the Internet. Additionally, many universities and Service schools now teach acquisition courses that have been accredited by the DAU as "equivalency courses." For example, the Florida Institute of Technology and Webster University currently offer such training (Luse et al., 2005). The DAU is also responsible for standardizing DAWIA certification levels, typically I, II, and III within a specific career path (e.g., logistics). This is a necessary step to ensure that the formal education of all of the DoD's acquisition professionals conforms to appropriate functional requirements, managerial responsibilities, and rank (or grade).

Despite the broad success of the DAU's curricula and nonresident training resources since its 1992 inception, including the introduction of CON 234 in 1997, formal instruction of practical contingency contracting knowledge remained largely ineffective until the Gansler Commission completed its 2007 assessment in Iraq. The Gansler Commission recognized that the DAU did not provide contingency contracting

instruction for the acquisition, logistics, and contracting workforce to the same level of competency that it trained traditional weapons systems contracting. The Commission also noted that contracting professionals, particularly Army personnel, were rarely certified to Level-I contracting proficiency before deploying to their first contingency contracting operation, and that the DAU should be provided the necessary resources to accommodate the surge of contracting professionals requiring Level-I certification in response to the Commission's recommendations (USD [AT&L], 2008). The Director of Defense Procurement and Acquisition Policy has since promoted the development of joint contingency contracting proficiency levels in conjunction with the DAU with the goal of standardizing CCO course requirements and materials; this initiative was demonstrated with the 2008 publication of the *Joint Contingency Contracting Handbook*, the basis for the DAU's revised CON 234 course (Calisti, 2009).

1. Authority

Congress enacted the DAWIA on November 5, 1990, prompting the subsequent creation of the DAU. The DAWIA required the Secretary of Defense to establish an acquisition workforce with specific experience, education, and training qualifications. Provisions of this initiative required the following actions:

(1) Establish a management structure, policies, and regulations for implementing the act's provisions;

(2) Establish qualification requirements; and

(3) Provide training and education to meet those requirements. (GAO, 1993, p. 1)

2. Contingency Contracting Officer Core Training Model

Despite the military's increasing reliance on contracted services in the wars of the 21st century, the DAU did not recognize contingency contracting as a legitimate proficiency within the DAWIA certification process. By 2005, it was determined that there were approximately 18 distinct contracting and acquisition courses being taught to individuals who were responsible for contingency contracting operations (Luse et al., 2005). However, since the 2007 Gansler Commission, the DAU has worked closely with

military service representatives to standardize the required contracting courses that CCOs should complete. The resulting core training model, shown in Figure 7, comprises nine required courses and is 90% to 95% common across the DoD's services (Calisti, 2009). The Under Secretary of Defense (AT&L) deems that completion of the nine courses—plus one optional course, not shown in Figure 7—qualifies an individual eligible as a contingency contracting officer (USD [AT&L], 2008).

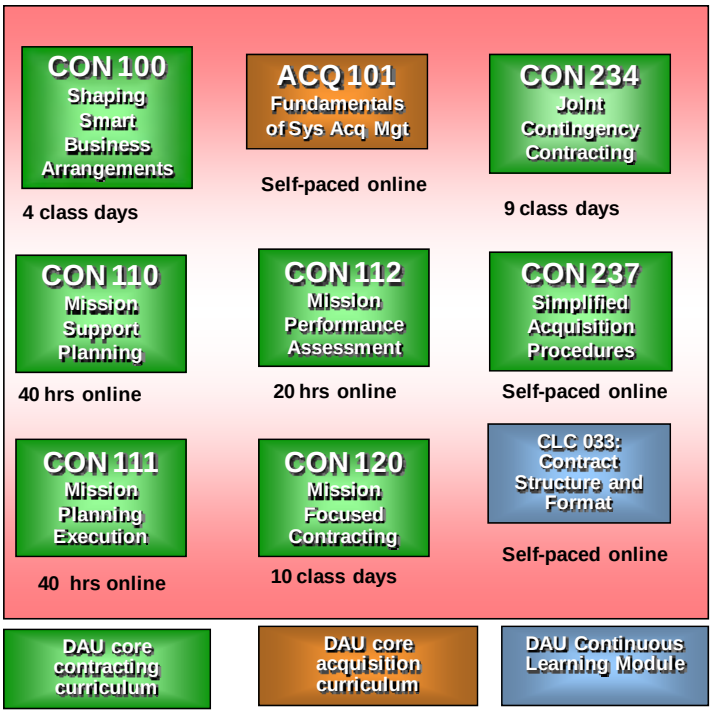

Figure 7. ***DAU's CCO Core Training Model (Calisti, 2009, p. 13)***

3. CON 234 Joint Contingency Contracting

In 1997, the DAU launched CON 234 Joint Contingency Contracting. The course was significantly updated and redeployed in late 2007 in response to the Gansler Commission. CON 234 was redesigned to train a journeyman-level CCO to be deployable worldwide and immediately effective upon arrival to support the contingency mission (USD [AT&L], 2008). The revised course was required to incorporate the *Joint Contingency Contracting Handbook* to the greatest extent possible. CON 234 is presently

offered to qualified acquisition professionals as a nine-day resident course at DAU training facilities, approximately 20 times per year.

4. CON 334 Advanced Contingency Contracting

Although not included in the DAU's CCO core training model, CON 334 Advanced Contingency Contracting is one of the four courses that we analyzed for this report. The course, scheduled for launch in August 2010 as a four-day resident course, is a follow-on course to CON 234 and will be offered approximately five times per year. This course was developed as an advanced contingency contracting course, which would provide just-in-time training to senior-level contracting personnel deploying to contract management positions (USD [AT&L], 2008).

F. NAVAL POSTGRADUATE SCHOOL

The NPS, established in 1909, is an institution dedicated to providing relevant education and research to the defense and security arenas and to recognizing and innovatively solving problems in support of U.S. military forces, global partners, and national security. The Graduate School of Business and Public Policy (GSBPP), one of four schools at the NPS, educates U.S. and allied military officers, as well as federal service civilians, in defense-focused business and public policy. The GSBPP conducts research in defense management and public policy, and provides intellectual resources for leaders and organizations concerned with defense business management practices and policies. The GSBPP's Acquisition and Contract Management curricula are designed to develop the knowledge, skills, and competencies necessary to effectively lead the DoD's acquisition workforce and efficiently manage the resources allocated to the acquisition process (NPS, 2010).

In 2003, the NPS introduced MN 3318 Principles of Contingency Contracting. MN 3318, certified in 2004 by the DAU as an equivalent to CON 234, is a graduate-level course of more than 30 hours delivered in resident format to NPS students (typically those enrolled in the school's acquisition and contract management curricula) twice per year; it is also delivered via distance learning to other acquisition professionals at least

once per year. Two key differences between MN 3318 and CON 234 are the delivery approach and the target audience. MN 3318 is instructed at the graduate education level through the seminar method of teaching, which is based on the Socratic technique of encouraging students to engage in divergent problem-solving instead of convergent rote learning.

G. EXPEDITIONARY CONTRACTING COMMAND

In October 2008, the ECC was established as a subordinate command of the ACC. The ECC provides contracting support to Army and joint contingency operations, while the ACC, a major subordinate command of the U.S. Army Materiel Command (AMC), oversees contract management for most of the Army's procurement programs.

1. Mission and Organizational Structure

The mission of the ECC is to "plan and execute effective and agile contracting support for U.S. Army Service Component Commanders in support of Army and Joint operations. [The mission additionally is to] provide effective and responsive contracting support for OCONUS installation operations" (ECC, 2010, p. 1). Its organization's command structure is illustrated in Figure 8. The ECC is composed of multiple modular elements that can direct contracting support to the warfighter. These elements are described below.

- Contracting Support Brigades—19 personnel each; plan for and coordinate all contracting functions within a theater of operation.
- Contingency Contracting Battalions—8 personnel each; provide contracting support planning to deployed corps and division level maneuver forces.
- Senior Contingency Contracting Teams—4 personnel each; provide contracting support to deployed brigade level maneuver forces.
- Contingency Contracting Teams—4 personnel each; provide contracting support to deployed Brigade Combat Teams. (ECC, 2010)

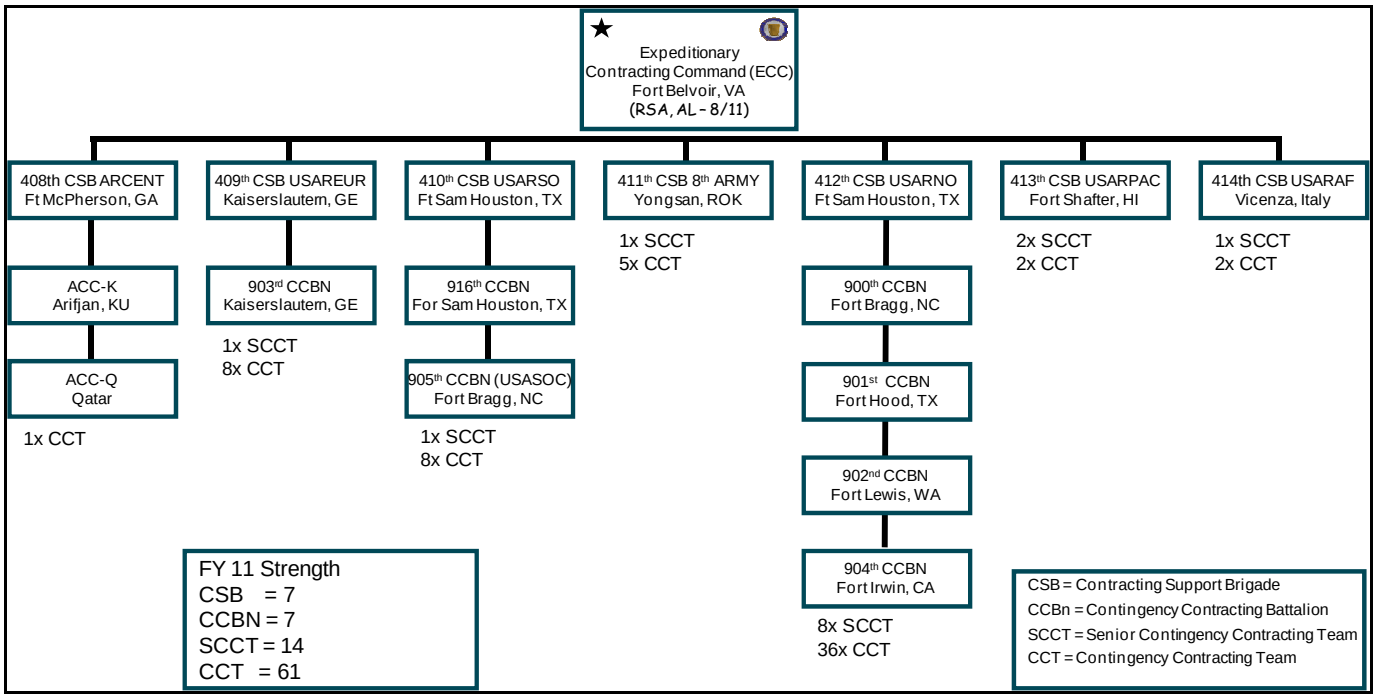

Figure 8. ***ECC Command Structure FY 2011 (ECC, 2010, p. 2)***

2. *Soldier's Manual of Common Tasks (51C)*

In September 2009, the ECC released a draft version of the *SMCT (51C)* for its contracting officers. The *SMCT (51C)* includes 36 key tasks comprising the body of knowledge essential for Army CCOs (51C). The manual, although still in draft format, is accessible to all military and civilian personnel with AKO user access. This resource is intended to be used as an independent study tool for all new 51Cs, but its content will be typically reinforced at the unit level through a mentor program whereby senior 1102s (federal service civilian contract specialists) guide junior 51Cs through a proficiency process. The *SMCT's* 36 tasks are distributed over four chapters:

- Chapter 1: Unit Engagement Tasks,
- Chapter 2: Pre Award Tasks,
- Chapter 3: Post-award Tasks, and
- Chapter 4: Other CCO Tasks. (ECC, 2009)

H. THE YODER THREE-TIER MODEL

In December 2004, Professor E. Cory Yoder published a working paper at the NPS, *The Yoder Three-Tier Model for Optimal Planning and Execution of Contingency Contracting*, which introduced a credential-based hierarchical tool that can assist the mission planner in maximizing effectiveness and efficiency of contingency contracting operations. The personnel structure model is a conceptual framework that aligns theater-wide contracting support with a COCOM's operational objectives through integrative planning and execution. Specifically, the model improves a planning staff's ability to determine the level of contracting resources needed to support a contingency operation by identifying the optimal combination of capabilities and expertise needed by a theater-wide corps of CCOs to accomplish the COCOM's mission. The tool can, and should, be applied throughout all phases of a contingency operation, including during the development of CSIPs, which align with OPLANs and OPORDs (Yoder, 2004).

Yoder created the YTTM to directly benefit COCOMs, J-4/J-5 staffs, senior planners and NGOs/PVOs. He proposed the YTTM as an approach to accomplish the following goals:

- Support theater contingency contracting objectives effectively and efficiently;
- Guide the education of military and civilian personnel in support of contingency contracting operations;
- Integrate effective planning of functional resources, training requirements, proficiency levels, and administrative support elements for a contingency contracting organization; and
- Provide contingency contracting commands a tool to identify areas of structural deficiency within its acquisition organization prior to deployment to a contingency environment. (Yoder, 2004)

The YTTM partitions the employment of CCOs into three "tier levels" that represent distinct functional capabilities and that are aligned with the amount of education and experience a CCO accumulates over the course of his or her career. Each tier is codependent, or integrated in a hierarchical manner, with respect to the other tiers (Yoder, 2004). The tier levels are

1. Tier One—Ordering Officer (OO);

2. Tier Two—Leveraging Contracting Officer (LCO); and

3. Tier Three—Integrated Planner and Executor (IPE).

Furthermore, each tier level of the YTTM is defined by four elements. The elements are as follows:

1. functional requirements;

2. education level;

3. skill sets; and

4. personnel and manpower characteristics. (Yoder, 2004)

Table 4 summarizes the YTTM. Note that the table also includes a section called *Highlights and Drawbacks* that describes broad operational consequences associated with each tier.

Table 4. ***Yoder Three-Tier Model for Contingency Contracting Operations (Yoder, 2004, p. 17)***

Model Tier Level & Model Title	Functions/Education/Rank	Highlights and Drawbacks
Ordering Officer—Tier One	• basic ordering • some simplified acquisitions • training: DAU CON 234 • DAWIA Certified CON Level I or II • junior to mid-enlisted, junior officers, GS-7 to GS-9 1102 series civilians	• simple buys • little integration • no operational planning • no broad liaison functions
Leveraging Contracting Officer—Tier Two	• leverages to local economy • reduces "pushed" material support • training/education: • DAU CON 234, recommended higher education • DAWIA Certified CON Level II or III • senior enlisted, junior to mid-grade officers, GS-11+ 1102 series civilians	• better local operational planning • some integration • more capability for the operational commander • no planned theater integration • no broad liaison functions • may perform to optimize local operations at the detriment to theater ops
Integrated Planner and Executor (IPE)—Tier Three	• highest level of planning and integration—joint • linked/integrated with J-4 and J-5 • creates and executes OPLAN CCO strategy • provides direction to tier two and one • links operations strategically to theater objectives of COCOM • education: Master's degree or higher and, JPME Phase I and II • DAWIA Certified CON Level III, and other DAWIA disciplines (LOG, ACQ, FIN, etc) • senior officers (0-6+), senior civilians, GS-13+ or SES	• performs operational and theater analysis, integrates results into OPLAN • link between COCOM and OPLAN to all theater contracting operations • coordinates theater objectives with best approach to contracted support • can achieve broader national security goals through effective distribution of national assets • includes planning, communication, coordination, and exercising with NGO and PVO in theater

1. Ordering Officer

The ordering officer (OO) provides the most rudimentary level of contracting support, which includes functions such as placing simple buys against existing theater contracts. By nature, this position requires little interactive engagement in the environment (Yoder, 2004). The OO conducts simplified acquisitions of relatively small dollar amounts. The OO typically has no broad liaison functions, nor is he or she engaged in operational planning. Ideally, the OO should have completed the DAU's CON 234 and be DAWIA CON Level I or II certified. The OO is typically a junior to mid-grade enlisted military Service member, junior officer, or a federal service civilian contract specialist of equivalent paygrade.

2. Leveraging Contracting Officer

The leveraging contracting officer (LCO) performs the basic ordering functions of the OO, but also leverages the capacities and capabilities of the local and regional economies in the contingent theater. This practitioner interfaces with local and regional businesses, creates business processes, and may coordinate with higher military echelons, NGOs, and PVOs (Yoder, 2004). However, the LCO typically does not have a broad liaison responsibility, which is an impediment that minimizes theater integration. The LCO provides a link between the senior planners and the customers and, therefore, is charged with ensuring that every facet of the contingency contracting operation complies with regulations and policies. This individual also executes contracting actions driven by the CSIP and provides flexible capabilities to support the operational commanders. The LCO should have completed CON 234 (and preferably other intermediate and advanced DAU education) and be DAWIA CON Level II or III certified. The LCO is typically a senior enlisted military Service member, a junior to mid-grade officer, or a federal service civilian contract specialist of equivalent paygrade. Often the LCO is a warranted contracting officer.[6]

[6] Warranted contracting officers may execute contracts only up to the amount for which they are warranted, applicable to the whole contract value (inclusive of all options). Contracting officer warrants expressly state dollar thresholds up to which the warranted contracting officer may sign on behalf of the government.

3. Integrated Planner and Executor

These well-educated and experienced CCOs are integrated into the operational planning phases of contingency operations, often before actual troop deployment. Subsequently, they make the transition to operations. The integrated planner and executor (IPE) plans and then executes strategic and theater objectives, exploiting all joint and multiagency assets available. This integrative approach minimizes the competing, and often conflicting, demands of the participants, aligns acquisition support with strategic objectives, promotes the creation of robust CSIPs, and integrates such plans into broader operational plans in support of theater operations (Yoder, 2004). The IPE, as the link between the COCOM and the CSIP, has broad liaison responsibilities, including planning and coordinating with NGOs and PVOs. The IPE must ensure that all contracting actions are planned and executed with the best approach to support the mission. Additionally, the IPE provides guidance to OOs and LCOs within his or her purview. The IPE should have a master's degree or higher, should have completed Joint Professional Military Education (JPME) Phase I and II, and should be DAWIA CON Level III certified. The LCO is typically a senior officer (O-6+), a senior federal service civilian (GS-13+), or a Senior Executive Service (SES) civilian.

I. OTHER TRAINING RESOURCES

Other training resources are available that can either introduce or reinforce contingency contracting knowledge to the acquisition professional. However, these resources were not considered in our course analyses because the material was either already incorporated into one of the four courses that we analyzed or it was not deemed credible or sufficiently mature to deliver practical and consistent knowledge to the CCO.

1. *Joint Contingency Contracting Handbook*

The *Joint Contingency Contracting Handbook* provides convenient tools, templates, and training material for the CCO in a compact and rugged cargo-pocket booklet. The handbook, which serves as the foundation for the DAU's CON 234, also contains resources for contracting officers to ensure uniform contracting practices,

including standardized contract forms and language for terms and conditions. The responsible publisher, DPAP, expects to update it annually with the latest version being released in July 2010 (GAO, 2010). The handbook is posted on the Internet as a web resource and contains e-mail addresses and telephone numbers of the DAU instructors who can provide reach-back contingency contracting advice (Thibault, 2009).

2. *Army Contingency Contracting Handbook*

Published in September 2006, the 34-page *Army Contingency Contracting Handbook* focuses on fundamental simplified acquisition procedures and formal acquisition procedures. While its content is succinct and mostly relevant with respect to its treatment of standard contract forms, the handbook provides little planning and execution guidance for the deployed CCO, and it does not consider statutory regulations that take effect during declared contingency operations. The handbook has not been updated since its 2006 publication. We observed that its most relevant information is already included in the *SMCT (51C).*

3. Databases

Databases of actual CCO purchases may be available in some cases, which could supplement classroom and pre-deployment training by providing insights into current contingency contracting operations. This information would be useful if it was tailored to the specific locations where CCOs were deploying so that they could become familiar with their future contracting environment, including the types of purchases made, the predominant types of contracts used for these purchases, and the local supply bases (RAND, 2008). Similar contracting data for other military branches and coalition partners could also be used to better prepare CCOs who will be operating in joint environments. This data may be useful; however, its availability is unpredictable and its completeness is unreliable.

4. Training Simulations and Exercises

Training commands can develop realistic contingency contracting scenarios to augment current contingency contracting training following a case study format. For

example, pre-deployment courses held at the Camp Atterbury Joint Maneuver Training Center and at the Muscatatuck Urban Training Center in Central Indiana familiarize civilian 1102s with everything from local supply bases to cultural sensitivities. Personnel take part in simulations in which they deal with outside vendors so they know what to expect when they're deployed. The DoD's director of Readiness and Training Policy and Programs observed, "They had to work with an interpreter; they had to take bids from three Afghan people that were going to provide gravel to the base; and then they had to work through some of the issues of a translator, understanding the bids, proposals and also some of the cultural issues" (Wilson, 2010, para. 9).

The DoD Evaluation and Implementation of Recommendations from the Commission on Army Acquisition and Program Management in Expeditionary Operations also suggest developing joint contingency gaming simulations, creating a video library of contingency contracting topics, and developing a multi-day joint contingency immersion experience (USD [AT&L], 2008). Though these events are presumably useful, we disregarded the analysis of these learning opportunities in our study because they are not generally incorporated in the DAWIA curricula or in the service-specific training doctrine.

5. Temporary Duty and Interviews

Finally, in-depth, hands-on training for CCOs may be achieved through a temporary duty (TDY) assignment to an ongoing contingency operation. Although it may be difficult to send a CCO on TDY during the pre-deployment phase, the opportunity might be more pragmatic and valuable if the TDY is planned early in the unit's homeport training cycle. A CCO might also gain valuable knowledge by conducting interviews with experienced contingency contracting officers who are currently deployed or have recently returned from contingency contracting operations (Coombs, 2002). However, we did not include these independent learning resources in the study because the methodology required to measure their effectiveness is beyond this report's scope of research.

J. SUMMARY

Chapter II provided a brief history of contingency contracting operations and described how contracted support services have evolved throughout the major conflicts in which the U.S. military has participated. This chapter also examined the modern contingency contracting environment and the statutory provisions that regulate it. We identified doctrinal contingency contracting definitions, types of contingency operations, joint operational phases, regulatory language in the FAR, and legislative reforms. Chapter II also described prevailing challenges in the DoD's acquisition workforce, contingency contracting workload, education system for CCOs and non-acquisition leaders, and resource planning. This chapter also introduced the three institutions that administer the four courses analyzed in the research and presented the elements of the YTTM. Finally, Chapter II discussed some other educational resources that are available to CCOs.

Chapter III, Course Review, presents course content for CON 234, CON 334, MN 3318, and the *SMCT*. We examine the primary and supporting learning objectives for each course and delineate them for further analysis in Chapter IV, Course Analysis.

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III. COURSE REVIEW

This chapter discusses course content for CON 234, CON 334, MN 3318, and the *SMCT (51C)*. The course content is detailed in Appendices A through E. We identified the primary and supporting learning objectives for each course for further analysis in Chapter IV, Course Analysis. Specifically, we identified each course's primary learning objectives, defined them, and subsequently listed the supporting learning objectives that comprise each primary learning objective. This task was necessary in order to facilitate course analysis using the YTTM.

Each course uses unique nomenclature to identify its learning objectives. CON 234 and CON 334 use the terms *terminal learning objectives* and *enabling learning objectives* to identify their learning objectives, whereas MN 3318 uses *topics* and *supporting topics*, and the *SMCT* uses *tasks* and *supporting tasks*. Since the academic structure of learning objectives, or "end states," between the four courses are hierarchically analogous, we commonly use the terms *primary learning objectives* and *supporting learning objectives* throughout the research. As such, CON 234 includes nine primary and 33 supporting learning objectives, CON 334 includes seven primary and 21 supporting learning objectives, MN 3318 includes 10 primary and 50 supporting learning objectives, and the *SMCT* includes 36 primary and 188 supporting learning objectives.

A. CON 234 JOINT CONTINGENCY CONTRACTING

The DAU launched CON 234 Joint Contingency Contracting in 1997. The course was significantly updated and redeployed in late 2007 in response to the Gansler Commission. CON 234 was redesigned to train a journeyman-level CCO to be deployable worldwide and immediately effective upon arrival to support the contingency mission (USD [AT&L], 2008). The course is currently designed to prepare acquisition professionals—typically enlisted personnel (E-5+), federal service civilians (GS-9+), and junior officers (O-2 to O-4)—for an initial deployment to a contingency contracting operation. This course includes topics on the practical application of contracting

processes in a contingency environment, assessing customer requirements, support planning, and ethics in contracting (DAU, 2010a).

CON 234 is offered as a nine-day, 71-hour resident course at the DAU training facilities approximately 20 times per year. CON 234 includes nine primary learning objectives (called terminal learning objectives) and 33 supporting learning objectives (called enabling learning objectives) (DAU, 2010b). The course content for CON 234 is identified in Appendix A.

