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Monterey, CA; Naval Postgraduate School

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NAVAL POSTGRADUATE SCHOOL

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JOINT APPLIED PROJECT REPORT

THE ANALYSIS OF THE CLOSEOUT PROCESS AND RECOMMENDATIONS FOR REDUCING BACKLOG

June 2022

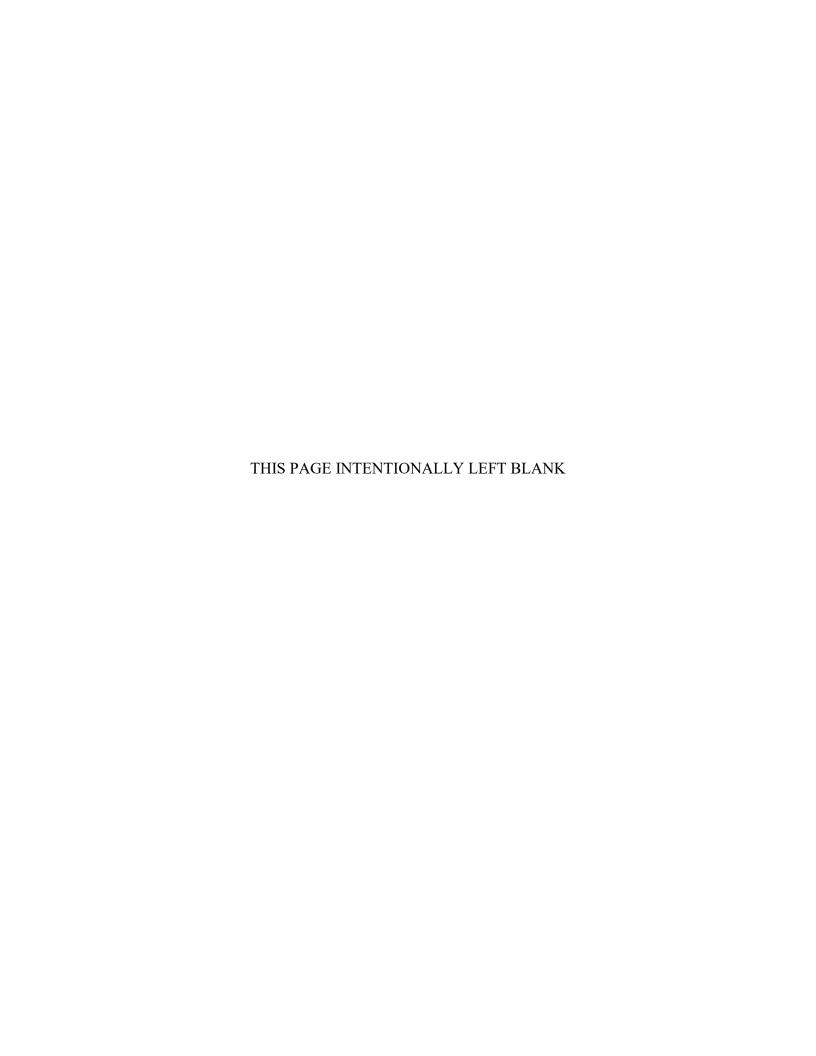
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US Army Health Contracting Agency

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Each year, more contracts are added to the Department of Defense Virtual Contracting Enterprise (VCE) database as overaged contracts. The purpose of this research is to analyze the Federal Acquisition Regulation (FAR) for the contract closeout process. This research assesses U.S. Government Accountability Office (GAO) reports and evaluates a survey from a contracting agency to offer recommendations that would reduce the current contract closeout backlog and allow organizations to improve overall closeout rates. The primary question we addressed is, How can contracting agencies prepare and prioritize the number of overage contracts for closeouts? The secondary question is, How can ontracting agencies prevent a backlog of contracts requiring closeout requirements in the future? This report determined that the government does not provide the resources required to effectively manage the process of contract closeouts at an institutional level. The suggestions provided are intended to increase the prioritization of the contract closeout process while capitalizing on the limited tools and resources available.

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THE ANALYSIS OF THE CLOSEOUT PROCESS AND RECOMMENDATIONS FOR REDUCING BACKLOG

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Submitted in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE IN CONTRACT MANAGEMENT

from the

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LIST OF ACRONYMS AND ABBREVIATIONS

AAPC Army Acquisition Professional Course

ACC Army Contracting Command

ACC-RI Army Contracting Command-Rock Island

ACE Army Contracting Enterprise
ACWS Army Contracting Writing System

AFARS Army Federal Acquisition Regulation Supplement

AOC Area of Concentration

ASSIST Acquisition Source Selection Interactive Support Tool

BI Business Intelligence

BTA Business Transformation Agency

CAR Contact Action Report

CAS-B Contracting Administrative Support-Branch Contract

CMBOK Management Body of Knowledge Contracting

COR Officer's Representative

DAU Defense Acquisition University

DAWIA Defense Acquisition Workforce Improvement Act

DCAA Defense Contract Audit Agency

DCMA Defense Contract Management Agency

DFARS Defense Federal Acquisition Regulation Supplement

DFAS Defense Finance Accounting Services

EDA Electronic Document Access

FMIS Financial Management Information System

FM Field Manual

FPDS Federal Procurement Data System

FPDS-NG Federal Procurement Data System-Next Generation

DOD Department of Defense

FAR Federal Acquisition Regulation

FFP Firm Fixed Price FOUO For Office Use Only

GAO Government Accountability Office

GFEBS General Fund Enterprise Business System

GFP Government Furnished Property

GS General Series

GSA General Services Administration

HIPAA Health Insurance Portability and Accountability Act

IDC Indirect Delivery Contract

IG Inspector General

KO Contracting Officer
KS Contracting Specialist

LH Labor Hour

MEDCOM Army Medical Command

MOCAS Mechanization of Contract Administration Services

MOS Military Operational Specialty

OFPP Office of Federal Procurement Policy

PADD Procurement Automated Data and Document PALT Procurement Administrative Lead Times

PCF Paperless Contracting File
PDS Procurement Data Standard
PD2 Procurement Desktop Defense

PGI Procedures, Guidance, and Information

PIEE Procurement Integrated Enterprise Environment

PII Personal Identifiable Information PMR Procurement Management Review

RHCO Regional Health Contracting Office

SOF Status of Funds

SPS Standard Procurement System STINFINS Standard Finance System

T&M Time and Material

UAC Unauthorized Commitments
ULO Unliquidated Obligations

USAHCA United States Army Health Contracting Activity

USC United States Code

VCE Virtual Contracting Enterprise

WAWF Wide Area Workflow

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I. INTRODUCTION

A. BACKGROUND

The Army Medical Command's (MEDCOM) contracting responsibility is so enormous that it cannot avoid overaged contracts. The United States Army Health Contracting Activity (USAHCA) is one of MEDCOM's subordinate commands. USAHCA is responsible for conducting most acquisition and contract administration for Army hospitals and clinics within the United States and European countries (USAHCA, 2022). USAHCA comprises four Regional Health Contracting Offices (RHCO): RHCO-Atlantic, RHCO-Central, RHCO-Pacific, and RHCO-Europe. Each regional office provides support to a designated geographic area of operation (USAHCA, 2022). USAHCA offers contracting support to approximately 67 medical facilities within those regions that support active-duty Soldiers, National Guard members, Reservists, retirees, their respective dependent populations, and training medical professionals (USAHCA, 2022). USAHCA's acquisition workforce does not specialize in one phase of the contract life cycle. They are operating in all phases of the contract life cycle; the acquisition community calls this action "cradle to grave." The term "cradle to grave" illustrates that the contracting specialist has actioned the contract from pre-award to closeout.

