IDENTIFYING KNOWLEDGE, SKILL, AND ABILITY REQUIREMENTS FOR CONTRACTING OFFICER REPRESENTATIVES IN DEPLOYED ENVIRONMENTS

GRADUATE RESEARCH PAPER

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Abstract

Sequestration has forced the military services to downsize, but given today's world events, the mission appears to be growing. With that said, the Department of Defense (DoD) has relied extensively on the private sector during contingencies to help carry out various aspects of its mission for military operations. Because of certain military specialties needed, total force capacity restraints, and service rotation policies, the critical reliance on contractor support has increased the DoD's demand for Operational Contract Support (OCS). This OCS increase has resulted in an equivalent reliance on Contracting Officer Representatives (COR) in order to provide effective and efficient contract surveillance for Contingency Contracting Officers (CCO) and ultimately Combatant Commanders (CCDR). This has been further amplified because as the DoD continues to downsize, a COR's competencies (knowledge, skill, and abilities (KSA) must be further developed to meet the CCDR's evolving OCS needs.

Due to the criticality of OCS, CORs are appointed by CCOs to assist in evaluating contractor performance and contract management. The Office of Federal Procurement Policy (OFPP) defines 12 critical COR competencies with 54 targeted performance outcomes, while the DoD defines 15 required competencies and no known targeted performance outcomes. Analysis suggests that the DoD has failed to clearly identify the right mix of KSAs for CORs to carry out their assigned duties. Unless KSAs clearly identify targeted performance outcomes, CCDRs will be left with CORs that are not matched to the types of service contracts they are required to monitor, poor contractor oversight, and performance misinterpretations when and where it is needed most.

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IDENTIFYING KNOWLEDGE, SKILL, AND ABILITY REQUIREMENTS FOR CONTRACTING OFFICER REPRESENTATIVES IN DEPLOYED ENVIRONMENTS

I. Introduction

Background

"…there is a lack of clarity as who is in charge of policy, doctrine, resourcing, training, planning, and execution for OCS. This is persistent and pervasive across the Office of the Secretary of Defense, the Military Departments, and the Combatant Commands. It is imperative that the Department establish effective policies, doctrine, and processes for operational contract support. Without effective leadership and guidance, a persistent lack of urgency has emerged in training for, planning for, and execution of OCS."

<div align="right">

Dr. Craig I. Fields
Chairman, DSB Task Force (2014)

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In accordance with Department of Defense Directive (DoDD) 5100.01, *Functions of the Department of Defense and Its Major Components*, organizing, training and equipping is a service responsibility. As such, the senior uniformed Air Force officer, General Mark A. Welsh III is responsible for this important triad for all 690,000 active duty, reserve, guard and civil service serving in the United States and overseas (DoD, 2014). CCDRs are dependent upon ready forces to achieve mission success. The Air Force and other services then ensure their forces are organized, trained and equipped to support a CCDR where and when the need for that capability arises. Likewise, a CCDR is responsible for advocating, coordinating and approving those aspects of the mission for resourcing, equipping, internal organization and training that they deem necessary to carry out missions assigned to their respective commands.

From the early days of the American Revolutionary War, contractors have been part of the battlefield in one form or another (Figure 1). Over time, this support has evolved from an ad hoc, add-on capability to an essential part of the United States' force projection capabilities. For example, General George Washington used civilian wagon drivers to haul military supplies. They also supported military operations during the American Civil War, both World War I and II, the Vietnam War, and the Persian Gulf War (ATP 1-06.1, 2011). From these early wars to the conflicts in which we are currently engaged abroad, the use of contractors represents a force projection capability that has increased overtime.

Importance of Contracting: Historical Perspective

Throughout US history, we have utilized Contractors in direct support of our military forces

Complexity of Conflict

All-Volunteer Army -

Iraq 1:1
Afghanistan 1:1
Balkans 1:1
Gulf War 1:60
Vietnam 1:6
Korea 1:2.5
World War II 1:7
World War I 1:20
Civil War 1:5
American Revolution 1:6

Force caps in Kosovo/Bosnia resulted in higher KR:Soldier ratios

Shorter duration of conflict in DS/DS required less contractor support
Numbers do not include HNS from Saudi Arabia

Time →

Simple Services → Longer Deployment / Nation Building → Complex Services

Complexity of Services

Medical
Laundry
Food Service
Shower Service
Sanitation
Transportation
Maintenance
Construction
Security

As conflicts become more complex, Commanders have been requiring more robust services in support of forces

Data Source: Center for Military History (CMH)

Figure 1, Importance of Contracting: Historical Perspective, CWC 2009.

The services rely on OCS for just about every part of the mission. A key to providing effective and timely OCS is to ensure contractor support is not only integrated with military forces but that contractor personnel are managed correctly. The widespread use of OCS without effective leadership has contributed to a level of fraud, waste, and abuse seemingly without long-term consequences (DSB Task Force, 2014). With that said, CORs play a crucial role in providing effective OCS leadership. They are the eyes and ears of the CCOs and are therefore the first to recognize when a contractor is performing poorly or underperforming. CORs are also the closest to monitoring contract performance, performing invoicing and payment, staffing contract changes or option years and implementing performance remedies.

With the increase of OCS on the battlefield, evidence emerged regarding rampant fraud, waste and abuse within contingency contracting across Iraq and Afghanistan. As a result of the Gansler Commission, the United States Congress passed Section 813 of the National Defense Authorization Act (NDAA) for Fiscal Year 2007 that required the DoD to establish a Panel on Contracting Integrity (PCI) that subsequently identified contracting vulnerabilities and abuses. One of the vulnerabilities PCI identified was lack of surveillance of services acquisition contracts. The DoD then developed and instituted a standard for certification of CORs for service acquisitions that defined minimum COR experience, training and competencies needed that were based off risk and complexity of the overall contract. This measure established minimum standards for successful performance as a COR for:

- Type A: fixed-price, low performance risk requirements;
- Type B: other than fixed-price, low performance risk requirements, and

- Type C: unique requirements that necessitate a professional license, higher education, or specialized training (USD AT&L, 2010)

To be sure CORs are trained and developed correctly, the new DoD COR standards (see Appendices A, B, and C) paired the three types of contracts above with requirements for experience, training and continuous learning points that are based on the types of contracts a COR would manage. All said, this research focuses on the training of CORs that support OCS and what actions a CCDR should take to ensure these key personnel are technically prepared to manage and oversee expeditionary contracts. Within a deployed theater such as Afghanistan, effective contract support is directly tied to effective contract surveillance. It can be quickly weakened by a CORs deployment rotation, overlap time with in-place personnel, operations tempo, travel constraints, inexperience and training in contract management. With the incredible amount of responsibility a COR has, it is imperative that they arrive to theater with the right KSAs necessary to succeed.

Problem Statement

OCS is broken down into the following three functional areas (Figure 2): contract support integration, contracting support, and contractor management. Contractor personnel will make up a part of almost any deployed joint force (JP 4-10). Because of the evolving nature of OCS, the current KSAs a COR requires to succeed may have also changed. Furthermore, the Defense Federal Acquisition Regulation Supplement requires that CORs be qualified by training and experience commensurate with the responsibilities to be delegated to them; however, the GAO has confirmed that individuals are still deploying without knowing that they would be assigned as CORs, thus precluding their ability to take COR training prior to deployment. This can be a significant issue because

although the courses are offered online, often there is limited Internet connectivity in theater (particularly in Afghanistan). As a result, personnel that are assigned to serve as CORs have to take the required training after arriving in theater, which provides technical challenges. (GAO, 2010). CORs are important members of the OCS team but ever more so in forward operating areas, where the risk of failure has greater consequences.

Research Objectives

The basic objective of this research is to determine whether the existing KSAs the DoD has outlined are still adequate. With this known, the purpose of this study is to better understand the gap in knowledge the DoD does not know about CORs and identify the KSAs they should have to successfully complete their missions. Further, this study seeks to identify the level of technical competency and effectiveness among current and former CORs prior to their arrival in a deployed location. This research also intends to identify KSA shortcomings that will benefit future COR education and training programs.
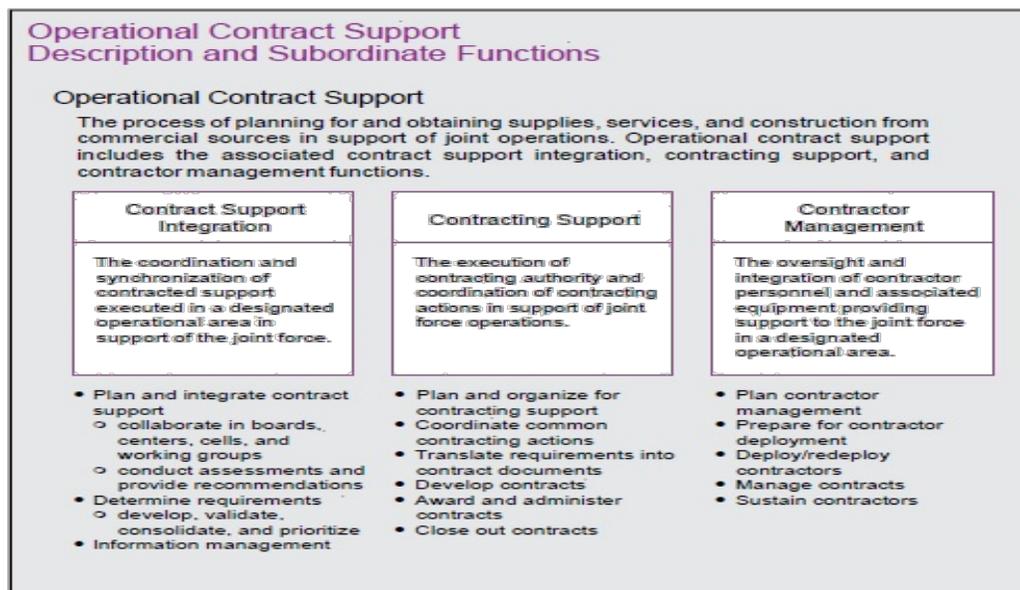
Figure 2, OCS Description and Subordinate Functions (JP4-10)

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Finally, this analysis may prove beneficial to implementing OCS policy changes that will ensure CORs are adequately trained at the right time and place to ensure proper contract oversight and accountability.

Scope of Research

The scope of this research is to obtain previously assigned CORs and CCOs with deployed experience. The study will consist of a sample size that will be limited to respondents who meet this criteria since communication with the Deputy Commander, Senior Contracting Official-Afghanistan (SCO-A), CENTCOM Joint Theater Support Contracting Command (C-JTSCC) confirmed the current workforce is engaged and supporting the C-JTSCC draw down, theater retrograde, redeployment, and theater-wide transition of forces. This study will not have any restrictions other than the respondent must have deployed and supported a CCDR as a COR or CCO. The researcher also intends to gather insight provided by deployed experience regardless of rank or years of service in order to address whether current competencies are still adequate. If CORs and CCOs identify there is a need for better training, than these experts would be best suited to articulate those specific performance outcomes.

Research Methodology

To determine the KSAs the CORs are training towards, the researcher canvassed current Contracting Officers and CORs using a Delphi Study. The following series of questions at Appendix D come from questions the researcher believed were valid and a 2005 study by the U.S. Merit Systems Protection Board titled, Contracting Officer Representatives: Managing the Government's Technical Experts to Achieve Positive

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Contract Outcomes.   The combination of the two will serve as a means to better determine whether the current KSAs are still sufficient or changes are needed.

Assumptions/Limitations

OCS is the process of planning for and obtaining supplies, services, and construction from commercial sources in support of joint operations. In a deployed environment, CORs perform critical acquisition and technical functions for CCOs. Their preparedness becomes a crucial element in managing contracts to the associated contractors that are authorized to accompany a force in order to provide vital support to U.S. forces abroad. A key element in ensuring preparedness is developing the right competencies to meet mission requirements. The researcher verified that the respondents have relevant deployment experience in performing duties as a CCO or as a COR and that they are representative of the population of CCOs and CORs. Therefore, these assumptions will make general statements about the nature of COR training and education. Further, this research makes the assumption that competencies identified by OSD encompass the broad range of KSAs required by CORs in today's deployed environment and that SAF/AQC, Secretary of the Air Force Acquisition – Contracting, is working with OSD to develop performance outcomes for on-site monitoring of contractor performance, providing quality assurance, certifying receipt of services, and acting as a liaison between the owning activity and the CCO. This assumption will also provide a basis for how the study will be refined in order to form a baseline for standardizing competencies to improve SAF/AQC's collective stewardship for a structured COR training program. This study further includes some essential limitations such as it attempts to capture perceptions

of previously assigned deployed CORs and CCOs. Therefore, as with any study, the opinions of respondents may be biased. It is further intended to provide the Air Force with a picture of what competencies, experience and minimum training are adequate as it relates to the current DoD Standard for Certification of CORs for Service Acquisitions. Additionally, CORs that were deployed at the time this survey was administered were prevented from taking part in it by the C-JTSCC for concern that they were heavily engaged with the current draw down and personnel turnover. Given the nature of providing OCS in a wartime environment and constant assessment, change and adaptation to the fact that this study was performed in a cross-functional manner makes the findings less and less relevant as time passes.

Implications

Results of this study will be used to further enhance the Joint Staff J-4s development guidance for CORs to the services. The Under Secretary of Defense plays a crucial role in developing CORs to support current and future deployed missions. The outcomes of this study can further be used to aid the Under Secretary of Defense in guiding newer standards of certification for CORs on service contracts that will ensure deployed CORs are adequately trained and developed appropriately. As such, the results may prove to be significant in tailoring existing training, experience requirements and development needs for CORs that reflect the various types of contracts they manage in an expeditionary environment.   Finally, deployed commanders and supervisors will be able to understand the performance, training and drawbacks of assigning COR responsibilities as a full-time duty when based on the complexity and scope of a contract, rather than CORs being

assigned as additional duties.

Summary

While much has changed since the CWC Interim Report was completed more than five years ago, the DSB Task Force Report on Contractor Logistics in Support of Contingency Operations identifies that there are still significant problems. Further, both reports substantiate that without proper oversight, the DoD cannot confirm that contractors are performing in accordance with contract requirements. Adding to this difficulty, CORs are often overloaded with multiple contracts to oversee as additional duty assignments (Huff and Warren, 2012). Moreover, CORs serve both the deployed commander and the CCO for addressing requirement changes and performance deficiencies in order to meet OCS mission requirements. That said, without efficient and effective surveillance monitoring, CORs cannot certify invoices for services performed or support payment of incentive or award fees that can ultimately damage U.S. interests or negatively impact the mission. This research further looks at OFPP's COR competencies and performance outcomes and seeks to find whether the DoD has identified the right KSAs. Finally, a literature review will be discussed in the next chapter that will cover relevant literature, OCS doctrine, and DoD guidance for the COR construct. Following a literature review, the research will transition to the methodology, followed by analysis and results and conclude with recommendations for future research.