B. CON 334 ADVANCED CONTINGENCY CONTRACTING

CON 334 Advanced Contingency Contracting was developed as an advanced contingency contracting course that can provide just-in-time training to senior-level contracting personnel deploying to contract management positions (USD [AT&L], 2008). This course is currently designed to provide senior acquisition professionals with the requisite knowledge for coordinating theater contracting resources, improving source selection procedures, managing contract resolutions, and developing ethical integrity (DAU, 2010c).

This course, scheduled for launch in August 2010 as a four-day, 28-hour resident course, is a follow-on course to CON 234 and will be offered approximately five times per year. Additionally, there are approximately 20 hours of prerequisite coursework required before the course begins. CON 334 includes seven primary learning objectives (called terminal learning objectives) and 21 supporting learning objectives (called enabling learning objectives) (DAU, 2010d). The course content for CON 334 is identified in Appendix B.

C. MN 3318 PRINCIPLES OF CONTINGENCY CONTRACTING

MN 3318 Principles of Contingency Contracting, certified in 2004 by the DAU as an equivalent to CON 234, is a graduate-level course of more than 30 hours delivered in resident format to NPS students (typically those enrolled in the school's acquisition and contract management curricula) twice per year; it is also delivered via distance learning to other acquisition professionals at least once per year. Two key differences between

MN 3318 and CON 234 are the delivery approach and the target audience. MN 3318 is instructed at the graduate education level through the seminar method of teaching, which is based on the Socratic technique of encouraging students to engage in divergent problem-solving instead of convergent rote learning. As such, the course leverages the students' backgrounds through relevant experiential discussions and sharing through lessons learned. The following is an excerpt from the 2010 summer quarter MN 3318 course syllabus:

> This course is a study of the principles of contingency contracting and the fundamental skills required to provide direct contracting support to joint tactical and operational forces participating in the full spectrum of armed conflict and military operations other than war, both domestic and overseas. (Yoder, 2010, p. 1)

MN 3318 is designed to enable mid-grade military officers (O-3 to O-5) and federal service civilian 1102s to assume positions of greater responsibility within the contingency contracting field. This course focuses on deliberate and crisis action planning, coordinating with staff elements in a joint planning environment, and synchronizing contract actions with OPLANs and OPORDs. MN 3318 includes a systematic approach based on five functional phases: shaping, mobilization, build-up, sustainment, and redeployment.

MN 3318 includes 10 primary learning objectives (called topics) and 50 supporting learning objectives (called supporting topics). This section presents the course content through (1) identification of primary and supporting learning objectives, and (2) typical weekly sessions in accordance with the course syllabus. The course content for MN 3318 is identified in Appendix C.

MN 3318 gives instruction on the above topics via 10 weekly sessions. The sessions are additionally augmented by required readings and course preparation that takes place outside of the 30-hour resident instructional format. A typical session requires between five and 10 hours of student preparation before the session begins. Appendix D shows a sample schedule from the 2010 summer quarter MN 3318 course syllabus. The

designated readings and assignments reported in Appendix D are not all-inclusive, and specific page numbers and reference citations are not indicated.

D. *SOLDIER'S MANUAL OF COMMON TASKS (51C)*

The *SMCT (51C)*, released in September 2009 in draft format, includes 36 key tasks comprising the body of knowledge essential for Army CCOs (51C). Although still in draft format, this manual is accessible to all military and civilian personnel with AKO user access. This resource is intended to be used as an independent study tool for all new 51Cs, but its content is typically reinforced at the unit level through a mentor program whereby senior 1102s guide junior 51Cs through a proficiency process. The development of the *SMCT (51C)* marks a significant event because prior to its release there was no standard Army training manual that focused exclusively on contingency contracting. The *SMCT* includes 36 primary learning objectives (called tasks) and 188 supporting learning objectives (called supporting tasks). The content for the draft *SMCT (51C)* is identified in Appendix E.

E. SUMMARY

This chapter discussed the course content for CON 234, CON 334, MN 3318, and the *SMCT (51C)*. The course content is detailed in Appendices A through E. We identified the primary and supporting learning objectives for each course for further analysis in Chapter IV, Course Analysis. Specifically, we identified each course's primary learning objectives, defined them, and subsequently listed the supporting learning objectives that comprise each primary learning objective. This task was necessary in order to facilitate the subsequent course analysis using the YTTM.

In Chapter IV, we will conduct a comparative analysis of the primary and supporting learning objectives for each of the four courses. The analysis will incorporate the use of a quantitative rating scheme that is based on the YTTM's four defining elements: function, education, skill set, and personnel and manpower attributes. We will then examine the relative similarities and differences between the four courses, the extent to which each course benefits CCOs of varying targeted levels of proficiency, and

whether the intent of each course is met in relation to its course description and targeted audience.

IV. COURSE ANALYSIS

We conducted a comparative analysis of the primary and supporting learning objectives identified in Chapter III. Accordingly, three factors were examined for CON 234, CON 334, MN 3318, and the *SMCT*: the relative similarities and differences between the four courses, the extent to which each course benefits CCOs of varying targeted levels of proficiency, and whether the intent of each course is met in relation to its course description and targeted audience. The analysis incorporates the use of a benchmark hierarchical model, the YTTM. The YTTM's intended purpose is to effectively link theater contracting requirements to the skill sets of a supporting CCO workforce. However, by altering its intended application, the model's flexibility also yields a tool that can be used to conduct a comparative analysis between contingency contracting courses through an examination of their respective learning objectives.

A. ANALYSIS METHODOLOGY

We categorized curricular learning objectives across the YTTM hierarchy and differentiated the four courses by applying a quantitative rating scheme to the model. This quantitative rating scheme represents the YTTM's hierarchical nature with respect to its four defining elements: function, education, skill set, and personnel and manpower attributes. The supporting learning objectives for each course were assigned numerical values. The average value of supporting learning objectives comprising each primary learning objective was computed. Next, we assigned each primary learning objective to one of four tier levels, which is a modification to the original YTTM that allows a primary learning objective to straddle more than one tier level of the YTTM. Each course was then positioned along the modified model according to the composite ratings of its primary learning objectives. The analysis methodology is described in greater detail below.

As previously recognized in Chapter III, each course uses unique nomenclature to identify its learning objectives. Since the academic structure of learning objectives, or "end states," between the four courses are hierarchically analogous, we used the terms

primary learning objectives and *supporting learning objectives*, where appropriate, throughout the course analysis. Employing this normalization of terms to the content extracted from the course review in Chapter III, we applied the YTTM's tier level criteria to each supporting learning objective.

The three members of our research team individually rated each supporting learning objective through the YTTM's "lens" by assigning a whole number from 1 to 5 that most accurately represents the YTTM attributes of the learning objective with respect to function, education, skill sets, and personnel and manpower characteristics (see Table 5). The YTTM descriptors in Table 4 (Chapter II), including those in the *Highlights and Drawbacks* column, were utilized for the analysis. It was anticipated during the development of the research methodology that the learning objectives would often straddle tier levels of the original YTTM. Accordingly, we developed a rating scheme that considers the fact that learning objectives will regularly include significant contributions from two adjacent YTTM tier levels; such learning objectives were assigned the whole numbers 2 or 4, as applicable. For example, a supporting learning objective that, as perceived by a rater, entailed a basic task that can be completed by an OO, but which might require the warranted signature of a LCO, would be assigned a 2. Conversely, a multi-faceted supporting learning objective that may be considerably weighted towards the OO, even if there is a minor LCO attribute, would be assigned a 1. We recognize that this rating process is susceptible to subjectivity; however, measures were introduced to reduce misinterpretation of learning objective descriptions and their implied instructional purposes. These measures are described below.

Table 5. *YTTM Rating Scale*

Tier One OO	← Combination of elements →	Tier Two LCO	← Combination of elements →	Tier Three IPE
1	2	3	4	5

Our research team consisted of three members, each possessing varying educational and experience levels in the contracting and acquisition field. Two of the members were Army officers enrolled full time in the NPS's acquisition and contracting curricula, which includes MN 3318, and were nearing completion of master's degrees in the business administration program. However, neither of these officers had yet completed military tours of duty as acquisition professionals. The third member of the research team, a Navy civil engineer corps officer certified at DAWIA CON Level II, had moderate contracting experience, including management of overseas MILCON and expeditionary contracting operations in Iraq, but he was neither enrolled in the NPS's acquisition track nor had he completed a CON 234 equivalency. As such, we presumed that subjectivity and differences between individual interpretations would be inherent in the rating process. Accordingly, we employed two provisions to reduce subjectivity resulting from rater bias.

1. We calculated a single average for each primary learning objective from the individual ratings of all supporting learning objectives that comprised each particular primary learning objective, thereby normalizing our interpretations.

2. We nominally expanded the YTTM to four tier levels that uniquely accommodate each primary learning objective (by its computed average) in order to provide a greater degree of flexibility for positioning the primary learning objectives on the YTTM, and for presenting the results.

Table 6 illustrates an example of a rating scheme for one primary learning objective: the *SMCT's Task 1-1, Identify Supported Units*. In this case, there are four supporting learning objectives (called supporting tasks in the *SMCT's* vernacular) that comprised Task 1-1. The three members of our research team, R_1, R_2, and R_3, individually rated each supporting task in accordance with the YTTM's criteria previously delineated in Table 4 (Chapter II) and the five-point rating scale described by

Table 5. A composite average was calculated by dividing the total rating sum by the number of rating actions. Note that we did not incorporate weighted averages into the analysis. The inclusion of weighted averages would have exacerbated the subjectivity of the results because we were unable to ascertain the supporting learning objectives' relative duration of instruction within each course and their ultimate bearing on the primary learning objectives' practical application in an authentic contingency environment. Table 6 is an example of the rating process, which also includes a narrative justification summarizing key arguments from all three raters.

Table 6. ***Rating Example***

Task 1-1 Identify Supported Units	**RATING**				**Justification**
	R_1	**R_2**	**R_3**	$\sum_{i=0}^{n}$	Junior to mid-enlisted, junior officers, GS-7 to GS-9-1102 series civilians
Receive tasking to provide contracting support	1	1	1	3	CCO can complete this task with DAU CON 234 or below
Identify critical unit attributes	1	2	1	4	No operational planning and little integration required
Identify support units' battle rhythm and processes	1	2	1	4	Can be expected to process basic orders and simple buys
Identify key contracting-related processes and procedures	2	1	2	5	
			Total	16	
			Composite Average, $\bar{x}$	**1.33**	

We recognized that by using this quantitative approach, a sorting mechanism would be required to position the primary learning objectives across the YTTM. As previously discussed, we anticipated that learning objectives would often span two tier levels of the original YTTM. Consequently, we developed a grading system that modified the YTTM from three to four tier levels in order to provide a greater degree of flexibility for positioning the primary learning objectives on the YTTM. The sorting mechanism is illustrated in Table 7. Each tier level description shown in Table 7 was derived from the YTTM and did not influence the initial ratings demonstrated in Table 6. This grading

system, combined with the quantitative normalization of primary learning objectives between the three raters, reduced the effects of subjectivity inherent to this analysis.

After calculating the composite average for a particular primary learning objective, we assigned it to a tier level in accordance with Table 7. For example, the *SMCT Task 1-1* in Table 6 was assigned to tier level 1-2 because its computed average was 1.33 (between 1.00 and 2.00). By definition of the sorting mechanism presented in Table 7, a primary learning objective can only be assigned to one of the four tier levels and no primary learning objective can span more or less than two categories of the five-point rating scale introduced in Table 5.

Table 7. ***Modified YTTM Tier Levels***

Composite Average	Description	Tier Level
1.00 – 2.00	**Intern**: minimal training required; individual is beginning to build a rudimentary acquisition knowledge base but generally is not yet DAWIA certified; able to perform simple administrative contracting actions; developing fundamental OO skill sets; requires extensive supervision and mentoring	1-2
2.01 – 3.00	**Apprentice**: junior practitioner certified at DAWIA Level I or higher; acquisition knowledge base and OO skill sets are mature or maturing; executes simplified acquisitions regularly; has satisfactory understanding of the FAR; may be a warranted contracting officer; has completed at least one CCO deployment	2-3
3.01 – 4.00	**Journeyman**: warranted contracting officer certified at DAWIA Level II or higher; able to plan and execute contracting solutions for the operational commander; leverages the local economy; understands the significance of integrative theater planning and execution; well-developed acquisition knowledge base and CCO experience; thorough understanding of the FAR and DoD acquisition policies; able to effectively contribute input to senior planners; mentors OOs	3-4
4.01 – 5.00	**Master**: mature LCO skill set or advanced acquisition planning experience; well-developed acquisition knowledge base; regularly contributes to (or is member of) theater COCOM staff; education includes advanced degree(s) and joint military professional training; DAWIA Level III certified; able to articulate OPLAN and OPORD requirements; supports national security objectives through CSIP contributions	4-5

B. RESULTS BY COURSE

This section reports our analysis results for the four courses. The results are presented by course in matrices that visually display the tier level to which each primary learning objective was assigned on the modified YTTM. Additionally, the matrices report the total number of "hits" in each category of our five-point scale; these are indicated along with their respective percentages of the total number of hits for each course. From these data, a histogram was created for each course to demonstrate the relative distribution of primary learning objectives across the four-tier model and, by extension, the original YTTM. This section also provides a brief explanation for each supporting learning objective's rating.

1. CON 234 Joint Contingency Contracting

The DAU launched CON 234 Joint Contingency Contracting in 1997. The course was significantly updated and redeployed in late 2007 in response to the Gansler Commission (Gansler et al., 2007). CON 234 was redesigned to train a journeyman-level CCO to be deployable worldwide and immediately effective upon arrival to support the contingency mission (USD [AT&L], 2008). CON 234 is presently offered to qualified acquisition professionals as a nine-day resident course at the DAU training facilities approximately 20 times per year. CON 234 includes nine primary learning objectives, called *TLOs*, and 33 supporting learning objectives, called *ELOs*. The CON 234 analysis is reported in Table 8.

Table 8. *CON 234 Matrix*

	OO		LCO		IPE
	1	2	3	4	5
TLO 1 Explain the elements of contingency contracting planning					
TLO 2 Recognize the importance of ethical behavior in a contracting environment					
TLO 3 Explain roles and responsibilities in a contingency contracting environment					
TLO 4 Explain the impact of cross-cultural behavior patterns, anti-terrorism vulnerabilities, and OPSEC in a contingency contracting environment					
TLO 5 Verify that a purchase request document is properly document and certified					
TLO 6 Complete the appropriate contract actions based on a given scenario					
TLO 7 Outline a course of action for a disaster or emergency response scenario					
TLO 8 Perform contract administration actions required for a contingency contracting scenario					
TLO 9 Discuss actions a contracting officer should take when completing a contract claim, protest, and/or dispute					
Summary	**1 (5.6%)**	**8 (44.4%)**	**8 (44.4%)**	**1 (5.6%)**	**0 (0%)**

- TLO 1 requires some unit-level planning to be conducted during pre-deployment, and it requires integration with other combat support agencies. TLO 1 also requires the ability to analyze theater support organizations and assess capabilities. These tasks are consistent with those CCOs found at the LCO level requiring some operational planning and facilitating integration with operational commanders.

- TLO 2 requires CCOs to conduct themselves ethically in foreign environments (i.e., generally those LCOs or IPEs coordinating with local national citizens). However, all CCOs are expected to be able to ascertain ethical resources.

- TLO 3 requires fundamental recognition of roles and responsibilities for CCOs. All CCOs should be capable of defining basic elements of the contingency contracting environment.

- TLO 4 requires the ability to differentiate between foreign acquisition solutions based on an understanding of cultural differences. This is commensurate with a CCO serving at the LCO level, where he or she is expected to conduct local operational planning and integrate all available resources accordingly. Additionally, the CCO should be prepared to initiate appropriate OPSEC measures as needed.

- TLO 5 requires a satisfactory understanding of the acquisition process and some knowledge of defense appropriations and lines of accounting. An understanding of the contract review board process and the contract ratification process is also required. A CCO at the LCO level is appropriate for this requirement.

- TLO 6 requires differentiating between the types of contingencies, contract types, and dollar thresholds. This task may require more experience and expertise than that found at the OO level.

- TLO 7 requires an intricate understanding of the various agencies within the U.S. government that are responsible for disaster relief and humanitarian missions. Additionally, the CCO must be experienced with advance planning and have the ability to recognize potential deficiencies prior to execution. A CCO at the IPE level would be most qualified for this level but a mature LCO would also possess the right skill set.

- TLO 8 requires a thorough understanding of purchase orders. The task entails experience with post-award contract actions, COR duties, contract termination, and closeout procedures in a contingency environment.

- TLO 9 requires an understanding of claims, protests, and dispute processes. Additionally, the CCO is expected to have experience in

mitigating the risks of these contracting events. A CCO serving at the LCO level would have the experience to both reduce the likelihood of such an occurrence and react appropriately.

Figure 9 illustrates the distribution of the nine primary learning objectives for CON 234, which appears to be symmetric about tier level 2-3. The analysis reports that seven of the nine primary learning objectives are tier level 2-3, while tier levels 1-2 and 3-4 each comprise one learning objective. On the basis of our five-point rating scale, categories 2 and 3 received 88.8% of the hits. Therefore, CON 234 neither emphasizes its course content on the inexperienced OO, nor on the vastly experienced senior LCO. The research suggests that CON 234's target audience should be the junior practitioner certified at DAWIA Level I or higher who has acquired an intermediate acquisition knowledge base, who possesses mature OO skill sets, and who is beginning to develop LCO proficiencies.

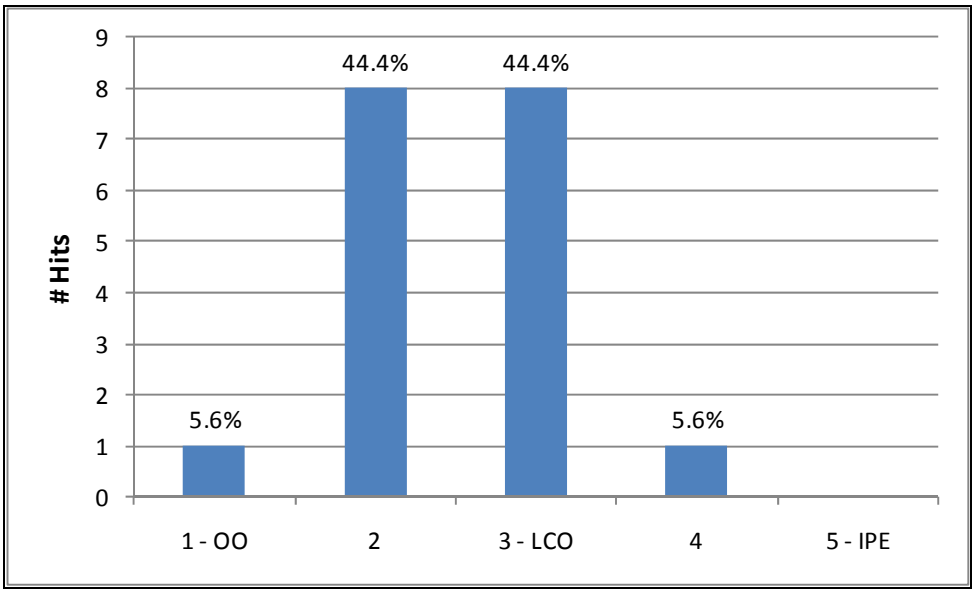

Figure 9. ***CON 234 Histogram***

2. CON 334 Advanced Contingency Contracting

CON 334 Advanced Contingency Contracting was developed as an advanced contingency contracting course that would provide just-in-time training to senior-level contracting personnel deploying to contract management positions (USD [AT&L], 2008). This course, scheduled for launch in August 2010 as a four-day resident course, is a

follow-on course to CON 234 and will be offered approximately five times per year. CON 334 includes seven primary learning objectives, called *TLOs*, and 21 supporting learning objectives, called *ELOs*. The CON 334 analysis is reported in Table 9.

Table 9. *CON 334 Matrix*

	OO		LCO		IPE
	1	2	3	4	5
TLO 1 Recognize and defend the most appropriate approaches for a contingency CoCo in an AOR throughout the four phases of a contingency					
TLO 2 Recommend contract support for the warfighter in any given situation					
TLO 3 Justify the appropriate ethical contingency contracting approach in an AOR contingency					
TLO 4 Select the most appropriate resource for the most efficient and effective contingency office operation during all phases of a contingency					
TLO 5 Determine the appropriate contractual resolution for a contingency AOR requirement					
TLO 6 Apply the necessary steps in the source selection process given the need to select a best value solution					
TLO 7 Select the most appropriate resource for the most efficient and effective contingency office operation during all phases of contingency					
Summary	**0 (0%)**	**1 (7.1%)**	**1 (7.1%)**	**6 (42.9%)**	**6 (42.9%)**

- TLO 1 requires the CCO to directly support the COCOM during all four phases of a contingency operation, which is the basis for an individual serving at the IPE level. This CCO also must provide direct planning support to the OPLAN, OPORD, and related national security strategies.

- TLO 2 requires an understanding of the CSIP and the ability to develop solutions guided by its doctrine. The CCO must possess the ability to anticipate issues not directly addressed in the CSIP. These joint planning qualities are commensurate with a CCO serving at the IPE level.

- TLO 3 requires an advanced understanding of acquisition regulations (U.S.C. and the FAR) and ethical conduct. CCOs serving at the IPE level have the experience required to identify the most ethical approach in complex contingency contracting situations.

- TLO 4 requires the ability to evaluate the requirements for a CSIP. This quality is commensurate with a CCO serving at the IPE level who would

be integrated into the highest level of joint planning and serves as the acquisition component between the COCOM and the OPLAN.

- TLO 5 requires a thorough understanding of the JARB processes. The CCO must be able to analyze and validate requirement packages for the JARB. This CCO must also be prepared to serve as a member of the JARB.

- TLO 6 requires a thorough understanding of the source selection process, the ability to prepare instructions to offerors, and experience evaluating factors for best-value source selection. CCOs serving at the LCO level are involved in these processes on a regular basis.

- TLO 7 requires the ability to evaluate redeployment plans and determine the efficacy of multiple acquisition strategies from a theater planning perspective. This CCO must be prepared to participate at the highest levels of military planning and acquisition strategy integration.

Figure 10 illustrates the distribution of the seven primary learning objectives for CON 334, which is weighted toward tier level 4-5. The analysis reports that six of the seven primary learning objectives are tier level 4-5, whereas one primary learning objective is at tier level 2-3. On the basis of the rating scale, categories 4 and 5 received 85.8% of the hits. Therefore, CON 334 does not emphasize its course content on the inexperienced LCO or below. The research suggests that CON 334's target audience should be the mature LCO or an advanced acquisition planner who must regularly contribute to (or is a member of) a theater COCOM staff. The individual should have completed advanced education, including joint military professional training, and he or she typically should be certified at DAWIA Level III. He or she should also be able to develop and execute CSIP requirements in support of OPLAN and OPORD requirements.

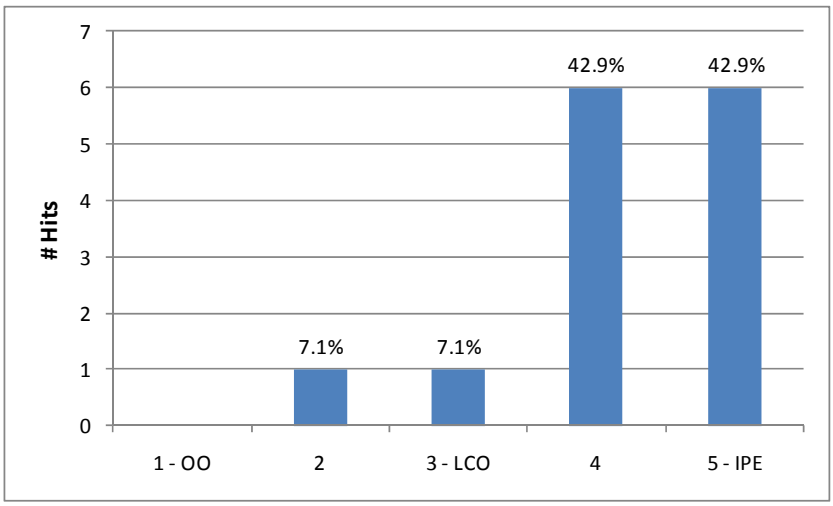

Figure 10. ***CON 334 Histogram***

3. MN 3318 Principles of Contingency Contracting

MN 3318 Principles of Contingency Contracting, certified in 2004 by the DAU as an equivalent to CON 234, is a graduate-level course of more than 30 hours delivered in resident format to NPS students (typically those enrolled in the school's acquisition and contract management curricula) twice per year, and additionally via distance learning to other acquisition professionals at least once per year. Two key differences between MN 3318 and CON 234 are the delivery approach and the target audience. MN 3318 is instructed at the graduate education level through the seminar method of teaching, which is based on the Socratic technique of encouraging students to engage in divergent problem-solving instead of convergent rote learning. MN 3318 includes 10 primary learning objectives, called *topics* and 50 supporting learning objectives called *supporting topics*. The MN 3318 analysis is reported in Table 10.