In the past, USAHCA has used initiatives to increase contracting specialists' motivation to close out more contracts. Initiative examples include giving employees paid time off, awards, and personal recognition in front of the entire organization. USAHCA also uses individual accountability through its annual objectives for minimum standards to be met. Lastly, USAHCA has outsourced closeout support operations to help with the overwhelming requirement of closeouts. Still, when comparing the number of awards USAHCA accomplishes to the number closed out each year, like most contracting agencies, the awards exceed the number of closeouts (VCE, 2022).

Closing out contracts physically or administratively is required once all contract terms are met, final payment is made to the contractor, and the deobligation of excess funds is completed (FAR, 2022). Each year, funding is left unexecuted due to contracts

not being closed in a timely manner. These funds could be repurposed to support the organization's mission.

B. PROBLEM STATEMENT

The government must defend itself for every taxpayer dollar used and how it's being used. Overaged contracts expose the government to liability risks. This exposure can be unobligated funds associated with the physically completed contracts, exposure to potential claims, increased indirect audit costs, or even improper reconciliation of government property. For example, deobligating Unliquidated Obligations (ULO) is the primary objective of a closeout. When ULOs are not appropriately actioned, there could be a variety of repercussions, such as invoices with errors, undelivered items, or services not performed. Not correctly closing out a contract can negatively impact the seller as well. When sellers are not getting paid, this could result in a claim or significantly infringe on the seller's cash flow.

Lastly, the long-term effects of not closing out contracts in the time allotted will increase the administrative burden on the contracting activity. The seller may or may not be in business anymore, or the government may not be capable of identifying the Government Furnished Property (GFP) because of a lack of communication with the contractor. Each year additional contracts continue to be added to the MEDCOM's portion of the Army's contracting database called the Virtual Contracting Enterprise (VCE) for contract administration and contract closeout. Even though current technology is advancing and the Army continues to make strides in cloud storage and better writing applications, elementary functions are still missing. These functions include but are not limited to contract management and strategic management of the contract cycle. Contract closeout is still a growing issue and a huge administrative burden in most organizations across MEDCOM.

C. PURPOSE

The purpose of this research is to examine the problems associated with the MEDCOM's contract closeout process, explain current applications and activities, evaluate the approach to closeout management, and compare it to the Federal Acquisition

Regulations' (FAR) closeout timeline requirements and GAO recommendations. This research analyzes the contract closeout process which is outlined in the FAR. Also, to compare current MEDCOM closeout procedures to the U.S. Government Accountability Office (GAO) audits and reports for recommendations for improving closeout rates. We will distribute a survey to USAHCA members on current closeout procedures, which will lead to recommendations for reducing overaged contracts and allow organizations to improve overall closeout rates.

Additional benefits of this research include optimizing performance in Army systems, engaging with leadership on strategies to improve contract closeout performance, and identify future best practices for contract closeouts. Helping leadership understand weaknesses or gaps in their organization better equips them to maximize performance.

D. RESEARCH QUESTIONS

The primary question we seek to answer is, "how can MEDCOM's contracting activities prepare and prioritize the number of contracts that are already overaged?" The secondary question is, "how to prevent a backlog of contracts requiring closeout requirements in the future?" The analysis will remain at the unclassified level and "For Office Use Only" (FOUO) to enable the inclusion of recent organizational and decision briefs highlighting the current standard operating procedures and contract statuses.

E. SCOPE

The scope of this study is centered on analyzing the federal regulations, GAO reports, audits, Inspector General (IG) reports, local policies, and USAHCA's contract closeout process. The analysis will include USAHCA's metrics for managing their contract closeouts. The research data will come from contracting professionals within USACHA, the organization's policies and guidelines regarding contract closeouts, and previous measures taken by USAHCA or data published on VCE. The data will provide context on the significance of the problem and why changes are necessary.

F. METHODOLOGY

This research uses the abductive qualitative research method with the approach of the auditability theory to analyze the contract closeout process. In qualitative research, the solution is offered by "following a chain of evidence," a process described in Yin's 2018 case study. It is also described as "focusing on the human experience through systematic and interactive approaches" (Jeanfreau & Jack, 2010, p 2). The abductive qualitative research model adjusts as new variables are introduced to illustrate multiple solutions to the same situation (Hühn, 1987). As Hühn describes, the research team will analyze the survey distributed to USAHCA to audit decisions that were made. In-person, telephonic, or virtual interviews will be conducted to provide insight into the concerns faced by contracting specialists, contracting officers, and contracting supervisors. The interviews aim to provide management's perspective on the ongoing issues of overaged contracts. This "process of systematically reviewing the decision and choices made during a qualitative study is called auditing" (Nair, 2021, p. 197). The auditability theory will be used to audit management decisions for current contract closeout processes within the USAHCA.

G. ORGANIZATION OF STUDY

This project analyzes the existing MEDCOM structure and its contract closeout procedures. Also, this project seeks to identify the factors causing the consistent backlog of overaged closeouts each fiscal year. Our research focuses on inconsistencies across the various USACHA organizations and training that impact closeouts. We will offer recommendations for organizational procedures to help improve closeout performance for each barrier or limitation. Our recommendations will be based on the review of current research conducted by government and government-sponsored private entities into the Department of Defense's (DOD) closeout process. This review will include peer-reviewed literature, practitioner literature, U.S. Army publications, manuals, and doctrines. Peer-reviewed and practitioner literature and Army-approved literature will consist primarily of government-requested studies into contract closeouts.

This report is organized into five chapters. Chapter I, the introduction, discusses background information surrounding the study while outlining the problem statement, the purpose of the thesis, the scope, methodology, and research questions. Chapter II covers the literature review, detailing the purpose and process of contract closeouts, how USAHCA manages closeouts, various tools and techniques available to aid in the completion of closeouts, and how the GAO has responded to problems surrounding contract closeouts. Chapter II compares how USAHCA handles closeouts with GAO recommendations.

Chapter III covers the perimeters around our research data. This chapter includes the rationale supporting the survey, the interview methods, and the goals and limitations of our research. Chapter IV examines results from both the survey and interviews. Chapter IV also addresses each research question. Lastly, chapter V contains conclusions and recommendations for USAHCA.