II. Literature Review

"The acquisition of services is a useful method to assist the Department in meeting its mission with agility, but contracts for services require effective surveillance. Trained and ready Contracting Officer's Representatives (CORs) are critical. They ensure contractors comply with all contract requirements and that overall performance is commensurate with the level of payments made throughout the life of the contract. COR activities should be tailored to the dollar value and complexity of the specific services contract."

Gordon R. England
Deputy Secretary of Defense (2008)

Chapter Overview

This chapter focuses on information retrieved over the past decade concerning relevant literature related to OCS doctrine, contingency contracting studies, audits, inspections and guidance. First, the information shows how the DoD needs to continue to change to meet the challenges of providing a trained and experienced deployed COR workforce in services acquisition management and contractor oversight functions. Second, it examines the current DoD standards for certification of CORs and compares them to the requirements for Federal Acquisition Certification for Contracting Officer Representatives (FAC-COR). Finally, it looks at the current Defense Acquisition University (DAU) COR training portfolio and analyzes whether the existing KSAs are still adequate to meet the challenges of today's deployed logistics environment.

Historical Background

In August 2007, the American Forces Press Service released a report titled, "Justice, Defense Agencies Examine Contracting Problems." It highlighted that the Department of Justice, Federal Bureau of Investigations, Defense Criminal Investigative Services, the Army Criminal Investigation Command, the Army Audit Agency, Defense Contract

Audit Agency, and Special Inspector General for Iraq Reconstruction were all coordinating to examine an estimated $5 billion in contracting irregularities and that 73 criminal investigations relating to contract fraud had been initiated. It also stated that there were a number of DoD employees and contractors accused of taking upwards of $15 million in bribes, which encompassed double billing, kickbacks, bid-rigging to product substitutions (Garamone, 2007).

As a result of this report, the Secretary of the Army ordered an independent commission to immediately review all acquisition and program management for expeditionary operations. He gave the commission 45-days to review and recommend improvements to the Army's policies and procedures for conducting acquisition and program management functions during military operations. The commission was chaired by the former Under Secretary of Defense, Dr. Jacques Gansler and in its initial report it addressed the following nine focus areas in preparation for the final report (Gansler, 2007):

1. Leadership, culture, and accountability within the key agencies responsible for contingency operations;
2. Staffing and training of the federal acquisition workforce;
3. Pre-deployment planning for contractor support and integration;
4. Policies related to inherently governmental functions;
5. The process for defining contract requirements;
6. Contract pricing and competition;
7. Contractor performance and cost effectiveness;
8. Visibility into and accountability of subcontractors—in particular, foreign subcontractors; and
9. The Iraq drawdown and the Afghanistan buildup.

With the public release of this report, the U.S. Congress was faced not only with growing costs for the wars in Iraq and Afghanistan but the reports validated widespread

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fraud, waste and abuse in contingency contracting. As a result, Congress authorized

establishing a Commission on Wartime Contracting (CWC) that was designed to assess

contracting in Iraq and Afghanistan while providing recommendations to Congress in

order to improve the contracting process (NDAA, 2008). In total, the CWC issued eight

reports – two interim, *"At What Cost?"* (Jun 2009) and *"At What Risk?"* (Feb 2011), five

Special Reports on specific issues, and a final report, *"Transforming Wartime*

Contracting, Controlling Costs and Reducing Risk" (August 2011). Each CWC report

along with subsequent reports from the DoD Inspector General to the Government

Accountability Office (GAO) identified a lack of planning, management and oversight of

deployed contractor support. Further, the CWC's Final Report concluded that there were

many weaknesses but most notably it got to the heart of the issue in that it stated while

the roles of CORs are an essential part of contract management, they are at best a "pick-

up game" in-theater. Additionally, the report cited that CORs represent the "last tactical

mile" of expeditionary contracting but they are assigned only as an "extra duty," without
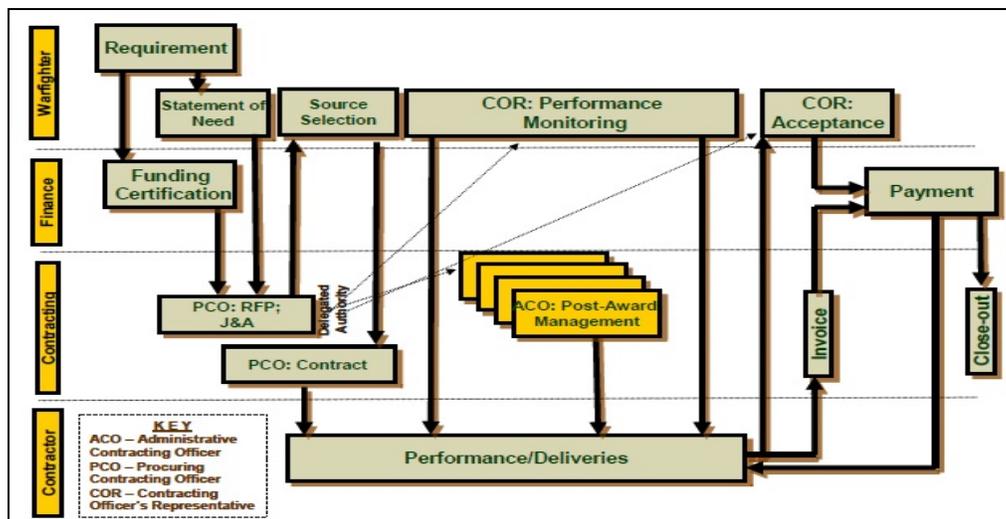
Figure 3: Contracting is More than Writing Contracts, Gansler Final Report

regard to prior contracting experience. With this known, it is understandable why CORs struggle to understand all the various contracting processes they are required to manage but knowing where they fit (Figure 1 above) is a starting point for understanding how dynamic the requirements management and contract management process is as a whole. The report further stated that little, if any, training was provided and that there were still too few CORs due to high turnover rates that frequently left many gaps in contract coverage (Gansler, 2007). Officials across DoD, including senior officials at DAU, told GAO that identifying non- Defense Acquisition Workforce Improvement Act (DAWIA) personnel with acquisition-related responsibilities is challenging. This was attributed to these personnel are considered a transient population and they are dispersed throughout many organizations, they come from a variety of career fields, and they are often involved in services acquisitions as a secondary and not a primary duty. Further, the frequent turnover of personnel assigned as CORs makes identifying and tracking CORs challenging whereas DAWIA-certified contracting officers are career acquisition professionals and their responsibilities as considered a full-time job. (GAO, 2011).

Relevant Research

The DoD Defense Science Board (DSB), chaired by Dr. Ronald Kerber, recently finished a report titled; *"Contractor Logistics Support of Contingency Operations."* The report was directed by the Acting Under Secretary of Defense for Acquisition, Technology and Logistics (AT&L) who had tasked the DSB to review 12 areas as a result of Section 848 of the National Defense Authorization Act for Fiscal Year 2011 (H.R. 5136, 150-151). This report called for a review of DoD's organization, doctrine, training,

and planning for contractor logistics support of contingency operations. The DSB Task

Force concurred that there is a lack of clarity as to who is in charge of policy, doctrine,

resourcing, training, planning, and execution for OCS. Moreover, the report highlighted

that without effective leadership and guidance, a persistent lack of urgency had emerged

in training for, planning for, and the execution of OCS. The Task Force further made the

following eight recommendations for immediate action that would ensure proper

attention is given to the critical role that OCS is expected to play in future contingency

operations (DSB Task Force, 2014):

> **Recommendation 1:** Secretary of Defense take the leadership action to enforce the importance of OCS to the Department's missions and formally task Chairman of the Joint Chiefs of Staff; Combatant Commanders; Secretaries of the Military Departments; Under Secretary of Defense for Policy; Under Secretary of Defense for Personnel and Readiness; and Under Secretary of Defense for AT&L to take leadership roles as recommended in this report to ensure that operational contract support is fully supported for contingency operations

> **Recommendation 2:** Secretary of Defense for AT&L, establish a Director-level organization (3-star equivalent) with responsibility as the DoD policy owner and proponent for operational contract support, taking on the following responsibilities:
> ☐ Coordinate efforts concerning operational contract support across the Office of the Secretary of Defense, the Joint Staff, Military Departments, and Defense Agencies, and support efforts to resource critical OCS-related requirements across these organizations
> ☐ Provide support, oversight, and reporting on all direction and guidance for OCS to include direction from the Secretary of Defense in addressing non-compliance, corrective actions, and resolution of key gaps
> ☐ Oversee the creation of a visible and transparent knowledge management system for operational contract support that links planning, requirements, contracting, and audit functions, and that easily identifies successful strategies and practices for ready use in emerging contingency operations
> ☐ Create new and support existing common business systems for OCS and institutionalize their use across the Department, to include developing and maintaining a roadmap for integration and compliance with supporting policies and procedures
> ☐ Oversee the implementation of the recommendations of this report

Recommended Action 2a: The Under Secretary of Defense for AT&L and Military Departments take charge of the institutional support requirements associated with using operational contract support. The Department must have a sourcing strategy for the skill sets required to manage and control contracted support in deployed operations, especially those in large or protracted contingency operations, and the ability to deploy these capabilities rapidly when needed. This strategy must include access to, support of, and security for contractors as required in contingency environments.

Recommendation 3: Secretary of Defense formally acknowledge contractors supporting deployed military operations as part of the total force structure, and establish the requirement for an organic capability to support short-term missions, as well as for contractor personnel with specialized skills unavailable in existing deployable personnel. Inappropriate functions for contracted support of deployed military operations should remain so:
- ☐ Actions that determine or decide national and mission policy and objectives
- ☐ Actions that determine or decide value to the nation and the dollar amount to be obligated
- ☐ Combat

Recommended Action 3a: Chairman of the Joint Chiefs of Staff; Military Departments; Under Secretary of Defense for Policy; Under Secretary of Defense for Personnel and Readiness; and Under Secretary of Defense for AT&L develop appropriate policies for operational contract support in all deployed military operations. This effort must include all elements of force structure—active duty, reserve forces, civil service, and contracted support. The significant policy implications and risk inherent in scaling operational contract support beyond initial operations plan timeframes (*i.e.*, for terms longer than 90 days) should require additional guidance and, in many cases, sign-off by the Secretary of Defense.

Recommended Action 3b: Combatant Commands and Military Departments should determine anticipated roles and criteria for the use of contracted support in planning each mission, and these anticipated roles should consider the anticipated length, complexity, scope, and urgency of each mission. The length of mission operations should be a guide but should not be the only discriminator; most missions will use a hybrid approach. For example, missions with durations of less than two weeks can typically be supported solely by uniformed military personnel while missions exceeding six months should use as much contractor support as needed.

Recommendation 4: Combatant Commands, with support from the Military Departments, adequately resource capabilities for planning, exercising, and managing OCS for their missions. This comprehensive planning function should determine the required level of support services and equipment to ensure mission success and to integrate operational contract support into all operational plans. Planners should

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incorporate all combat functional requirements into the appropriate functional annexes (*e.g.*, logistics, communications, intelligence, operations, force protection, weapons system support, and so on), and these should be cross-referenced to the Annex W of the operational plan. The complexity of this task warrants additional resources.

Recommended Action 4a: Combatant Commands and Military Departments vigorously and realistically test operational contract support in all phases of all exercises. To accomplish this, representatives of actual contractor companies from the existing industrial base providing support services to deployed military forces should be integrated into all contingency war games and exercises. Equally important is including representatives from the agencies responsible for mobilizing and managing such contracted support, such as DLA, the U.S. Transportation Command, the DCMA, and finance detachment pay agents. Each should perform their roles in exercises with similar realism and timing of actual operations.

Recommendation 5: Each Combatant Command integrate OCS requirements into their Defense Readiness Reporting System (DRRS). The Chairman of the Joint Chiefs of Staff should develop a means to identify and measure readiness of OCS elements, and develop standards for planning readiness and the readiness of the defense contractor base, in addition to those for combat readiness. This should include determining metrics that can help identify and mitigate root causes of past problems with OCS, including documenting the reliability of the local industrial base, training and skills of contractor personnel, how third country national personnel are recruited, the ability to vet and pre-qualify second and lower tier contractors, and other factors.

Recommendation 6: Under Secretary of Defense for ATL and Chairman of the Joint Chiefs of Staff, with support of Under Secretary of Defense for Policy and Under Secretary of Defense for Personnel and Readiness, develop policy, doctrine, tactics, techniques, and procedures to effectively manage and mitigate risk in using contracted support to conduct military missions that could damage U.S. interests and impact mission performance. This risk management process should begin with the identification and documentation of potential OCS risk factors that could undermine missions and readiness. The Joint Staff should analyze past experience with contracted support of deployed military operations to understand the root causes of identified risks that have already been experienced or are anticipated. Such risks may include opportunistic fraud, inadvertent funding of adversary actions, lack of transparency into subcontractor levels, too many subcontractor levels, and trafficking in persons. An important aspect of this is to incorporate pre-deployment qualification of likely contractor entities and to monitor and mitigate the risks associated with the use of foreign subcontractors and local and third country national personnel. As well, the training of contracting officers, representatives, and commanders before they deploy to a mission should include strong ethics training with emphasis on

understanding local practices and customs and the consequences of contract fraud. To ensure effectiveness of these tactics, the Joint Staff should track, assess, and report on risk mitigation successes.

Recommendation 7: Secretary of the Army ensures an enduring, rapid deployment contracting capability is available that effectively supports the Army and acts as a Joint Force capability in contingency operations. This permanent capability should be tightly integrated with OCS planners in each Combatant Command and other Military Departments, and should be prepared to respond to Combatant Command requests as the designated military department supporting OCS in all Joint operations. It must include program management, contracting, and other functional expertise that gives the Combatant Commander the ability to integrate, synchronize, and de-conflict OCS during contingency operations. An appropriate institution for this capability currently exists in the Expeditionary Contracting Command (ECC).

Recommended Action 7a: Under Secretary of Defense for AT&L transfer the current function and related resources of the Joint Contingency Acquisition Support Office (JCASO) to provide strategic and operational synchronization, integration, and optimization of OCS during peacetime and contingency operations from the current position in the Defense Logistics Agency (DLA) to the Army's Expeditionary Contracting Command (ECC) as part of the proposed Rapid Deployment Contracting Capability (RDCC).