Table 10. *MN 3318 Matrix*

	OO		LCO		IPE
	1	2	3	4	5
Topic 1 Types of Contingencies					
Topic 2 Cross-Cultural Awareness					
Topic 3 Roles and Responsibilities					
Topic 4 Automated Tools					
Topic 5 Deliberate and Crisis Action Planning					
Topic 6 Anti-Terrorism and Security					
Topic 7 Funding of Contingency Operations					
Topic 8 Administration, Termination, and Closeout of Contingency Contracts					
Topic 9 Case Studies and Integrating Concepts					
Topic 10 Ethical Business Conduct					
Summary	0 (0%)	2 (10%)	5 (25%)	8 (40%)	5 (25%)

- Topic 1 requires a moderate ability to identify contracting sources throughout all phases of support. The CCO must have sufficient experience to discuss waivers, deviations, and other expedited contracting procedures. A CCO at the basic OO level would lack the expertise to meet these requirements.

- Topic 2 requires an understanding of cross-cultural behaviors and the ability to communicate at high levels with foreign governments and businesses. The CCO must have mature cultural awareness and be able to coordinate theater objectives into contracting support.

- Topic 3 requires joint task force experience and experience with the contracting processes of the JARB. The CCO needs to understand the roles and responsibilities of joint task force operations and interagency coordination.

- Topic 4 requires the ability to develop and implement contract actions given an array of resource levels. A CCO serving at the OO level would not be expected to execute these complex administrative actions.

- Topic 5 requires an understanding of the JULLS and the CSIP. The CCO would be expected to effectively participate in joint operational planning.

- Topic 6 requires mastery of integrating anti-terrorism practices into all applicable contingency contracting operations.

- Topic 7 requires a thorough understanding of congressional appropriations. A CCO serving at the OO level would generally lack the

knowledge to identify types of appropriations and practical understanding of all fiscal regulations.

- Topic 8 requires an understanding of the claims process, types of contract modifications, and the procedures for ratifying UCs. Generally, the ability to properly conduct administrative and termination actions is expected at the LCO and IPE levels.

- Topic 9 requires the CCO to prepare a LOGCAP case exercise. This exercise requires a broad understanding of contracting concepts, spanning simple buys to developing a CSIP. The CCO must be able to support theater objectives with well-crafted contracting strategies.

- Topic 10 requires extensive experience and education with respect to ethics, ethical dilemmas, fiscal law, and advance planning at the theater level.

Figure 11 illustrates the distribution of the 10 primary learning objectives for MN 3318, which is predominantly concentrated on number 4 of the scale. The analysis reports that five of the 10 primary learning objectives are tier level 4-5, three are tier level 3-4, and the remaining two are tier level 2-3. On the basis of the rating scale, category 4 received 40% of the hits, categories 3 and 5 each received 25%, and category 2 received 10%. Therefore, MN 3318 does not emphasize its course content on the individual operating below an LCO level. The research suggests that MN 3318's target audience should be the well-developed LCO, although course content for beginning LCOs and advanced acquisition planners are also well represented. MN 3318 is a course tailored toward the higher end of the YTTM scale, although its content is broad enough to benefit individuals at the apprentice to master tier levels in accordance with Table 7. It is superior to CON 234 in the sense that this course is better equipped to train future contingency contracting leaders; however, it does not provide extensive training of administrative duties for the OO operator, and its enrollment is limited to NPS graduate students and a small number of acquisition professionals through distance learning.

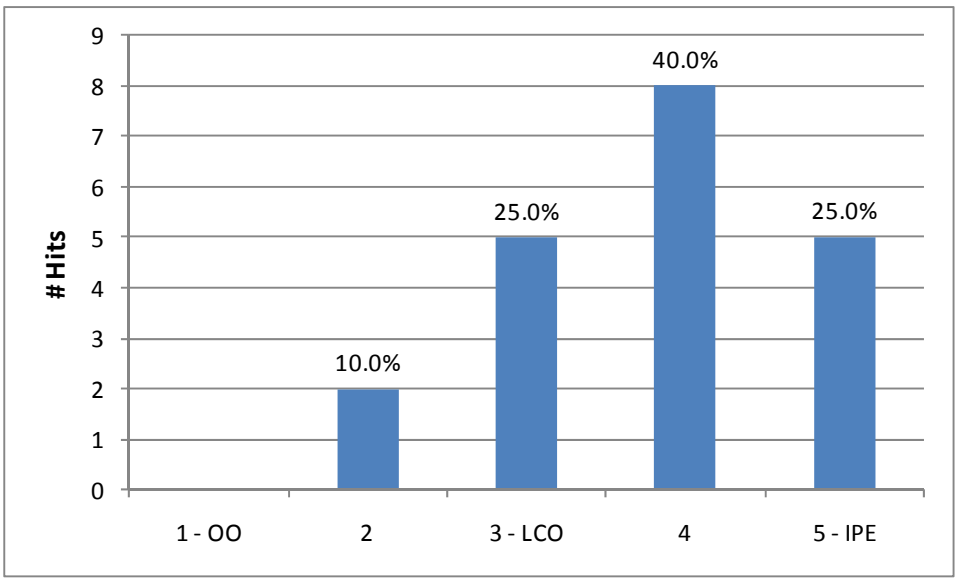

Figure 11. ***MN 3318 Histogram***

4. *Soldier's Manual of Common Tasks (51C)*

The *SMCT (51C)*, released in September 2009 in draft format, includes 36 key tasks comprising the body of knowledge essential for Army CCOs (51C). Although still in draft format, the manual is accessible to all military and civilian personnel with AKO user access. This resource is intended to be used as an independent study tool for all new 51Cs, but its content is typically reinforced at the unit level through a mentor program whereby senior 1102s guide junior 51Cs through a proficiency process. The *SMCT* includes 36 primary learning objectives called *tasks* and 188 supporting learning objectives called *supporting tasks*. The *SMCT's* 36 tasks are distributed over four chapters:

- Chapter 1: Unit Engagement Tasks
- Chapter 2: Pre Award Tasks,
- Chapter 3: Post-award Tasks, and
- Chapter 4: Other CCO Tasks. (ECC, 2009)

The *SMCT* analysis is reported in Table 11.

Table 11. ***SMCT Matrix***

	OO		LCO		IPE
	1	2	3	4	5
Task 1-1 Identify Supported Units					
Task 1-2 Train Supported Units - Oper. Contract Support					
Task 1-3 Advise Supported Units					
Task 1-4 Review Contracting Support Integration Plans					
Task 2-1 Procurement Desktop Defense (PD2)					
Task 2-2 Review Purchase Rqsts & Supporting Documents					
Task 2-3 Conduct Market Research					
Task 2-4 Conduct Acquisition Planning					
Task 2-5 Document Other Than Full and Open Competition					
Task 2-6 Synopsize Proposed Contract Actions					
Task 2-7 Solicit Competition					
Task 2-8 Receive Solicitation Responses					
Task 2-9 Evaluate Offers					
Task 2-10 Prepare Contract Awards					
Task 2-11 Special Funds Codes					
Task 2-12 Unspecified Minor Military Construction					
Task 2-13 Train, Appoint, and Manage CORs					
Task 3-1 Conduct Post award Orientations					
Task 3-2 Notify Unsuccessful Offers Award Synopsis					
Task 3-3 Issue Delivery Orders/Task Orders/BPA Calls					
Task 3-4 Exercise Options					
Task 3-5 Monitor Contractor Performance					
Task 3-6 Process Documents for Payments					
Task 3-7 Modify Contracts					
Task 3-8 Terminate Contracts					
Task 3-9 Conduct Contract Closeout					
Task 3-10 Process Protests					
Task 3-11 Process Claims					
Task 3-12 Process Unauthorized Commitments					
Task 4-1 Use The SF 44					
Task 4-2 Train, Appoint, and Manage OOs and FOOs					
Task 4-3 Conduct Vendor Education					
Task 4-4 Employ a GPC as a Payment Method and Procurement Tool					
Task 4-5 Manage Bulk Funds					
Task 4-6 Prepare For Deployment					
Task 4-7 Maintain a PIIN Log					
Summary	**7 (9.7%)**	**28 (38.9%)**	**29 (40.3%)**	**8 (11.1%)**	**0 (0%)**

- Task 1-1 requires fundamental knowledge to identify the supported unit's needs and requisite processes.

- Task 1-2 requires the CCO to plan, prepare, execute, and assess training for other CCOs. A CCO who is a senior OO or junior LCO has the competency to complete this task.

- Task 1-3 requires little guidance. There is no expectation for the CCO to conduct operational planning and no broad liaison functions required to complete this task.

- Task 1-4 requires the CCO to analyze mission requirements and develop a CSIP. The CCO should be able to exploit the local and theater ELOO.

- Task 2-1 requires fundamental knowledge to complete basic ordering and simple buys, but the CCO is expected to be under supervision for this task.

- Task 2-2 requires the CCO to review PRs and supporting documents. Typically, these documents are prepared by a subordinate CCO. The reviewing CCO is normally certified DAWIA Level I or higher and has a moderate understanding of the FAR.

- Task 2-3 requires an understanding of basic business principles and the FAR to conduct market research. The CCO should be prepared to coordinate local contracting operations.

- Task 2-4 requires the CCO to have basic analytical skills, limited experience, and a moderate understanding of the FAR. The CCO should be prepared to coordinate local contracting operations.

- Task 2-5 requires a moderate understanding of the FAR and the ability to coordinate local contracting operations. This CCO should also be familiar with administrative requirements to document *other than full and open competition* contract actions.

- Task 2-6 requires a moderate understanding of the FAR. The CCO should also know the procedures for preparing and posting a synopsis.

- Task 2-7 requires a moderate understanding of the FAR and the ability to coordinate local contracting operations. The CCO is required to have significant experience in basic ordering and simple buys.

- Task 2-8 requires minimal training. The workload includes basic administration functions and assumes that the OO is under supervision.

- Task 2-9 requires the CCO to be certified DAWIA Level I or higher and have a moderate understanding of the FAR. The CCO is required to have significant experience in basic ordering and simple buys.

- Task 2-10 requires the CCO to be certified DAWIA Level I or higher and have a moderate understanding of the FAR. The CCO should also have experience in preparing contract awards.

- Task 2-11 requires the CCO to be certified DAWIA Level I or higher and have a moderate understanding of the FAR. The CCO is required to identify different types of buy programs requiring unique funding codes.

- Task 2-12 requires the CCO to be certified DAWIA Level I or higher and have a moderate understanding of the FAR. The CCO should also have experience in completing simple contract actions.

- Task 2-13 requires the CCO to be thoroughly knowledgeable in the FAR and DoD acquisition policies, and certified DAWIA Level II or higher. This CCO is expected to train and manage CORs.

- Task 3-1 requires the CCO to be able to prepare post-award documents.

- Task 3-2 requires the CCO to notify unsuccessful offerors through an award synopsis. The task requires a moderate understanding of the FAR.

- Task 3-3 requires the CCO to issue delivery orders, task orders, and work with blanket purchase agreements. This task requires no complex contract actions.

- Task 3-4 requires a moderate understanding of the FAR and experience with simple contract actions. The CCO is required to evaluate the efficacy of a contract and decide if it is in the best interest of the government to exercise its associated options.

- Task 3-5 requires the CCO to review, understand, and inspect the requirements of the contractor. The CCO should be able to accurately document discrepancies of contractors and train CORs in the monitoring of contractor performance.

- Task 3-6 requires the CCO to review, resolve discrepancies, and process documents for payment. The CCO should have sufficient experience to complete this task with no supervision.

- Task 3-7 requires the CCO to review, resolve, and process contract modifications. The CCO must be warranted to allocate funds on behalf of the government.

- Task 3-8 requires the CCO to review and recommend if a contract meets the criteria for termination. This competency is expected of a warranted contracting officer; it also requires a thorough understanding of the FAR and DoD acquisition policies.

- Task 3-9 requires an extensive understanding of the FAR and broad experience with contract actions. The CCO at this level should be warranted and must be able to complete contract closeouts.

- Task 3-10 requires an extensive understanding of the FAR, DoD acquisition policies, and GAO protest procedures.

- Task 3-11 requires the CCO to prepare determinations in accordance with the FAR and to process contractor claims.

- Task 3-12 requires the CCO to determine if a UC has occurred and to gather information to process the UC.

- Task 4-1 requires the CCO to understand the correct utilization of SF 44. This task implies that the individual is sufficiently trained and is capable of conducting simple buys and purchases with little supervision.

- Task 4-2 requires the individual to train, appoint, and manage OOs. This task implies that the CCO has the authority to appoint OOs and has attained the requisite experience and rank (or paygrade).

- Task 4-3 requires the CCO to have knowledge of the local economy and the skill to coordinate the education of vendors in the area of operation.

- Task 4-4 requires the knowledge to conduct basic orders and simple buys using a GPC. This task implies that the CCO requires minimal guidance and has no DAIWA certifications.

- Task 4-5 requires a moderate understanding of the FAR, and the individual should be certified DAWIA Level I or higher.

- Task 4-6 requires a fundamental understanding of the FAR and a sufficient experience level to complete basic contingency contracting actions.

- Task 4-7 requires the knowledge to maintain a PIIN log. This task requires a technical understanding commensurate with an experienced OO.

Figure 12 illustrates the distribution of the 36 primary learning objectives for the *SMCT (51C)*, which is generally concentrated on tier level 2-3. The analysis reports that

seven of the 36 primary learning objectives are tier level 1-2, 21 of the 36 are tier level 2-3, and the remaining eight are tier level 3-4. On the basis of the rating scale, category 2 received 38.9% of the hits and category 3 received 40.3%. The remaining hits were spread between categories 1 and 4 receiving 9.7% and 11.1%, respectively. Therefore, the *SMCT (51C)* neither emphasizes its course content on the new and inexperienced OO nor on the well-experienced LCO or IPE CCO. The research suggests that the *SMCT's* target audience should be the experienced OO or the junior LCO. Like CON 234, the *SMCT's* ideal student is a junior practitioner certified at DAWIA Level I or higher who has acquired an intermediate acquisition knowledge base, who possesses mature OO skill sets and who is beginning to develop LCO proficiencies.

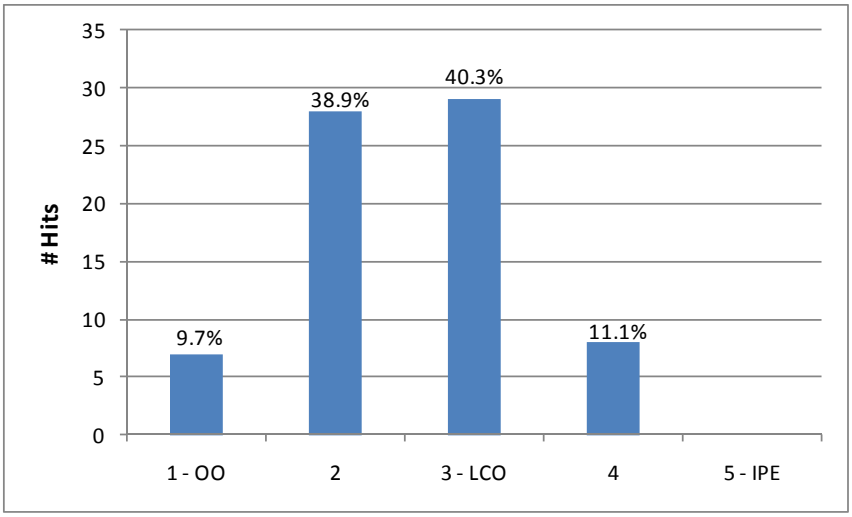

Figure 12. ***SMCT (51C) Histogram***

C. COMPOSITE RESULTS

Figure 13 illustrates the relationship of the four courses on a radar chart. Specifically, each course is arrayed on the chart according to their percentage frequency of hits within the five primary learning objective categories, which are displayed in clockwise fashion beginning at the top of the chart. Notice that the farther from the center a course's category is positioned, the more prominently that course's primary learning

objectives are represented by the category. By extension, this figure visually demonstrates in two dimensions how the courses' current content spans the YTTM.

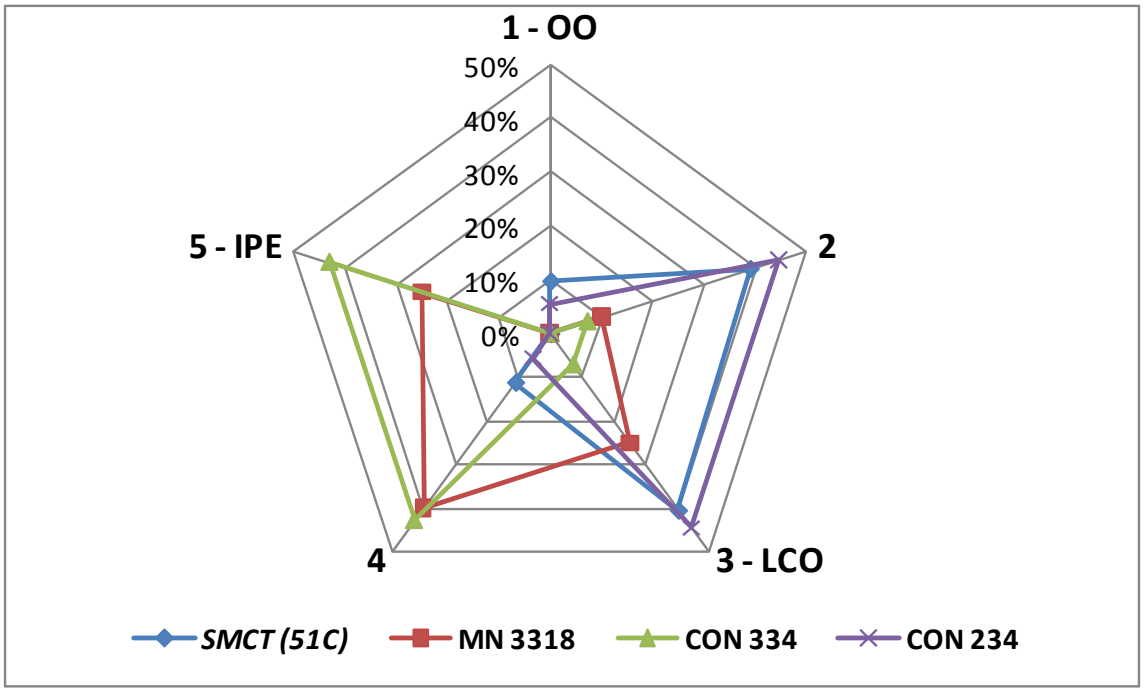

Figure 13. ***Composite Radar Chart***

CON 234 is a tier level 2-3; categories 2 and 3 received 88.8% of the hits. Therefore, CON 234 neither emphasizes its course content on the inexperienced OO nor on the vastly experienced senior LCO. We anticipated this finding because CON 234 is designed to train contracting professionals from junior enlisted personnel to mid-grade officers who have never deployed to a contingency contracting operation. The developing CCO must complete several fundamental DAU courses prior to taking CON 234 in accordance with the CCO core training model. This requirement accounts for the fact that less than 6% of CON 234 focuses on the lowest category (1-OO), which is otherwise gained by the CCO in mission-focused courses such as CON 120. Likewise, the target audience of CON 234 lacks the more advanced education, experience, and rank to employ the learning objectives of higher tier levels; less than 6% of the course's content is concentrated at categories 4 or 5. The research suggests that CON 234's target audience should be the junior practitioner certified at DAWIA Level I or higher who has

acquired an intermediate acquisition knowledge base, who possesses mature OO skill sets, and who is preparing to develop LCO proficiencies.

CON 334 is a tier level 4-5; categories 4 and 5 received 85.8% of the hits. Therefore, CON 334 does not emphasize its course content on the inexperienced LCO or below. We anticipated this finding because the course is an advanced contingency contracting course that prepares senior-level contracting personnel who are deploying to contract management positions. This course description accounts for the fact that less than 15% of the course material focuses on the lowest three categories of the model. CON 234 is a prerequisite for CON 334; therefore, the CCO is ideally trained at the lower tier levels before enrolling in CON 334. The research suggests that CON 334's target audience should be the mature LCO or the advanced acquisition planner who must regularly contribute to (or is a member of) a theater COCOM staff or joint task force. The individual should have completed advanced education, to include joint military professional training, and typically should be certified at DAWIA Level III. He or she should also be able to develop and execute CSIP requirements in support of OPLAN and OPORD requirements.

MN 3318 spans categories 3, 4, and 5; its course content comprises tier levels 3-4 and 4-5. On the modified model, category 4 received the most hits at 40%, and categories 3 and 5 each received 25%. Due to the symmetry about category 4, we elected to designate MN 3318's course content as equally representing tier level 3-4 and tier level 4-5. Therefore, MN 3318 does not emphasize its course content on the individual operating below a LCO level. We anticipated this finding because the course is instructed at a graduate education level for mid-grade officers who are preparing to assume positions of greater responsibility within the contingency contracting field. This graduate-level format accounts for the fact that only 10% of the course material focuses on the lowest two categories of the model. Yet the course does not mimic CON 334 because, as a CON 234 equivalency, it must additionally provide coursework at the LCO level, which most of its students have not previously completed nor experienced in the field. Additionally, basic contract management training is provided in the NPS curriculum before graduate students enroll in MN 3318. The research suggests that MN 3318's target

audience is the NPS student; however, its course content is suitable for most LCOs (beginning or more advanced) and for senior acquisition planners.

The *SMCT (51C)* is a tier level 2-3; categories 2 and 3 received 79.2% of the hits. Therefore, the *SMCT (51C)* neither emphasizes its course content on the new and inexperienced OO nor on the well-experienced LCO or IPE CCO. We anticipated this finding because the *SMCT* is tailored to augment the fundamental training that Army soldiers and civilians receive from the DAU's CCO core training model. This objective accounts for the fact that less than 10% of the *SMCT* focuses on the lowest category (1-OO), which is otherwise gained through standard DAU training, and the remaining 11.1% is concentrated at category 4. The research suggests that the *SMCT's* target audience should be the experienced OO or the junior LCO. Like CON 234, the *SMCT's* ideal student is a junior practitioner certified at DAWIA Level I or higher who has acquired an intermediate acquisition knowledge base, who possesses mature OO skill sets, and who is beginning to develop LCO proficiencies.

We found significant overlap between CON 234, MN 3318, and the *SMCT (51C)*; we also identified significant overlap between MN 3318 and CON 334. We anticipated overlap between CON 234 and the *SMCT*, given the similarities of each courses' target audiences and the premise that the Army's intent for the *SMCT (51C)* is to augment the training received in CON 234 and the DAU's CCO core training model. The learning objectives comprising CON 234 and the *SMCT* are not entirely similar, but both courses emphasize skill sets that prepare junior CCOs for their first contingency contracting deployment. MN 3318 contains category 3 elements of CON 234 and the *SMCT*, but it primarily focuses on the more advanced categories 4 and 5. We anticipated some overlap between MN 3318 and CON 234 because the DAU granted CON 234 equivalency for MN 3318 in 2004, and the NPS must ensure that relevant learning objectives remain consistent in order to uphold its accreditation. Figure 14 illustrates the relationship between CON 234, MN3318, and the *SMCT (51C)* by comparing their percentage frequency of hits on a smoothed line chart.

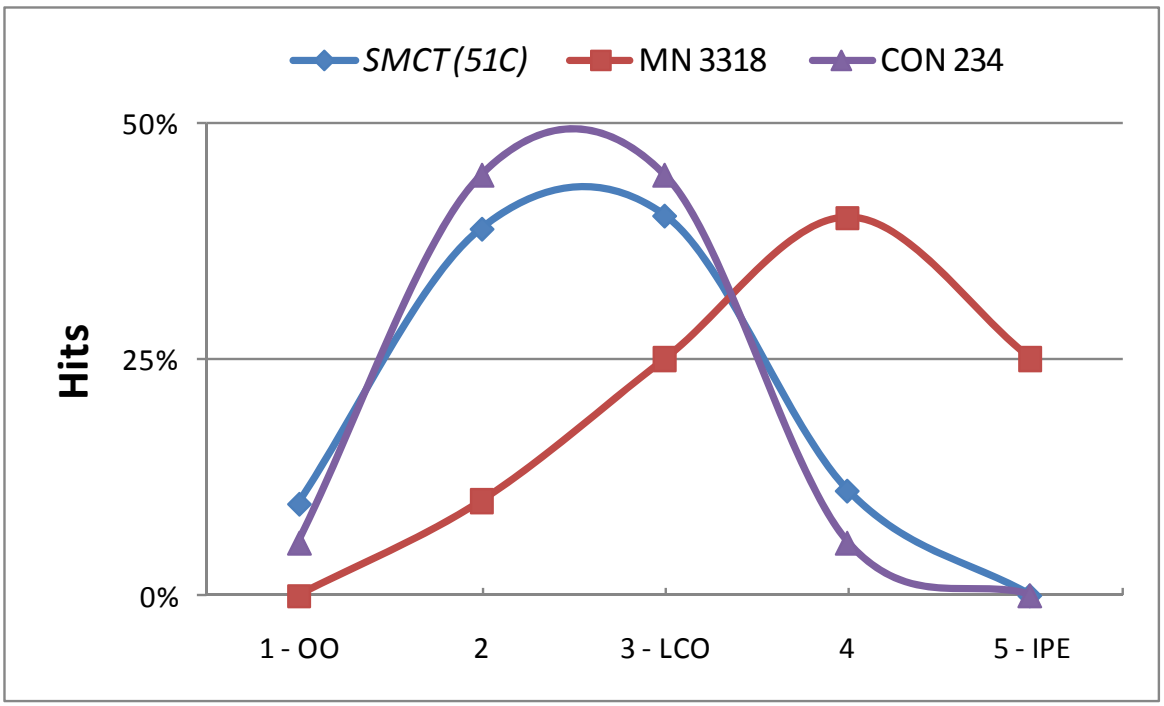

Figure 14. ***CON 234, MN 3318, and the SMCT (51C)***

We also discovered overlap between MN 3318 and CON 334. We anticipated this overlap because both target audiences include military and civilian leaders within the contingency contracting community. The learning objectives comprising MN 3318 and CON 334 are not entirely similar—as described previously, MN 3318 more prominently touches category 3 by design—but both primarily concentrate on the higher echelons of the YTTM and our modified model. Figure 15 illustrates the relationship between CON 334 and MN3318 by comparing their percentage frequency of hits on a smoothed line chart.