II. LITERATURE REVIEW

A. INTRODUCTION

The GAO reported in 2017 that there were three main reasons for delays in closing out contracts. First, agencies don't prioritize contract closeouts. Secondly, agencies do not have a centralized metric to manage and track progress, and lastly, the incurring of costs due to audit backlogs (GAO, 2017a). Despite these sounding easy to implement, agencies have difficulties applying the logic to the everyday operations involving contract administration. As a by-product effect, hundreds of millions of dollars each year are left un-executed due to contracts being physically completed but not administratively closed.

One of the many contract administrative functions in the post-award phase is contract closeout. Federal regulations and policies govern this task. First, under the Contract Management Body of Knowledge (CMBOK), chapter 8, the closeout procedures start with the award of the contract (National Contract Management Association, 2019). Second, per the Guidebook for the Acquisition of Services, the closeout procedures should begin at the execution phase during step six when the award is executed and will continue throughout step seven until the contract is complete. Lastly, FAR Part 4 contains contracting administrative and information matters. Requirements discussing closeouts are in FAR Subpart 4.804 (FAR, 2022). The closeout procedures should begin as soon as the contract is awarded but cannot be physically complete until the performance period has lapsed. Depending on the type of contract, various procedural and administrative duties have to be completed before changing the status to closed. These duties include returning or disposing of any government furnished property, resolving any claims or pending issues, obtaining final patent and royalty reports, deobligating excess funding, and creating and signing a formal notice of contract completion. The amount of administrative responsibility for contracting activities continues to increase with the lack of oversight of regulatory requirements.

This chapter provides a literature review of contract closeout requirements, standards, and procedures. The literature review begins with an overview of contract closeouts, including key definitions, allowable time limits for closeouts, and the steps of the closeout process while identifying critical participants in the process and the training and educational requirements needed by the contracting professionals certifying the contract closeout process. The literature then uses GAO and IG reports to identify management gaps within DOD contracting organizations. These reports highlight areas of weakness in the contract closeout process and discuss the significance of completing contract closeouts within the required timelines. This chapter also examines the tools needed to navigate the financial and contracting systems related to closeouts. The last section discusses the Army MEDCOM subordinate command USAHCA, covering organizational structure, mission, roles and responsibilities, and management of the closeout process while completing an analysis of closeout factors for not meeting the allowable time limits.

B. OVERVIEW OF THE CONTRACT CLOSEOUT PROCESS

The FAR is the primary source of guidelines that all federal entities must follow if they use government funding to source services or supplies (FAR, 2022). The FAR is governed by the Office of the Law Revision Counsel of the United States House of Representatives. United States Code (USC) Title 41 covers laws related to public contracts, and ramifications of violations of any of the public laws in Title 41 section 6705 (U.S. House of Representatives, n.d.). FAR Part 4 contains contracting administrative and information matters. Requirements discussing closeouts are in FAR Subpart 4.804.

Contract closeouts fall within the post-award life cycle phase of contract management. Contract closeout is a step within contract administration that occurs when all of the terms of a contract have been met and both the contractor and customer agree that all financial obligations have been cleared. To initiate the closing of a contract, both the buyer and seller must agree that all terms and conditions of the agreement have been

fulfilled, the contractor's performance evaluated, the documents within the contract reconciled, and final payments made to the contractor (FAR, 2022).

Key terms related to contract closeouts include physically complete, administrative closeout, overaged contract, automated contract closeouts, and manual contract closeouts. A contract is considered physically complete when a contractor has delivered all supplies or performed all required services. Also, the government must have accepted these supplies and services. Additionally, if the government has not issued a notice of termination, then all provisions and options year must have lapsed before closeout (Department of Defense [DOD], 2019). An administrative closeout occurs once evidence is provided to the Contracting Officer (KO) illustrating that a contract is physically complete (DOD, 2019). Administratively, all documentation needs to be included in the contract file for proper record storage and a contract completion statement needs to be completed. These administrative tasks must be completed before the KO approves the contract for closure (DOD, 2019).

There are two types of closeout methods: automated contract closeouts, where a system is permitted to initiate and execute a closeout without action from the contracting officer responsible for the contract and then there are manual contract closeouts, where the contracting specialist (KS) responsible for the contract administration of the contract begins to examine the requirements of the contract and review the current status of funds upon receiving notice of physical completion of the contract (Defense Contract Management Agency [DCMA], 2019). The KS then documents the acceptable completion of the tasks required for a closeout before submitting the contract for closeout to the KO (DOD, 2019). When a contract is physically complete but has exceeded the time allotted by the FAR for closeout, the contract is considered overaged (DCMA, 2019).

The closeout process should begin as soon as possible once the contract is physically complete. Depending on the type of contract, various procedural and administrative duties must be completed by the contract administration office before changing the status to closed. These duties include returning or disposing of any buyer furnished property, resolving any claims or pending issues, obtaining final patent and

royalty reports, de-obligate excess funding, and creating and signing a formal notice of contract completion (FAR, 2022). Once the contracting officer (KO) confirms the final payment and has proof of the delivery of property the contract can be considered closed if the method of procurement was simplified acquisition procedures (SAP) (FAR, 2022).

1. Participants in the Contract Closeout Process

Successful completion of contract closeouts requires participation from multiple people involved in the procurement of a supply or service. The contractor represents the person or company that undertakes a contract to provide a supply or service to the government. The contractor is responsible for meeting the terms and conditions of the contract, submitting a final invoice, and providing confirmation once all debts are cleared. The Contracting Officers Representative (COR), the person designated and appointed in writing by the KO to complete administrative tasks related to the contract and to ensure the contractor meets the commitment of the contract, is responsible for organizing and completing the documents necessary for closeouts in conjunction with the customer (DCMA, 2019). The budget analyst assists in administering the total budget program primarily utilizing the General Fund Enterprise Business System (GFEBS) and is responsible for verifying the status of funds obligated to contract requirements. The only person with the "authority to enter into, administer, and terminate contracts" is the KO (DOD, 2022; FAR Part 1.602-1). The KO signs off once all contract closeout requirements are met (DCMA, 2019).

2. Allowable Time Limits for Contract Closeout

Timely and proper closeouts ensure that all invoices are paid, reduce the risks of losing funds to interest payments, lower the number of open contract files needing management, and ensure that contract files are in accordance with FAR guidelines. Table 1 shows, following FAR PART 4.804-1, addresses Firm Fixed type contracts and cost type contracts. Also, addresses types of agreements, Time and Material (T&M) and Labor hour type contracts (FAR, 2022). As illustrated in the chart the more complex the contract types the more time allotted for the closeout. Purchase orders are not addressed in the chart but once the final shipment has been administered contracting officials have

three months to close out the contract (DCMA, 2019). Once contracting officials have lapsed the allotted timeframes in Table 1 the contracts are considered overaged (DCMA, 2019).