Recommend Action 7b: Under Secretary of Defense for AT&L transfer permanently the current function and related resources of JCASO's OCS planners from DLA to the Combatant Commands.

Recommendation 8: Secretary of Defense ensures all Department of Defense audit agencies establish appropriate mechanisms and have adequate resources to meet audit demands in both peacetime and during large contingency operations.

Recommended Action 8a: By Fiscal Year 2016, the Secretary of Defense require all DoD audit agencies to eliminate the current audit backlog and ensure audits of contingency contracts are completed within two years of contract completion. The task force recognizes that the massive current backlog can be attributed to the dramatic growth in contingency contracting. The task force also recognizes the important role of timely in-theater audits. To get back on track, contingency contracts prior to 2011 should be analyzed and then audited only on a high-risk basis. The task force also strongly recommends outsourcing the necessary data gathering for older contracts and moving current contracts up in the queue with a goal to complete current audits while they are relevant. Private sector risk-based audit practices can be a useful guide in this catch-up process, such as prioritizing audits based on the significance and risks of the contract.

Recommended Action 8b: To ensure timely resolution and mitigate potential damage caused by future audit backlogs, major contingency contracting offices in the Military Departments that award large logistics service contracts, such as the Logistics Civil Augmentation Program (LOGCAP), should more aggressively utilize alternative dispute resolution processes well before contract activities cease to resolve issues and prevent litigation.

Recommended Action 8c: To prevent future delays related to audits, DCMA and the Military Department Audit Agencies should identify and address the root causes that delay their audits, develop strategies to handle surge requirements, and adopt risk profiling and selection processes that are used by private sector companies to prioritize these efforts.

The Congressional Research Service's 2014 report, *"The Cost of Iraq, Afghanistan, and Other Global War on Terror Operations Since 9/11"* identified a number of issues regarding the use of contractors in Iraq and Afghanistan. Specifically, the number of contractors in Afghanistan in December 2008 (Figure 4) represents the highest recorded percentage of contractors used by DoD in any conflict in the history of the United States. While it is beneficial the Joint Staff has expanded training and is actively working to standardize and improve training, the actions taken thus far will not enable the DoD to

Figure 4: Contractor Personnel and Troop Level in Afghanistan Feb 2008 – Apr 2014, Congressional Research Service
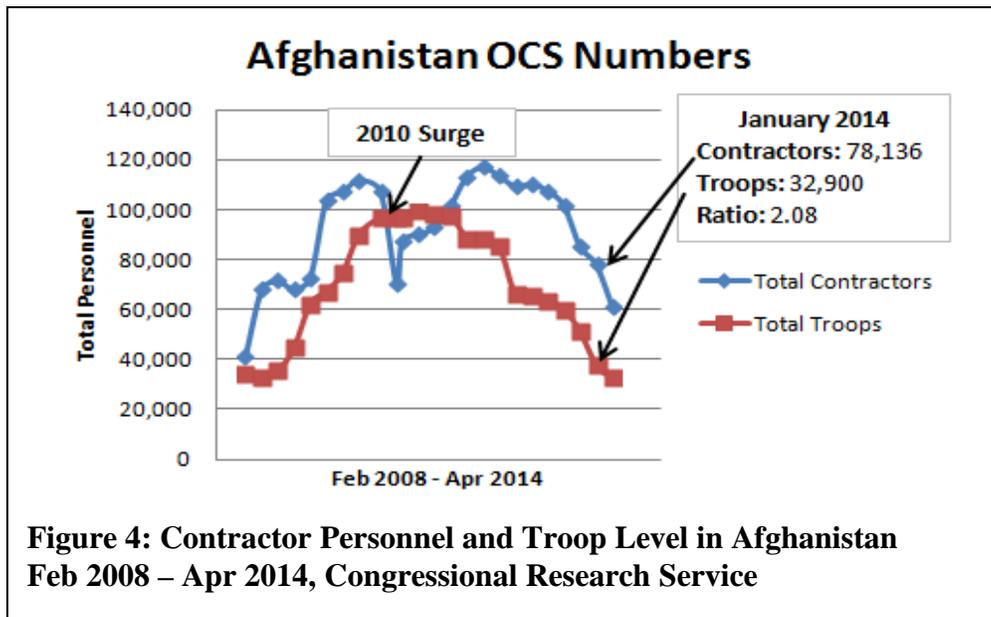
properly manage contracts and contractors in a surge environment. These programs largely target field grade and higher ranking officers, the population from which most CORs will not be drawn. (Henderson, 2014). Even though troop levels briefly surpassed contractors as a percentage of the total force in Afghanistan during the surge (2010), contractor personnel dominance significantly rebounded to represent 62% of the total force in Afghanistan, or approximately 109,000 personnel (CRS, 2014). For Afghanistan, during this same period, DoD obligations for contracts exceeded $95 billion. Combined with the obligations for Iraq, this amount exceeded the total contract obligations of any other U.S. federal agency (see Appendix F).

Summary

Timely and efficient contracting for materiel, supplies, and services in support of expeditionary operations, and the subsequent management of those contracts, are and will be a key component of our achieving success in future military operations. (Gansler, 2007). In planning for future conflicts, particularly for any that require the U.S. military to surge, the DoD will continue to rely on higher levels of commercial support as OCS is and will continue to be a significant force enabler. Especially in terms of the scale and duration of future contingency operations, CORs will need to be readily available in order to levy the speed necessary for planning and implementation of contract support integration, contracting support, and contractor management. Eight years ago, the Gansler report identified that lack of training and leadership that can lead to fraud and placed a call to action to overhaul the way personnel are trained on expeditionary contracting practices. What the report and subsequent reports have failed to address is

the type and amount of training needed to become technically proficient as a COR. Not much has changed since, the DoD has turned largely to on-line training for CORs. CORs are expected to learn the same level of technical knowledge, if not more, but in a much shorter time given they are doing it while deployed via CBTs. Adding to the difficulty, a CORs service is largely an additional duty. They cannot direct the contractor by making commitments or changes that affect price, quality, quantity, delivery, or other terms and conditions of the contract. Instead, they act as the eyes and ears of the contracting officer and serve as the liaison between the contractor and the contracting officer. (GAO, 2010). This along with the fact that deployed CORs are expected to complete all of their associated training on-line (see Appendix G), ultimately affects their overall ability to become fully qualified.

III. Methodology

Research Design

The purpose of this chapter is to describe the research design that was used in collecting and conducting this research. The Delphi technique was first developed in the 1950s by Olaf Helmer, Nicholas Rescher, Norman Dalkey, and others at the RAND Corporation in order to remove conference room impediments that would establish true expert consensus. (Gordon, 1994). The intent of the Delphi, as it was originally conceived, was to create a method, using expert opinions, to forecast long-range trends, with special emphasis on science and technology, which could be related to the military potential (Linstone and Turoff, 1975). The Delphi technique is designed to elicit opinions from a group with the aim of generating a group response. It replaces direct confrontation and debate by carefully planned, anonymous, orderly program of sequential individual interrogations that are conducted by questionnaires. (Brown, Cochran, Dalkey, 1969). The series of questionnaires is interspersed with feedback derived from the respondents. Respondents are also asked to give reasons for their expressed opinions and these reasons are subjected to a critique by fellow respondents. It attempts to improve the panel or committee approach by subjecting the views of individual experts to each other's criticism in ways that avoid face to face confrontation and provide anonymity of opinion and of arguments advanced of those opinions. (Brown, 1968).

Procedures

Without question, contracting is the most effective way for a Combatant Commander, or the DoD to accomplish today's contingency missions. The volume of contract

spending for USCENTCOM for FY07-FY14 was $225 billion (Appendix F), this demonstrates the importance of developing and managing DoD contracts in ways that will not only ensure the best contract outcomes but the best return on America's tax dollars. And, while the DoD to even our federal government has modernized contracting rules, policies, and procedures, CCOs have been the ones that have carried out the business obligations and demands for contingency contracting. That said, CORs represent the "last tactical mile" of expeditionary contracting. (Gansler, 2007). Further, the DoD has not identified a plan to develop the skills or competencies necessary for other non-DAWIA personnel with acquisition-related responsibilities in other roles. (GAO, 2011). DoD Instruction, 5000-XX, *DoD Standard for COR Certification*, is currently in draft form and undergoing review. Once released, this instruction may give more specificity to the overall COR certification process but it has not been formally issued and published. As such, the focus of this research is to examine COR competencies that are needed by CCDRs and determine how effectively CORs are being developed. The researcher found that the majority of information required to complete this research project resided with CCOs who were not only responsible managing COR training but were ultimately responsible for developing fully qualified CORs.

Delphi Forecasting Steps

The Delphi approach is suitable and appropriate to access a level of reflective knowledge and expertise as it applies to a problem of cross cultural leadership. (Grisham, 2009).

Step	Activity
1	Define the problem
2	Select willing and knowledgeable participants
3	Structure the initial questionnaire
4	Select the medium
5	Questionnaire 1: Initial input
6	Combine and refine the initial predictions
7	Questionnaire 2: Likelihood ratings
8	Compute the average and range
9	Questionnaire 3: Reconsideration
10	Re-compute the average and range
11	Further analysis

Figure 5: Delphi Forecasting Techniques, (Ogden et al, 2005).

The Delphi method also creates opportunities to gain valuable insight from practicing managers, compare how their practical insights align with those from academia, and identify topics that need further investigation. (Malhotra, et al., 1994). Further, the primary objective of a Delphi study is to reach consensus among a panel of experts regarding a specific topic. (Okoli and Pawlowski, 2004). As shown above in Figure 5, Delphi forecasting steps are an iterative process that requires multiple phases. As adapted from (Ogden, et al., 2005), each of these steps are discussed further as they apply to this research.

Step 1: Define the Problem. The first step in the Delphi forecasting process requires identification of the problem by identifying what constitutes a competent COR and what KSAs are needed to professionally develop a COR. In order to identify the right COR competencies that would prove applicable to a wide range of accelerated operational tempo demands across expeditionary operations, a diverse panel of acquisition experts was sought.

Step 2: Select Willing and Knowledgeable Participants. The Delphi process requires

identification and solicitation of panel members with the necessary knowledge and

backgrounds to identify topics that academics can address. (Malhotra et al., 1994).

Delphi participants are typically selected, not for demographic representativeness, but for

the perceived expertise that they can contribute to the topic. In order to obtain the

desired, valid results, three kinds of participants are sought for creating a successful mix:

stakeholders, those who are or will be directly affected; experts, those who have an

applicable specialty or relevant experience; and facilitators, those who have skills in

clarifying, organizing, synthesizing, stimulating, and when appropriate, individuals who

can supply alternative global views of the culture and society. (Scheele, 1975). Further,

researchers (Delbecq, Van de Ven & Gustafson, 1975) recommends a panel of 10-15

experts. Under the right conditions, even a group of four experts can successfully

participate in a Delphi study (Brockhoff, 1975). Additionally, Scheele (1975) suggested

that in order to obtain valid results, panel members must be selected from stakeholders

who are not only experts but have relevant experience in the field of study. In

Brockhoff's Delphi performance study (1975), he suggested that for forecasting

questions, groups with as few as eleven participants were more accurate in their

predictions than larger groups. For fact-finding questions, such as what was included in

this research, groups with as few as five to eleven participants had the highest

performance. (Linstone & Turoff, 1975). To initiate this phase of the research,

stakeholders, experts, and facilitators were recommended and requested from the research

sponsor along with other senior leaders from the DoD acquisition community that had

been trained on the roles and importance of contracting and contractors in expeditionary operations.

Step 3: Structure the Initial Questionnaire. The researcher developed the initial questionnaire based on a thorough review of relevant literature. Round 1 was then structured around the participant's judgment and opinion for competencies needed by current and future CORs to succeed in deployed environments. The analysis would identify a range of opinions regarding what constituted an effective COR and what KSAs were needed.

Step 4: Select the Medium. An internet-based survey tool, SurveyMonkey, was used to support data collection for this study. The benefits of using this tool included: (1) global 24/7 access, (2) compressed cycle times, and (3) easier linking of successive rounds. Continuous global access was important because some inputs came from deployed members and these participants requested to forward the survey to other CORs that were interested in taking part in the survey. (Ogden, et al., 2005).

Step 5: Questionnaire 1 - Initial Input. A number of questions were explored during the developmental stage for Round 1. The final draft was revised in order to allow for a more accurate and comprehensive analysis of a CORs strengths and factors that impede their performance in deployed environments.

Step 6: Combine and Refine the Initial Predictions. During this step, relevant issues to Round 1 questions were identified from the participants and were used to scope the second round. This included combining and refining the opinions of this heterogeneous

group of experts in order to establish a judgment based on a merging of the information collectively available. (Jones, 1975).

Step 7: Questionnaire 2: Likelihood Ratings. Preparation of the second round questionnaire began shortly after the first had been completed. In round two, a range was presented to the group and anyone holding strong opinions would be evident at one extreme of a ten point scale. They then would be asked to reassess their opinions in view of the group's range in round three for consensus and provide reasons for their views.

Step 8: Compute the Average and Range. The Web-based Delphi tool automatically calculated this information in preparation for the next round of the study. (Ogden, et al., 2005),

Step 9: Questionnaire 3. Reconsideration. In the third round, participants would be asked to reconsider their estimate and revise it if they desired. They would also be asked to give reasons for the estimate and state what factors were considered in obtaining the answer. The participants would also be asked to give a critique of the reasons offered by members of the group and to specify which arguments were found to be unconvincing and why. (Brown, 1968). The experts review the group rankings and continue to re-rank the issues given of the aggregated responses of the group (Cegielski, 2007).

Step 10: Re-compute the Average and Range. Once responses to the third round were collected, the averages and ranges of the revised forecasts were computed. This data represents the final estimate of the group average that was determined by voting and whether members conformed to a majority opinion. (Ogden, et al., 2005),

Step 11: Further Analysis. While this data may provide a glimpse into more systemic issues affecting CORs, further analysis with C-JTSCC involvement and data would likely yield actionable results.

Summary

The research of this project is an analysis of qualitative and quantitative data that relied on expert analysis to determine the effectiveness of COR competencies and their impact on expeditionary contracts and contractors in expeditionary operations. By focusing the research on this data, an analysis of what impedes a COR from successfully performing their duties was analyzed since a lack of proficiency is compounded by an expeditionary environment with its complexity, tempo, and heightened contracting workload.