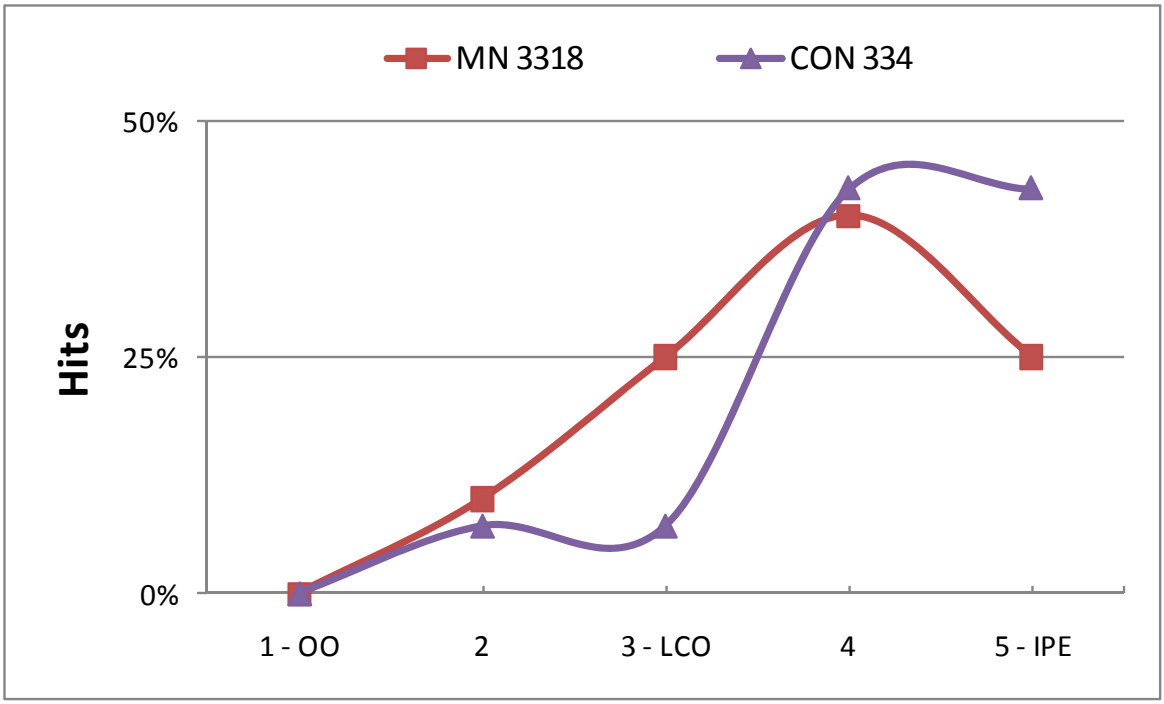

Figure 15. ***CON 334 and MN 3318***

D. SUMMARY

Chapter IV provided a comparative analysis of the primary and supporting learning objectives for each of the four courses. The analysis incorporated the use of a benchmark hierarchical model, the YTTM, and a quantitative rating scheme that exploited the YTTM's hierarchical nature with respect to its four defining elements: function, education, skill set, and personnel and manpower attributes. Supporting learning objectives were rated by each member of our research team, and primary learning objectives were accordingly graded and positioned along a four-tier model, which is a modification to the original YTTM that allows a primary learning objective to straddle more than one tier level of the YTTM. We examined the relative similarities and differences between the four courses, the extent to which each course benefits CCOs of varying targeted levels of proficiency, and whether the intent of each course is met in relation to its course description and targeted audience.

Chapter V, PAT Validation, describes our support efforts to the ECC, including market research, test construction, administrative oversight, and examinee test result analysis.

V. PAT ANALYSIS

The purpose of this chapter is to outline the process utilized by our research team to format the Proficiency Assessment Test (PAT) into multiple digital assessments. We will present this data in the following manner. First, we will discuss the selection process utilized to identify the web-based software platform for PAT validation to take place at two test locations. Second, we will identify which of the 36 tasks within the *SMCT* where both or at least one of the test sites failed to achieve a passing score (80%), as determined by the ECC. Third, for the failed tasks, we identified the questions that test takers answered correctly less than 50% of the time. Our efforts were in direct support of the ECC's initiative to train CCOs for future operations.

The ECC and the NPS partnered in a previous endeavor to develop the PAT questions to test a contracting officer's knowledge of the *SMCT*. Arzu et al. (2010) developed question pools for each of the 36 tasks within the *SMCT*, but validation of the test questions was outside of their research scope. Their efforts resulted in the development of question pools ranging between 20 and 40 task-dependent multiple choice questions. This chapter describes our efforts to select a web-based testing platform, build PATs, and administer two testing events.

A. INTRODUCTION

The 2007 Gansler Report called for the development of an expeditionary contracting manual, stating,

> Much like an infantryman has a field manual, expeditionary contracting officers need a quick reference tool that allows them to practice expeditionary contracting before setting foot in-theater and to continue using the same reference while deployed. Most important, contracting personnel must be trained and thoroughly familiar with the Expeditionary Contracting Manual prior to deployment. Doing it for the first time in-theater is not acceptable. (Gansler, 2007)

The resulting manual is the *SMCT*, in which the ECC serves as the proponent for development. The *SMCT* is composed of 36 mission essential tasks all 51Cs should be able to accomplish prior to deployment. As part of our research, we converted 35 of the

36 tasks into web-based assessments. Task 2-1 was not converted into web-based format because the scope of the task was under development during this project. We designed this web-based test to accomplish 3 goals:

1. Provide a tool for the ECC to validate the PAT questions, thus assisting the ECC in preparing CCOs for operations in contingency environments;

2. Provide a digital platform to rapidly administer the test to a large number of CCOs in potentially remote locations, if needed; and

3. Use analytical tools inherent to the chosen software to assist in the interpretation of the assessment results.

The ECC's initial requirements included four key performance parameters (KPP). The following four requirements shaped the selection of the software required to administer the PAT:

1. Must be a web-based platform that can store unlimited results for indefinite time;

2. Must have online security features to include password protection and ability to limit users;

3. Should have built-in analytical tools to assist examining the results; and

4. Allows an administrator to form question pools in which the software will randomly select a preset number of questions from the pool and randomly organize the answers differently every time the test is taken.

Our market research utilized these 4 KPPs as elimination criteria for the available commercial software products. It was also important for us to find a commercial off the shelf (COTs) solution that was simple to use, thus facilitating a more rapid conversion of the previously developed questions into the selected software's format.

Our efforts resulted in the conversion of over 1,400 questions to the format of the selected software. We completed this task in 140 hours over approximately 3 weeks. The ECC used our selected software solution in testing all 35 tasks at two locations in June 2010. The validation of the test was a success according to the feedback received from the ECC.

B. MARKET RESEARCH

An LPTA source selection approach was used in lieu of a trade-off approach. We anticipated that the COTS software that we selected would not serve as a long-term solution for the ECC. This was based on the assumption that the selected software would not meet the long-term requirements of the ECC to maintain ownership of the data, provide a sufficient level of security, and allow for customization. Our method of market research involved exploring all available options by conducting online searches for software. We researched available COTS test-administering software services and ultimately evaluated six potential providers. Subject-matter experts were queried at the NPS to determine if products were available in the commercial market. After selecting the software, we built 35 web-based assessments within a six-week period.

C. SELECTION FACTORS

We based the evaluation factors on four of the ECC's technical requirements. The four factors were all of equal weight, and price alone was the determining factor in selecting the software. We did not consider past performance in the evaluation process. Table 12 shows our four technical evaluation factors and the six products that we evaluated. Product A and Product B failed to fulfill all key technical requirements, resulting in immediate elimination. Of the remaining products, we selected the software with the lowest price available for eight months of unlimited service.

Table 12. *LPTA Evaluation*

TECHNICAL EVALUATION FACTOR	Product A	Product B	Product C	Product D	Product E	Product F
WEB-BASED SOFTWARE THAT CAN STORE UNLIMITED RESULTS FOR INDEFINITE TIME	X	X	X	X	X	X
HAS ONLINE SECURITY FEATURES TO INCLUDE PASSWORD PROTECTION AND ABILITY TO LIMIT USERS.	X	X	X	X	X	X
HAS SIMPLE ANALYTICAL TOOLS ALLOWING AN ADMINISTRATOR TO SORT DATA THROUGH BIOGRAHICAL QUESTIONS.	X	X	X	X	X	X
ALLOWS THE ADMINISTRATOR TO FORM QUESTION POOLS IN WHICH THE SOFTWARE WILL RAMDONLY SELECT A PRESET NUMBER OF QUESTIONS FROM THE POOL AND RAMDOMLY ORGANIZE THE ANSWERS DIFFERENTLY EVERYTIME THE TEST IS TAKEN.			X	X	X	X
COST	ELIMINATED	ELIMINATED	$360.00 x 8 months = $2,880	$365.62 x 8 months = $2,925	$375.00 x 8 months = $3,000	$150.00 x 8 months = $1,200

Based on the technical factors, Product F fulfilled the requirement at the lowest price. We discovered that some providers offered additional features, resulting in greater capabilities, but they were not considered due to our LPTA approach. As previously stated, we did not see Product F as an enduring solution, but as the LPTA solution to validate the PAT within the scope of our research project.

D. PRODUCT F FEATURES

Product F met all four of our selection criteria. Product F additionally allowed us to experiment utilizing a free trial period, which allowed us to initiate construction of the PAT and evaluate its features. We determined Product F to be the most simple software solution to convert the PAT questions from Microsoft Word format to the testing software's format. Product F had numerous features that made it attractive to validating the PAT questions. Product F allowed the administrator to use preformatted templates to tailor the assessment to provide a more professional appearance. Product F also provided two options for administering the test to a potential test taker. Option 1 allowed the administrator to send a test link directly to the tester via email. Option 2 allowed the administrator to link the test to his or her web page. Product F includes numerous evaluation tools that can be utilized to examine an array of results for each assessment. For example, Product F allows the administrator to create a maximum of eight demographic filters (e.g., experience level, rank, DAWIA certification level). Additionally, each assessment can be analyzed according to test takers' collective responses (e.g., percentage of correct responses per question). We input the demographic filters for each of the 35 assessments in accordance with the ECC's requirements.

Product F provided five features to assist in administrative controls. First, the administrator had the ability to password-protect each assessment so that an individual taking the assessment must be sent a link and a password. Second, the administrator could set parameters to limit the number of attempts for each assessment. Third, the administrator could set parameters to allow access only via matching email address. Fourth, the administrator could set the parameters to view every assessment that has been initiated. Finally, the administrator could set parameters to identify up to 50 people to be

notified when an assessment is completed. While Product F's administrative controls were robust, we recognize that management of the preceding features required an exorbitant amount of time.

Despite all of Product F's positive features, it lacked the needed security features for long-term implementation within the Army. For example, the Army utilizes Defense Knowledge Online (DKO) and Army Knowledge Online (AKO) as the host to conduct DOD, Army directed training (e.g., Survive, Evade, Resist, Escape [SERE 100]). The aforementioned DKO and AKO utilize a Hypertext Transfer Protocol Secure (HTTPS) Internet protocol; meanwhile, Product F used an unsecured Internet protocol.

E. PAT CONSTRUCTION AND ADMINISTRATION

While the construction and administration of the PAT was a joint effort, we took the lead in the construction of each assessment, while the ECC took the lead in administering (i.e., proctoring) the assessments. As previously discussed, we converted over 1,400 multiple-choice questions and responses from Microsoft Word format to the testing software's format. Before converting the test questions, we customized the test template of Product F in accordance with the ECC's requirements. We then developed eight demographic filters for each assessment in partnership with the ECC. The PAT was administered at Ft. Riley, Kansas, and at Ft. Campbell, Kentucky, in June 2010.

ECC's original intent was for the 35 assessments to be conducted at the two test sites and for each test taker to answer all questions associated with a given task. At Ft. Riley, the plan was executed as intended by the ECC; however, at Ft. Campbell, the ECC administered only half the test questions to the target audience and, furthermore, implemented a random test question format (a feature of Product F). Specifically, at Ft. Campbell, two test takers might have been asked different questions for the same assessment. The change in technique for administering the PAT made validation of the questions by the ECC difficult due to an insignificant statistical number of responses. In all, 26 individuals were tested at the two testing sites. The tested population included CCOs, 1102s, and contract specialist interns. At the end of the second test, we turned over maintenance and administration responsibility associated with Product F to the ECC.

F. METHODOLOGY

PAT results are presented in the following fashion: first, by providing a comparison of the overall test scores at both test sites by chapter of the *SMCT*; second, by identifying those tasks where at least one of the test locations failed to achieve a passing score (80%); third, by reviewing where we rated each failed task on the YTTM; and fourth, by identifying the questions that were incorrectly answered more than 50% of the time.

G. CHAPTER BREAKDOWN

The following section reports the average scores by testing site and task. As previously introduced in Chapter III of this report, the *SMCT* is comprised of four chapters and 36 tasks. Chapter 1, Unit Engagement Tasks, has four tasks. Chapter 2, Pre Award Tasks, has 13 tasks. Chapter 3, Post-award Tasks, has 12 tasks. Chapter 4, Other CCO Tasks, has 7 tasks.

1. Chapter 1

As depicted in Figure 16, scores were very similar between the two test sites. There was only one task in Chapter 1 where at least one of the sites failed to achieve an 80% average. The failed task was Task 1-4, entitled Review Contracting Support Integration Plan. The validate test group averaged a 60%, and the random test group averaged a 64% on this task. In the previous chapter, we determined Task 1-4 to be at tier level 3-4 on the YTTM, which makes this task commensurate with that of a journeyman.

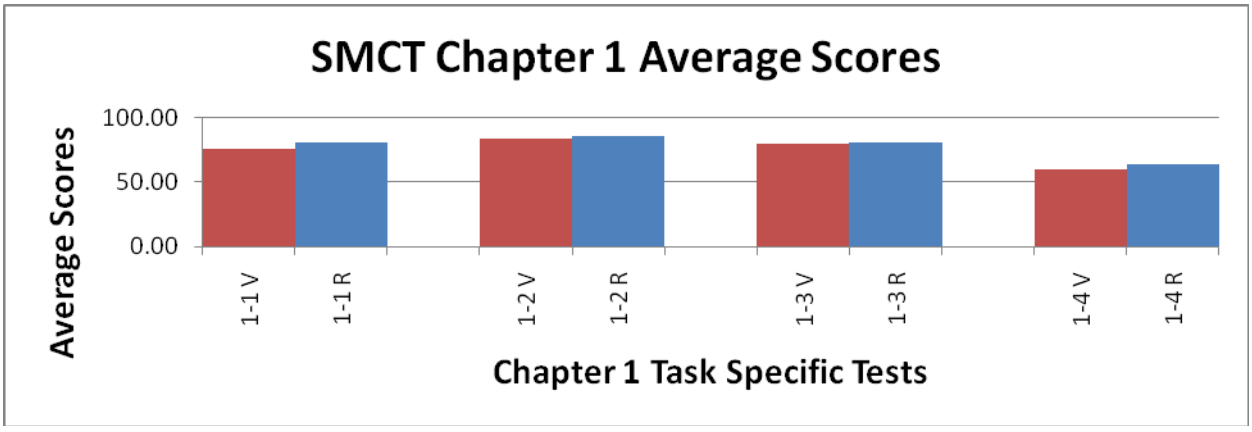

Figure 16. ***SMCT Chapter 1 Average Scores***

There were eight total questions in Task 1-4 where test takers failed to achieve an average score of 50%. (See Appendix F).

2. Chapter 2

As depicted in Figure 17, scores were generally similar between the two test sites. There were a few tasks where there was a 10-point or more difference in average test score. Those tasks were Task 2-9, which had an 11-point difference, Task 2-11 which had a 16-point difference, and Task 2-13 which had a 14-point difference.

There were four tasks in Chapter II where at least one of the sites failed to achieve an 80% average. The first of those was Task 2-5, entitled Document Other Than Full and Open Competition. The validate test group averaged a 79% and the random test group averaged a 77% on this task. The next task was Task 2-6, entitled Synopsize Proposed Contract Actions. The validate test group averaged a 68% and the random test group averaged a 70% on this task.

The third failed task was Task 2-7, entitled Solicit Competition. The validate test group averaged a 72% and the random test group averaged a 77% on this task. Lastly was Task 2-12, entitled Unspecified Minor Military Construction. The validate test group averaged a 67% and the random test group averaged a 72% on this task. All four failed tasks in chapter 2 were placed at tier level 2-3 on the YTTM, which makes these tasks commensurate with that of an apprentice.

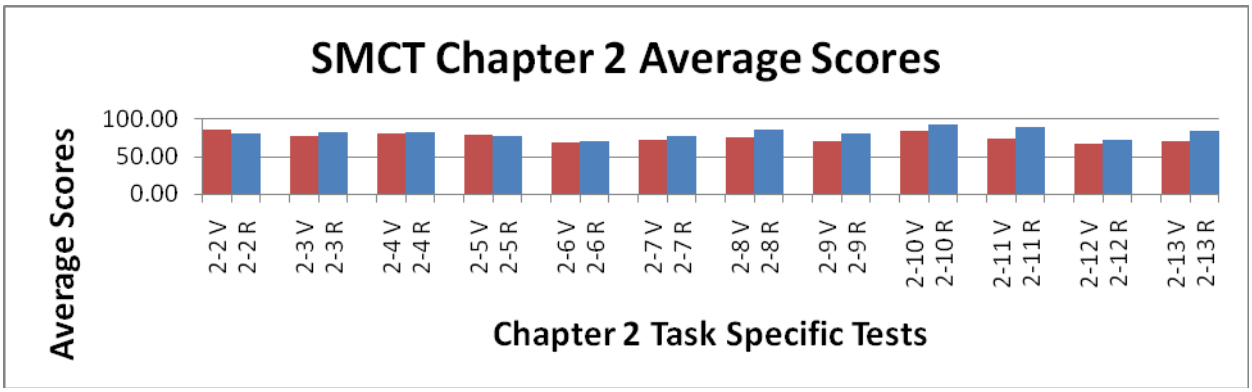

Figure 17. ***SMCT Chapter 2 Average Scores***

There were four total questions in Task 2-5 where test takers failed to achieve an average score of 50%. There were seven total questions in Task 2-6 where test takers failed to achieve an average score of 50%. There were six total questions in Task 2-7 where test takers failed to achieve an average score of 50%. There were four total questions in Task 2-12 where test takers failed to achieve an average score of 50%. (See Appendix F for missed questions)

3. Chapter 3

As depicted in Figure 18, scores were generally similar between the two test sites. There was only one task where there was a 10-point or more difference in average test score. That task was Task 3-2, which had a 15-point difference.

There were nine tasks in chapter 3 where at least one of the sites failed to achieve an 80% average. The first of those was Task 3-2, entitled Notify Unsuccessful Offers of Award Synopsis. The validate test group averaged a 61% and the random test group averaged a 76% on this task. The next task was Task 3-3, entitled Issue Delivery Orders, Task Orders, and BPA Calls. The validate test group averaged a 70% and the random test group averaged a 77% on this task. The third failed task was Task 3-6, entitled Process Documentation for Payments. The validate test group averaged a 70% and the random test group averaged a 78% on this task.

The fourth was Task 3-7, entitled Modify Contracts. The validate test group averaged a 66% and the random test group averaged a 73% on this task. The fifth was Task 3-8, entitled Terminate Contracts. The validate test group averaged a 65% and the random test group averaged a 69% on this task. The sixth was task 3-9, entitled Conduct Contract Closeout. The validate test group averaged a 65% and the random test group averaged a 67% on this task.

The seventh was Task 3-10, entitled Process Protests. The validate test group averaged a 57% and the random test group averaged a 63% on this task. The eighth was

Task 3-11, entitled Process Claims. The validate test group averaged a 76% and the random test group averaged a 73% on this task. The ninth was Task 3-12, entitled Process Unauthorized Commitments. The validate test group averaged a 78% and the random test group averaged a 79% on this task.

Of the nine failed tasks in chapter 3, Task 3-3 was placed at tier level 1-3 on the YTTM, which makes it commensurate with that of an intern. Tasks 3-2, 3-6, 3-11 and 3-12 were placed at tier level 2-3 on the YTTM, which makes them commensurate with that of an apprentice. Meanwhile Tasks 3-7, 3-8, 3-9 and 3-10 were placed at tier level 3-4 on the YTTM, which makes them commensurate with that of a journeyman.

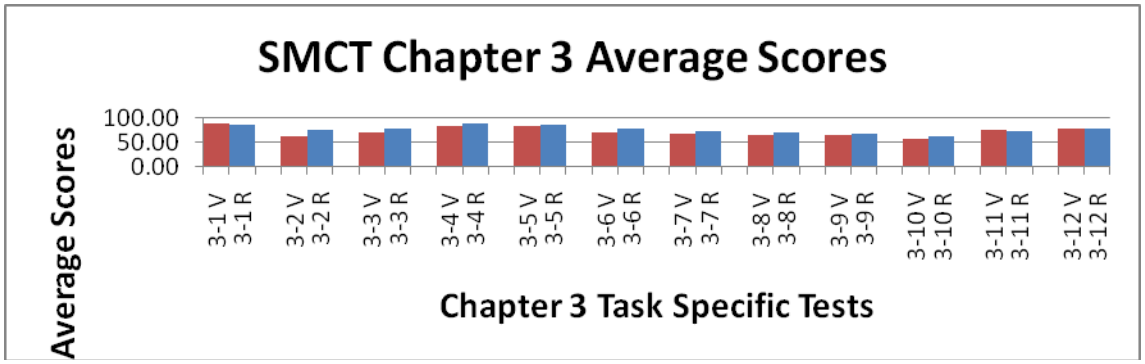

Figure 18. ***SMCT Chapter 3 Average Scores***

There were six total questions in Task 3-2 where test takers failed to achieve an average score of 50%. There were eight total questions in Task 3-3 where test takers failed to achieve an average score of 50%. There were nine total questions in Task 3-6 where test takers failed to achieve an average score of 50%. There were nine total questions in Task 3-7 where test takers failed to achieve an average score of 50%. There were eleven total questions in Task 3-8 where test takers failed to achieve an average score of 50%. There were eight total questions in Task 3-9 where test takers failed to achieve an average score of 50%. There were twelve total questions in Task 3-10 where test takers failed to achieve an average score of 50%. There were four total questions in Task 3-11 where test takers failed to achieve an average score of 50%. There were two

total questions in Task 3-12 where test takers failed to achieve an average score of 50%. (See Appendix F for missed questions)

4. Chapter 4

As depicted in Figure 19, scores were generally similar between the two test sites. There was only one task in chapter 4, where at least one of the sites failed to achieve an 80% average. The failed task was Task 4-4, Employ a GPC as a Payment Method and Employment Tool. The validate test group averaged a 78% and the random test group averaged a 75% on this task. In the previous chapter, we determined Task 4-4 to be at tier level 1-2 on the YTTM, which makes this task commensurate with that of an intern.

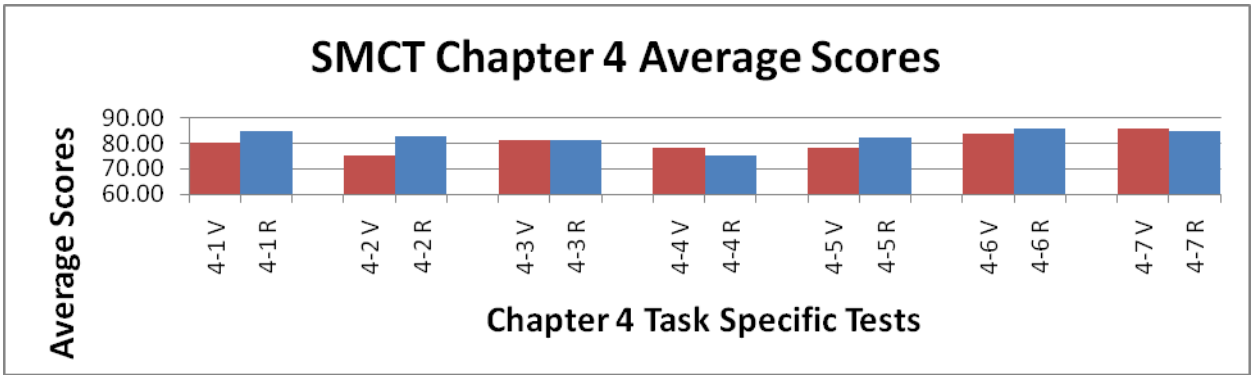

Figure 19. ***SMCT Chapter 4 Average Scores***

There were six total questions in Task 4-4 where test takers failed to achieve an average score of 50% (see Appendix F for missed questions).