Table 1. Allowable Time Limits for Contract Closeout Source: FAR (2022).

Timeframes	Contract Type
3 Months	Fixed Price-unilateral
6 Months	Firm Fixed Price
20 Months	Fixed Price Redetermination Fixed Price w/ Economic Price Adjustment Basic Ordering Agreement Blanket Purchase Agreement Indefinite Delivery Labor Hour
36 Months	Fixed Price Incentive Cost-Plus Award Fee Cost Contract Cost Sharing Cost Plus Fixed Fee Cost Plus Incentive Fee Time and Materials

Meeting the timelines established by the FAR for closing out contracts is crucial because it ensures that contractors and the government are compliant with public laws, funding is settled and allows time to prepare for government audits. Settling funds is necessary for the government because delays in settling claims or finishing the closeout process can result in losing funds. Appropriated funds have a lifespan of five years. Contractors' fund settlement is vital for verifying that they are paid in full for all services or supplies. Additionally, if an award has clause 52.215-2 in the contract it means "The Contractor shall make available at its office at all reasonable times the records, materials, and other evidence... for examination, audit, or reproduction, until three years after final payment under this contract or for any shorter period specified" (FAR, 2022). The

amount of time the government can require a contractor to retain documents for an audit cannot begin until a contract is officially closed.

3. The Steps for the Contract Closeout Process

Once the contract administration office can confirm that a contract is physically complete, they are responsible for initiating an administrative closeout. The actions required for proper contract closeout depend on the type and if specific clauses are present within the award. The contract closeout process is not linear. Many of the tasks involved depend on the type of contract awarded, require communication between the various participants, and can occur concurrently.

When initiating an administrative closeout, the first step is to ensure the proper disposition of any classified material (FAR, 2022). The contracting officer will use a DD 254 if a contract or purchase order is "classified or requires the handling of classified material," (DCMA, 2019, p. 25). Form DD 254 outlines certain security requirements to contractors and subcontractors to adhere by throughout the duration of the performance period (DCMA, 2019).

Once the disposition of classified materials is complete, the following actions need to occur. These actions can occur simultaneously:

- 1. Final royalty report is cleared
- 2. There is no outstanding value engineering change proposal;
- 3. Plant clearance report is received;
- 4. Property clearance is received;
- 5. All interim or disallowed costs are settled;
- 6. Price revision is completed;
- 7. Subcontracts are settled by the prime contractor;
- 8. Prior year indirect cost rates are settled;
- 9. Termination docket is completed;
- 10. Contract audit is completed;
- 11. Contractor's closing statement is completed;
- 12. Contract's final invoice has been submitted; and
- 13. 13. Contract funds review is completed and excess funds deobligated (FAR, 2022.)

For contracts requiring royalty payments to the government contractor, the KO must ensure that all royalties have been paid (DCMA, 2019). If a contract has FAR

clause 52.227-9, then royalty payment must be confirmed by the government (DCMA, 2019).

In accordance with FAR 52.227-11, FAR 52.227-13, or Defense Federal Acquisition Regulation Supplement (DFARS) 252.227-7039, if the government owns the patent, the contractor is required within three months of the physical completion of the contract to file a DD form 882 called Report of Inventions and Subcontracts (FAR, 2022) to the KO. This requirement only pertains to contracts that have the required patient right clause associated with the contract.

When FAR clause 52.245-1 is assigned to a contract for government furnished property a plant clearance report is required prior to the award (FAR, 2022). A Plant Clearance Officer is the KO's authorized representative, responsible for "screening, redistributing, and disposing of contractor inventory" excess to government contracts (FAR, 2022, FAR Part 2). Standard form 1428 is used when reporting the inventory status of the government-furnished property (FAR, 2022).

On the list of required tasks to close a contract are a set of final financial actions that need to occur while administratively closing out contracts: settling all provisional or disallowed costs, verifying price alterations, closing out subcontracts, settling prior year indirect cost rates, completing a contract audit, verifying final invoices, and deobligating any excess funding (DCMA, 2019). These tasks help ensure that the government is no longer financially liable for contracted goods and services. During the pre-award phase of contract administration, funding is assigned to a requirement. The exact amount needed is not always known before the execution of the award. In some cases, obligated funds are not needed because of a variance in the amount of a service or supply required. Examples of contracts that have an estimated number of services required include maintenance and repair contracts (DOD, 2019). When a contract possesses more funds than needed, the remaining funds must be deobligated. Flexibly priced contract types require "the settlement of final overhead rates and incentives" (DOD, 2019, p. 12). Issuing the final payment covering final overhead rates with DOD contractors has the potential to be a lengthy process. The KO should perform an initial review of the award and deobligate excess funding at the time of the physical completion of the contract (DOD, 2019). While

de-obligating funding, it is essential to avoid deobligating funds that could be needed for final payment (DOD, 2019). The KO is also responsible for retaining confirmation that funding paid equates to the final overhead pay adjustments, which will be examined for excess funds during future excess funds review (DOD, 2019).

Once the contract administrator has verified that all administrative actions for closeout are complete, they must generate a contract completion statement. The contract completion statement serves as the last step within the contract life cycle. Requirements for the statement include details about the contract administration office, the contractor, the contract and any modification numbers, the dollar amount paid to the contractor, final invoice information, and a statement that all required contract conditions and terms have been fully met (FAR, 2022). The contracting officer will ensure the signed completion statement is filed with the award file. DD Form 1594, contract completion statement, is the Defense Federal Acquisition Regulation Supplement (DFARS) authorized electronic form of the contract completion statement. The contract administration office uses the form to inform the KO of the final payment and the physical completion and closure of the contract file. The DD 1594 itself is the basis for the KO to close out the contract (DOD, 2019).

4. Accelerating the Closeout Process

Contract closeouts are traditionally completed using the administrative process previously addressed. Alternate methods such as automated closeouts, quick closeouts, and early closeouts are all techniques that can be used to expedite the process and prevent aging funds from expiring (DCMA, 2019).

Automated closeouts are permitted for certain firm fixed-priced contracts that do not exceed \$500,000 in value (FAR, 2022). Automatically closing out contracts removes the responsibility of initiating and executing the closeout steps from the KO and allows a Mechanization of Contract Administration Services (MOCAS) system to perform the closeout (DCMA, 2019).

In accordance with FAR 42.708 contracting officers can use the quick closeout (QCO) process while waiting on a determination on the final indirect cost rates (DCMA,

2019). It is recommended by the DMCA manual that contracting officers use quick closeouts as much as possible to prevent further delays. "The determinations of final indirect costs under quick closeout procedures are final for the covered contracts, and adjustments are made to other contracts for over or under recoveries of costs allocated or allocable to the contracts covered by the advance agreement," (DCMA, 2019, p. 41). If a delivery order requires an indirect rate settlement determination within an Indefinite Delivery Contract (IDC) then the contracting officer is authorized to use early closeout procedures to avoid canceling funds and overage contracts (DMCA, 2019). IDCs are unique because the task orders built into the IDC are not individual contracts and therefore can be used in the QCO procedure in accordance with FAR 42.708 (DMCA, 2019. Additionally, FAR 52.232-7 identifies T&M and LH contracts as eligible for early closeout as well (DCMA, 2019).