IV. Analysis and Results

Chapter Overview

This chapter describes the data that was collected and explains the results for the three rounds of data collected. Using the Delphi technique, analysis began once two formal rounds of data were collected and continued into round three leading to consensus. This phase of the research consisted of military and civilian members that were either current and/or former CORs and Contracting Officers with contingency contracting experience. In an effort to select willing and knowledgeable personnel, a pool of experts was leveraged from existing contacts from within the field. For success in this approach, these experts were guaranteed anonymity. Additionally, these experts represented a variety of perspectives that understood COR training prerequisites and obligations, and issues across the COR continuum.

Delphi Panel and Demographics

The survey with a request for exemption from human experimentation requirements (32 CFR 219, DoDD 3216.2 and AFI 40-402) for an analysis of competencies required for CORs in deployed environments was submitted on 5 January 2015. That said, the survey was approved on 20 January 2015 by AFIT's Exempt Determination Official and Appendix D contains the entire survey. In order to maintain a balanced approach, the researcher attempted to recruit experts from the Office of the Secretary of Defense, Joint Staff, Headquarters Air Force and Secretary of the Air Force Staffs, Defense Acquisition University, Army, Navy, and base level contracting squadrons. For all three rounds, the survey was sent to a total of 25 participants with an expectation that some would either

not respond or be unavailable to participate. In fact, out of 25 respondents, 96%

completed Round One. There is usually a decrease in response rates for the second round

of a Delphi study, particularly those involving voluntary participation. (Linstone and

Turoff, 1975). With this known, participation rates naturally decreased over the course of

the next round as Round Two yielded a 40% participation rate and Round Three, a 44%

completion rate. Overall participation is summarized below in Table 1.

Table 1: Delphi Panel Participation

ROUND	REQUESTED	RETURNED	PERCENT
1	25	24	96
2	25	10	40
3	25	11	44

In order to further preserve panel member anonymity, minimal demographic data was

requested. With that, the first criterion for each of the panel members was to ascertain

the level of experience or expertise they had in service acquisitions. For the purpose of

this study, the researcher deemed at least 3 months of experience was sufficient to form a

valid opinion as these members could be current and/or previously deployed CORs. All

of the panel members met this criterion. (See Table 2).

Table 2: Delphi Panel Experience

YEARS OF EXPERIENCE	TOTAL # OF RESPONDENTS	PERCENT
Less than 1 Year	3	12.5%
1 – 2 Years	3	12.5%
3 – 4 Years	1	4.17%
5 – 6 Years	6	25%
More than 6 Years	11	45.83%

The second criterion was to determine the average total contract amount each panel member was typically working at one time while deployed. The majority of the panel members managed contracts ranging from $100,001 to $1 million dollars. This dollar threshold is assigned to Level II CORs within the FAC-COR program and is appropriate for contract vehicles of moderate to high complexity and has contract threshold values ranging from $25K to $10M. Additionally, Level II CORs are required a minimum of 60 hours of acquisition-related training and 1 year of previous COR experience. (DOHHS FAC-COR Handbook, 2012). NOTE: The DoD COR Handbook does not identify an equivalent requirement for CORs.

Table 3: Total Delphi Panel Contracts Managed

AVERAGE TOTAL DOLLARS	TOTAL # OF RESPONDENTS	PERCENT
Less than $100,000	0	0%
$100,001 to $1 Million	11	45.83%
$1 to $5 Million	3	12.5%
$5 to $100 Million	7	29.17%
Over $100 Million	3	12.5%

Next, each panel member was asked to estimate what proportion of their time, at work, while deployed they spent on COR-related activities. (See Table 4).

Table 4: Time Dedicated to COR-Related Activities

TIME SPENT ON COR-RELATED ACTIVITIES	TOTAL # OF RESPONDENTS	PERCENT
1 – 25%	7	29.17%
26 – 50%	13	54.17%
51 – 75%	1	4.17%
76 – 100%	2	8.33%
Don't Remember	1	4.17%

After each panel member answered the above demographics, they were then allowed to proceed to the following five questions for the first round of this Delphi study. The researcher's overall intent for the first round questionnaire was to allow the panel members to identify today's current issues and challenges they deemed most critical for deployed CORs. The questions were then reviewed by a small panel of academic experts who gave minor suggestions regarding question format and how to improve them. See Appendix D for the final questions for rounds 1 through 3 of this survey.

Investigative Questions Addressed

For Round One, each panel member was given approximately two weeks to respond to the survey. To compile the responses, the researcher reviewed each of the Round One replies and consolidated a listing of the ideas that were expressed by the panel members to each question for Round Two. Content analysis was conducted in order to create a reasonable and consolidated listing for Round Two that captured as much as possible of the panel member responses and contained seven questions.

Eleven experts responded to the second round of questions with the researcher analyzing the responses to determine both common points of opinions and weighted rankings. Once Round Two was complete, Round Three survey questions were developed and sent to the researcher's advisor and minor adjustments were made and redistributed back to the same 25 panel members who responded in Rounds 1 and 2. Again, each recipient was requested to complete their respective questionnaire and was asked to rank order their responses from Round Two. NOTE: Questions 5 and 7 were omitted from Round 3 due to the overwhelming consensus of the panel members. For

Question Five, the panel felt that the DoD's training and experience program provided more flexibility than the FAC-COR and moreover that three levels of certification was deemed excessive. In terms of Question Seven, panel members identified that CORT Tool database needs to be useful, accessible, and able to be manipulated by the end user. They also identified that the internet bandwidth and distance from a regional contracting office was a continual challenge.

In Round Three, ten of the experts that completed Round Two completed the survey for a 91% response rate. This final round not only provided these panel members the opportunity to review the rank ordered responses from Round Two but compare them to their own responses. Additionally, each question allowed the panel members the opportunity to add optional comments for any question they disagreed with or wanted to explain their rationale for disagreeing with the panel majority.

KSAs Required by Deployed CORs

The panel of experts was additionally asked to recommend specific KSAs they deemed to be a necessary requirement to be a COR in a deployed environment. The following comments have been consolidated from their responses and are provided below:

- *"...basic contracting knowledge; a foundation centered on government-contractor relationships, contract administration, and how to deal with fraud, waste, and abuse; knowledge of procurement regulations, program objectives, contract policies and contracting laws."*
- *"...how to write/read Performance Work Statements and Statement of Work; the overall payment process; what contractors can and can't do; holding contractors accountable; training on guiding contractors to do what they need to do."*
- *"...proficiency with task management; technical understanding of services on contracts; what apparent authority, implied authority, and express authority are and who has them."*

- *"...advanced knowledge (not basic) of FARs, DFARs, and USCENTCOM supplements and resources available that can assist i.e. legal, financial, logistics, etc)."*
- *"...knowledge of finance in order to understand invoices and how to deal with delayed payments; an understanding of contracting and contract types; training on Project Management and Earned Value Management (specifically, for large programs and construction projects); a thorough understanding of property management, acceptance, and disposal."*
- *"...ability to travel and be onsite with the contractor; training necessary to adequately document and communicate contract performance and conduct announced/ unannounced contract performance reviews."*

The OCS education and training portfolio will continue to receive Departmental attention. (CWC, 2011). These identified KSAs can not only inform but enhance COR training while facilitating awareness of the roles and responsibilities of commanders, staff, and personnel for contracted support. Through education and training, the processes and tools CORs need can positively impact operational success. With regard to training, the panel was evenly split between an in-residence program that was 1-3 days in length and one that was 3-7 days in length. Additionally, the researcher makes note that DAU does not collect a post deployment survey. If one was offered, the actual training length as well as the type of training could be tailored to fit the current needs of deploying CORs.

Table 5: Training Length Recommended for CORs Prior to Deploying

TRAINING LENGTH	TOTAL # OF RESPONDENTS	PERCENT
1 – 3 Days	5	50%
3 – 7 Days	5	50%
7 – 14 Days	0	0%

CORs Technical Preparedness

For Question Two, the panel was asked whether they believed our current CORs were technically prepared to succeed in today's forward operating environments. The majority, 74%, of the panel felt that CORs were not technically prepared. Moreover, one expert stated that they had seen no consistent pattern where an individual COR had the requisite technical expertise needed as recently in Afghanistan (2014). They stated that USCENTCOM's Joint Theater Support Contracting Command went so far as to hire Quality Assurance Specialists with DCMA backgrounds along with engineers that assisted customers in not only building sufficient requirement packages but in overseeing contractors' performance because many operational units lacked the necessary skill sets needed. Another panel member stated that they had received very little training prior to and even when they arrived in theater when they had been assigned as a COR. Still yet, another panelist noted that they were not prepared since not enough time (capacity) was allowed to complete all of the required on-line training once they had arrived.

For Round 2, nine recipients responded to Question Two with one recipient choosing to skip this question. The panel members concurred that line remarks for CORs were needed and were asked to rank order the below options from 1 (Most Essential/Important) to 5 for (Least Essential/Important). The majority of panel members identified that a modified DAU COR 222 Course that offered modules on systems the CORs would be using while deployed was overwhelmingly needed.

Table 6: COR Training Recommendations

RANK ORDER	TRAINING COURSE
1	A modified COR 222, *COR Course*, with training modules on the following enterprise systems (CORT, SPOT, etc) that CORs will be required to use.
2	With the current problems a deployed COR faces, anything that adds onto existing DCMA to DAU led courses that can cover the full range of OCS issues.
3	A COR post deployment survey would be beneficial to further refine future training needs. In-res courses that further enhance contingency contracting skills and covers responsibilities, guidelines, and what exactly they'll manage as a deployed COR.
4	A training course that is similar to the QAPC course offered by AETC would be ideal; it could probably be shortened from the 7-day course to 3-4 days.
5	Keep current COR training/courses as they are with no changes.

Competent CORs

For Question Three, the researcher asked the panel how they would describe a competent COR. Nine experts answered this question with one opting to skip it. With a majority consensus in the overall rankings from Round 2 to Round 3 and an examination of the comments provided by the participants, the data suggests they were comfortable group's consolidated rankings. Table 7 below illustrates the panel's assessed rankings. Given a ten-point rating scale, 77% ranked agreed that CORs need to understand the contract structure, statement of work, and quality assurance surveillance plan for the contracts they oversee. The panel identified what they deemed as most important to least important and ranked ordered them from 1 (Most Essential/Important) to 10 for (Least Essential/Important). That said, each member was given the opportunity to compare their results to the panels and decide if they would like to modify their answer(s) or retain their existing rankings. Three panel members provided the following comments:

- *"…the most important thing you need to do is select the right person (ethical, technically competent, communicates well, can dedicate the time), then educate*

them in the fundamentals of being a COR, and then train them on the specifics of their contract/environment."

- *"…I elevated communication because I think everything is impacted if you're not an effective communicator."*
- *"…while being technically competent in their field is important, it's equally important to fully understand what's being asked of you under your COR duties and what the contractual agreements state."*

Table 7: Delphi Panel's Description of a Competent COR

RANK ORDER	ANSWER CHOICES
1	CORs understand contract structure, statement of work, and quality assurance surveillance plan for contracts to which they're overseeing.
2	CORs adhere to all ethical requirements and are able to identify conflicts of interest.
3	CORs are technically competent in their field, able to operate independently (self-tasked) and are able to multitask.
4	CORs comprehend the processes for coordinating, inspecting, and accepting deliveries (and/or services) and the procedures to pay invoices.
5	CORs understand duties and responsibilities set forth in the COR delegation letter and ensure COR file is documented according to specific requirements.
6	CORs understand the contract/task or delivery orders designated to them and have a plan for when and how to conduct surveillance.
7	CORs have attended all required DAU in-residence COR classroom training sessions.
8	CORs can accurately communicate (written & orally) with the contractor and CCO regarding the contractor's performance.
9	CORs have prior experience with working with their local contracting office.
10	CORs have completed all DAU online COR CBTs.

Factors that Impeded CORs from Performing Their Duties

For Question Four, Round 3 participants were given the below lists of factors from Round Two that they felt most impeded a COR from successfully performing their duties in deployed environments (from high to low). The panel was then asked to ranked order the below options from 1 (Most Essential/Important) to 10 for (Least Essential/Important) and to compare their results to the panels. Again, if a panel member opted to modify their answer(s) from Round Two, they were requested to provide comments. Three panel members provided the following comments:

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- *"…unit leaders need more information to ensure they are selecting the right person to act as a COR."*
- *"… since there's no QA/COR UTC, a DRMD without any line remarks will not accurately show/capture the manning required to manage contracts as a COR. I also believe poor training and turnover should be much higher. And, better training and turnover would help alleviate the problem of CORs don't take their job seriously and are assigned additional duties."*
- *"… CORs are given poor training and turnover. Most of my experience has been hands-on learning while trying to figure out my duties as a COR. I also think most CORs have sufficient oral and communication skills but they have a harder time going and seeing the end state of some of their contracts due to the security situation in many deployed environments."*

Table 8: Factors That Impede CORs from Successfully Performing Their Duties

RANK ORDER	ANSWER CHOICES
1	CORs don't understand their specific role or responsibilities.
2	A CORs unit doesn't give them the time necessary to conduct COR related duties.
3	CORs lack technical expertise and their primary duties always take priority.
4	CORs don't take their job seriously and are assigned as additional duties.
5	CORs job performance is almost never part of their performance report.
6	CORs are assigned too many contracts and inadequate oversight from their CCO.
7	CORs receive poor training and turnover.
8	CORs lack oral and written communication skills.
9	COR duties are given to individuals who don't have enough seniority.
10	Kinetic activity prevents CORs from travelling to observe contractor performance.

Summary

The objective of this research was to determine whether the existing competencies the DoD has in place are still adequate, better understand gaps in knowledge the DoD does not know about CORs, and identify KSA shortcomings that will benefit future COR education and training programs. Finally, Round Three confirmed the results of this study with the expert panel members being in strong agreement with the rank-order of responses provided. This analysis should prove beneficial to implementing OCS policy

changes that will ensure CORs are adequately trained at the right time and place while

ensuring proper contract oversight and accountability.

V. Conclusions and Recommendations

Chapter Overview

This chapter discusses in more detail the researcher's conclusions, research significance, overall recommendations, and possible recommendations for future research.