H. SUMMARY

Our analysis of the 15 failed tasks revealed that 14% of the failed tasks were classified as intern tasks, 53% were apprentice tasks, and 33% were journeyman tasks. We anticipated this distribution of failed tasks by the examinees because these results are similar to the composition of the *SMCT's* course content. In Chapter IV, our course analysis of the 36 *SMCT* tasks highlighted that 20% of the tasks were intern tasks, 58% were apprentice tasks, and 22% were journeyman tasks. There is not enough evidence to

conclude that the distributions of the failed tasks from the PAT results and the composition of the *SMCT's* tier levels (intern, apprentice, journeyman) are different.

We found Product F to be a very efficient tool in validating the PAT test questions when test groups were required to answer every question within the test pool. The analytical tools associated with Product F allow an administrator to rapidly determine how often a question was missed and what answer was most selected when a question was answered incorrectly. This is a very powerful tool in determining if a question lacks clarity or content. It also allows the administrator to immediately focus on questions that may need to be reviewed.

As a tool to implement the test across the Army, we found Product F to be deficient in its security features. We feel implementing Product F as a long-term solution would be high risk; however, we see this as a quick and efficient way to validate/correct questions associated with the PAT,

If implemented correctly, the PAT will provide the ECC leadership a benchmark to determine how well prepared the contingency contracting workforce is to accomplish the task found within the *SMCT*. The PAT could identify organizational knowledge shortfalls, and this information could be used to develop training plans at the brigade and battalion levels. The PAT could also identify knowledgeable employees and those needing additional mentorship. Knowing organizational shortfalls would allow leaders to make a conscious decision about which areas to train or, if in a time-constrained environment, which areas to assume risk by omission. The PAT could also be used as a certification tool for deployment readiness at the individual and team levels to prepare CCOs to serve in contingency environments.

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VI. SUMMARY, CONCLUSION, AND AREAS FOR FURTHER RESEARCH

A. SUMMARY

This research report examined the fundamental educational resources available to the contemporary contingency contracting officer. We comparatively analyzed four contingency contracting educational resources: the Defense Acquisition University's CON 234 Joint Contingency Contracting and CON 334 Advanced Contingency Contracting; the Naval Postgraduate School's MN 3318 Principles of Contingency Contracting; and the U.S. Army's *Soldier's Manual of Common Tasks (51C)* for contingency contracting officers. We examined three factors pertaining to the courses: the relative similarities and differences between the four courses; the extent to which each course benefits contingency contracting officers of varying targeted levels of proficiency; and whether the intent of each course is met in relation to its course description and targeted audience. The analysis incorporated the use of a benchmark hierarchical model, the Yoder Three-tier Model. We categorized curricular learning objectives across the Yoder Three-tier Model's hierarchy and, by applying a quantitative rating scheme to the model, differentiated the four courses.

Our research additionally evaluated the efficacy of the Yoder Three-tier Model as a personnel structure model for senior planners and commanders to use to align contracting resources with mission requirements. However, this research objective was limited by our evaluation method of applying the model exclusively as a tool for differentiating contingency contracting courses. We did not examine empirical evidence of the model's intended application in authentic contingency contracting operations, which was not within the scope of our research. Lastly, we assisted the Army's Expeditionary Contracting Command in the fielding and validation of a proficiency assessment test for the *Soldier's Manual of Common Tasks (51C)* via a secure web-based platform. Our research efforts in this regard included conducting market research of web-based test software, designing the user interface, inputting over 1,400 test questions, and analyzing examinee results from two testing events.

B. CONCLUSION

This section will answer the following research questions, which were introduced in Chapter I. These questions are as follows:

1. **How do CON 234, CON 334, MN 3318, and the *SMCT (51C)* compare?**
2. **To what extent does each course benefit CCOs of varying targeted levels of proficiency?**
3. **Is the intent of each course met in relation to its course description and targeted audience?**
4. **Is the YTTM, although originally designed as a personnel structure model, an effective tool for comparing contingency contracting educational resources?**
5. **How effective is the recommended web-based testing platform in validating the PAT?**
6. **Is this product a sustainable solution for the ECC?**

Question 1. How do CON 234, CON 334, MN 3318, and the *SMCT (51C)* compare?

The primary learning objectives of CON 234, MN 3318, and the *SMCT (51C)* are significantly related. The commonality between CON 234 and the *SMCT (51C)* is logical because the courses are intended for similar target audiences, and the Army intends to use the *SMCT (51C)* as an augmentative training resource for individuals who have completed CON 234. The learning objectives comprising CON 234 and the *SMCT (51C)* are not entirely similar, but both courses emphasize skill sets that prepare junior CCOs for their first contingency contracting deployment. Meanwhile, MN 3318 contains category 3 elements of both CON 234 and the *SMCT (51C)*, but it primarily focuses on the more advanced categories 4 and 5 of our rating scheme. The commonality between MN 3318 and CON 234 is rational because the DAU grants CON 234 equivalency for MN 3318, and the NPS must ensure that relevant learning objectives remain consistent in order to uphold this accreditation. Figure 20 illustrates the relationship between CON 234, MN 3318, and the *SMCT (51C)*.

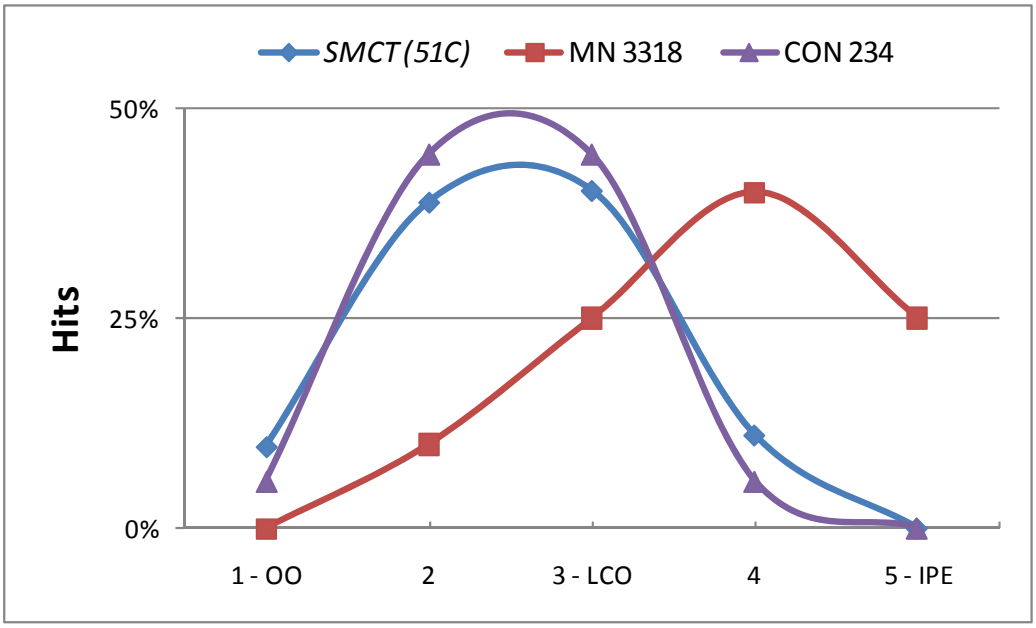

Figure 20. ***CON 234, MN 3318, and the SMCT (51C)***

Primary learning objectives of MN 3318 and CON 334 are also significantly related. This commonality is logical because both courses target audiences that include military and civilian leaders within the contingency contracting community. The learning objectives comprising MN 3318 and CON 334 are not entirely similar—as described previously, MN 3318 more prominently touches category 3 by design—but both courses primarily concentrate on the integrated planner and executor tier of the Yoder Three-tier Model and the higher echelons of our modified model. Figure 21 illustrates the relationship between MN 3318 and CON 334.

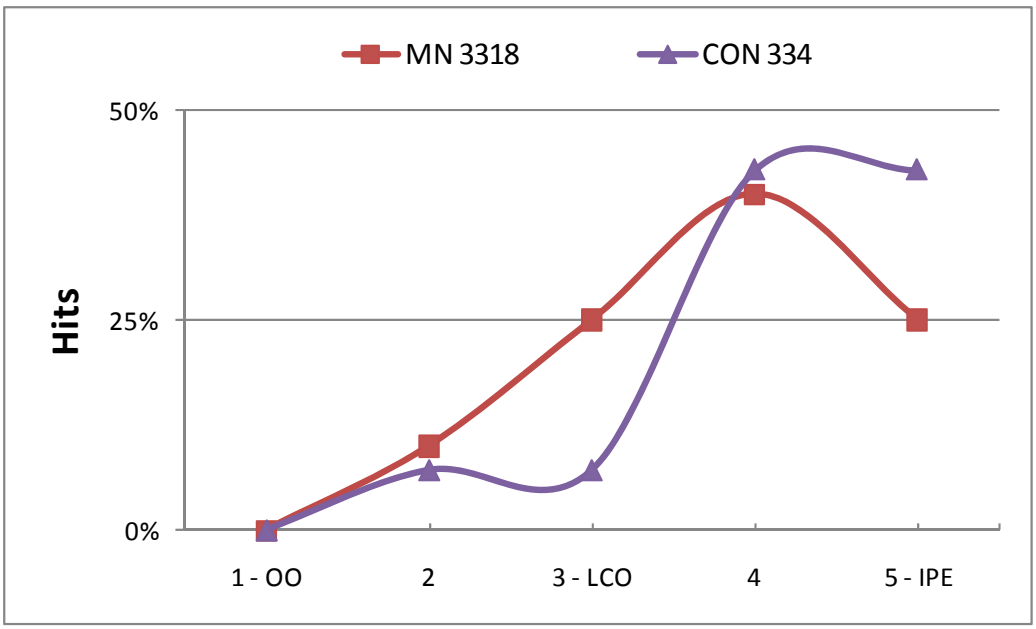

Figure 21. ***CON 334 and MN 3318***

Question 2. To what extent does each course benefit CCOs of varying targeted levels of proficiency?

CON 234 prepares CCOs to perform at the *apprentice* level in accordance with our modified YTTM model described in Table 7. An *apprentice*, as defined by our model, is one who is a junior practitioner certified at DAWIA Level I or higher, has a moderate understanding of the FAR and related acquisition knowledge, and has developed mature OO skill sets.

CON 334 prepares CCOs to perform at the master level in accordance with our modified YTTM model. A master is one who possesses both advanced acquisition planning experience and a mature acquisition knowledge base. This individual also has completed advanced degree(s) and joint professional military training. A master is typically DAWIA Level III certified and regularly contributes to (or is a staff member of) a theater COCOM or joint task force. He or she is able to articulate OPLAN and OPORD requirements in support of national security objectives through CSIP contributions.

MN 3318 prepares CCOs to perform equally at the journeyman and master levels in accordance with our modified YTTM model. A journeyman is one who is certified at

DAWIA Level II or higher and is able to plan and execute contracting solutions for an operational commander. This individual possesses a well-developed acquisition knowledge base and is able to leverage the local economy when deployed. He or she, as a senior LCO, understands the role of IPEs and often contributes planning input to IPEs but has not attained sufficient education and planning experience to develop CSIPs as a joint staff member. The MN 3318 graduate is additionally prepared to perform at the master level, whose attributes are described in the previous paragraph.

The *SMCT (51C)* prepares CCOs to perform at the apprentice level in accordance with our modified YTTM model. An apprentice is defined in the opening paragraph similarly describing the CON 234 graduate in response to this research question. Figure 22 illustrates the relationship between CON 234, CON 334, MN 3318, and the *SMCT (51C)*.

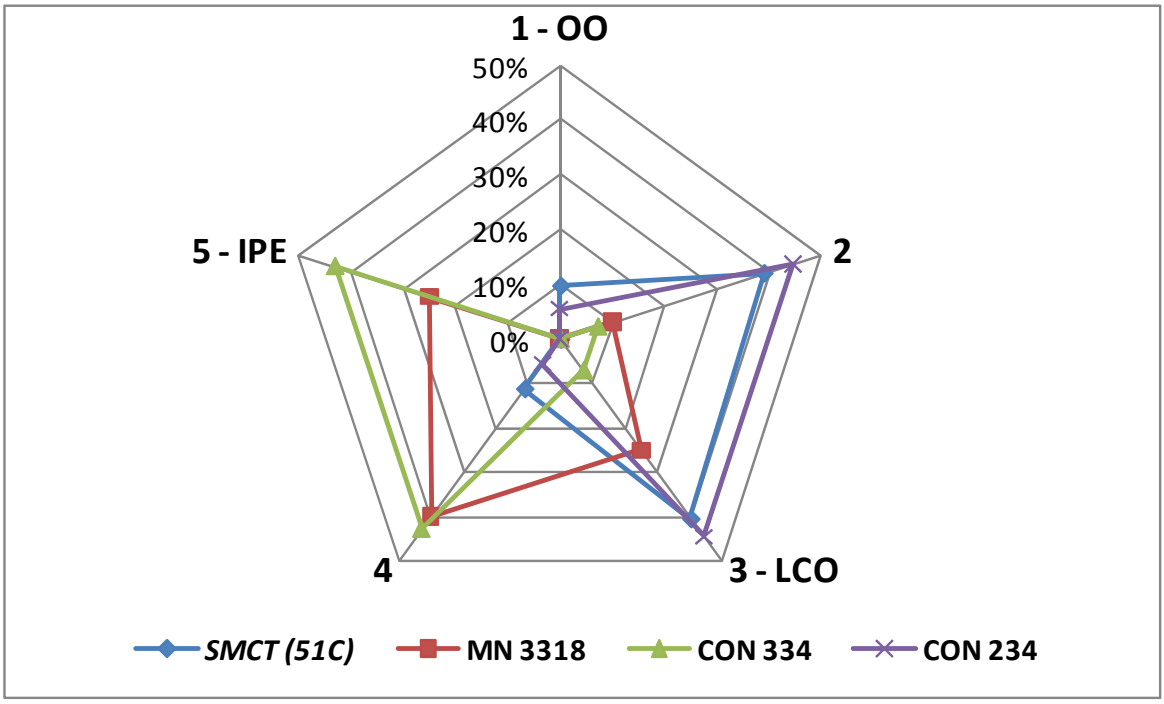

Figure 22. ***Composite Radar Chart***

Question 3. Is the intent of each course met in relation to its course description and targeted audience?

CON 234: Yes. The DAU describes CON 234 as a course that prepares CCOs for an initial deployment to a contingency contracting operation. This course includes topics on the practical application of contracting processes in a contingency environment, assessing customer requirements, support planning, and ethics in contracting (DAU, 2010a). We conclude that CON 234 does meet the intent of its course description because our research model recognizes CON 234 graduates as apprentices, which is commensurate with the DAU's representation of the course's primary learning objectives.

CON 334: Yes. The DAU describes CON 334 as a course that prepares senior acquisition professionals with the requisite knowledge for coordinating theater contracting resources, improving source selection procedures, managing contract resolutions, and developing ethical integrity (DAU, 2010c). We conclude that CON 334 does meet the intent of its course description because our research model recognizes CON 334 graduates as masters, which is commensurate with the DAU's representation of the course's primary learning objectives.

MN 3318: Yes. The NPS describes MN 3318 as a course that prepares mid-grade military officers and federal service civilian 1102s for positions of greater responsibility within the contingency contracting field. This course includes topics on deliberate and crisis action planning, coordinating with staff elements in a joint planning environment, and synchronizing contract actions with OPLANs and OPORDs (Yoder, 2010). Additionally, in order to maintain the course's accreditation as a CON 234 equivalency, MN 3318 teaches basic principles of contingency contracting and the fundamental skills required to provide direct contracting support to joint tactical and operational forces operating across the ROMO. We conclude that MN 3318 does meet the intent of its course description because our research model recognizes MN 3318 graduates as journeymen and masters, which is commensurate with the NPS's representation of the course's primary learning objectives. While MN 3318 is an equivalent to CON 234, its graduates are not considered apprentices under our research model because MN 3318's

learning objectives are concentrated at the model's higher echelons; yet, MN 3318 has sufficient course content to satisfy the DAU's accreditation requirements for CON 234.

The *SMCT (51C*): Conditional yes. As a U.S. Army Soldier Training Publication, no course description exists for the *SMCT*. However, this manual was written to augment the fundamental training that Army soldiers and civilians receive from the DAU's CCO core training model, which includes CON 234. As such, an individual is not typically introduced to the *SMCT* unless he or she completes some or all of the DAU's core training for CCOs or unless the individual has demonstrated competency in completing bona fide contingency contracting actions prior to completing the requisite DAU education. In this respect, we assert that the *SMCT* does meet the intent as an augmentative training resource to the DAU's CCO core training curriculum because our research model recognizes that individuals who are proficient in *SMCT (51C)* course content perform at the apprentice level, which is commensurate with someone who has completed CON 234—a component of the DAU's educational track for CCOs.

Question 4. Is the YTTM, although originally designed as a personnel structure model, an effective tool for comparing contingency contracting educational resources?

Yes, with some modification to the model. The research model that we adapted from the YTTM incorporates an evaluation system that modifies the YTTM from its original three tier levels to four in order to provide a greater degree of flexibility for ranking the courses' primary learning objectives hierarchically. Figure 23 shows the relationship between contingency contracting educational resources, our modified YTTM model, and the original YTTM.

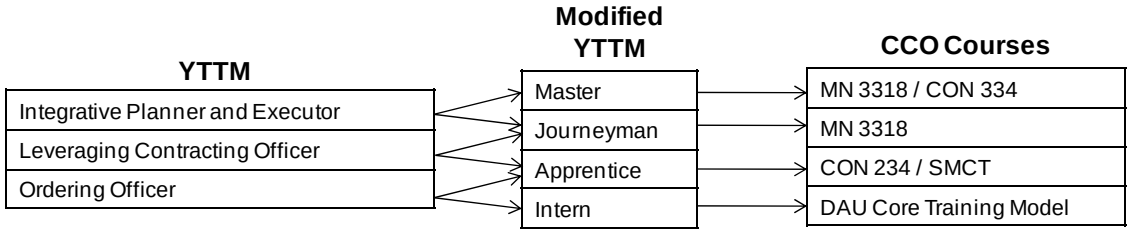

Figure 23. ***Modification of YTTM***

Question 5. How effective is the recommended web-based testing platform in validating the PAT?

The testing platform that we selected is adequately effective in validating the PAT because it permits administrators to analyze responses to multiple-choice test questions using an array of statistical parameters. For example, administrators can review the percentage of correct responses for a particular test question by demographic criteria (e.g., paygrade, unit, or test site). Accordingly, PAT questions can be modified or eliminated, if required, based on relevancy, difficulty, or clarity; similarly, the *SMCT* can be revised to improve correct response rates for particular test questions. Additionally, this testing software is web-based; hence, the PAT can be disseminated efficiently to large pools of CCOs.

Question 6. Is this product a sustainable solution for the ECC?

No. While the testing software is adequate for validating the PAT, it lacks administrative features and controls that the ECC requires for its long-term CCO assessment program. For example, the software limits the number of administrators requiring user rights. Additionally, the product lacks security features that are required by the U.S. Army, such as a configuration for secure Internet protocol. Lastly, the software, in its current state, is complex for the novice user and is laborious to create user accounts.

C. RECOMMENDATIONS

As a result of our research conclusions, we recommend the following three administrative actions:

1. MN 3318 should be a CON 234 and CON 334 equivalent.

The NPS should validate its MN 3318 course content to attain dual equivalency accreditation for CON 234 and CON 334 by the DAU. MN 3318 is currently accredited as a CON 234 equivalency. In our research, we concluded that the primary learning objectives for CON 234 and MN 3318 are significantly correlated, but we also reached the same conclusion for CON 334 and MN 3318. CON 334 was recently launched in August 2010; this may impede any immediate attempts by the NPS to gain accreditation

because the DAU will likely undergo an internal validation period for CON 334 before sanctioning non-DAU syllabi for the course.

2. Leverage existing information technology within the DoD to deliver the PAT.

The ECC, upon validation of the PAT for the *SMCT (51C)*, should utilize an existing Army Knowledge Online or Defense Knowledge Online testing platform for the PAT's administration. Either resource would ensure that administrative and security controls are congruent with the Army's conventional protocols and that maintenance and support issues are mitigated. While this solution does not guarantee an optimal testing platform for the ECC, it bridges the gap between a costly commercial product that is uniquely designed to meet the ECC's desires and an unreliable COTS solution that lacks robustness and risks security and data.

3. Apply the modified YTTM to maximize fiscal resources for CCO training.

The ECC should use the modified YTTM from this research project as a tool to determine optimal training plans for CCOs in accordance with available educational funding. The Efficiencies Initiative mandated by the Secretary of Defense in 2010 requires that the DoD improve its contracting and acquisition processes; however, this objective must be reached within a fiscally constrained environment. The modified YTTM will help leaders effectively shape the workforce for future assignements, identify billets that have specific education requirements, and prudently allocate limited training dollars.

D. AREAS FOR FURTHER RESEARCH

The following four topics were not incorporated into our research objectives. We recommend that other research teams assume these areas for further research.

1. Relationship between the six-phase contracting model and the *SMCT (51C)* tasks

The contract management process can be analyzed using a six-phase model. The six phases consist of procurement planning, solicitation planning, solicitation, source selection, contract administration, and contract close out (Rendon & Snider, 2008). A research team could determine how the 36 tasks span the six-phase model and

subsequently analyze PAT results to evaluate the proficiency levels of CCOs with respect to each of the six phases.

2. PAT Validation

The two testing events described in Chapter V did not produce statistically significant data. The ECC intends to increase the size of its testing pool to effectively validate its PAT. However, the ECC headquarters lacks personnel resources to efficiently proctor and analyze PAT responses. We recommend that a research team conduct a joint applied project with the ECC to proctor and analyze a statistically significant sample of test questions to eligible CCOs in order to validate the PAT. The research efforts will mutually benefit the ECC and the research team by providing administrative assistance to the ECC while giving the researchers an opportunity to apply test theory and data analysis in an academic setting. Additionally, the ECC anticipates developing a *SMCT* for senior level CCOs in the near future; this would instigate the need for an additional PAT to be validated.

3. Information Technology

While we recommend that the ECC utilize an existing Army Knowledge Online or Defense Knowledge Online testing platform for the PAT's administration, we recognize that other solutions may be feasible. Accordingly, we recommend that a research team develop a long-term testing software for the ECC to implement for PAT administration. The research team's members should include individuals who are proficient in programming and knowledgeable in software development.

4. Joint PAT Implementation

Finally, we recommend that a research team analyze sample data that consist of responses from non-Army contracting personnel. Typically, contemporary contingency contracting operations are joint in nature. This study would validate the relevance, accuracy, and corroborative attributes of the *SMCT (51C)* across military departments.

Chapter VI presented our responses to the six research questions, proposed three recommendations, and identified four areas for further research based on the research and analysis that we conducted throughout this project. Our research examined the

similarities and differences among the four courses available to the contemporary CCO, the relevance of the YTTM, and the effectiveness of the PAT. The body of this work will help leaders effectively shape the acquisition workforce for future assignments, identify billets that have specific education requirements, and prudently allocate limited training dollars.

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APPENDIX A—CON 234 COURSE CONTENT

Terminal Learning Objective 1

Purpose: *Explain the elements of contingency contracting planning.*

Enabling Learning Objectives:
- Identify action to be taken during pre-deployment phase,
- Identify types of contingencies,
- Describe the four phases of contingencies,
- Identify the various combat support agencies, and
- Compare service theater support organizations and capabilities.

Terminal Learning Objective 2

Purpose: *Recognize the importance of ethical behavior in a contracting environment.*

Enabling Learning Objectives:
- Describe ethical behaviors in a foreign contracting environment, and
- Identify ethical resources in a contingency environment.

Terminal Learning Objective 3

Purpose: *Explain your role and responsibilities in a contingency contracting environment.*

Enabling Learning Objectives:
- Define contingency contracting,
- Describe the contracting support structure, and
- Compare various contracting structures.

Terminal Learning Objective 4

Purpose: *Explain the impact of cross-cultural behavior patterns, anti-terrorism vulnerabilities, and operational security in a contingency contracting environment.*

Enabling Learning Objectives:
- Differentiate between foreign acquisition solutions,
- Identify actions to ensure operational security (OPSEC) during a contingency, and
- Describe various anti-terrorism measures in a contingency environment.

Terminal Learning Objective 5

Purpose: *Verify that a purchase request (PR) document is properly documented and certified.*

Enabling Learning Objectives:

- Identify types of contingency funding,
- Discriminate between various lines of accounting,
- Explain the contract board review process, and
- Explain the contract ratification process.