5. Personnel and Training Requirements

To create solutions for reducing the number of overaged contracts within MEDCOM, it is important to understand who is qualified to complete the closeouts. To work as a government contracting professional, a civilian must work in the General Series (GS) 1102, and an Army service member, must work in the Acquisition Corp as a FA51C or in the Medical Service Corp as a 70K8X (officers) or 68J (enlisted). The GS-1102 series includes positions that involve the procurement or purchasing of supplies, services, construction, or research and development using the administration or termination and closeout of contracts. To serve as a GS-1102, the contracting specialists must understand the legislation and protocols used in contracting along with familiarity with business and industry practices, sources of supply, cost factors, and requirements characteristics (Office of Personnel and Management [OPM], n.d.a).

Service members must complete the Army Acquisitions Professional Course (AAPC) before performing contract administration or serving as a supervisor to a contracting organization. Prerequisites to attend AAPC require commissioned officers to be a Captain (O3) or above and have been assessed into the U.S. Army Acquisition Corps with a functional area code of 51(OPM, n.d.a). The officer had to have successfully

completed their advanced course. Additionally, a baccalaureate degree or higher is required or 24 business-related credit hours. Non-Commissioned Officers must have been assessed into the 51C Military Operational Specialty (MOS) and promoted as a Sergeant (E5) or above (OPM, n.d.b).

Soldiers within the Army Acquisition Corps are not appropriately trained to procure medical service or supplies. To address the capability gap, health service materiel officers Area of Concentration AOC (70K) and medical logistic specialists (68J) within the Army medical service corps are permitted to attend AAPC (OPM, n.d.b).

The DOD is required to inaugurate and enforce education and training standards for both civilian and military acquisition professionals (DAU, n.d.). In 1996, the Clinger-Cohen Act stipulated those requirements established by the Office of Federal Procurement Policy (OFPP) and the Defense Acquisition Workforce Improvement Act (DAWIA) are to be equivalent for the contracting professional for the government (DAU, n.d.). DAWIA was initially enacted by Public Law 101-510 on November 5, 1990. Congress intended for DAWIA to "improve the effectiveness of the personnel who manage and implement defense acquisition programs," (DAU, n.d.). The implementation of DAWIA resulted in the institution of the Defense Acquisition University (DAU). Acquisition professionals employed by the government are required to meet DAWIA certification levels to perform their duties (DAU, n.d.). DAU provides both physical and distance learning in 14 different career fields (DAU, n.d.).

The standards for obtaining DAWIA certification for defense contracting professionals include a virtual training curriculum, job experience, and a comprehensive assessment. To maintain certification, 80 hours of continuous learning must be completed every two years (DODI 5000.66). The courses required are Contract Foundational Skills, Contract Pre-award, Contract Award, and Contract Post-award (DAU, n.d.). The minimum experience needed is twelve months of full-time work where the contracting competencies are applied. After completing the required online training and minimum hands-on experience, contracting professionals are required to pass a comprehensive assessment. An application is then submitted to the review board by the contracting professional for contracting certification (DAU, n.d.).

The AAPC curriculum is tailored to adhere to the specific DAWIA education program for acquisition professionals within contracting and program management career fields (DAU, n.d.). The DAU training required for DAWIA certification includes lessons pertaining to contract closeouts. There isn't a specific certification that GS 1102s or Army acquisition professionals need in order to perform contract administration or obligate government funding. Additionally, there isn't a requirement to receive refresher training specific to contract closeouts post-certification (DAU, n.d.).

6. Summary

Despite extensive personnel and training requirements and a clearly defined contract closeout process, completing contract closeouts is a vital step within contract administration that is often overlooked by contracting leadership. The DOD has systems that provide key participants in the closeout process with the training needed to fully understand the importance of completing contract closeouts and multiple methods to achieve the standard.

C. GOVERNMENT REPORTS, AUDITS, AND RECOMMENDATIONS

Having an excess of overaged contracts has been an ongoing problem spanning over the last four decades for the DOD. The following reports provide a chronological overview of contract closeouts issues that have been identified in recent years.

1. GAO B-245856.7

The need to accelerate the completion of contract closeouts stems from issues identified in the 1980s (GAO, 1992). There are two issues addressed in GAO Report B-245856.7. The first is that current year funds were potentially being used to fund expired, over obligated accounts, and the second is the need to boost enforcement of the Antideficiency Act. The Antideficiency Act requires that the over obligated funds of prior year appropriations are reported to Congress (GAO, 1992). Traditionally, the funding remaining on physically completed contracts that was not deobligated was combined in a slush account. By contrast, over obligated contracts were merged into "M"

accounts. Using funds from a slush account to cover requirements in "M" accounts increased the likelihood that funds were not being used as intended.

In 1990, Public Law 101-510 passed, phasing out the use of "M" accounts and ruling that unobligated funds will expire five years after the budget authority expires (GAO, 1992). The enactment of Public Law 101-510, in combination with the Antideficiency Act, reduced the amount of funding available to agencies to meet their requirements, creating a need to make contract closeouts a priority and for closeouts to be conducted promptly. Once funds are deobligated and a contract is closed, the unexecuted funds can be reallocated for a new requirement.

2. GAO 11-891

The completion of contract closeouts in a timely manner continued to be an issue throughout the conflict in Iraq. Between 2002 and 2011, the DOD obligated close to \$170 billion on contracts to support Iraq and Afghanistan's reconstruction and stabilization efforts (GAO, 2011). Numerous contracts were awarded manually and tracked on independent spreadsheets during this era. This method resulted in a high rate of administrative error, including duplicate contract numbers and incorrect period of performance dates. Additionally, there was no standard across regional contracting offices on how to manage contracts, so there wasn't a clear picture of how many contracts had been awarded, the dollar amounts obligated, or contracts pending closing across the battlefield at a given moment (GAO, 2011).

In 2007, the Gansler Commission investigated the contracting crisis surrounding contingency operations in Iraq. The investigation identified that, at the time, only five percent of eligible contracts had been closed. As a result, the Army created a Contract Closeout Task Force Office to resolve the problem. Due to high levels of inaccuracy in the contracting data, the task force could not control the situation. The task was reassigned to the Army Contracting Command-Rock Island (ACC-RI) (GAO, 2011). Once ACC-RI took over, they began using the Standard Procurement System (SPS) to control data management better. Although information management improved and the DOD had a better understanding of the overall problem, the ACC-RI continued to

struggle with staffing enough personnel, which slowed closing out contracts. Once ACC-RI could secure the personnel required to conduct closeout, the Army reported having over 99% of the Iraq and Afghanistan Contracts that required closing closed by June of 2015. Supplementary recommendations made in this GAO report to help reduce the number of contracts requiring closeout include revising the DOD's contingency contracting doctrine and requiring that senior contracting officials monitor and access the progress of contract closeout activities throughout the contingency operation (GAO, 2011).