Conclusions and Significance of Research

This Delphi Study is the first known attempt at examining how a COR's competencies (knowledge, skill, and abilities) can be further improved and better developed to meet a Combatant Commander's evolving OCS needs. As emphasized in this paper, the use of contractors to support DoD's military missions abroad has risen significantly over the past 200 years (see Figure 1). As a result, the extent in which OCS has been and will be used in future conflicts will continue to grow. In fact,

Figure 6, Contract Obligations - Federal Procurement Database System
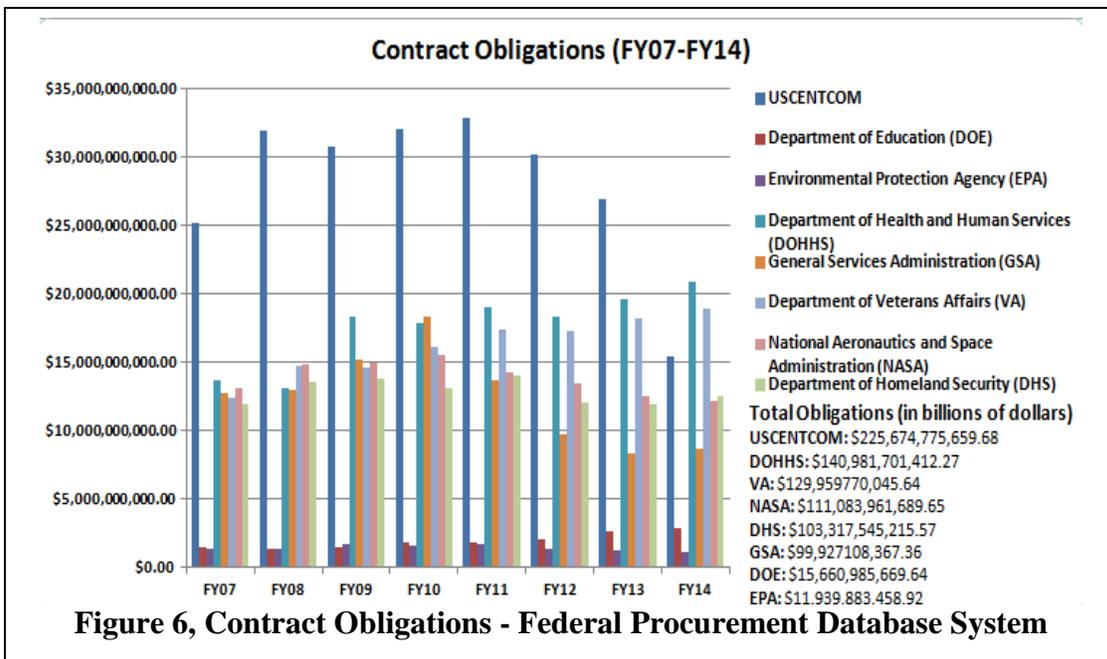
for the periods examined for this research, the amount of contract obligations expended for USCENTCOM significantly outweighed that over other U.S. agencies (see Figure 6 above or Appendix G for further details). Additionally, the number of contingency contracting personnel for Afghanistan was immensely larger than that of the deployed military personnel (see Figure 4). This research underscores the incredible value of CORs to OCS and therefore provides CCDRs an impetus for action; especially, in the ways in which CORs trained to increase contract support planning, policy and oversight, administration, and overall contractor surveillance in support of our deployed forces.

Recommendations for Action

Three Recommendations

Based on the analysis presented in the previous chapter, three recommended courses of action were developed. The first recommendation is that there is a need for CCDRs to identify COR taskings with line remarks so that on-line and/or in-residence COR training can be scheduled prior to members arriving in the AOR. Numerous reports continue to identify CORs arriving or managing existing multi-million dollar contracts that lack training, experience, and/ or subject matter expertise. For example, a COR that was identified in the 2014 DSB Task Force Report on Contractor Logistics in Support of Contingency Operations, assigned to a $250 million fuel contract in Afghanistan that lacked any fuel experience. Ensuring CORs arrive trained and ready on the front end is no less important than ensuring our forces attend Combat Skills Training to ensure they can shoot, move, and communicate outside the wire. This effort should further lead to improved deployed contract management while decreasing the lack of coordination and

inefficiencies that has given rise to fraud, waste, and abuse, which can negatively corrode our deployed workforce's morale. As a result of these findings, it is recommended that a review and modification to DAU's existing COR 222 Course is needed. Specifically, one that allows no less than 3-days of hands-on training instruction for deploying CORs whereby CORs can be trained and exposed to existing systems such as the CORT Tool, SPOT, and any other legacy system tools they will be required to use before deploying.

The second recommendation is that the DoD CORT Tool database needs improved in order to encapsulate historical analysis. The researcher reviewed the July 2014 CORT information posted on the Air Force Contracting Knowledge Center, and identified it lacked the ability to provide historical analysis. Specifically, the CORT Tool, in its present form, lacks the ability to ascertain how many CORs and CCOs were deployed in previous years as well as how many contracts they managed. Furthermore, CCDRs will continue to lack the ability to identify what type of OCS they have used for previous humanitarian assistance events, disaster relief operations, and/or conflicts. More importantly, they currently lack what actually may be needed for enabling integration, synchronization, and deconfliction in scaling OCS for existing operational plans. The researcher would also like to note that a request was sent to the SAF/AQ, Contracting Functional Area Manager (FAM), for any/all previous year Air Force COR and/or CCO deployment numbers for 2007 to 2014. The FAM identified that the numbers could not be broken out and did a search of their old shared drives for any documents from his predecessors but could not identify any running deployment totals. Further, a CORT Tool modification could also encapsulate the totals for Type A, B, and/or C contracts

being managed across the services. The researcher believes that CCDRs would find this incredibly useful for identifying the type and scope of contingency contracted support used for previous major combat operations and during stabilization and transition phases to civil authority.

The third and final recommendation is for improving Air Force doctrine regarding OCS. Guidance for OCS can be traced back to the Code of Federal Regulations, (CFR) Title 32 - *National Defense* [32 CFR], Part 158 - *Operational Contract Support* [32 CFR 158] and applies collectively to the DoD Components. That said, doctrine governing OCS, is broken down further in DoD Directives and Joint Publications. As such, DoD leadership have recognized a need for a culture change in the DoD community in which the DoD Components integrate OCS at the earliest stages of planning that includes oversight and management after a contract is in place. With an abundance of OCS material available at a DoD level to the publication of JP 4-10, the researcher expected to find how the Air Force integrated OCS training, policy, education, or planning since OCS is directed by law. A review of the Air Force e-Publishing Library and Air University's Curtis E. LeMay Center for Doctrine Development identified that there was no such OCS material to be found. The researcher used both query site query tools, examined Annex 4.0, *Combat Support*, to even checking the Air Force Glossary and there was still no OCS related material. All said, the researcher is left concluding there are clear gaps and a lack of clarity as to who is in charge regarding Air Force specific doctrine, policy, training, planning, and execution for OCS.

Recommendations for Future Research

This research only covered a small area of OCS. One area for future research is how the DoD and services implement suggested recommendations from the following GAO report. Specifically, the GAO recently identified that geographic combatant commands continue to improve efforts to collect OCS issues from operations and exercises, but the military services, other than the Army, are not generally collecting OCS issues nor is there a requirement for training on OCS lessons learned. Further, actions to improve and develop specific guidance as well as require OCS training for commanders and senior leaders could improve awareness of OCS capabilities and the importance of collecting OCS issues for mission success. (GAO 15-243). Another area of possible research is how the Air Force has taken on the leadership roles within governing OCS. Specifically, JP 4-10 identifies three pillars of OCS (Contract Support Integration, Contracting Support and Contractor Management). Further, the researcher identified that OCS is a Tier 2 Logistics Joint Capabilities Area capability. With that known, follow on research could be explored in how the Air Force is aligning the OCS pillars in terms of planning and readiness within Contract Support Integration; contracting administration requirements within Contracting Support; and finally, with the continued heavy use of contracted personnel within a contingency theater, how is the Air Force currently supporting the CCDR within the Contractor Management pillar.

Summary

According to the Congressionally Chartered Commission on Wartime Contracting Support, more than $30 billion was lost from contract waste and abuse from 2001 to 2011

during Iraq and Afghanistan. It also identified that a lack of training and leadership can lead to fraud. Preventing this in the future starts with ensuring our CORs have the right competencies and they are arriving to support the CCDR's mission by being properly trained, knowledgeable, and experienced. Whether supporting humanitarian efforts, peacekeeping operations, or deploying in support of a conflict, the chances are pretty high that we will be doing it with our service brethren and trusted multi-national partnering nations and that CORs will be that critical lynch pin.

In April 2015, the DoD conducted OCS Joint Exercise 2015 (OCSJX-15). The goal was to integrate DoD service members and multi-national partnering nations to participate in one of the largest contract support exercises to date. While the lessons learned are still be collected, some of the OCSJX-15 takeaways were learning how we collectively execute OCS with our partners while best practices and learning overall interoperability. Another intangible takeaway was the collective broadening of everyone's understanding of the potential of OCS and how improvements are still needed; especially, in how the DoD plans, prepares, and integrates CORs to manage future expeditionary contracts and contractors in a resource-constrained environment.

Lastly, OCSJX-15 illustrates that the DoD has moved to incorporate OCS into their plans and exercises, it still falls short of who actually needs the hands-on training. By adding line remarks to current JET taskings, it that would require CORs to attend an in-residence DAU led training platform. This would ensure these critical personnel are being uniformly (amount, intensity and duration) trained, while focusing on providing the necessary contract management skills (writing, negotiating, surveillance, and

enforcement) they will need to be successful. Once trained, CCDRs could quickly move

this capability to where they are needed in support of deployed forces. Finally, with the

number of contracting problems the DSB Task Force identified e.g. lack of training, poor

coordination, and contract management resourcing, the DoD clearly has still not

remedied these issues and, until they do, they are likely to be repeated again. If left

unchecked, it will continue to erode our public's confidence in our military, give

perceptions of poor financial stewardship, and systemic contractor oversight issues while

allowing our adversaries the opportunity to exploit our weaknesses that could lead to U.S.

mission failure and costs lives.

Appendix A

DoD STANDARD FOR CERTIFICATION OF CONTRACTING OFFICER'S REPRESENTATIVES FOR SERVICES ACQUISITIONS

NATURE OF TYPE A WORK/REQUIREMENT	REQUIRED COMPETENCY TOPICS	REQUIRED COMPETENCIES	EXPERIENCE/TRAINING REQUIREMENTS
Fixed-price requirements without incentives, low performance risk. Attributes of such requirements might include: lack of technical or administrative complexity, no identifiable risk factors; limited requirement for technical expertise; low likelihood of modification; effort is a follow-on to an existing contract. COR duties/responsibilities are generally limited to minimal technical and/or administrative monitoring of the contract.	**General:** • Attention to Detail • Decision Making • Flexibility • Oral and Written Communication • Problem Solving/Reasoning • Self-management/Initiative • Teamwork **Technical:** • Business Ethics • Effective Communication of Contract Requirements • Effective Contract Performance Management • Effective COR Performance	Upon completion of mandatory training, COR should be able to perform, at least the following competencies in a manner consistent with the nature of Type A work/requirements: 1. Assist in acquisition planning. 2. Assist in contract award process. 3. Establish/maintain COR file with all required documentation. 4. Identify/prevent unethical conduct and instances of fraud/waste/abuse. 5. Perform technical/administrative monitoring and reporting duties in accordance with letter of delegation and surveillance plan. 6. Recommend/monitor proposed changes. 7. Monitor contract expenditures/payments 8. Monitor contract schedule compliance. 9. Perform liaison duties between the Contracting Officer, the Requiring Activity, and the contractor for management of the contract. 10. Inspect, accept or reject deliverables during contract performance and at close-out in conformance with contract terms and conditions. 11. Monitor the control/disposition of Government furnished assets. 12. Perform surveillance in a contingency environment, when applicable.	**Experience:** • Agency experience: minimum of 6 months (may be waived) • Relevant technical experience: As determined by the nominating supervisor for the Contracting Officer's consideration and appointment. • General competencies: As determined by the nominating supervisor for the Contracting Officer's consideration and appointment. **Training:** • DAU CLC 106, Contracting Officer's Representative (Basic) • DAU COR XXX (to be determined), COR in the Contingency Environment, when applicable (Competency 12) • Minimum of 1 hour acquisition ethics training (e.g., CLM 003 or agency provided training) annually. • Additional training mandated by the contracting activity (e.g., WAWF). **Refresher Training:** • Minimum of 8 hours COR specific training; • Every 3 years, OR • Prior to assuming COR responsibilities if the individual has not served as a COR within the previous 24 months. • Minimum of 1 hour acquisition ethics training (e.g., CLM 003 or agency provided training) annually. • Any additional training mandated by the Activity.

Appendix B

DoD STANDARD FOR CERTIFICATION OF CONTRACTING OFFICER'S REPRESENTATIVES FOR SERVICES ACQUISITIONS

NATURE OF TYPE B WORK/REQUIREMENT	REQUIRED COMPETENCY TOPICS	REQUIRED COMPETENCIES	EXPERIENCE/TRAINING REQUIREMENTS
Fixed-price requirements without incentives, other than low performance risk. Attributes of such requirements might include: the nature of the work is more complex; effort will be performed in multiple regions/remote geographic locations, contract contains incentive arrangements or cost sharing provisions, contract is cost-type of T&M/LH type, or FP LOE. COR duties/responsibilities are of increased complexity.	**General:** ➤ Attention to Detail ➤ Decision Making ➤ Flexibility ➤ Influencing/Persuasive ➤ interpersonal skills ➤ Oral and Written Communication ➤ Planning and Evaluating ➤ Problem Solving ➤ Reasoning ➤ Self-management/Initiative ➤ Teamwork **Technical:** ➤ Business Ethics ➤ Defining Government requirements ➤ Understanding and knowledge of contract type ➤ Effective analytic skills ➤ Effective Communication of Contract Requirements ➤ Effective Contract Performance Management ➤ Effective COR Performance ➤ Project Management ➤ Strategic Planning ➤ Understanding the Marketplace	Upon completion of mandatory training, COR should be able to perform at least the following competencies in a manner consistent with the nature of Type B work/requirements: 1. Assist in acquisition planning. 2. Assist in contract award process. 3. Establish/maintain COR file with all required documentation. 4. Identify/prevent unethical conduct and instances of fraud/waste/abuse. 5. Review technical submittals/ensure compliance with Statement of Work/Statement of Objectives (e.g., perform technical monitoring and reporting in accordance with a Quality Surveillance Plan) 6. Perform administrative monitoring and reporting duties (e.g., handle security issues, attend meetings, etc.). 7. Recommend/monitor proposed changes. 8. Monitor contract expenditures/payments. 9. Monitor contract schedule compliance. 10. Perform liaison duties between the Contracting Officer and the contractor for management of the contract. 11. Inspect, accept or reject deliverables during contract performance and at close-out in conformance with contract terms and conditions. 12. Review and validate that contractor payment requests are commensurate with performance. 13. Monitor control/disposition of Government furnished assets. 14. Perform surveillance in a contingency environment, when applicable	**Experience:** ➤ Agency experience: minimum of 12 months (may be waived by the requiring activity. Waiver to be addressed in nomination package) ➤ Relevant technical experience: As determined by the nominating supervisor for the Contracting Officer's consideration and appointment ➤ General competencies: As determined by the nominating supervisor for the Contracting Officer's consideration and appointment. **Training:** ➤ DAU COR 222 or ALMC-CL or equivalent course ➤ DAU COR XXX (to be determined), COR in a Contingency Environment, when applicable (competency 14) ➤ Minimum of 1 hour acquisition ethics training (e.g., DAU CLM 003 or agency provided training) annually. ➤ Additional training mandated by the Contracting activity (e.g., WAWF). **Refresher Training:** ➤ Minimum of 16 hours COR specific training: • Every 3 years, OR • Prior to assuming COR responsibilities if the individual has not served as a COR within the previous 24 months ➤ Minimum of 1 hour acquisition ethics training (e.g., DAU CLM 003 or agency provided training) annually ➤ Any additional training mandated by the Activity

Appendix C

DoD STANDARD FOR CERTIFICATION OF CONTRACTING OFFICER'S REPRESENTATIVES FOR SERVICES ACQUISITIONS

NATURE OF TYPE C WORK/REQUIREMENT	REQUIRED COMPETENCY TOPICS	REQUIRED COMPETENCIES	EXPERIENCE/TRAINING REQUIREMENTS

Unique contract requirements that necessitate a professional license, higher education or specialized training beyond the Type B requirements.
 	