Terminal Learning Objective 6

Purpose: *Complete the appropriate contract actions based on a given scenario in a contingency contracting operation.*

Enabling Learning Objectives:

- Differentiate between declared and non-declared contingency contracting thresholds,
- Identify contracting dollar thresholds,
- Distinguish between contract types,
- Identify contractual instruments and appointed personnel in a contingency contracting environment, and
- Identify elements in a procurement instrument identification number (PIIN) log.

Terminal Learning Objective 7

Purpose: *Outline a course of action for a disaster or emergency response scenario.*

Enabling Learning Objectives:

- Describe the relationship among the Department of Homeland Security (DHS), the Federal Emergency Management Agency (FEMA), and the DoD;
- Identify actions taken during the advance planning phase of disaster response; and
- Recognize potential pitfalls when conducting disaster response contracting operations.

Terminal Learning Objective 8

Purpose: *Perform common contract administration actions required in a contingency contracting operation.*

Enabling Learning Objectives:

- Identify documents required in a contract file,
- Identify post-award actions to be taken by contracting officer,
- Summarize COR duties,
- Identify items required in a COR's file,
- Compare contract termination options, and
- Identify contract closeout procedures in a contingency environment.

Terminal Learning Objective 9

Purpose: *Discuss actions a contracting officer should take when completing a contract claim, protest and/or dispute.*

Enabling Learning Objectives:

- Identify actions to take when notified of a potential claim or protest, and
- Identify actions to reduce the probability of claims or protests (DAU, 2010b, para. 1-9).

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APPENDIX B—CON 334 COURSE CONTENT

Terminal Learning Objective 1

Purpose: *Recognize and defend the most appropriate approaches for a contingency Chief of Contracting Office (CoCo) throughout the four phases of a contingency.*

Enabling Learning Objectives:
- Chose the most appropriate resource(s) during all phases of a contingency contracting operation, and
- Create a brief for the operational commander showing comprehension of the contingency contracting sustainment environment.

Terminal Learning Objective 2

Purpose: *Recommend contract support for the warfighter in any given situation.*

Enabling Learning Objectives:
- Create a brief overview of the joint operations planning process with focus on CSIP Annex W of OPORD/OPLAN,
- Identify the challenges of CSIP development efforts,
- Examine the options for support available for oversight of contract actions,
- Analyze the contingency contracting issues not covered, and
- Propose solutions to contingency challenges identified by various congressional studies.

Terminal Learning Objective 3

Purpose: *Justify an appropriate ethical approach in a contingency contracting environment.*

Enabling Learning Objectives:
- Determine ethical contingency contracting attributes for a lead CCO, and
- Defend the most effective ethical approach given a contingency contracting scenario.

Terminal Learning Objective 4

Purpose: *Choose the most appropriate resource for a contingency contracting operation during its planning phases.*

Enabling Learning Objectives:
- Evaluate the requirements needed to prepare contingency contracting support plan, and
- Prepare a brief for the COCOM and discuss how contingency contracting can be a

force multiplier.

Terminal Learning Objective 5

Purpose: *Determine the appropriate contractual resolution for a contingency requirement.*

Enabling Learning Objectives:
- Explain the role of the Joint Acquisition Review Board (JARB),
- Summarize the flow of the JARB process,
- Analyze requirement packages to the JARB, and
- Validate requirements packages throughout the JARB process.

Terminal Learning Objective 6

Purpose: *Apply the necessary steps in the source selection process given a situation requiring the need to select a best-value offer in response to a government requirement.*

Enabling Learning Objectives:
- Define the term *source selection*,
- Explain the elements of the formal source selection process, and
- Create instructions to offerors and evaluation factors for a best value source selection.

Terminal Learning Objective 7

Purpose: *Choose the most appropriate resource during the redeployment phase of a contingency operation.*

Enabling Learning Objectives:
- Examine different redeployment possibilities,
- Determine which processes are the most appropriate for a given redeployment scenario, and
- Defend a redeployment approach. (DAU, 2010d, para. 1–7)

APPENDIX C—MN 3318 COURSE CONTENT

Topic 1—Types of Contingencies

Purpose: *Identify the contracting laws, regulations, and procedures unique to various types of contingency operations.*

Supporting Topics:
- Define and explain contingency contracting,
- Identify contingency contracting sources of guidance,
- Compare and contrast various types of contingencies,
- Explain the four phases of typical support,
- Discuss waivers and deviations for contingency operations, and
- Discuss expedited contracting procedures.

Topic 2—Cross-Cultural Awareness

Purpose: *Recognize cross-cultural behavior patterns and anti-terrorism vulnerabilities and explain their impact on contingency contracting.*

Supporting Topics:
- Introduce students to cross-cultural concepts,
- Understand how *enculturation* may lead to obstacles in communication,
- Identify cross-cultural behaviors and discuss adaptation and assimilation,
- Compare and contrast U.S. values with other world views, and
- Discuss awareness to culture as it affects behaviors, perspectives, and the ability to function and conduct business in a dissimilar culture.

Topic 3—Roles and Responsibilities

Purpose: *Identify key personnel and organizations in a contingency, their roles and responsibilities, and required coordination.*

Supporting Topics:
- Describe the mission and capabilities of the DoD's contracting organizations that support contingency operations;
- Describe the roles and missions of non-DoD and NGOs in contingency operations;
- Describe and discuss joint contingency contracting to include command structure from the national level to the joint task force (JTF), differences between operational and contracting authority, and key players in a JTF and the CCO's relationship with them;
- State the most significant differences between U.S. and multinational contingency contracting operations;
- Explain the responsibilities of a CCO in a JTF;

- Compare and contrast the roles, responsibilities, and contractual authority (including training requirements) of OOs, CORs, government purchase card (GPC) holders, and disbursing agents;
- Identify potential customers and other key personnel and agencies in the contracting officer's area of responsibility;
- Discuss the roles of the CCO, U.S. Army Corps of Engineers (USACE), AMC, Air Force Civil Engineer Support Agency (AFCESA), Defense Contract Management Agency (DCMA), and supported operational commanders by using CAP programs (e.g., LOGCAP) to support a contingency;
- Describe an effective program to train customers, OOs, CORs, quality assurance evaluators (QAEs), GPC holders, and disbursing agents for their respective roles in contingency contracting operations; and
- Develop a process for customers to submit procurement requests to the CCO.

Topic 4—Automated Tools

Purpose: *Assess customer requirements and select, justify, and execute the appropriate procurement action.*

Supporting Topics:
- Apply automated procedures to assemble, prepare, and closeout documents, files, and reports;
- Identify and demonstrate familiarity with the automated resources required for optimization of the contingency contracting office;
- Conduct automated tool familiarization; and
- Identify, select, and complete specific contract vehicles based on case scenarios.

Topic 5—Deliberate and Crisis Action Planning

Purpose: *Identify, summarize, and discuss the key elements of deliberate and crisis action planning as they relate to contingency contracting planning.*

Supporting Topics:
- Describe the major elements of the Joint Operation Planning and Execution System (JOPES) and discuss the importance of joint planning to the contracting function,
- Describe the Joint Uniform Lessons Learned System (JULLS) and discuss how a CCO would use it,
- Describe and discuss the contents of a CSIP, and
- Discuss CCO pre-deployment actions.

Topic 6—Anti-Terrorism and Security

Purpose: *Recognize anti-terrorism vulnerabilities and explain their impact on contingency contracting.*

Supporting Topics:

- Identify and discuss effective anti-terrorism practices necessary for personal security, travel, vehicle security, and operational, information, personnel, and physical security.

Topic 7—Funding of Contingency Operations

Purpose: *Identify and apply the contracting laws, regulations, and procedures for funding and operations unique to various types of contingency operations.*

Supporting Topics:

- Demonstrate familiarity with various types of funds used in contingency operations,
- Describe the various fiscal controls on appropriate funds,
- State the approval level required for the amount and the type of funds being used for specific contracting actions,
- Explain the circumstances in which CAP may be authorized,
- Describe the proper use of operations and maintenance funds for deployment and contingency operations,
- Explain the difference between Military Construction (MILCON) appropriations and their proper use,
- Describe the proper use of funds from other congressional appropriations, and
- Discuss the proper use of funds received from other countries and alliances.

Topic 8—Administration, Termination and Closeout of Contingency Contracts

Purpose: *Apply automated and manual procedures to assemble, prepare, and close out contract documents, files, and reports.*

Supporting Topics:

- Identify the duties and responsibilities of personnel involved in contingency contract administration and describe the training each requires to adequately perform contract administration functions,
- Compare and contrast the types of contract modifications that are used in contingency contracting and their effect on timely performance,
- Explain the procedures for ratifying unauthorized commitments (UC) and *definitizing* un-priced actions,
- Explain the procedures used to transfer open contracts and orders to other contracting offices and agencies,
- Discuss the judgmental, ethical, and environmental factors considered when terminating and closing out contracts,
- Discuss the typical reasons for contractor submission of claims and list the documentation required for negotiation and settlement of modifications, claims, and disputes,
- Describe the record-keeping required in administering and closing out contingency contracts and discuss procedures for monitoring the performance of

contracting personnel, and
- Demonstrate proper conduct of administration and termination actions.

Topic 9—Case Studies and Integrating Concepts

Purpose: *Prepare and brief the class on various case scenarios designed to enhance and capitalize on the major lessons.*

Supporting Topics:
- Select one of the cases that was utilized during the course, and
- Analyze the LOGCAP case that takes place in the Balkans and was co-developed by the NPS, George Washington University, and contractors.

Topic 10—Ethical Business Conduct

Purpose: *Exercise and apply ethical principles in performing the duties of a contingency contracting officer.*

Supporting Topics:
- Assess ethical dilemmas facing the CCO,
- Determine the best approach and course of action when dealing with challenging scenarios, and
- Make sound recommendations and choices based on operational, ethical, and theater objectives. (Yoder, 2010, p. 1–8)

APPENDIX D—MN 3318 COURSE SYLLABUS

Session 0—Pre-class Commencement Readings

Purpose: *Familiarize students with current contingency contracting operations prior to Day 1 of class in order to provide a course orientation.*

Reading assignments:
- *Creating something from nothing*
- *The Yoder Three-tier Model*, 2004 NPS Working Paper Series
- *Orchestrating, synchronizing, and integrating program management of contingency acquisition planning and its operational execution*, DoD Directive 3020.49
- *Joint Publication 4-10 Operational Contract Support*

Session 1—Course Introduction, Types of Contingencies, Ethics, and Integrity

Purpose: *Familiarize students with types of contingency operations and introduce concepts related to ethics, fraud indicators, standards of conduct, and procurement integrity in the expeditionary environment.*

Reading assignments:
- *Battlefield business deals are cut in Afghanistan*
- *Blood money* (Chapters 1–5)
- *Joint Contingency Contracting Handbook* (Chapters 1 and 2)
- *Army husband and wife sentenced to jail term*

Session 2—Authorities and Structure

Purpose: *Familiarize students with the authorities and structure, in addition to the contingency funding and requirements process.*

Reading assignments:
- *Contingency contracting in the Pacific Command*
- *Joint Contingency Contracting Handbook* (Chapters 3, 4, and 8)
- *Blood money* (Chapters 1–5)

Session 3—Planning and Guidance

Purpose: *Familiarize students with contingency contract planning and guidance for Phase "0" Operations with discussion of planning resources required to orchestrate and synchronize contract support.*

Reading assignments:
- *Joint Contingency Contracting Handbook* (Chapter 7)

- *Joint effects-based contracting execution system*
- JCS joint planning overview, combined reading and slides
- *Joint Publication 4-10 Operational contract support*
- *Joint Publication 5-0 Joint operation planning*
- *Planning: The key to contractors success on the battlefield*

Session 4—Contracting Processes and Contract Administration

Purpose: *Familiarize students with contracting processes and contract administration in the expeditionary environment.*

Reading assignments:
- *Joint Contingency Contracting Handbook* (Chapters 5, 6, and 10)
- SF-44 Automated fact sheet
- SPS-DP2: Contingency suite fact sheet

Session 5—Cross Cultural Awareness and Anti-Terrorism Awareness and Security

Purpose: *Familiarize students with cross cultural awareness topics and discuss force protection principles and anti-terrorism awareness.*

Reading assignments:
- *Joint Contingency Contracting Handbook* (Chapters 3, 6, and 8)
- CJCS Anti-terrorism Level I brief
- *Blood money* (Chapters 6–9)
- *JCS Long war*
- *Al Qaeda's New front*, PBS Frontline

Session 6—Humanitarian and/or Combat Operations Support

Purpose: *Familiarize students with a CCO's responsibilities in various scenarios including a humanitarian environment and during combat operations.*

Reading assignments:
- *Joint Contingency Contracting Handbook* (Chapter 9)
- *Blood money* (Chapters 10–14)
- Humanitarian operations slides
- *FEMA National response framework*, handbook
- Civil-military coordination in disaster response, presentation
- *Time to clarify military roles in disaster relief*
- *Federal troops for disaster response: Legal issues and the Stafford Act*, CRS report
- *The storm*, PBS Frontline
- Take-home exam

Session 7—Contractors Accompanying the Force

Purpose: *Familiarize students with the benefits and challenges as well as the regulations governing contractors accompanying the force.*

Reading assignments:
- *Contractors on the battlefield*
- *Civilians on the battlefield*, Military Review 2004
- *Contractors Accompanying the force*
- *How should the Army use contractors?*
- *Who's getting away with murder?*
- DoD Instruction 3020.41, dated Oct 2005
- *Blood money* (Chapters 10–14)
- *Private warriors*, PBS Frontline

Session 8—Guest Speaker

Purpose: *Familiarize students with recent and relevant contingency contracting lessons learned.*

Reading assignments:
- *Blood money* (Chapters 10–14)

Session 9—Security, Stabilization, and Rebuilding

Purpose: *Familiarize students with the role contracting has played in the security, stabilization, and rebuilding in Iraq.*

Reading assignments:
- Comprehensive Oversight Plan, Afghanistan 2009–2010
- Comprehensive Oversight Plan, Southwest Asia (Iraq) 2009–2010
- *Operation Iraqi Freedom: Drawdown plan*, GAO report
- Report for Special Inspector General for Afghanistan Reconstruction
- *No end in site*, PBS Frontline

Session 10—Team Presentations

Purpose: *Students are broken into teams and then assigned readings with the task of preparing a presentation on a particular topic that captures the assigned readings, previous class materials and any previous CCO experience.*

Reading assignments:
- As assigned

Session 11—Final Exam

Purpose: *Students are evaluated on their comprehension of the previous ten sessions, discussions, and assigned readings.*

There are no reading assignments (Yoder, 2010, p. 1–8).

APPENDIX E—*SMCT (51C)* CONTENT

Task 1-1—Identify Supported Units

Purpose: *Ensure that a CCO can identify supported unit(s) and obtain contracting related information about their structure, equipment, mission, key personnel, and processes necessary for effective contracting support.*

Supporting Tasks:
- Receive tasking to provide contracting support,
- Identify critical unit attributes,
- Identify supported units battle rhythm and processes, and
- Identify key contracting related processes and procedures.

Task 1-2—Train Supported Units (Operational Contract Support)

Purpose: *Ensure that a CCO can plan, prepare, execute, and assess contingency contracting training for an assigned unit in all phases of the ARFORGEN (Army force generation) cycle.*

Supporting Tasks:
- Train CORs, field ordering officers (FOO), and leaders to conduct contract-related processes in accordance with applicable regulations and procedures in garrison and field environments,
- Ensure the unit can leverage economic lines of operation (ELOO), and
- Assist in the development and implementation of the unit's tactical standing operating procedures (TACSOP).

Task 1-3—Advise Supported Units

Purpose: *Ensure that a CCO can provide advice to the supported unit by applying principles of best business practices, FAR 7, and the military decision-making process (MDMP).*

Supporting Tasks:
- Identify situations requiring advisement to supported units, and
- Advise supported units.

Task 1-4—Review Contracting Support Integration Plans

Purpose: *Ensure that a CCO can conduct mission analysis, identify key tasks related to contingency contracting support, and prepare a comprehensive CSIP in accordance with Joint Publication 4-10.*

Supporting Tasks:

- Receive and analyze the mission, and
- Prepare a CSIP.

Task 2-1—Procurement Desktop Defense

Purpose: *Ensure that a CCO can operate the functions within a Procurement Desktop Defense (PD2) system and administer contracting actions within the PD2 framework.*

Supporting Tasks:
- Administer a solicitation ("T" Contract),
- Administer a purchase order ("P" Contract),
- Administer a General Services Administration (GSA) order ("F" Contract),
- Administer an indefinite delivery/indefinite quantity (IDIQ) order ("D" Contract),
- Administer a blanket purchase agreement (BPA) call order ("A" Contract),
- Administer a modification order in PD2, and
- Administer closeout procedures in PD2.

Task 2-2—Review Purchase Requests and Supporting Documents

Purpose: *Ensure that a CCO can review a procurement package for completeness, accuracy, and compliance with appropriate regulations, laws, and applicable international agreements and local policies.*

Supporting Tasks:
- Review PRs and accurately indentify erroneous or missing information;
- Review supporting documentation, accurately identifying erroneous or missing information;
- Review service contract supporting documentation, accurately identifying erroneous or missing information; and
- Review construction contract supporting documentation, accurately identifying erroneous or missing information.

Task 2-3—Conduct Market Research

Purpose: *Ensure that a CCO can determine the most suitable approach to acquiring, distributing, and supporting supplies and services by collectively gathering and documenting available market information from relevant sources inside and outside the contracting activity.*

Supporting Tasks:
- Contact knowledgeable individuals in government and industry to determine capabilities,
- Review market research to support requirements,
- Publish formal requests for information in appropriate technical or scientific journals or business publications, and
- Analyze and document results of market research appropriately.

Task 2-4—Conduct Acquisition Planning

Purpose: *Ensure that a CCO can analyze a supported organization's requirement and develop the most efficient and effective strategy for meeting its needs.*

Supporting Tasks:
- Analyze the requirement,
- Determine the level of *commerciality*,
- Determine an optimal source of supply,
- Determine the socioeconomic requirements,
- Determine the level of competition,
- Determine the evaluation procedures,
- Determine the contract type procedures,
- Determine the publicizing actions,
- Determine the solicitation method,
- Identify additional planning requirements, and
- Document the plan in accordance with local procedures.

Task 2-5—Document Other Than Full and Open Competition

Purpose: *Ensure that a CCO can identify the correct authority authorizing the contracting action, the correct format for the justification, the necessary publicizing and announcements, and the appropriate approvals required based on the requirement and applicable thresholds.*

Supporting Tasks:
- Receive a purchase request requiring the restriction or the limiting of competition,
- Identify the correct procedure(s) for authorizing the restriction or the limiting of competition,
- Prepare a justification in accordance with the appropriate format,
- Obtain required approvals, and
- Announce the requirement as required.

Task 2-6—Synopsize Proposed Contract Actions

Purpose: *Ensure that a CCO can prepare a complete and accurate synopsis in compliance with appropriate regulations, laws, and local policies that clearly communicate the government's intent to solicit supply items, services, or construction.*

Supporting Tasks:
- Determine if a solicitation must be synopsized,
- Prepare the synopsis,
- Post the synopsis to the government point of entry (GPE), and
- Cancel the synopsis.

Task 2-7—Solicit Competition

Purpose: *Ensure that a CCO can prepare a solicitation including the required clauses and provisions, which are in compliance with appropriate regulations, laws, and applicable local policies.*

Supporting Tasks:
- Conduct an oral solicitation correctly and document it appropriately;
- Conduct a request for quotation (RFQ), correctly including applicable clauses and provisions;
- Conduct a request for proposal (RFP), correctly including applicable clauses and provisions;
- Conduct a RFP for construction, correctly including applicable clauses and provisions; and
- Conduct a combined synopsis/solicitation, correctly including applicable clauses and provisions.

Task 2-8—Receive Solicitation Responses

Purpose: *Ensure that a CCO can receive solicitation responses and secure them in accordance with the FAR, DFARS, and the Army Federal Acquisition Regulation (AFARS).*

Supporting Tasks:
- Properly receive and mark solicitation responses, and
- Initiate steps to safeguard solicitation responses from unauthorized disclosure.

Task 2-9—Evaluate Offers

Purpose: *Ensure that a CCO can evaluate offers consistent with the specifications in the solicitation and determine the offer that is the best value.*

Supporting Tasks:
- Eliminate unresponsive offers and sufficiently document the rationale for the contract file;
- Utilize the Excluded Parties List System (EPLS) in accordance with FAR 9.405 to ensure there are no offerors from a vendor debarred, suspended, or proposed for debarment to be evaluated for award;
- Verify prospective contractors are registered in the Contractor Central Registration (CCR) system in accordance with FAR 4.1103;
- Apply the evaluation criteria and process appropriately and consistently as defined in the solicitation in accordance with FAR 13.106-2;
- Review price and past performance of offerors to determine the best value in accordance with FAR 13.106-2(b)(4)(ii);
- Form, conduct, and close a technical evaluation board (TEB);
- Determine the LPTA offer in accordance with FAR 13.106-2(b)(4)(i) and consistent with the specification of the award solicitation;
- Determine a fair and reasonable price using FAR 13;

- Make a contractor's responsibility determination prior to award in accordance with FAR 9.103 and document the file; and
- Properly document the contract file with the evaluation results and fair and reasonable price determination in accordance with the FAR and applicable local procedures.

Task 2-10—Prepare Contract Awards

Purpose: *Ensure that a CCO can correctly prepare a contract award in support of contract operations.*

Supporting Tasks:
- Properly receive and review offers/quotes to ensure completeness and ensure sufficient certified funds are available,
- Determine the appropriate type of award instrument,
- Incorporate the proper clauses from the solicitation,
- Incorporate appropriate terms and conditions from the solicitation,
- Determine and document the use of un-priced purchase orders, and
- Properly document the award for the contract file.

Task 2-11—Special Funds Codes

Purpose: *Ensure that a CCO understands how to explain the difference between when to use appropriated operation and maintenance funds.*

Supporting Tasks:
- Identify the purpose of the Commander's Emergency Response Program (CERP) program;
- Identify key threshold levels in the CERP program;
- Identify authorized and non-authorized uses of CERP funds;
- Identify the FAR waiver on CERP requirements;
- Identify overseas humanitarian, disaster, and civic aid (OHDACA);
- Identify the process to secure funding for OHDACA programs;
- Identify the legal constraints on the DoD under OHDACA programs;
- Identify OHDACA contract dollar thresholds;
- Identify the purpose of the Defense Security Cooperation Agency (DSCA);
- Identify the process to secure funding for a DSCA-funded item;
- Identify restrictions when dealing with DSCA;
- Identify the DSCA contract dollar threshold;
- Identify Other Procurement, Army (OPA);
- Identify how OPA is used in the procurement of base-level commercial equipment (BCE) items; and
- Identify expenditures that cannot be funded by OPA.

Task 2-12—Unspecified Minor Military Construction

Purpose: *Ensure that a CCO can conduct mission analysis and properly identify and explain all key tasks related to unspecified minor military construction (UMMC) projects in accordance with the* SMCT.

Supporting Tasks:
- Define UMMC projects,
- Identify funding limits for UMMC projects,
- Identify how to finance UMMC projects using Operation and Maintenance, Army (OMA) funds,
- Identify legitimate UMMC project expenditures, and
- Identify funding pitfalls of UMMC projects.

Task 2-13—Train, Appoint, and Manage CORs

Purpose: *Ensure that a CCO can train a COR prior to a contract award to perform his or her assigned responsibilities.*

Supporting Tasks:
- Train and appoint CORs,
- Verify COR qualifications, and
- Ensure COR personnel files are completed.

Task 3-1—Conduct Post-award Orientations

Purpose: *Ensure that a CCO can provide the contractor an accurate review of the contract milestones within 10 days after award but before performance is initiated.*

Supporting Tasks:
- Identify the key players and the significant responsibilities of all parties,
- Identify and resolve issues that may affect contract performance,
- Determine the appropriate type of post-award orientation,
- Prepare a post-award letter with minimum requirements,
- Properly conduct a post-award conference,
- Prepare a summary report of post-award conference, and
- Provide a timely post-award orientation.

Task 3-2—Notify Unsuccessful Offerors Award Synopsis

Purpose: *Ensure that a CCO can provide required notifications and debriefings in accordance with FAR 5 and 15.*

Supporting Tasks:
- Receive a contract file,
- Determine post-award notice requirements,
- Notify unsuccessful offerors in accordance with FAR 15.503(b),

- Determine if an award requires a synopsis in accordance with FAR 5.301 and DFARS 205.301, and
- Transmit a notification through a GPE in accordance with FAR 5.207,if no exemptions apply.

Task 3-3—Issue Delivery Orders/Task Orders/BPA Calls

Purpose: *Ensure that a CCO can place orders using appropriate procedures against existing indefinite delivery contracts (IDC) or place a call against existing BPAs.*

Supporting Tasks:
- Place an order for supplies or services using a federal supply schedule contract;
- Issue a single or multiple award delivery order (DO) or task order (TO) against a federal supply schedule contract;
- Order supplies or services against a BPA;
- Prepare a contract action report (CAR) accurately; and
- Properly document a DO, TO, or BPA order.