3. GAO 13-131

The DOD made progress on contract closeouts after the 2011 report, but the improvements were not fast enough to mitigate risks associated with overaged contracts such as interest payments increasing on pending payments to contractors (GAO, 2012). The Defense Contract Audit Agency (DCAA) attempted to remedy this issue by increasing the threshold that automatically requires an audit from \$15 million to \$250 million. This action would reduce the time required to close out lower-risk awards (GAO, 2012).

The Defense Contract Management Agency (DCMA) is tasked with conducting contract administration services for the DOD but is hindered by not being able to identify which contracts are ready for action from the various branches of service. GAO report 13-131 discusses how DCMA established performance metrics to help local offices meet closeout goals and recommended the use of quick closeout procedures when applicable to expedite contract closeouts (GAO, 2012).

4. GAO 17-738

The last report discussed DCAA adjusting the dollar threshold amount requiring audits to increase the rate at which closeouts were conducted. GAO Report 17-738 states that DCAA needs to reduce its time to initiate audits. Between 2011 and 2016 it took on average 1,002 days to complete an incurred cost audit (GAO, 2017a). These delays contribute to the backlog of flexibly priced contracts requiring closeouts while increasing the financial risks the government is exposed to (GAO, 2017a).

In 2015, the GAO conducted a review of five federal agencies to determine if they were effectively handling contract closeouts. The agencies analyzed were the DOD, Department of Human and Health Services, Department of Homeland Security, Department of Justice, and the Department of State. The investigation into these agencies highlighted the importance of having a method available to consolidate information as it pertains to contracts that qualify for closeout (GAO, 2017a). Having information that is easily accessible makes creating goals to lower the contract closeout workload easier. Another key factor to reducing the closeout metric for the government includes having a way to measure progress in achieving contract closeout goals (GAO, 2017a).

5. GAO 17-457

Good leadership can only do so much; valid information is vital to making decisions that positively impact the organization and reduce the overall risk associated with contract management. The GAO conducted research to determine how Army leaders have assessed the effectiveness and efficiency of contract operations within their organizations (GAO, 2017b). Over the past few decades, Army leaders have been making changes aimed at improving the support to field operations, supporting small businesses, and improving overall contract administration. GAO found that these changes were being made prior to organizations creating metrics and standards to measure if these changes resulted in a positive change (GAO, 2017b).

For leaders to obtain information needed to improve contract operations, GAO recommends establishing metrics that can be reviewed routinely, creating measurable objectives, and identifying an effective way to collect and report data. By adhering to these recommendations, leaders can implement change that limits confusion for employees, create clear direction, and properly assess whether the changes are warranted (GAO, 2017b).

6. Office of Inspector General (OIG) 18-5

The GAO addressed that they have made strides into improving contract closeout controls. Past recommendations that were highly successful in reducing the closeout backlog include having staff assigned specifically to complete backlogged closeouts and

improving management supervision in combination with monitoring through periodic backlog contract closeout status reports (OIG, 2018).

Additional actions recommended that the GAO take to continue making progress on reducing the closeout backlog by recording accurate contract types in the current procurement system and utilizing complete checklists (OIG, 2018). Correctly identifying contract types is important because each contract type has different steps for completing the closing while having an updated contract closeout checklist will ensure all contracting specialists are aware of standard operating protocols (OIG, 2018).

7. Summary

Over the years, the government has identified many issues surrounding contract closeouts and provided recommendations to improve the overall status of overaged contracts. The passing of public law 101-510 in 1990 created precedence for contract closeouts to be taken more seriously. Around the time public law 101-510 was enacted, it became evident that the government needed to place more emphasis on contracts postaward to ensure funds were used as intended. Factors that contribute to an influx of overaged contracts are insufficient workforce populations and a lack of supervisory emphasis on the closeout process. Without enough people to conduct contract administration or emphasis from leadership, closeouts cannot occur at an effective rate.

Accurate and timely information is vital in the contract closeout process. The more accessible awards are to contracting professionals that are ready for closeout or already in the closeout process, the more likely it is that those contracts will close within the required timeframe. Additionally, if the different military branches could synchronize how contracts that are eligible for closeout are referenced and the metrics used for tracking closeouts, the government would better understand its current level of financial risk and future budgetary requirements.

D. CLOSEOUT TOOLS AND TECHNIQUES

1. Introduction

This section of the research reviews all the systems and applications required by government agencies for contract closeout. Although government contracting agencies support different customers, the methods or approaches used to verify the contract closeout will differ but yield the same results. The FAR does not dictate how to close out a contract; it only states the areas the contract administrating office must address and the allowable time requirements. This chapter also walks through the electronic applications needed for contracting officers to physically and administratively close a contract.

Technology is advancing each year, but a common challenge that contracting activities face is managing resource management systems, contract applications, and industry platforms to officially close a contract. The contracting specialist must become an expert in all platforms to effectively close a contract.

2. Contract Closeout Applications and Systems

Resource management personnel and contracting personnel must be intimately involved in each other's areas of expertise for successful closeout operations. Per Field Manual (FM) 1-06, Financial Management Operations, obligating funds is a legally binding action between the buyer and the seller. Closeout support operations start when the contract is awarded (National Contract Management Association, 2019). Figure 1 the stages of a transaction and Figure 2 Procurement Support will illustrate the flow of funding, understanding of flow, and the status of funding, for each contract. This understanding will guide the contracting specialist to know what actions are required by the end of the performance period.

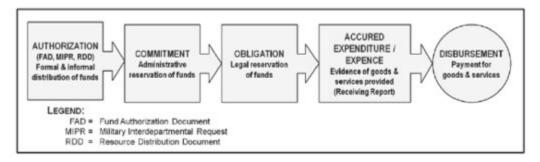


Figure 1. Stages of Transaction. Source Department of the Army (2014).

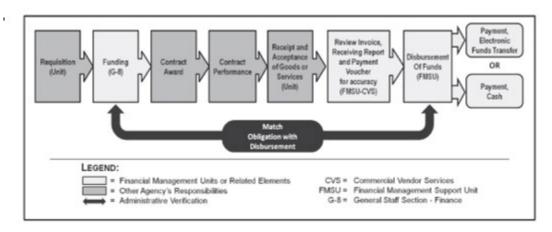


Figure 2. Procurement Support. Source: Department of the Army (2014).

The Army's primary financial system is called the General Fund Enterprise Business System (GFEBS). With the execution of an award, we are already in the obligation stage of the resource management system according to Figure 1. GFEBS replaced the Standard Finance System (STINFINS) (Department of the Army, 2014). GFEBS gives the Army the ability to link financial accounting, fund control, cost management information, and logistics. Figure 3 depicts GFEBS as the first step for generating contract support. For contracting specialists, GFEBS is also the first step in contract closeout operations to verify excess funds, commonly referred to as gaining the Status of Funds (SOF) for the contract.