Such requirements might include, for example, environmental remediation; major weapons systems; medical/dental/ veterinarian services, etc.
 	
COR duties/responsibilities are of increased complexity.
	General:
	✓ Attention to Detail
	✓ Decision Making
	✓ Flexibility
	✓ Influencing/Persuasive
	✓ interpersonal skills
	✓ Oral and Written Communication
	✓ Planning and Evaluating
	✓ Problem Solving
	✓ Reasoning
	✓ Self-management/Initiative
	✓ Teamwork
	
	Technical:
	✓ Business Ethics
	✓ Defining Government requirements
	✓ Understanding and knowledge of contract type
	✓ Effective analytic skills
	✓ Effective Communication of Contract Requirements
	✓ Effective Contract Performance Management
	✓ Effective COR Performance
	✓ Project Management
	✓ Strategic Planning
	✓ Understanding the Marketplace
		Upon completion of mandatory training, COR should be able to perform at least the following competencies in a manner consistent with the nature of Type C work/requirements:
		
		1. Assist in acquisition planning.
		2. Assist in contract award process.
		3. Establish/maintain COR file with all required documentation.
		4. Identify/prevent unethical conduct and instances of fraud/waste/abuse.
		5. Review technical submittals/ensure compliance with Statement of Work/Statement of Objectives (e.g., perform technical monitoring and reporting in accordance with a Quality Surveillance Plan)
		6. Perform administrative monitoring and reporting duties (e.g., handle security issues, attend meetings, etc.)
		7. Recommend/monitor proposed changes.
		8. Monitor contract expenditures.
		9. Monitor contract schedule compliance.
		10. Perform liaison duties between the Contracting Officer and the contractor for management of the contract.
		11. Inspect, accept or reject deliverables during contract performance and at close-out in conformance with contract terms and conditions.
		12. Review and validate that contractor payment requests are commensurate with performance.
		13. Monitor control/disposition of Government furnished assets.
		14. Perform surveillance in a contingency environment, when applicable.
		15. Other specific functions consistent with the objectives of the Activity's mandatory specialized/technical training.
			Experience:
			✓ Agency experience; minimum of 12 months (may be waived by the requiring activity. Waiver to be addressed in nomination package)
			✓ Relevant technical experience: As determined by the nominating supervisor for the Contracting Officer's consideration and appointment
			✓ General competencies: As determined by the nominating supervisor for the Contracting Officer's consideration and appointment.
			
			Training:
			✓ DAU COR 222 or ALMC-CL or equivalent course
			✓ DAU COR XXX (to be determined), COR in the Contingency Environment, when applicable (competency 14)
			✓ Minimum of 1 hour acquisition ethics training (e.g., DAU CLM 003 or agency provided training) annually.
			✓ Additional training mandated by the contracting activity (e.g., WAWF).
			
			Refresher Training:
			✓ Minimum of 16 hours COR specific training:
			  • Every 3 years, OR
			  • Prior to assuming COR responsibilities if the individual has not served as a COR within the previous 24 months.
			✓ Minimum of 1 hour acquisition ethics training (e.g., DAU CLM 003 or agency provided training) annually
			✓ Any additional training mandated by the Activity.
			✓ Any necessary for maintenance of license/certification/etc.

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Appendix D

Round 1

Survey Instructions:

The motivation of this study is to better understand and identify competencies (aka knowledge, skills and abilities (KSA)) that are required by deployed Contracting Officer Representatives (COR) to successfully complete their missions. That said, your direct assistance will help identify the level of technical competency and effectiveness among current and former CORs, while identifying KSA shortcomings that will benefit future COR education and training programs. Lastly, this analysis is important to implementing the necessary OCS policy changes that will ensure CORs are adequately trained at the right time and place to ensure proper contract oversight and accountability where it matters most. Lastly, please answer questions in terms of your direct experience.

Part I: Background Information

Please select one response for each of the following:

1. How much experience do you have in service acquisitions? (Select one response only please.)
   o   Less than one year.
   o   1 - 2 years.
   o   3 - 4 years.
   o   5 - 6 years.
   o   More than 6 years.

2. In general, how many contracts did you typically work on at the same time? (Select one response only please.)
   o   1 - 2 contracts.
   o   3 - 4 contracts.
   o   5 - 6 contracts.
   o   More than 6 contracts.
   o   Don't know.

3. How much money was generally involved in the contracts on which you typically worked? (Select one response only please.)
   o $0 to $100,000
   o $100,001 to $1 million
   o $1 million to $5 million
   o $5 million to $100 million
   o $100 million and above
   o   I don't remember

4. What was the duration of the contract(s) on which you typically worked? (Select one response only please.)
    o   Less than 1 year.
    o   Up to 2 years.
    o   Up to 3 years.
    o   Up to 4 years.
    o   Up to 5 years.
    o   More than 5 years.
    o   I don't remember.

5. About what proportion of your time at work while deployed did you spend on COR-related activities? (please select one response.)
    o   1 – 25%
    o   26 – 50%
    o   51 – 75%
    o   76 – 100%
    o   I don't remember

Part II: COR Competencies

On 29 March 2010, the Undersecretary of Defense established a DoD Standard for Certification of CORs for Service Acquisitions, (http://www.acq.osd.mil/dpap/policy/policyvault/USA005569-09-DPAP.pdf). This DoD standard specifically identifies competencies, experience and minimum training requirements needed for successful performance as a COR. Further, the 17 June 2014, Defense Science Board completed the Task Force on Contractor Logistics in Support of Contingency Operations, (http://www.acq.osd.mil/dsb/reports/CONLOG_Final_Report_17Jun14.pdf). This report suggests that CORs are increasingly being asked to manage high-value, complex contracts that involve varying degrees of risk. As such, CORs play a critical role in that they're the eyes and ears of the CCOs for providing the necessary contract surveillance, influencing the contractor to meet the conditions of the contract and recognizing when a contract is under performing. The intent of the following survey questions are to obtain your expert opinion as to the competencies that are needed by current and future CORs to succeed in deployed environments.

1. In your opinion, what specific knowledge, skills, and abilities do you feel are required to be a COR in a deployed environment?

2. Do you believe our current CORs are technically prepared to succeed in today's forward operating environments?

3. How would you describe a competent COR? Please explain.

4. What factors do you feel impedes CORs from successfully performing their duties in deployed environments?

5. In your own words, do you believe the current COR training program is designed to produce CORs with the necessary KSAs to ensure contractors are meeting the commitments of today's expeditionary contracts?

Round 2

1. Did you participate in Round 1 of this survey? Yes or No

2. Would a pre-deployment <u>in-residence</u> training platform significantly increase a COR's Knowledge, Skills, and Abilities (KSAs) in conducting contract surveillance, improve government-contractor relationships, knowledge of procurement regulations, program objectives, contracting laws, administration, and ethics (including fraud, waste, and abuse)? Why or why not? If so, how long an in-residence program would you recommend?

3. The majority of respondents in round #1 stated CORs are not technically prepared to succeed in today's forward operating environment. If Combatant Commanders instituted line remarks that required CORs to attend in-residence DCMA and DAU training, what courses do you feel would offer them the most capabilities to succeed in today's operating environment?

The following questions seek to determine the importance amongst criteria chosen by you as the subject matter experts. Please rank-order the criteria below with a number 1 ranking being the most important attribute, 2 the next and so forth for the least important attribute for the items listed below. If you feel that a response is not applicable based on your expert knowledge, please rank order that response, but include a comment as to why you feel the item should be removed.

How would you describe a competent COR?
Responses Rank Order (1(most important) -10 (least important))

1.) They have attended all required DAU *in-residence* COR classroom training sessions.
2.) They have completed all DAU *on-line* COR CBTs.
3.) They understand the contract structure, statement of work, and quality assurance surveillance plan for contracts to which they're overseeing.
4.) They have prior experience with working with their local contracting office.
5.) They understand the contract/task or delivery orders designated to them and have a plan for when and how to conduct surveillance.
6.) They comprehend the processes for coordinating, inspecting, and accepting deliveries (and/or services) and the procedures to pay invoices.
7.) They adhere to all ethical requirements and are able to identify conflicts of interest.

8.) They're technically competent in their field, able to operate independently (self-tasked)
and they are able to multitask.
9.) They understand the duties and responsibilities set forth in the COR delegation letter and
ensure the COR file is documented according to specific requirements.
10.) They can accurately communicate (written & orally) with the contractor and CCO regarding the contractor's performance.

What factors do you feel most impede CORs from successfully performing their duties in deployed environments?
Responses Rank Order (1(most important) -10 (least important))

1.) COR duties are given to individuals who don't have enough seniority.
2.) CORs lack oral and written communication skills.
3.) CORs receive poor training and turnover.
4.) CORs don't understand their specific role or responsibilities.
5.) CORs don't take their job seriously and are assigned as additional duties.
6.) CORs are assigned too many contracts and inadequate oversight from their CCO.
7.) CORs job performance is almost never part of their performance report.
8.) CORs lack technical expertise and their primary duties always take priority.
9.) Kinetic activity prevents CORs from travelling to observe contractor performance.
10.) A CORs unit doesn't give them the time necessary to conduct COR related duties.

6. Do you believe the DoD COR certification program should mirror the Office of Federal Procurement Policy's Federal Acquisition Certification for Contracting Representatives (FAC-COR) process i.e. three levels of certification (http://www.fai.gov/drupal/pdfs/FAC-COR_20Sep2011.pdf) with varying requirements for training, experience and continuous learning that is dependent on the types of contracts CORs manage? If so, would it be more efficient, effective, neither, or a combination of both? Please expound.

7. If CORs could be tracked via Special Experience Identifiers (SEIs), list or describe the potential advantages or disadvantages of creating a cross-service SEI that Combatant Commander's could utilize for deployments, disaster relief requirements, or short-notice taskings requiring COR skill sets.

8. Do you believe that the current DoD Contracting Officer Representative Tracking Tool (CORT Tool) database could be more efficient or effective? If so, how?

9. Thank you very much for taking the time to complete this survey. If you would like to be notified of subsequent rounds once the data has been compiled and analyzed, please

include your name and contact details. Lastly, if you have any additional comments, please place them below.

Round 3

1. Did you participate in Round 1 and/or Round 2 of this survey? Yes or No

2. In round two, the panel was asked if a pre-deployment in-residence training platform would significantly increase a COR's Knowledge, Skills, and Abilities (KSAs) in conducting contract surveillance, improving government-contractor relationships and knowledge of procurement regulations, program objectives, contracting laws, administration, and ethics (including fraud, waste, and abuse). The panel participants also agreed that additional training for CORs is needed. Please rank order the below consolidated answers on a scale from 7 (Strongly Agree) to 1 for (Strongly Disagree). Lastly, if you have additional comments, please place them below.

For question one, please select what you believe to be the adequate training length needed for CORs prior to deploying:

Comments	Training Length Recommendation
1-3 Day	
3-7 Days	
7-14 Days	
Optional Comments:	

3. Additionally, the panel was asked to consider if Combatant Commanders instituted line remarks that required CORs to attend in-residence DCMA and DAU training, what courses would offer CORs the most capabilities to succeed in today's operating environment. For an explanation of DAU's 2015 courses, please use the following link: http://icatalog.dau.mil/onlinecatalog/doc/2015Catalog_Online.pdf. The survey participants concurred that line remarks were needed. Please rank order the below options from 1 (Most Essential/Important) to 5 for (Least Essential/Important).

Comments	Rank Order
A modified COR 222, *Contracting Officer's Representative Course*, with training modules on the following enterprise systems (CORT, SPOT, etc) that CORs will be required to use.	
With the current problems a deployed COR faces, anything that adds onto existing DCMA to DAU led courses that can cover the full range of OCS issues.	
A COR post deployment survey would be beneficial to further refine future training needs. In-res courses that further enhance contingency contracting skills and covers responsibilities, guidelines, and what exactly they will manage as a deployed COR would be beneficial.	

A training course that is similar to the Quality Assurance Program Coordinator (QAPC) course offered by Air Education and Training Command (AETC) would be ideal; it could probably be shortened from the 7-day course to 3-4 days.	
Keep current COR training/courses as they are with no changes.	
Optional Comments:	

4. In round two, I asked the participants how would you describe a competent COR and to rank order their responses from most important to least important. **The panel provided the below responses that are ranked from what the panel thought was most important to least important.** Please rank order the below options from 1 (Most Essential/Important) to 10 for (Least Essential/Important). Please **compare your results** to the panels and decide if you would like to modify your answer(s) or retain your existing rankings.

If you decide to change the panel's recommended ratings below, please explain below **WHY** you believe your answers are significantly different or unique from the rest of the panel.