Task 3-4—Exercise Options

Purpose: *Ensure that a CCO can correctly identify available options, determine whether to exercise the option, and appropriately document the file in accordance with FAR 17.207.*

Supporting Tasks:
- Identify options available for exercise,
- Evaluate options,
- Determine whether to exercise options in accordance with FAR 17.207(d),
- Notify the contractor within time limits specified in contract clauses, and
- Exercise options and correctly document actions.

Task 3-5—Monitor Contractor Performance

Purpose: *Ensure that a CCO can monitor contract performance and initiate appropriate contractual actions.*

Supporting Tasks:
- Review award contracts,
- Determine monitoring requirements,
- Review evidence of performance and nonperformance,
- Initiate appropriate contract actions, and
- Document contractor performance.

Task 3-6—Process Documentation for Payments

Purpose: *Ensure that a CCO can maintain contract consistency and completeness of the invoice and receiving report.*

Supporting Tasks:
- Determine whether to authorize payment against an invoice in full, in part, or deny payment in accordance with the terms and conditions of the contract;
- Review contract file for terms and conditions;
- Review invoices from the contractor;
- Review receiving reports;
- Resolve any discrepancies; and
- Process documents for payment.

Task 3-7—Modify Contracts

Purpose: *Ensure that a CCO can review contract awards and determine when modifications are required.*

Supporting Tasks:
- Determine if a modification is within the scope of the original contract in accordance with FAR 43, FAR 12, and FAR 52.212-4(c),
- Determine the type of contract modification required in accordance with FAR 43.103(a) and FAR 43.103(b) or FAR 52.212-4,
- Receive and evaluate evidence requiring a contract modification,
- Determine if a modification is within the scope of the contract,
- Determine unilateral or bilateral contract modifications, and
- Process contract modifications.

Task 3-8—Terminate Contracts

Purpose: *Ensure that a CCO can terminate commercial items, non-commercial items, and simplified acquisition procedures (SAP) contracts using applicable FAR regulations.*

Supporting Tasks:
- Identify evidence to terminate a contract for commercial items;
- Assess termination options in accordance with FAR 12, 13, and 49;
- Determine termination methods;
- Terminate for convenience commercial items, non-commercial items, and SAP contracts;
- Terminate for cause commercial items, non-commercial items, and SAP contracts; and
- Notify the Director of Defense Procurement, as appropriate.

Task 3-9—Conduct Contract Close-Out

Purpose: *Ensure that a CCO can determine whether a contract is physically complete and that all outstanding contract administration issues have been resolved.*

Supporting Tasks:
- Verify contract content;
- Determine that a contract is physically complete;
- Determine if there are any administrative or financial issues to be closed out;
- Close a contract and prepare a completion statement; and
- Store, handle, and dispose of contract documentation appropriately.

Task 3-10—Process Protests

Purpose: *Ensure that a CCO can process protests in accordance with FAR 33, AFARS 5133.1, and agency requirements.*

Supporting Tasks:
- Receive a notice of protest,
- Identify types of protests,
- Issue a denial of protest to the protester(s),
- Sustain a protest and take appropriate actions in accordance with decision, and
- Prepare a protest package in accordance with GAO protest procedures.

Task 3-11—Process Claims

Purpose: *Ensure that a CCO can determine if a request for claim meets contract and regulatory requirements.*

Supporting Tasks:
- Receive a claim from the contractor,
- Determine the need for certification of claim by the contractor,
- Process a claim and issue an appropriate final decision, and
- Prepare a contracting officer's final determination memo in accordance with the FAR.

Task 3-12—Process Unauthorized Commitments

Purpose: Ensure *that a CCO can review UC evidence, find it adequate, and determine if the agreement or purchase in question requires ratification or if the party entering into the agreement remains liable.*

Supporting Tasks:
- Receive evidence for and evaluate a UC,
- Determine if a ratification is appropriate, and
- Process a UC.

Task 4-1—Use Standard Form (SF) 44

Purpose: *Ensure that a CCO can purchased supplies and services at a fair and reasonable price, using the SF 44 as a small purchase/contractual instrument.*

Supporting Tasks:
- Explain how to safeguard the SF 44,
- Ensure the SF 44 is authorized for use,
- Properly prepare a SF 44, and
- Correctly distribute copies of the SF 44.

Task 4-2—Train, Appoint, and Manage FOOs

Purpose: *Ensure that a CCO can train, appoint, and manage an FOO to make over-the-counter purchases in amounts up to the micro-purchase threshold.*

Supporting Tasks:
- Receive and review a FOO nomination letter from a unit commander,
- Conduct FOO training,
- Appoint a FOO, and
- Manage a FOO file.

Task 4-3—Conduct Vendor Education

Purpose: *Ensure that a CCO can conduct vendor education and provide contractors with essential information on how to conduct business with the U.S. government consistent with and in support of the ELOO.*

Supporting Tasks:
- Ensure vendor education plan supports local plans to leverage the ELOO,
- Properly analyze local contracting procedures for the deployed area,
- Select the appropriate topics to educate vendors,
- Properly coordinate the location for a vendor education forum,
- Properly coordinate interpreter support,
- Conduct vendor education, and
- Monitor results of vendor training.

Tasks 4-4—Employ a GPC as a Payment Method and Procurement Tool

Purpose: *Ensure that a CCO can determine the proper use of the GPC as procurement tool and payment card.*

Supporting Tasks:
- Identify a unit's GPC program dollar threshold levels,
- Demonstrate an understanding that the unit GPC cardholder needs to seek pre-purchase approval from a billing official (BO),
- Demonstrate an understanding that the cardholder conducts market research,
- Demonstrate an understanding of procedures to purchase items or services,
- Demonstrate an understanding that the cardholder needs to document transaction,
- Demonstrate an understanding that the cardholder needs to reconcile monthly statements,

- Demonstrate an understanding that the cardholder prepares documentation for payment, and
- Demonstrate an understanding that the cardholder and BO reconcile monthly statement for payment process.

Task 4-5—Manage Bulk Funds

Purpose: *Ensure that a CCO can manage bulk funds in compliance with appropriate regulations, laws, and policies.*

Supporting Tasks:
- Review and verify that a bulk-funded document is complete and appropriate for the contract, BPA, or other specified use;
- Properly and accurately reconcile a bulk fund spreadsheet;
- Properly distribute a bulk-funded contract actions; and
- Notify the finance and accounting office at the close of each month.

Task 4-6—Prepare for Deployment

Purpose: *Ensure that a CCO can conduct mission analysis, identify requirements for deployment, and effectively prepare for deployment.*

Supporting Tasks:
- Conduct mission analysis,
- Identify requirements for deployment,
- Determine support and equipment requirements, and
- Prepare for deployment.

Task 4-7—Maintain a PIIN Log

Purpose: *Ensure that a CCO can properly maintain a PIIN log.*

Supporting Tasks:
- Create a proper PIIN Log,
- Properly review PIIN Log and resolve any discrepancies, and
- Properly monitor and employ the PIIN Log as a contract management tool (ECC, 2009, pp. 3–51).

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APPENDIX F—*SMCT (51C)* QUESTIONS MISSED

Chapter 1

Task 1-4 Review Contracting Support Integration Plan		
Question	**Answer Choices**	**Responses**
What types of contract support is a CCO most likely to engage in?	A. Theater Support Contracts 20%	3
	B. System Support Contracts 0%	0
	C. External Support Contracts 6%	1
	D. CCOs will likely work on contracts encompassing all three types of contract support 66%	10
	E. Unanswered 6%	1
Which of the following is the least preferred method to determine known or potential contracting requirements during Mission Analysis	A. Identifying the supported unit's key contracting related processes and procedures 46%	7
	B. Identifying the type of unit, its task organization, and MTOE to anticipate contracting needs 0%	0
	C. Identifying what type of mission the supported units will be conducting and/or the listing of current contracts supporting the unit currently performing the mission 6%	1
	D. Identifying where in the ARFORGEN training cycle the supported unit is 46%	7
	E. Unanswered 0%	0
Which of the following generic Mission Statements of a notional CSIP contains all necessary information required for subordinate elements to understand their mission	A. Team/RCC provides contingency contracting, COR training, and FOO program management IOT support organization's operational objectives NLT date/time 46%	7
	B. Team/RCC provides, contingency contracting, COR training, and FOO program management NLT date/time 6%	1
	C. Team/RCC supports organization's operational objectives NLT date/time 0%	0
	D. Team/RCC provides, contingency contracting, COR training, and FOO program management IOT support organization's operational objectives 46%	7
	E. Unanswered 0%	0
What pertinent contract related information can be taken from a higher unit's Situation Paragraph (Paragraph 1) of their OPLAN or OPORD?	A. Any Intelligence on enemy that has a direct impact on contracting operations and additional and / or location of adjacent contract support elements to include other agency, Combined, Joint and Army level contracting offices in theater 46%	7
	B. Enemy location, disposition, composition and strength 33%	5
	C. Coordinating Instructions relating to contractors on the battlefield 0%	0
	D. Location of contract support elements to include other agency, Combined, Joint and Army level contracting offices in theater 20%	3
	E. Unanswered 0%	0
Information regarding an organization's existing Systems Support Contracts may help to	A. Identify the supported organization's equipment needing logistics support 33%	5
	B. Identify the supported organization's support provided by LOGCAP and Army wide contracts 6%	1
	C. Identify the supported organization's requirements consolidated at the Theater level and contracts available for use 0%	0
	D. All of these answers are correct 60%	9
	E. Unanswered 0%	0

Information regarding existing External Support Contracts may help to	A. Identify the supported organization's support provided by LOGCAP and Army wide contracts 26%	4
	B. Identify the supported organization's equipment needing logistics support 0%	0
	C. Identify the supported organization's requirements consolidated at the Theater level and contracts available for use 6%	1
	D. All of these answers are correct 60%	9
	E. Unanswered 6%	1
Who plans, directs and supervises contracting for supplies, services and construction for assigned customers?	A. Chief of Contracting Office 26%	4
	B. Head of Contracting Activity (HCA) 13%	2
	C. CCO 53%	8
	D. Unit Commander 6%	1
	E. Unanswered 0%	0
Contingency Contracting Officers have which of the following duties and responsibilities?	A. Execute individual contracts and maintain contract oversight 20%	3
	B. Plan, direct, and supervise purchasing and contracting for supplies, services, and construction for assigned customers 26%	4
	C. Establishes policies and procedures for developing, reviewing and managing the contingency contracting process 6%	1
	D. Provides the contractual policies and procedures for procurement of mission essential supplies, services and minor construction that are unavailable through normal logistics channels for US and coalition forces 46%	7
	E. Unanswered 0%	0

Chapter 2

Task 2-5 Document Other Than Full and Open Competition		
Question	**Answer Choices**	**Responses**
An acquisition that uses a brand name description to specify a particular product provides for full and open competition as long as more than one source is solicited, it does not need a justification?	A. False 42%	6
	B. True 57%	8
	C. Unanswered 0%	0
Justification and Approval (J&A) documents for sole source Federal Supply Schedule orders between $550,000 and $11.5 Million must be approved by?	A. Special Competition Advocate 42%	6
	B. Contracting Officer 7%	1
	C. Head of Contracting Activity 50%	7
	D. Requesting Agency 0%	0
	E. Unanswered 0%	0
A Determination and Finding (D&F) document is required any time a CCO awards a contract without providing for full and open competition based on one of the seven exceptions?	A. False 21%	3
	B. True 78%	11
	C. Unanswered 0%	0
Is the CCO required to include the justification document on other than full and open competition with the solicitation?	A. True 42%	6
	B. False 57%	8
	C. Unanswered 0%	0

Task 2-6 Synopsize Proposed Contract Actions		
Question	**Answer Choices**	**Responses**
In order to determine if a synopsis is required for an acquisition, the contracting officer should review	A. All answers are correct 43%	7
	B. The procurement plan 0%	0
	C. The acquisition strategy 6%	1
	D. FAR 43%	7
	E. Unanswered 6%	1
If the contract action is a modification to an existing contract for additional supplies and services, the contracting officer is not required to submit a synopsis unless the modification exceeds $100,000	A. False 43%	7
	B. True 50%	8
	C. Unanswered 6%	1
Even if posting a synopsis would be advantageous to the government, the contracting officer is not required to post a synopsis if the contract action is below the minimum dollar threshold. This provision in the FAR is to protect the contracting officer from unnecessary work	A. False 31%	5
	B. True 62%	10
	C. Unanswered 6%	1
When using the combined synopsis/solicitation procedure for the acquisition of a commercial item, the SF1449 is not used for issuing the solicitation	A. True 18%	3
	B. False 75%	12
	C. Unanswered 6%	1
Only the government can post synopsis onto the GPE	A. False 12%	2
	B. True 81%	13
	C. Unanswered 6%	1
The program manager may establish a shorter period for issuance of the solicitation than outlined in FAR 5.203	A. False 43%	7
	B. True 50%	8
	C. Unanswered 6%	1
Which of the following is a required field when entering a synopsis in the government point of entry	A. The date you received the requirements package 31%	5
	B. None, you upload the SF 1499 directly into the site 37%	6
	C. Dates you will not be in the office to receive offers 25%	4
	D. CCOs personal home address to receive hard copy responses 0%	0
	E. Unanswered 6	1

Task 2-7 Solicit Competition		
Question	**Answer Choices**	**Responses**
The competitive procedures available for use in fulfilling the requirements for full and open competition include	A. Sealed bidding 13%	2
	B. Competitive proposals 6%	1
	C. Both answers are wrong 46%	7
	D. Both answers are correct 33%	5
	E. Unanswered 0%	0
A contractor proposes commercial terms and conditions that are different than those solicited for in an RFP. The contracting officer should	A. Consider the terms and conditions if they are not precluded by law or executive order 40%	6
	B. Inform the vendor that he/she has been placed on the watch list 0%	0
	C. Place the proposal in the non responsive pile and move on to the next proposal 53%	8
	D. None of these answers are correct 6%	1
	E. Unanswered 0%	0
In response to solicitations for commercial items, the contracting officer should	A. Allow offerors to propose more than one product that will meet a government need 26%	4
	B. Specify in the RFP that contractors are limited to proposing one product or service in order to simplify the proposal review process and keep it fair 26%	4
	C. Request certified cost and pricing data to support proposals for previous contracts with the Government 20%	3
	D. Conduct market research to ensure that the items proposed by the contractor qualify as commercial items 26%	4
	E. Unanswered 0%	0
When using the combined synopsis/solicitation procedure, the SF 1449 is not used for issuing the solicitation	A. True 33%	5
	B. False 66%	10
	C. Unanswered 0%	0
In sealed bidding, wage determination for the primary site must be established no later than 14 days after bids have been opened	A. False 40% (6 answers)	6
	B. True 60% (9 answers)	9
	C. Unanswered 0%	0
When conducting an oral solicitation, which form do you use under SAP?	A. None of these answers are correct 46%	7
	B. SF 1449 40%	6
	C. SF 1442 6%	1
	D. SF 30 6%	1
	E. Unanswered 0%	0

Task 2-12 Unspecified Minor Military Construction		
Question	**Answer Choices**	**Responses**
Repair is defined as recurrent work necessary to preserve or maintain a facility so it can be used for its designated purpose. In other words, recurrent work necessary to prevent deterioration.	A. False 20%	3
	B. True 80%	12
	C. Unanswered 0%	0
Maintenance means to restore a real property facility, system, or component to such a condition that it may effectively be used for its designated purpose.	A. False 33%	5
	B. True 66%	10
	C. Unanswered 0%	0
Funding cost that count toward an "Unspecified" Minor Military Construction project are?	A. Maintenance and operation of government-owned equipment 13%	2
	B. Lodging (TDY) 6%	1
	C. Materials 53%	8
	D. All Answers are correct 26%	4
	E. Unanswered 0%	0
Funding cost that count toward an "Unspecified" Minor Military Construction project?	A. lodging (TDY) 40%	6
	B. Planning and design costs 13%	2
	C. Depreciation of government-owned equipment 0%	0
	D. None of these answers are correct 46%	7
	E. Unanswered 0%	0

Task 3-2 Notify Unsuccessful Offerors Award Synopsis		
Question	**Answer Choices**	**Responses**
Providing unsuccessful offerors a notification in a contingency environment serves as?	A. Disclosure of proprietary information about the winning contractor 0%	0
	B. Educational tool to contractors not familiar with the American contracting process 80%	8
	C. Both answers are wrong 20%	2
	D. Both answers are correct 0%	0
	E. Unanswered 0%	0
Post-award notices to unsuccessful offerors are not required for which of the following?	A. Both answers are correct 40%	4
	B. CCO determines in writing that the urgency of the requirement calls for award without delay 0%	0
	C. Contract is entered into under the 8(a) program 30%	3
	D. Both answers are wrong 30%	3
	E. Unanswered 0%	0
Unsuccessful offerors must be notified within how many days?	A. 3 40%	4
	B. 5 20%	2
	C. 7 0%	0
	D. 10 40%	4
	E. Unanswered 0%	0
Notices to unsuccessful offerors must include the following information?	A. All answers are correct 30%	3
	B. Name and address of each offeror receiving an award 30%	3
	C. Number of proposals received 30%	3
	D. Number of offerors solicited 10%	1
	E. Unanswered 0%	0
To the maximum extent practicable, the debriefing should occur within __days after written request is received?	A. 5 30%	3
	B. 3 30%	3
	C. 10 40%	4
	D. 7 0%	0
	E. Unanswered 0%	0
Sole source justifications must be made available to the public within how many days after contract award when the justification does not fall under FAR Part 6.302-2 Unusual and Compelling Urgency?	A. NLT 14 days 20%	2
	B. NLT 7 days 30%	3
	C. NLT 30 days 30%	3
	D. NLT 10 days 20%	2
	E. Unanswered 0%	0

Task 3-3 Issue Delivery Orders / Task Orders / BPA Calls		
Question	**Answer Choices**	**Responses**
An indefinite-quantity contract provides for an indefinite quantity, within stated limits, of supplies or services during a fixed period. The contract must require the Government to order?	A. Both answers are wrong 0%	0
	B. The contractor to furnish at least a stated minimum quantity of supplies or services. 50%	3
	C. If ordered, the contractor must furnish any additional quantities, not to exceed the stated maximum. 16%	1
	D. Both answers are correct 33%	2
	E. Unanswered 0%	0
A BPA does not need to cite which of the following?	A. Accounting and appropriation data 16%	1
	B. FAR and DFAR references 0%	0
	C. Items to be purchased 0%	0
	D. Customer approval letter 83%	5
	E. Unanswered 0%	0
CCOs who authorize Ordering Officers (OO?s) to place calls under BPAs shall?	A. Furnish copies of BPAs to each Field Commander to place calls. 50%	3
	B. Ensure sufficient funding is expired 16%	1
	C. Instruct the OOs in the proper use of BPAs and SF 1449 66%	4
	D. All answers are correct 0%	0
	E. Unanswered 0%	0
Grants and cooperative agreements must be reported to the FPDS-NG?	A. False 33%	2
	B. True 66%	4
	C. Unanswered 0%	0
Which of the following do not require CAR and do not have to be reported to the FPDS-NG?	A. Both answers are wrong 0%	0
	B. SF 44 purchases 33%	2
	C. Micro-purchases obtained thru the use of GPC 33%	2
	D. Both answers are correct 33%	2
	E. Unanswered 0%	0
Contracts awarded in a contingency environment do not have to be reported to the FPDS-NG?	A. True 16%	1
	B. False 83%	5
	C. Unanswered 0%	0
If a contract writing system or program is not integrated with FPDS, the contract action report must be submitted to FPDS within how many days?	A. 3 33%	2
	B. 5 16%	1
	C. 7 16%	1
	D. 1 33%	2
	E. Unanswered 0%	0
The existence of a BPA, DOES justify purchasing from only one source or avoiding small business set-aside?	A. False 16%	1
	B. True 83%	5
	C. Unanswered 0%	0

Task 3-6 Process Documentation for Payments		
Question	**Answer Choices**	**Responses**
CCO can obtain payment verification at which of the following?	A. WAWF Website 50%	7
	B. Defense Finance and Accounting Service (DFAS) Vendor Pay Website 14%	2
	C. Defense Information System Agency (DISA) Website 0%	0
	D. All these answers are correct 35%	5
	E. Unanswered 0%	0
The inclusion of which of the following clauses allows payment under limited conditions to a contractor prior to the Government's verification that supplies have been received and accepted as prescribed in the FAR?	A. The Payment Request Clause 7%	1
	B. The Prompt Payment Act Clause 35%	5
	C. The Fast Payment Procedure Clause 35%	5
	D. All answers are wrong 21%	3
	E. Unanswered 0%	0
Conditions for use of fast payment procedures include which of the following?	A. Individual purchases do not exceed $30,000 (some exceptions may apply) 7%	1
	B. Deliveries of supplies are to occur at locations where there is both geographical separation and a lack of adequate communication facilities between receiving activity and paying activity that will make it impractical to make timely payment based on evidence of Government acceptance 28%	4
	C. Both answers are correct 21%	3
	D. Both answers are wrong 35%	5
	E. Unanswered 0%	0
Discrepancies between contractor invoice and contract must be resolved within 30 days after payment was made?	A. False 35%	5
	B. True 64%	9
	C. Unanswered 0%	0
Payment approval and disbursement depend on all of the following except?	A. Contractor's ability to receive EFT payments 42%	1
	B. Proper invoice and other documentation 14%	4
	C. Satisfactory contract performance 21%	3
	D. Funds availability 21%	5
	E. Unanswered 0%	0
refers to any payment that is not a commercial advance payment or a delivery payment but is given to the contractor after some work has been done?	A. Commercial interim payment 35%	5
	B. Invoice payments 14%	2
	C. Mandatory payment 0%	0
	D. None of the above 50%	7
	E. Unanswered 0%	0
Which of the following are not considered contract financing payments?	A. Invoice Payments 35%	5
	B. Lease and Rental Payments 28%	4
	C. Both answers are correct 35%	5
	D. Both answers are wrong 0%	0
	E. Unanswered 0%	0
CCOs can authorize progress payments of 80% or more of the accumulated costs by the contractor?	A. True 35%	5
	B. False 64%	9
	C. Unanswered 0%	0
Progress payments requests must be documented on which of the following form's)?	A. DD Form 1195 21%	3
	B. SF 44 7%	1
	C. SF 1443 21%	3
	D. SF 30 7%	1
	E. Answers a and c are correct 42%	6
	F. Unanswered 0%	0

Task 3-7 Modify Contracts		
Question	**Answer Choices**	**Responses**
An oral or written act or omission by the Contracting Officer or other authorized Government official which is of such a nature that it has the same effect as a formal written change order is a?	A. Constructive change 15%	2
	B. Unilateral change 46%	6
	C. Administrative change 7%	1
	D. Cardinal change 30%	4
	E. Unanswered 0%	0
An example of a buyer requirement for contract modification is	A. Contract termination 30%	4
	B. Request for a name change 7%	1
	C. Change in contractor's address 30%	4
	D. Request for contracting officer to confirm a constructive change 30%	4
	E. Unanswered 0%	0
Only unilateral changes may be made to FAR Part 12 commercial contracts	A. True 7%	1
	B. False 92%	12
	C. Unanswered 0%	0
If a contract modification cannot be priced before it is authorized, the contracting officer should	A. Negotiate with the contractor a ceiling price 46%	6
	B. Issue the change as a cost plus reimbursement modification 15%	2
	C. Issue a unilateral change using an independent government estimate 30%	4
	D. Terminate the existing contract and renegotiate a new contract 7%	1
	E. Unanswered 0%	0
If a mutual agreement regarding an appropriate equitable adjustment to the contract cannot be reached with the contractor, the contracting officer must	A. Issue a final decision to a contractor's claim 46%	6
	B. Forward the request to GAO to make the final decision 15%	2
	C. Forward the request to DCMA to make the final decision 7%	1
	D. Accept the contractor's best and final offer as long as all costs are acceptable and legal 30%	4
	E. Unanswered 0%	0
A change order is a unilateral order signed by the contracting officer directing the contractor to make changes under the various change clauses. If the change causes an increase or decrease in the cost of, or the time required for, performance of any part of the work under the contract the CCO should?	A. Make an equitable adjustment in the contract price 46%	6
	B. Make an equitable adjustment to the delivery schedule. 7%	1
	C. The contractor is not required to comply with the change 38%	5
	D. Make an equitable adjustment to past performance 0%	0
	E. Unanswered 7%	1
A contracting officer will typically execute a unilateral modification to perform	A. Executing supplemental agreements for negotiated equitable adjustments resulting from the issuance of a change order 7%	1
	B. Reflect other agreements of the parties modifying the terms of contracts 0%	0
	C. In-scope change 15%	2
	D. All answers are wrong 76%	10
	E. Unanswered 0%	0
A contracting officer will typically execute a bilateral modification in order to	A. definitize a letter contract 38%	5
	B. administrative contracts 0%	0
	C. Both answers are wrong 46%	6
	D. Both answers are correct 15%	2
	E. Unanswered 0%	0