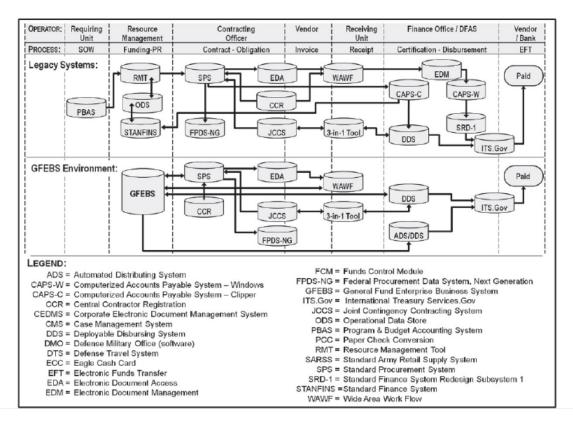


Figure 3. Financial Management Information Systems (FMIS). Source: Department of the Army (2014).

To address the complexities of communicating with the commercial industry, the government made technological efforts to standardize methods and interactions. The Electronic Document Access (EDA) was established through the Business Transformation Agency (BTA) sourcing programs (PIEE, n.d.), also known as the Procurement Integrated Enterprise Environment (PIEE). The communication and flow of information can be followed using Figure 4 called PIEE. The EDA module, located in PIEE, is used by contracting specialists and vendors to locate any contract and report on eligible contracts for closeout. The web-based EDA system can provide Defense Finance Accounting Services (DFAS) transactions, vouchers, retrieval of contracts, and much more.

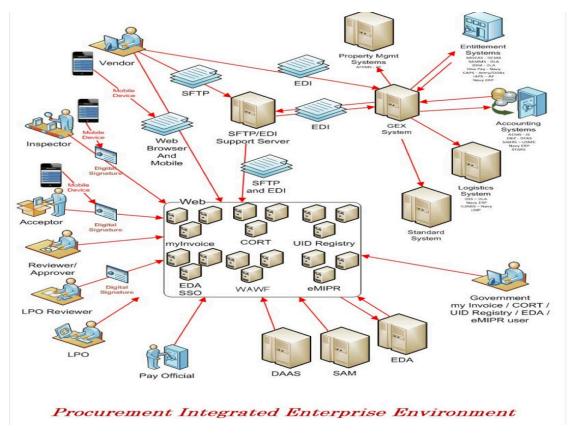


Figure 4. PIEE Process Map Source: PIEE (n.d.).

The EDA system communicates with WideArea WorkFlow (WAWF) because they are under the umbrella of PIEE. WAWF, another module in PIEE, is the required system for vendors to submit their electronic payments for their goods and services. The Federal Registry made invoicing, receipt, and acceptance mandatory for vendors in WAWF in March of 2003 (DLA, n.d.). WAWF also communicates with DFAS for the government to pay the vender for their services. DFAS was established in 1991. DFAS functions in many areas, but the main areas are payrolls, bill payments, and military services (Keating et al., 2001). DFAS is the entity that writes checks for each contractor that conducts business with the government. PIEE has other applications within the system called my-invoice and other data points ranging from pre-award tasks to contract closeout administration. Although the systems will help the contracting specialist verify funding and the type of closeout operation required, the contracting specialist must

understand all the required systems for the vender to ensure invoicing and payments are correct.

The contracting specialist must also perform the administrative details associated with the contract closeout forms in a SPS or commonly referred as a contract writing system. The SPS is used by the DOD acquisition community. For most agencies, the closeout operations will start in either the Procurement Automated Data and Document (PADD) system or Procurement Desktop Defense (PD2).

The Army uses two main systems to write contracts. The procurement writing system that has been around the longest is PADD. PADD has been around for over 40 years (Suits, 2019). The second system is called PD2, which the acquisition community has used for the past 23 years (Suits, 2019). Both systems communicate with PIEE but only through the EDA and WAWF modules. The Army will replace both writing systems, PD2 & PADD, with the Army Contracting Writing System (ACSW). An ACSW pilot started in 2020 for integration in all contract activities (Suits, 2019). Currently, if there are unpaid services or modifications needed PD2 or PADD is used until ACSW is fully integrated.

For contracting specialists to start the closeouts in one of the systems mentioned, they will need acknowledgment from the contractor that no more funds are owed, the invoices and receiving report are available and placed in the Paperless Contracting File (PCF). PCF is a government storage system that was established in 2015 for all contracting agencies to store all required contract files for the life of the contract (VCE, 2022). PIEE communicates with some of the writing systems within the SPS (PIEE, n.d.). Another way of using PIEE for administering closeouts is using the module called automatic contract closeout (CCO). This system is an automated system that initiates and executes the contract closeout process to improve auditability and timely recovery of excess funds. In 2015, Mrs. Claire Grady, the Director of Defense Procurement and Acquisition Policy, published her recommendation for using the automatic contract closeout module to execute an automatic contract closeout completion notice (Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics, 2015). The recommendation also mentioned that the requirement to use the module was the contract

has to be in the procurement data standard (PDS) (Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics, 2015). The PDS "defines the minimum requirements for contract writing system output," both systems, PD2 and PADD must pass PDS approvals to award a contract (Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics, 2015). Therefore, contract activities that are using these writing systems could be able to use the automatic contract closeout system.

When a contract is created, an associated Contract Action Report (CAR) is required. According to FAR Part 4.601, 4.603, and the Federal Funding Accountability and Transparency Act requires the U.S. government to make every federal award public and all CARs must be posted in the Federal Procurement Data System (FPDS). The latest version of FPDS is called Federal Procurement Data System Next Generation (FPDS-NG). FPDS-NG generates the document called a CAR for the final award, and a CAR must be generated for each modification of the contract. Moreover, the family of CARs must be closed before the contract can be considered administratively closed. The closeout module in PIEE sends information to EDA and FPDS-NG so that the CAR is closed out as well. On the other hand, if the contracting agency uses PD2 as their system for writing and executing contracts, then that activity will need to close out the respective CARs in FPDS-NG individually.

Beyond the procurement writing system, PIEE can be used for the reconciliation of GFP, vendor payments, and retrieving invoices for the closeout process all pertaining to closeouts. For a reconciliation of GFP, the contracting officer should have made an attachment per Airforce Procedures, Guidance, and Information (PGI) 5345 for accountability. This attachment must be reviewed and approved within the GFP module in PIEE. For payments and invoicing, contract activities are only allowed to accept electronic forms of payment submissions within the WAWF module. The WAWF module is also in PIEE. The DFARS policy 232.7002 requires contractors to submit payments and invoices electronically through the WAWF module.