Panel Ratings	**Rank Order**
CORs understand the contract structure, statement of work, and quality assurance surveillance plan for contracts to which they're overseeing.	
CORs adhere to all ethical requirements and are able to identify conflicts of interest.	
CORs are technically competent in their field, able to operate independently (self-tasked) and are able to multitask.	
CORs comprehend the processes for coordinating, inspecting, and accepting deliveries (and/or services) and the procedures to pay invoices.	
CORs understand the duties and responsibilities set forth in the COR delegation letter and ensure the COR file is documented according to specific requirements.	
CORs understand the contract/task or delivery orders designated to them and have a plan for when and how to conduct surveillance.	
CORs have attended all required DAU in-residence COR classroom training sessions.	
CORs have prior experience with working with their local contracting office.	
CORs can accurately communicate (written & orally) with the contractor and CCO regarding the contractor's performance.	
CORs have completed all DAU on-line COR CBTs.	

5. Additionally, I asked the Round 2 Panel Members to rank order the below lists of factors that they felt most impeded a COR from successfully performing their duties in deployed environments (from high to low). **The panel provided the below responses that are ranked from what the panel thought was most important to least important.** Please rank order the below options from 1 (Most Essential/Important) to 10 for (Least Essential/Important). Please **compare your results** to the panels and decide if you would like to modify your answer(s) or retain your existing value(s). If you decide to keep your existing answer(s), please explain below **WHY** you believe your answers are significantly different or unique from the rest of the panel.

Panel Ratings	Rank Order
CORs don't understand their specific role or responsibilities.	
A CORs unit doesn't give them the time necessary to conduct COR related duties.	
CORs lack technical expertise and their primary duties always take priority.	
CORs don't take their job seriously and are assigned as additional duties.	
CORs job performance is almost never part of their performance report.	
CORs are assigned too many contracts and inadequate oversight from their CCO.	
CORs receive poor training and turnover.	
CORs lack oral and written communication skills.	
COR duties are given to individuals who don't have enough seniority.	
Kinetic activity prevents CORs from travelling to observe contractor performance.	

6. Thank you again for taking the time to complete this survey. If you would like a copy of the completed GRP, please include your name and contact details.

Appendix E

Number of Troops vs. Number of Contractors in Afghanistan and Iraq
Troop Level in Afghanistan and Contractor Personnel
Aug 2008 – Apr 2014

The below data shows the monthly U.S. troops deployed in-country in Afghanistan from Aug 2008 to Apr 2014 and was pulled from CENTCOM Quarterly Census Reports and "Boots on the Ground" monthly reports provided to Congress.

Month/Year	U.S. Citizens	Third Country Nationals	Local Nationals	Total Contractors	Total Troops	Ratio
Aug 2008	4,724	4,121	32,387	41,232	34,200	1.21
Nov 2008	5,405	4,381	58,466	68,252	32,813	2.08
Feb 2009	5,960	5,232	60,563	71,755	35,900	1.99
May 2009	9,378	7,043	51,766	68,187	44,600	1.53
Aug 2009	10,036	11,806	51,126	72,968	62,200	1.17
Nov 2009	9,322	16,349	78,430	104,101	67,300	1.55
Feb 2010	10,016	16,551	80,725	107,342	74,600	1.43
May 2010	16,081	17,512	78,499	112,092	89,700	1.25
Sep 2010	19,103	14,984	73,392	107,479	96,600	1.11
Dec 2010	20,879	15,503	34,222	70,604	96,900	0.72
Jan 2011	19,381	21,579	46,523	87,483	96,700	0.90
Apr 2011	20,413	23,537	46,389	90,339	99,300	0.91
Jul 2011	23,294	25,666	44,158	93,118	98,500	0.95
Oct 2011	23,190	27,912	50,687	101,789	97,800	1.04
Jan 2012	25,287	34,811	53,393	113,491	88,300	1.29
Apr 2012	34,765	37,898	44,564	117,227	88,000	1.33
Jul 2012	30,568	35,118	48,050	113,736	85,300	1.33
Oct 2012	31,814	39,480	38,270	109,564	65,900	1.66
Jan 2013	33,444	35,714	41,246	110,404	65,300	1.69
Apr 2013	33,107	34,375	40,314	107,796	63,500	1.70
Jul 2013	32,442	32,050	37,363	101,855	60,000	1.70
Oct 2013	27,188	28,677	29,663	85,528	51,200	1.67
Jan 2014	23,763	25,145	29,228	78,136	37,600	2.08
Apr 2014	20,865	19,235	21,352	61,452	32,900	1.87

	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	Totals
Afghanistan	$4,242,747,306.92	$7,433,727,962.29	$8,734,635,037.71	$13,949,495,734.83	$18,026,922,261.74	$19,493,248,858.25	$15,491,822,459.70	$7,685,401,981.18	$95,058,001,602.62
Iraq	$14,316,943,009.53	$16,270,287,459.31	$11,182,936,866.14	$7,751,498,870.16	$6,564,076,539.60	$2,179,183,157.90	$1,148,170,484.17	$648,473,601.65	$60,061,569,988.46
Kuwait	$4,212,279,896.21	$4,175,665,666.74	$5,091,239,693.14	$4,509,463,894.88	$3,637,631,140.49	$2,431,530,699.83	$2,974,586,345.88	$1,747,751,084.51	$28,780,148,421.68
U.A.E.	$227,593,878.49	$1,131,779,476.96	$285,325,512.12	$2,394,266,465.65	$983,055,584.90	$1,380,419,846.44	$2,189,717,507.45	$1,725,010,756.09	$10,317,169,028.10
Kyrgyzstan	$366,011,221.05	$26,021,630.40	$341,632,171.48	$149,125,324.35	$951,978,485.03	$1,874,473,256.62	$1,926,207,392.45	$698,767,548.36	$6,334,217,029.74
Bahrain	$499,530,903.45	$1,126,431,178.89	$1,920,045,937.97	$549,784,848.76	$484,769,492.14	$318,566,755.40	$838,472,901.81	$209,166,959.07	$5,946,768,977.49
Saudi Arabia	$309,360,935.03	$332,308,729.74	$878,996,823.68	$730,615,553.68	$288,245,193.93	$570,585,834.42	$921,529,397.33	$1,226,349,319.17	$5,257,991,786.98
Qatar	$274,308,087.72	$397,196,873.53	$774,818,758.33	$319,565,027.10	$768,049,977.79	$810,886,140.55	$394,814,052.07	$171,157,475.65	$3,910,796,392.74
Pakistan	$268,948,304.88	$333,060,216.65	$413,751,463.19	$853,072,085.43	$591,806,281.39	$258,272,467.27	$256,490,566.48	$283,389,962.05	$3,258,791,347.34
Egypt	$132,767,865.38	$215,172,724.49	$617,462,210.93	$313,717,704.56	$81,558,923.84	$267,705,058.10	$85,951,045.49	$57,936,260.12	$1,772,271,792.90
Jordan	$211,629,598.72	$214,109,526.27	$155,562,848.55	$159,110,855.39	$132,133,931.03	$167,973,322.35	$269,788,784.05	$373,315,097.36	$1,683,623,963.72
Oman	$80,582,912.25	$96,846,905.42	$77,260,818.64	$113,624,722.48	$136,411,974.80	$202,301,591.10	$219,912,567.41	$104,620,266.35	$1,031,561,758.45
Kazakhstan	$37,992,992.31	$62,431,122.77	$93,154,603.84	$106,842,429.69	$101,307,144.74	$110,363,942.65	$109,448,303.89	$56,733,102.06	$678,273,641.95
Lebanon	$56,515,141.99	$53,218,372.54	$66,516,797.32	$46,269,317.89	$48,249,980.10	$50,911,458.36	$72,088,957.01	$71,751,275.34	$465,521,300.55
Yemen	$4,370,765.12	$10,767,756.85	$120,066,320.36	$39,784,338.10	$73,808,483.02	$20,349,830.84	$36,304,942.10	$116,108,883.89	$421,561,320.28
Turkmenistan	$2,438,912.63	$20,288,159.21	$17,623,778.99	$35,003,873.42	$12,654,991.68	$8,919,219.91	$16,415,655.88	$198,924,935.46	$312,269,527.18
Tajikistan	$2,985,604.85	$7,489,140.12	$20,159,947.44	$54,687,638.82	$21,665,876.93	$36,072,712.25	$32,800,499.50	$49,789,785.19	$225,651,205.10
Uzbekistan	$17,581,362.45	$17,005,583.97	$9,060,292.27	$23,353,400.01	$19,809,570.23	$27,592,790.17	$19,855,644.02	$24,327,931.28	$158,586,574.40
Totals:	$25,264,588,698.98	$31,923,808,486.15	$30,800,249,882.10	$32,099,282,085.20	$32,924,135,833.38	$30,209,356,942.41	$27,004,377,506.69	$15,448,976,224.78	$225,674,775,659.68
Department of Education (DOE)	$1,448,873,321.29	$1,379,118,056.08	$1,507,616,131.12	$1,835,644,373.41	$1,864,907,220.39	$2,061,985,966.15	$2,628,104,054.85	$2,934,736,546.35	$15,660,985,669.64
Environmental Protection Agency (EPA)	$1,389,634,228.05	$1,382,222,219.14	$1,758,847,149.24	$1,655,121,045.64	$1,790,639,107.21	$1,436,868,332.84	$1,323,083,151.72	$1,203,468,225.08	$11,939,883,458.92
Department of Health and Human Services (DOHHS)	$13,753,853,257.73	$13,117,202,239.68	$18,314,619,836.90	$17,935,322,860.29	$19,033,418,242.50	$18,353,315,304.51	$19,585,821,824.86	$20,888,147,845.80	$140,981,701,412.27
General Services Administration (GSA)	$12,761,665,710.42	$12,972,465,594.66	$15,207,956,195.23	$18,305,384,195.91	$13,727,075,204.39	$9,806,248,702.80	$8,411,631,608.68	$8,734,681,155.27	$99,927,108,367.36
Department of Veterans Affairs (VA)	$12,423,741,776.22	$14,781,185,863.77	$14,653,188,069.51	$16,126,746,971.76	$17,413,004,443.21	$17,261,919,857.73	$18,302,505,148.02	$18,997,477,915.42	$129,959,770,045.64
National Aeronautics and Space Administration (NASA)	$13,104,999,573.36	$14,865,315,575.80	$15,005,438,990.49	$15,516,180,896.89	$14,255,985,673.05	$13,490,407,584.99	$12,588,278,381.28	$12,257,355,013.79	$111,083,961,689.65
Department of Homeland Security (DHS)	$11,970,305,654.92	$13,585,328,350.36	$13,871,586,380.49	$13,166,087,146.02	$14,022,850,219.46	$12,131,790,234.69	$11,986,742,101.06	$12,582,855,128.57	$103,317,545,215.57

Public Law 93-400 requires that Office of Management and Budget (OMB), specifically the Office of Federal Procurement and Policy (OFPP), establish a system for collecting, developing, and disseminating the procurement data which takes into account the needs of the Congress, the executive branch, and the public sector. Under this guidance, the Federal Procurement Database System (FPDS) provides a central point to respond to the requirements of the legislative, executive, and judicial branches of the Government as well as the private sector. The data above was pulled from FPDS on 14 Feb 2015 and is considered a reliable basis for measuring and assessing the impact of the Federal acquisition policy and management improvements.

Appendix G

The following are required courses for CORs depending on the functions

delegated. CORs also must annually complete DAU's CLM 003, "Ethics" and

Combating Trafficking in Persons training. Finally, CORs will further receive contract-

specific training from their CCOs (http://icatalog.dau.mil/onlinecatalog/courses.aspx?crs_id=1783):

- Continuous Learning-Contracting (CLC) 106, CORs with a Mission Focus: (8-hour online course)
- CLC 206, CORs in the Contingency Environment: (3-hour on-line course)
- CLC 222, Contracting Officer's Representative: (32 hour on-line course)
- CLC 004, Market Research: (3-hour on-line course)
- CLC 006, Contract Terminations: (2-hour on-line course)
- CLC 007, Contract Source Selection: (3-hour on-line course)
- CLC 011, Contracting for the Rest of Us: (2-hour on-line course)
- CLC 013, Performance-Based Services Acquisition: (3-hour on-line course)
- CLC 055, Competition Requirements for DoD Acquisition: (2-hour on-line course)
- CLC 133, Contract Payment Instructions: (1-hour on-line course)
- Continuous Learning Module (CLM) 013, Work Breakdown Structure: (6-hour on-line course)
- CLM 024, Contracting Overview: (8-hour on-line course)
- CLM 031, Improved Statement of Work: (4-hour on-line course)
- CLM 039, Foundations of Government Property: (1.5-hour on-line course)
- CLM 104, DoD Combating Trafficking in Persons Training: (1-hour on-line course)
- Harvard Business School (HBS) 408, Customer Focus: (2-hour on-line course)
- HBS 409, Decision Making: (2-hour on-line course)
- HBS 427, Meeting Management: (2-hour on-line course)
- HBS 442, Time Management: (2-hour on-line course)
- HBS 444, Writing Skills: (2-hour on-line course)

Identifying Knowledge, Skill, and Ability (KSAs) Requirements for Contracting Officer Representatives (CORs) in Deployed Environments

Major Allen Husted
Advisor: Lt Col Christopher Randall, PhD
Advanced Studies of Air Mobility (ENS)
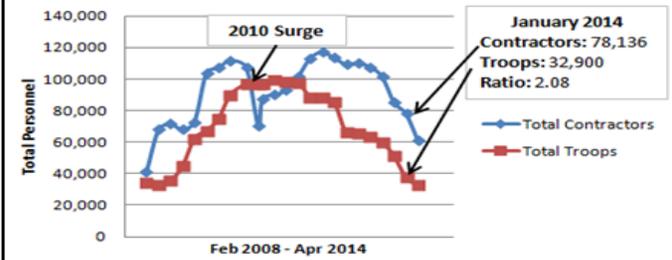Air Force Institute of Technology

Introduction

The DoD has relied extensively on the private sector during contingencies to help carry out various aspects of its mission for military operations. Due to the criticality of OCS, effective and efficient CORs are needed to ensure CORs are matched to the types of contracts they're required to monitor to avoid poor contractor oversight and finally performance mis-interpretations when and where it is needed most. This research evaluated the competencies of deployed CORs that support OCS and what actions Combatant Commanders (CCDRs) should take to ensure these key personnel are technically prepared to manage and oversee expeditionary contracts. This research utilized a three-round Delphi technique with experts from OSD, JS, Army, Navy, Air Force and DAU, that examined the proper mix of COR competencies needed that would enhance COR training, planning and execution for OCS.