In order to exercise an option and issue a bilateral change order, the contracting officer should	A. Modify FAR clause 52.217-8 to extend the contract beyond the original time extended 0%	0
	B. Prepare a determinations and finding memorandum 15%	2
	C. Modify FAR clause 52.217-9 to extend the period of performance 0%	0
	D. All answers are wrong 76%	10
	E. Unanswered 0%	0

Task 3-8 Terminate Contracts

Question	Answer Choices	Responses
Contracting officers shall process terminations for commercial items in accordance with	A. Both answers are wrong 6%	1
	B. Either FAR Part 52.212-4(l) or 52.212-4(m) 6%	1
	C. FAR Part 12.403 46%	7
	D. Both answers are correct 40%	6
	E. Unanswered 0%	0
In the event a commercial item contract is terminated for the government's convenience the contractor	A. Shall immediately stop all work and cause any and all of its suppliers and subcontractors to cease work 26%	4
	B. Shall complete the work associated with the current billing period and submit a final bill to the government 26%	4
	C. Shall be paid for all work performed or costs incurred 33%	5
	D. Is required to justify all costs in accordance with cost accounting standards or contract cost principles 13%	2
	E. Unanswered 0%	0
A contract that the government improperly terminated shall be	A. Be deemed a termination for convenience 46%	7
	B. Reinstated automatically and the contractor is entitled to paid damages 40%	6
	C. Fully executed to the contractor's benefit to include penalty fees 6%	1
	D. Re-competed and awarded to the contractor with the lowest technically acceptable price 6%	1
	E. Unanswered 0%	0
Terminating a contract for default in a contingency environment is more likely than terminating a contract for convenience	A. False 20%	3
	B. True 80%	12
	C. Unanswered 0%	0
When a T4C is requested on a construction project, a CCO should	A. Request or recommend meeting with contractor 6%	1
	B. Resource Manager should provide an estimate of the cost incurred on base 0%	0
	C. Establish and negotiate cost settlement with Resource Manager 53%	8
	D. Write a SF 1442 using T4C clause 52.249-2 40%	6
	E. Unanswered 0%	0
Contracts for commercial items purchased under the procedures outlined in FAR Part 12 may be terminated for:	A. Cause or convenience 46%	7
	B. Cause only 0%	0
	C. Convenience only 0%	0
	D. Convenience or Default 53%	8
	E. Unanswered 0%	0
Progress payments requests must be documented on which of the following form's)?	A. TCO 40%	6
	B. ACO 0%	0
	C. KO 40%	6
	D. PM 6%	1
	E. termination for convenience in order to protect the government's interests 6%	1
	F. Unanswered 6%	1

When a termination for convenience settlement is made, the contractor is paid for actual costs with a profit fee not to exceed 5%	A. False 40%	6
	B. True 60%	9
	C. Unanswered 0%	0
If the contractor does not cure a failure within 10 days after receipt of a cure notice, the contracting officer must terminate them for default	A. False 40%	6
	B. True 60%	9
	C. Unanswered 0%	0
The administrative contracting officer has the authority to issue a show cause notice or cure notice without the prior approval of the contracting office	A. False 46%	7
	B. True 46%	7
	C. Unanswered 6%	1
If the contractor is a small business firm, the contracting officer should contact the local small business specialist	A. Before proceeding with the default termination 20%	3
	B. Within 10 days of issuing a cure notice to the contractor 0%	0
	C. To authorize the termination for default 0%	0
	D. None of these, the small business administration is not authorized involvement in default terminations. 46%	7
	E. Unanswered 0%	0

Task 3-9 Conduct Contract Closeout		
Question	**Answer Choices**	**Responses**
Each D&F shall set forth enough facts and circumstances to clearly and convincingly justify the specific determination made. As a minimum, each D&F shall include:	A. Nature and/or description of the action being approved 21%	3
	B. Identification of the sister agency of the contracting activity 0%	0
	C. Citation of the appropriate agency statute and/or regulation upon which the D&F is based 78%	11
	D. Unanswered 0%	0
If the contracting office is administering their own contracts	A. Both answers are wrong 7%	1
	B. Locally developed forms or a statement of completion may be used instead of the DD Form 1594, Contract Completion statement 35%	5
	C. Prepare a DD Form 1594 for contracts valued above the simplified acquisition threshold 35%	5
	D. Both answers are correct 21%	3
	E. Unanswered 0%	0
This form is the primary document for initiating a systematic contract closeout	A. DD Form 1597, Contract Closeout Checklist 42%	6
	B. DD Form 1594, Contract Completion Statement 42%	6
	C. DD Form 1593, Contract Administration Completion Record 7%	1
	D. DD Form 1599, Contract Termination Checklist 7%	1
	E. Unanswered 0%	0
Upon receipt of final invoice and a receiving report, the contracting officer should	A. Issue a unilateral modification to de-obligate any excess funds 42%	6
	B. Complete DD From 1599, Contract Termination Checklist 42%	6
	C. Initiate options found in the contract before contract closeout 0%	0
	D. Issue a stop work order to ensure the contractor does not perform additional and unauthorized work 14%	2
	E. Unanswered 0%	0
Administrative closeout procedures must be followed in the order listed in FAR Part 4.804-5. Deviations from the prescribed order must be approved using a J&A	A. False 35%	5
	B. True 64%	9
	C. Unanswered 0%	0
The working file shall contain original documents until contract closeout procedures are initiated and the official contract file is prepared	A. False 28%	4
	B. True 64%	9
	C. Unanswered 7%	1
The working file shall contain original documents until contract closeout procedures are initiated and the official contract file is prepared	A. False 35%	5
	B. True 64%	9
	C. Unanswered 0%	0
Construction contracts below _____ dollars must be maintained a minimum of 3 years after final payment	A. $2,000 42%	6
	B. $10,000 0%	0
	C. $25,000 57%	8
	D. $5,000 0%	0
	E. Unanswered 0%	0

Task 3-10 Process Protests		
Question	**Answer Choices**	**Responses**
Upon notification of a protest the CCO should do which of the following within the first 24 hours of receipt?	A. Transmit a copy of the protest documents to the supporting legal office 41%	5
	B. Confirm the identity of the attorney assigned to work the protest 16%	2
	C. Discuss the allegations with the appointed attorney 0%	0
	D. All answers are correct 33%	4
	E. Unanswered 8%	1
The government must submit its agency report to the GAO and to whom during the first 30 days?	A. The protestor 33% (4 answers)	4
	B. The HCA 33% (4 answers)	4
	C. The COR 0%(0 answers)	0
	D. b and c 16%(2 answers)	2
	E. none of these 16% (2 an	2
	F. Unanswered 0%	0
The contracting officer must immediately suspend performance of a contract that was protested within the required timeframe and through the proper channels	A. False 25%	3
	B. True 75%	9
	C. Unanswered 0%	0
A protest should include the following information	A. A waiver to an interested party status 16%	2
	B. A notice that the contractor is staying performance until the protest is resolved 16%	2
	C. A request for a ruling by the agency 66%	8
	D. An justification as to why the protest was filed 30 days after awareness of the conditions leading to protest were discovered 0%	0
	E. Unanswered 0%	0

Where are the vast majority of protests filed by contractors?	A. GAO 16%	2
	B. Local Contracting Office 66%	8
	C. Through their Congressman 0%	0
	D. Court of Contracts Appeals 16%	2
	E. Unanswered 0%	0
A procurement integrity violation must be reported to the contracting officer within ___ days after the person first discovered the possible violation before it can filed as a protest at the GAO level	A. 14 16%	2
	B. 10 16%	2
	C. 30 8%	1
	D. 5 58%	7
	E. Unanswered 0%	0
When the agency has received notice of a GAO protest filed directly with the GAO, a contract may be awarded under the following circumstances, EXCEPT?	A. Untimely award would delay project completion date 33%	4
	B. Authorized in accordance with agency procedures 8%	1
	C. Head of contracting activity consents to award 0%	0
	D. Urgent and compelling circumstances does not permit awaiting GAO decision 58%	7
	E. Unanswered 0%	0
When the agency has received protest notification prior to award, a contract may not be awarded, EXCEPT?	A. Both answers are wrong 0%	0
	B. Urgent and compelling circumstances exist 66%	8
	C. Award is likely to occur within 30 days of the written finding 0%	0
	D. Both answers are correct 33%	4
	E. Unanswered 0%	0
The HCA may authorize contract performance notwithstanding a protest.	A. On a nondeligable basis upon written finding that contract performance will be in the best interest of the United States and urgent and compelling circumstances exist 25%	3
	B. On a delegable basis upon finding that contract performance will be in the best interest of the United States and Urgent and compelling circumstances exist 16%	2
	C. On a nondeligable basis upon finding that contract performance will be in the best interest of the United States and Urgent and compelling circumstances exist 33%	4
	D. Only upon verification from the CCO the protest was a mistake and will be shredded at their earliest convenience 16%	2
	E. Unanswered 8%	1
In accordance with the FAR, an agency should make their best effort to resolve a protest within ___ days after the protest is filed	A. 35 33%	4
	B. 10 25%	3
	C. 15 8%	1
	D. 60 33%	4
	E. Unanswered 0%	0
Which regulation has precedence when determining procedures for protests filed with the GAO	A. Federal Acquisition Regulation (FAR PART 33) 66%	8
	B. DoD 5000.1 8%	1
	C. Code of Federal Regulations (4 CFR Part 21) 25%	3
	D. OMB A-87 0%	0
	E. Unanswered 0%	0
After the government has provided their report to a protest filed with the GAO, the protestor typically has ____ days to file a written response to the government agency report	A. 10 41%	5
	B. 30 33%	4
	C. 90 25%	3
	D. 45 0%	0
	E. Unanswered 0%	0

Task 3-11 Process Claims		
Question	**Answer Choices**	**Responses**
After the receipt of a claim equaling $100,000 or less, the final decision shall be made within	A. 60 days after receipt of certified claim 26%	4
	B. 30 days after receipt of certified claim 20%	3
	C. 60 days after receipt of written claim 46%	7
	D. 30 days after receipt of written claim 6%	1
	E. Unanswered 0%	0
What may result, as a result of the CCO final decision to deny (either in part or in total) a contractors claim?	A. A dispute by the contractor under the applicable contract disputes clause 40%	6
	B. A modification by the contracting officer to increase CLIN 0005 0%	0
	C. The contractor may appeal the decision to the GAO 60%	9
	D. Nothing, The CCO's decision is final 0%	0
	E. Unanswered 0%	0
A solatia payment typical to those paid during combat operations in Iraq/Afghanistan are considered	A. Non-contract claims 40%	6
	B. Implied contract claims 20%	3
	C. Expressed contract claims 20%	3
	D. None of these 20%	3
	E. Unanswered 0%	0
A defective certification of a claim eliminates an agency's jurisdiction over the claim, and the claim automatically falls under the jurisdiction of the Federal Court of Appeals	A. False 46%	7
	B. True 46%	7
	C. Unanswered 6%	1

Task 3-12 Process Unauthorized Commitments		
Question	**Answer Choices**	**Responses**
The _____ is responsible for locating funds to ratify an unauthorized commitment	A. Customer 42%	6
	B. Contracting officer 50%	7
	C. Chief of contracting 7%	1
	D. Contractor 0%	0
	E. Unanswered 0%	0
When gathering information for an unauthorized commitment, a CCO should	A. Should not seek legal counsel 78%	11
	B. None of these answers are correct 7%	1
	C. Consolidate all unauthorized commitments for one period into a file and focus one to three days a month towards completing these files 7%	1
	D. Seek a justification and approval document from the chief of contracting office before conducting the investigation 7%	1
	E. Unanswered 0%	0

Chapter 4

Task 4-4 Employ a GPC as a Payment Method and Procurement Tool		
Question	**Answer Choices**	**Responses**
Inside the U.S. in support of a contingency operation a non-warranted GPC holder may make single purchases up to	A. $15,000 42%	6
	B. $2,500 50%	7
	C. $10,000 7%	1
	D. SAT 0%	0
	E. Unanswered 0%	0
A warranted contracting officer may use the GPC to make a purchase that exceeds the micro-purchase threshold if?	A. The warrant states a higher dollar limit, but only to that	4
	B. All answers are correct 14%	2
	C. Never 42%	6
	D. Only if approval is received in writing from the Resource Manager 14%	2
	E. Unanswered 0%	0
A GPC holder should notify the approving official when a card is no longer needed no later than 90 days after this determination is made	A. False 35%	5
	B. True 64%	9
	C. Unanswered 0%	0
The cardholder has ____ days from the date of the cardholder's billing statement to dispute a transaction	A. 60 35%	5
	B. 14 28%	4
	C. 5 7%	1
	D. 30 21%	3
	E. Unanswered 7%	1
CCOs are required to create a log for all GPC purchases made above the micro-purchase threshold level	A. False 28%	4
	B. True 71%	10
	C. Unanswered 0%	0
Within _____ of the end of the billing cycle, the cardholder shall manually reconcile their monthly statement and submit all documentation to the billing official for approval and certification	A. 3 days 42%	6
	B. 14 days 14%	2
	C. 30 days 7%	1
	D. 5 days 35%	5
	E. Unanswered 0%	0

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LIST OF REFERENCES

Arzu, J., Castro, B., & Mack, B. (2010, June). *Contingency contracting officer proficiency assessment test development* (NPS-CM-10-007, Master's thesis, Naval Postgraduate School). Retrieved from http://www.acquisitionresearch.net

Barbaris, R., & Callanan, C. (2008, September). *United States Army contingency contacting operations: Emerging roles, procedures, and challenges facing contracting professionals* (Joint applied project). Monterey, CA: Naval Postgraduate School.

Calisti, S. (2009, February). *OSD view of contingency contracting*. PowerPoint presentation given at the Program Acquisition and Contingency Contracting DAU South Region Conference, Orlando, FL.

Carter, A. B. (2010, June 29). Carter promotes Pentagon procurement efficiency.Retrieved from U.S. Department of Defense website: http://www.defense.gov

Chairman of the Joint Chiefs of Staff (CJCS). (2007a, February). *Joint task force headquarters* (Joint Publication 3-33). Retrieved from Federation of American Scientists website: http://www.fas.org

Chairman of the Joint Chiefs of Staff (CJCS). (2007b, May). *Deployment and redeployment operations* (Joint Publication 3-35). Retrieved from Federation of American Scientists website: http://www.fas.org

Chairman of the Joint Chiefs of Staff (CJCS). (2008, October). *Operational contract support* (Joint Publication 4-10). Retrieved from Defense Technical Information Center (DITC) website: http://www.dtic.mil

Chairman of the Joint Chiefs of Staff (CJCS). (2010, March). *Joint operations* (Joint Publication 3-0). Retrieved from Defense Technical Information Center (DITC) website: http://www.dtic.mil

Cibinic, J. J., & Nash, J. R. (1998). *Formation of government contracts*. Washington, DC: George Washington University Press.

Congressional Budget Office (CBO). (2008, August). *Contractors' support of US operations in Iraq* (Pub. No. 3053). Retrieved from http://www.cbo.gov/ftpdocs/96xx/doc9688/08-12-IraqContractors.pdf

Congressional Research Service (CRS). (2010a, April). *Defense logistical support contracts in Iraq and Afghanistan: Issues for Congress* (RL33834). Retrieved from http://assets.opencrs.com/rpts/RL33834_20100428.pdf

Congressional Research Service (CRS). (2010b, July). *Department of Defense contractors in Iraq and Afghanistan: Background and analysis* (R40764). Retrieved from http://opencrs.com

Coombs, J. L. (2002, June). *Contingency contracting and private volunteer organization procurement in Uzbekistan: A comparative analysis* (Master's thesis, Naval Postgraduate School). Retrieved from http://www.acquisitionresearch.net

Defense Acquisition University (DAU). (2010a). CON 234 joint contingency contracting course description. Retrieved June 29, 2010, from http://icatalog.dau.mil/onlinecatalog/courses.aspx?crs_id=29

Defense Acquisition University (DAU). (2010b). CON 234 joint contingency contracting course objectives. Retrieved June 29, 2010, from https://myclass.dau.mil/bbcswebdav/xid-465766_4

Defense Acquisition University (DAU). (2010c). CON 334 Advanced contingency contracting officer course description. Retrieved June 29, 2010, from http://icatalog.dau.mil/onlinecatalog/courses.aspx?crs_id=1685

Defense Acquisition University (DAU). (2010d). CON 334 Advanced contingency contracting officer course objectives. Retrieved June 29, 2010, from https://myclass.dau.mil/bbcswebdav/xid-593413_4

Director, Defense Procurement and Acquisition Policy (DPAP). (2008, December). *Contingency contracting: A joint handbook for the 21st century*. Maxwell AFB, AL: Air Force Logistics Management Agency.

Duncan Hunter National Defense Authorization Act for Fiscal Year 2009, Pub. L. No. 110-417: Section 833, Title 10 U.S.C. §1705; Section 834, Title 10 U.S.C. §1722(a); Section 869, Title 41 U.S.C. §433(a); Section 870, Title 41 U.S.C. §403. (2008).

Expeditionary Contracting Command (ECC). (2009, September). *Soldier's manual of common tasks for MOS 51C acquisition, logistics, and technology* (Draft). Ft. Belvoir, VA.

Expeditionary Contracting Command (ECC). (2010, April). *ECC update to the ACC executive director's offsite* (Unpublished PowerPoint presentation). Ft. Belvoir, VA.

Federal Acquisition Regulation (FAR), 48 C.F.R. ch. 1. (2005).

Gansler, J. S., Berteau, D. J., Maddox, D. M., Oliver, D. R., Salomon, L. E., & Singley, G. T. (2007, October). *Urgent reform required: Army expeditionary contracting*.

Report of the Commission on Army Acquisition and Program Management in Expeditionary Operations. Washington, DC: Author.

Gates, R. M. (2009, April 6). *Prepared remarks*. Defense Budget Recommendation Statement. Retrieved from U.S. Department of Defense website: http://www.defense.gov

Gates, R. M. (2010a, May 8). Gates calls for significant cuts in Defense overhead. Retrieved from U.S. Department of Defense website: http://www.defense.gov

Gates, R. M. (2010b, August 9). *Secretary Gates announces efficiencies initiatives* (Release No. 706-10). Retrieved from U.S. Department of Defense website: http://www.defense.gov

Government Accountability Office (GAO). (2004, July). *Military operations: DoD's extensive use of logistics support contracts requires strengthened oversight* (GAO-04-854). Washington, DC: Author.

Government Accountability Office (GAO). (2006, December). *Military operations: High-level DoD action needed to address long-standing problems with management and oversight of contractors supporting deployed forces* (GAO-07-145). Washington, DC: Author.

Government Accountability Office (GAO). (2007, January). *Defense acquisitions: DoD needs to exert management and oversight to better control acquisition of services* (GAO-07-359T). Washington, DC: Author.

Government Accountability Office (GAO). (2008a, January). *Defense acquisitions: DoD's increased reliance on service contractors exacerbates long-standing challenges* (GAO-08-621T). Washington, DC: Author.

Government Accountability Office (GAO). (2008b, September). *Military operations: DoD needs to address contract oversight and quality assurance issues for contracts used to support contingency operations* (GAO-08-1087). Washington, DC: Author.

Government Accountability Office (GAO). (2009, April). *Defense acquisitions: Actions needed to ensure value for service contracts* (GAO-09-643T). Washington, DC: Author.

Government Accountability Office (GAO). (2010, March). *Warfighter support: Continued actions needed by DoD to improve and institutionalize contractor support in contingency operations* (GAO-10-551T). Washington, DC: Author.

General Accounting Office (GAO). (1993, April). *Acquisition management: Implementation of the Defense Acquisition Workforce Improvement Act* (GAO/NSIAD-93-129). Washington, DC: Author.

General Accounting Office (GAO). (1997, February). *Contingency operations: Opportunities to improve the logistics civil augmentation program* (GAO/NSIAD-97-63). Washington, DC: Author.

John Warner National Defense Authorization Act for Fiscal Year 2007, 10 U.S.C. § 2333 (2006).

Kirstein, J. (2003). *A study of the efficacy of unit contingency contracting training*. Wright-Patterson Air Force Base, OH: Air Force Institute of Technology.

Luse, C., Madeline, C., Smith, L., & Starr, S. (2005, December). *An evaluation of contingency contracting: Past, present, and future* (MBA professional report). Monterey, CA: Naval Postgraduate School.

National Defense Authorization Act for Fical Year 2008, 10 U.S.C. § 1705 (2008).

National Defense Authorization Act for Fical Year 2010, 10 U.S.C. § 1705(d) (2009).

Naval Postgraduate School (NPS). (2010, June). *Naval Postgraduate School academic catalog*. Retrieved August 23, 2010, from http://www.nps.edu/admissions/Doc/NPS%20General%20Catalog%20JUN%202010.pdf

Office of the President of the United States (POTUS). (1997, May). *The Clinton administration's policy on managing complex contingency operations* (Presidential Decision Directive 56). Retrieved from Federation of American Scientists website: http://www.fas.org

Office of the Secretary of Defense (OSD). (2008, April). *Department of Defense program for planning, managing, and accounting for contractor services and contractor personnel during contingency operations*. Retrieved from Defense Technical Information Center (DITC) website: http://www.dtic.mil

Office of the Secretary of Defense (OSD). (2010, February). *Quadrennial defense review report*. Retrieved from http://www.defense.gov/qdr/images/QDR_as_of_12Feb10_1000.pdf

Prepared testimony: *Report of the Acquisition Advisory Panel to the Office of Federal Procurement Policy and the U.S. Congress* (2006, June 13) (testimony of S. Assad). Retrieved from https://www.acquisition.gov/comp/aap/documents/Introduction%20and%20Executive%20Summary.pdf

RAND Corporation (RAND). (2008). *Analyzing contingency contracting purchases for Operation Iraqi Freedom*. Santa Monica, CA: Author.

Rendon, R. G., & Snider, K. (2008). *Management of defense acquisition projects*. Washington, DC: American Institute of Aeronautics and Astronautics.

Thibault, M. J., Shays, C. H., Ervin, C. K., Green, G. S., Gustitus, L. J., Henke, R. J., … Zakheim, D. S. (2009, June). *At what cost? Contingency contracting in Iraq and Afghanistan*. Retrieved from http://www.wartimecontracting.gov/docs/CWC_Interim_Report_At_What_Cost_06-10-09.pdf

Under Secretary of Defense (Acquisition, Technology, & Logistics) (USD [AT&L]). (2008). *Department of Defense evaluation and implementation of recommendations from the Commission on Army Acquisition and Program Management in Expeditionary Operations*. Retrieved from http://www.acq.osd.mil/dpap/pacc/cc/docs/section849.pdf

U.S. Army (USA). (2006, September). *Contingency contracting handbook*. Arlington, VA: Author.

Wilson, E. (2010, July 8). Training prepares civilian employees for deployment. Retrieved from U.S. Department of Defense website: http://www.defense.gov/News/NewsArticle.aspx?ID=59941

Yoder, E. C. (2003, August). *Contingency contracting operations: Achieving better results*. Unpublished PowerPoint presentation, Naval Postgraduate School, Monterey, CA.

Yoder, E. C. (2004, December). *The Yoder Three-tier Model for optimal planning and execution of contingency contracting* (NPS-AM-05-002). Monterey, CA: Naval Postgraduate School.

Yoder, E. C. (2010, July). Principles of contingency contracting [Syllabus, MN 3318]. Graduate School of Business and Public Policy, Naval Postgraduate School, Monterey, CA.

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- Contractors in 21st-century Combat Zone
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- Strategic Contingency Contracting
- Transforming DoD Contract Closeout
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- Capital Budgeting for the DoD
- Energy Saving Contracts/DoD Mobile Assets
- Financing DoD Budget via PPPs
- Lessons from Private Sector Capital Budgeting for DoD Acquisition Budgeting Reform
- PPPs and Government Financing
- ROI of Information Warfare Systems
- Special Termination Liability in MDAPs
- Strategic Sourcing
- Transaction Cost Economics (TCE) to Improve Cost Estimates

Human Resources

- Indefinite Reenlistment
- Individual Augmentation
- Learning Management Systems
- Moral Conduct Waivers and First-tem Attrition
- Retention
- The Navy's Selective Reenlistment Bonus (SRB) Management System
- Tuition Assistance

Logistics Management

- Analysis of LAV Depot Maintenance
- Army LOG MOD
- ASDS Product Support Analysis
- Cold-chain Logistics
- Contractors Supporting Military Operations
- Diffusion/Variability on Vendor Performance Evaluation
- Evolutionary Acquisition
- Lean Six Sigma to Reduce Costs and Improve Readiness
- Naval Aviation Maintenance and Process Improvement (2)

- Optimizing CIWS Lifecycle Support (LCS)
- Outsourcing the Pearl Harbor MK-48 Intermediate Maintenance Activity
- Pallet Management System
- PBL (4)
- Privatization-NOSL/NAWCI
- RFID (6)
- Risk Analysis for Performance-based Logistics
- R-TOC AEGIS Microwave Power Tubes
- Sense-and-Respond Logistics Network
- Strategic Sourcing

Program Management

- Building Collaborative Capacity
- Business Process Reengineering (BPR) for LCS Mission Module Acquisition
- Collaborative IT Tools Leveraging Competence
- Contractor vs. Organic Support
- Knowledge, Responsibilities and Decision Rights in MDAPs
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