Research Goals

CORs are the "eyes and ears" that provide the necessary contract surveillance needed to ensure contractors are meeting the conditions of the contract and recognize when a contract is under performing. This research sought to identify a more accurate and comprehensive analysis of a COR's strengths and factors that impede their performance in deployed environments. The following investigative questions obtained SME opinions as to the competencies that are needed by current and future CORs to succeed in deployed environments:

1) In your opinion, what specific knowledge, skills, and abilities do you feel are required to be a COR in a deployed environment?

2) Do you believe our current CORs are technically prepared to succeed in today's forward operating environments?

3) How would you describe a competent COR? Please explain.

4) What factors do you feel impedes CORs from successfully performing their duties in deployed environments?

5) In your own words, do you believe the current COR training program is designed to produce CORs with the necessary KSAs to ensure contractors are meeting the commitments of today's expeditionary contracts?

Collaboration

JS/J4, HQ AF/A4, SAF/AQ, and DAU

Afghanistan OCS Numbers

2010 Surge

January 2014
Contractors: 78,136
Troops: 32,900
Ratio: 2.08

Total Personnel — Feb 2008 - Apr 2014

— Total Contractors
— Total Troops

Figure 1: Contractor Personnel and Troop Levels in Afghanistan

Contract Obligations (FY07-FY14)

—Afghanistan
—Iraq
—Kuwait
—U.A.E.
—Kyrgyzstan
—Bahrain
—Saudi Arabia
—Qatar
—Pakistan
—Egypt
—Jordan
—Oman
—Kazakhstan
—Lebanon
—Yemen

Figure 2: Contract Obligations - Federal Procurement Database System
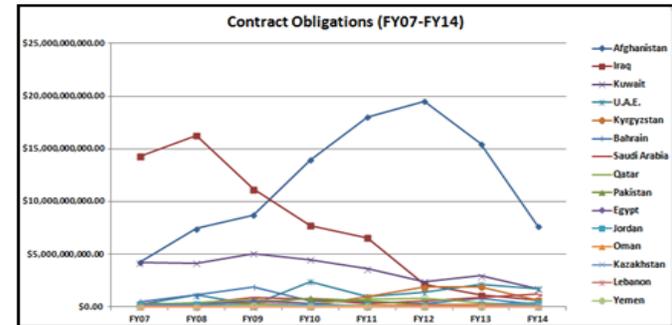
Methodology

This research design utilized 24 OCS subject matter experts that examined what constitutes a competent COR and what KSAs are needed to professionally develop CORs. By using a Delphi technique approach, the series of questionnaires elicited opinions from a group SMEs in order to adequately identify what the right COR KSAs are given the wide range of accelerated operational tempo demands CORs face. Additionally, this research project used quantitative data analysis that consisted of 66 months of contractor to troop ratios and total contract obligations. This data was used to make certain assumptions since the current DoD CORT Tool lacks historical analysis in terms of how many CORs or CCOs were utilized during one fiscal year to the next along with the number and types of contracts they managed.

Implications

Just as the effective use of contractors can significantly augment critical military capabilities, the ineffective use of contractors can prevent our warfighters from receiving what they need, when they need it, and can lead to the wasteful spending of billions of tax payers' dollars. Due to a CCDR's level of dependency for OCS, contractor and troop total force mix, and the need to better plan for OCS in the future, the outcome of this study can be used to better aid commanders and supervisors in the selection, training, and use of expeditionary CORs. Improved planning for, training, and management of CORs may not eliminate all problems, but it can mitigate contractors compromising the credibility and effectiveness of our deployed forces by being prepared to manage deployed contractor personnel and providing the necessary oversight in the next contingency.

Recommendations

1. CCDRs need to identify COR taskings with line remarks so that on-line and/or in-residence COR training can be scheduled prior to members arriving in the AOR.

2. The DoD CORT Tool Database needs improved in order to encapsulate historical analysis. At present, CCDRs lack the ability to identify what type of OCS they've used for previous humanitarian assistance events, disaster relief operations, and conflicts for enabling integration, synchronization, and deconfliction in scaling OCS for future OPLANs.

3. The Air Force needs to improve its role in OCS publications containing doctrine for commanders and their staffs in order to plan for and obtain contracting support when deployed. A failure to integrate OCS into service level publications leads to a clear gap and a lack of clarity as to who's in charge regarding overall OCS doctrine, policy, planning for, training, implementation, and execution.

Bibliography

1. Brockhoff, K. (1975). *The Performance of Forecasting Groups in Computer Dialogue and Face-to-Face Discussion*, In H.A. Lindstone (Ed.), The Delphi Method: Techniques and applications. Reading, MA: Addison-Wesley.

2. Brown, B.B., (1968). *Delphi Process: A methodology used for the elicitation of opinions of experts.* The Rand Corporation, Santa Monica, CA: RAND Corp. (P-3925).

3. Brown, B., Cochran, S., and Dalkey, N., (1969). *The Delphi Method, II: Structure of Experiments.* Santa Monica, CA: RAND Corp. (RM-5957-PR).

4. Cegielski, C.G. (2007). *Toward the development of an interdisciplinary information assurance curriculum: Knowledge domains and skill sets required of information assurance professionals.* Auburn University, Auburn AL.

5. Chairman of the Joint Chiefs of Staff. (16 Jul 2014). Joint Publication 4-10, *Operational Contract Support.* Washington, Joint Staff.

6. On Wartime Contracting in Iraq and Afghanistan. (June 2009). *"At What Cost?"* Contingency Contracting in Iraq and Afghanistan, Interim Report.

7. Commission on Wartime Contracting in Iraq and Afghanistan. (21 Nov 2009). CWC Special Report 1 – Contractor Business Systems, *"Defense agencies must improve their oversight of contractor business systems to reduce waste, fraud, and abuse.*

8. Commission on Wartime Contracting in Iraq and Afghanistan. (1 Oct 2009). CWC Special Report 2 – Embassy Security Contracts, *"Lowest-priced security not good enough for war-zone embassies."*

9. Commission on Wartime Contracting in Iraq and Afghanistan. (12 Jul 2010). CWC Special Report 3 – Iraq Transition Planning, *"Better planning for Defense-to-State transition in Iraq needed to avoid mistakes and waste."*

10. Commission on Wartime Contracting in Iraq and Afghanistan. (1 Mar 2011). CWC Special Report 4 – Iraq a forgotten mission, *"The United States needs to sustain a diplomatic presence to preserve gains and avoid waste as the U.S. military leaves Iraq."*

11. Commission on Wartime Contracting in Iraq and Afghanistan. (3 Jun 2011). CWC Special Report 5 – Sustainability: hidden costs risk new waste, *"Preparations for ending U.S. military presence and contracting activities in Iraq and Afghanistan must include action to avoid waste from host nations' inability to operate and maintain projects and programs."*

12. Commission on Wartime Contracting in Iraq and Afghanistan. (24 Feb 2011). "At What Risk?" Correcting Reliance on Contractors in Contingency Operations, Second Interim Report to Congress.

13. Commission on Wartime Contracting in Iraq and Afghanistan. (Aug 2011). *"Transforming Wartime Contracting,"* Controlling costs, reducing risk, Final Report to Congress.

14. Defense Pricing, Defense Procurement and Acquisition Policy. (29 Mar 2010). *"COR Standard for Certification of Contracting Officers Representatives (CORS) for Service Acquisition."* Washington: Undersecretary of Defense, Acquisition Technology & Logistics (USD, AT&L).

15. Delbecq, Andre L.; Van de Ven, Andrew H.; and Gustafson, David H. (1975). *"Group Techniques for Program Planning: A Guide to Nominal Groups and Delphi Process"*; University of Minnesota, Minneapolis, MN.

16. Department of Defense. *"Contractor Support of U.S. Operations in the USCENTCOM Area of Responsibility to Include Iraq and Afghanistan,"* (April 2013); "Boots on Ground Report," (March 2013).

17. Department of Army. (Oct 2011). Army Techniques Publication (ATP) 1-06.1, *Field Ordering Officer (FOO) and Pay Agent (PA) Operation*. Washington, HQ Army.

18. Department of Health and Human Services (DOHHS). (Jan 2012). *Federal Acquisition Certification for Contracting Officer's Representatives (FAC-COR) Handbook.* Office of the Secretary Office of the Assistant Secretary for Financial Resources (ASFR) Office of Grants & Acquisition Policy and Accountability (OGAPA) Division of Acquisition.

19. Gansler Commission Report. (Nov 2007). Urgent Reform Required: Army Expeditionary Contracting. Report of the *"Commission on Army Acquisition and Program Management in Expeditionary Operations."*

20. Garamone, J. American Forces Press Service. (28 Aug 2007). *"Justice, Defense Agencies Examine Contracting Problems."* Department of Defense News Article.

21. Gordon, T. J. (1994). *The Delphi method*. Washington, DC: American Council for the United Nations University.

22. Grisham, T. (2009). *"The Delphi Technique: A method for testing complex and multifaceted topics."* International Journal of Managing Projects in Business, Vol. 2 No. 1, pp. 112-130.

23. Jones, C.G. (1975). *"A Delphi Evaluation of Agreement between Organizations."* In H. A. a. T. Linstone, M. (Ed.), The Delphi method: Techniques and Applications (pp. 155 - 161). Massachusetts: Addison-Wesley.

24. Linstone, H. A., Turoff, M. (1975). *"The Delphi Method: Techniques and Applications."* Boston, MA: Addison-Wesley.

25. Malhotra, M. K., Steele, D. C., and Grover, V. (1994). *"Important strategic and tactical manufacturing issues in the 1990s",* Decision Sciences, Vol. 25 No. 2, pp. 189-214.

26. National Defense Authorization Act for Fiscal Year 2008, Pub. L No. 110-181, § 841 and 842.

27. N.M. Huff and P.L. Warren (30 Aug 2012). *"Contracting Officer Workload and Contractual Terms: Theory and Evidence."* Naval Post Graduate School, NPS-CM-184.

28. Ogden, Jeffrey A.; Petersen, Kenneth J.; Carter, Joseph R.; and Monczka, Robert M. (2005). *"Supply Management Strategies for the Future: A Delphi Study"*; The Journal of Supply Chain Management, pgs 29-48.

29. Okoli, C. and Pawlowski, S. D. (2004), *"The Delphi method as a research tool: An example, design consideration and applications",* Information & Management, Vol. 42 No. 1, pp. 15-29.

30. Report of the Defense Science Board (DSB). (Jun 2014). *Task Force on Contractor Logistics in Support of Contingency Operations.* Office of the Secretary of Defense for Acquisition, Technology, and Logistics (OSD, AT&L).

31. R. Henderson, Lt Col, USAF (2014). *"Management Implications of Contractors and the Ability to Surge."* The Dwight D. Eisenhower School for National Security and Resource Strategy, National Defense University, Seminar 9.

32. Schwartz, Moshe and Swain, Joyprada (13 May 2011). Congressional Research Service, "*Department of Defense Contractors in Afghanistan and Iraq: Background and Analysis.*"

33. Scheele, D. S. (1975). *"Reality construction as a product of Delphi interaction."* In H. A. a. T. Linstone, M. (Ed.), The Delphi method: Techniques and Applications (pp. 37-71). Massachusetts: Addison-Wesley.

34. United States Government Accountability Office (GAO). (2011). "Defense Acquisition Workforce: Better Identification, Development, and Oversight Needed for Personnel Involved in Acquiring Services." (GAO-11-892).

35. United States Government Accountability Office (GAO). (2015). *"OCS: Actions Needed to Enhance the Collection, Integration, and Sharing of Lessons Learned."* (GAO-15-243).

36. United States Government Accountability Office (GAO). (2010). *"Warfighter Support: Cultural Change Needed to Improve How DoD Plans for and Manages Operational Contract Support."* (GAO-10-829T).

Vita

Major Husted entered Active Duty as an Airman First Class in August 1992 as an Aerospace Propulsion Technician and holds Federal Aviation Administration Airframe and Powerplant Licenses. He graduated Magna Cum Laude with a Bachelor of Science in Professional Aeronautics from Embry-Riddle Aeronautical University in March 2001 and was later commissioned through Officer Training School at Maxwell AFB, Alabama, where he was recognized as a Distinguished Graduate. He additionally earned a Master's degree in Administration from Central Michigan University in August 2011.

His first Air Force logistics officer assignment was to the 75th Logistics Readiness Squadron (LRS), Hill AFB, Utah and culminated in him serving as the Readiness Flight's Assistant Flight Commander. Next, he was assigned to the 28th LRS at Ellsworth AFB, South Dakota where he served as Flight Commanders for both Management and Systems Flight and the Material Management Flight. Following South Dakota, he was selected to serve at Headquarters Air Force (HAF), Washington, D.C., and was responsible for integrating expeditionary equipment requirements with all Major Commands and HAF Staff. He was then hand-selected by the 355th Fighter Wing Commander to serve as the Operations Officer for the 355th LRS.

In May 2014, he entered the Advanced Study of Air Mobility at the Air Force Expeditionary Center, JB MDL, New Jersey, to complete his Intermediate Developmental Education. Upon graduation, he will take command of the 65th Logistics Readiness Squadron at Lajes Field, Portugal.

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14. ABSTRACT

This research examined the training of deployed CORs that support OCS and what actions a CCDR should take to ensure these key personnel are technically prepared to manage and oversee expeditionary contracts. This study utilized a Delphi Study of 24 OSD, JS, Army, Navy, Air Force and DAU experts with experience across contract support integration, contracting support, and contractor management. The panel shared their insights through three rounds of questionnaires to better understand why today's CORs are not technically prepared to succeed in today's forward operating environment. Analysis suggests that the DoD needs to reexamine the proper mix of KSAs needed in order to identify the right performance outcomes. These experts know firsthand the issues and on-going challenges affecting deployed CORs in terms of enhancing contract surveillance, government-contractor relationships, communication (written & orally) regarding the contractor's performance, knowledge of procurement regulations, contracting laws, ethics (including fraud, waste, and abuse), etc. Results from this research will be provided to the JS/J4, OCS and Services Division, the study's sponsor, who is responsible for ensuring subordinate requiring activities and supported units execute requirements development and contract management requirements (i.e., CORs and receiving official tasks) as directed by the JFC and supporting contracting organizations.

15. SUBJECT TERMS
Delphi, Contracting Officer Representative, Contracting, Competency, Knowledge, Skills, and Abilities

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