Although closeouts are fairly simple in understanding the elements needed to be completed, the variety of systems and the time required for each closeout can be timeconsuming. Some contracting activities have invested in outsourcing contract closeout support operations.

3. Outsourcing

Contracting organizations across Army Contracting Command (ACC), Marines, Navy, and Air Force have outsourced closeout support operations for many years (SAM, 2022). Reviewing notices in sam.gov, filtering only for ACC, the primary provider for closeout support is the committee for Purchase from People Who Are Blind or Severely Disabled, also known as The National Industry for the Blind (SAM, 2022). Outsourcing for ACC has been a trend since 2009, if not earlier (SAM, 2022). Since the vendor being used is a mandatory source by the FAR 8.002(a)(2) and Subpart 8.7 and is found in the U.S. General Services Administration (GSA) catalog, the competition is little to none. According to the notices placed in SAM.gov, the support given would be closeouts assigned under the umbrella that would cover FFP contracts only, the contract is not assigned to DCMA, and is considered overage by the contracting agency (SAM, 2022).

4. Summary

This section has reviewed the most used business systems, resource management systems, and procurement systems needed to close out contracts. As technology continues to develop and update, this may not be a complete listing.

E. MANAGEMENT OF CONTRACT CLOSEOUTS WITHIN UNITED STATES ARMY HEALTH CONTRACTING AGENCY (USAHCA)

1. Introduction

Gansler Commission report in 2007 was pivotal in exposing the gaps within the acquisition community. The Gansler Commission outlined four areas that needed improvement for the acquisition workforce.

(1) Increased stature, quantity, and career development for contracting personnel -- both military and civilian, particularly for expeditionary operations; (2) Restructure of the organization and responsibility to facilitate contracting and contract management; (3) Provide training and tools for overall contracting activities in expeditionary operations; and (4)

Obtain legislative, regulatory, and policy assistance to enable contracting effectiveness, important in expeditionary operations. (McMahon & Sheftick, 2007, paragraph 5)

Although this report isn't exclusively on contract closeouts, this report was an important step toward developing a system to track progress. In the report, Dr. Gansler mentioned that the workload for contracting officers had increased more than seven-fold (The Army Lawyer, 2008). He also alluded that with the increasing gross negligence of little oversight in acquisition, the future for government contracting is bleak (The Army Lawyer, 2008). The Army's main source for contract administration data collection is the VCE and the background information, on the website, explains that the Gansler Commission findings were the keys to creating the Army's Contracting Enterprise (ACE) within VCE (Virtual Contracting Enterprise, 2022).

The reason these issues were highlighted in the Gansler report was since the Army had no digital way of analyzing contract administration effectively. Therefore, the following systems were created within the VCE database: The PCF, Acquisition Source Selection Interactive Support Tool (ASSIST), Business Intelligence (BI), dashboards, VCE-Forms, Procurement Management Review (PMR) Assistant, VCE Manpower and Staffing, and VCE-Warrants wasn't established until 2015 (Virtual Contracting Enterprise (VCE), 2022. Once PCF was established, the data obtained in PCF, along with data from the dashboards in VCE are linked to the ACE dashboard for analysis and tracking. The ACE dashboard can show all Army contracting agencies their contract data, ranging from pre-award statistics to post-award actions (VCE, 2022). To understand activities' difficulties with delays in contract closeouts, we need to analyze an individual contracting agency and their contract closeout process. The next sub-chapter analyzes USAHCA's closeout process and how management tracks progress.

2. The Headquarters Organization

USAHCA is the subordinate command to MEDCOM for acquisition. USAHCA conducts medical acquisitions for most Army hospitals and clinics around the United States and in European countries (USAHCA, n.d.). The USAHCA organization is authorized 261 employees but has 248 employees currently assigned. USAHCA's

operational area comprises four regional offices: Atlantic, Central, Pacific, and Europe (USAHCA, n.d.). Within those regions, USAHCA supports 67 medical facilities that support active duty Soldiers, National Guard, Reservists, retirees, dependent populations, and training medical professionals (USAHCA, n.d.). Since services are provided worldwide, USAHCA continues to gain overaged contracts each year.

3. Mission and Roles

According to the USAHCA website, its vision is "Dynamic and Influential Partner in Army Medicine," and its mission statement is "The USAHCA enables Army readiness through responsive accountable, and flexible medical contract support and business solutions," (USAHCA, n.d.). USAHCA's role within the MEDCOM's operational area is to support each hospital or clinic with all the required acquisitions to meet Joint Commission requirements and a safe work environment. These services range from the maintenance of buildings and equipment to the doctors for patient care. USAHCA also has the mission to send uniformed personnel to humanitarian missions when tasked by MEDCOM for acquisition support.

4. Management of Contract Closeout Process

The management and tracking mechanism of individual agencies can vary even though they follow both the federal regulation and policies of their department. The department of the Army has created VCE to advance its ability to analyze data. Within VCE is ACE for Army associated units to track predicted obligations, current contract administration, and future and past data for contract closeouts. USAHCA uses ACE to track contracts that are eligible for closeout. Contracts are considered "overage" and "eligible" for closeout as soon as their period of performance has ended. Managers can also create a report to know which contracts will become overage within 30, 90, and 180 days. USAHCA creates these reports each week and sends them to the branch chiefs of each region for the regional branch chiefs to set priorities.

Overall, this is one way of instructing or managing the branch chiefs on the workload, but there isn't an approach for feedback or measuring progress. This, in turn, puts contract closeouts at an even lower priority because there is no visibility of progress.

When reviewing the federal regulations and policies governing contracting, not all the above systems are required. For example, the Army Federal Acquisition Regulation Supplement (AFARS) subpart 5104.8(f) for government contract files states that "Contracting officers shall utilize the VCE tools throughout the acquisition process" but also states that contracting officers shall use "PCF module to store, access, and route documents necessary to manage the acquisition process for review and approval," (FAR, 2022). There is a disclaimer about the official system of record because the contract could be stored in PIEE, but not both. In DFARS 204.270-1, the policy states that EDA, which is in PIEE, is the "DOD's primary tool for electronic distribution of contract documents and contract data," (FAR, 2022). The exception to this regulation is if the contract is too sensitive for widespread distribution. Examples include Personal Identifiable Information (PII), Privacy Act, Health Insurance Portability and Accountability Act (HIPAA), or documents that cannot be converted to electronic format. To summarize, the regulations state the acquisition community must manage contract data in VCE, store data in PCF, but also distribute contracts in EDA (FAR, 2022). Although it doesn't say what writing system is the correct one to use.

5. Analysis of Late Contract Closeout Factors and Metrics

The VCE captures data for closed contracts and eligible contracts for closeouts. To analyze USAHCA's operations closer, the time frame chosen is from January 1, 2021, through February 15, 2022. For the time frame selected, the analysis focused on contracts that are closed out and eligible contracts that are physically completed but not administratively closed. For USAHCA, there are 23,396 contracts that are physically complete but not administratively closed out (*VCE*, 2022). The majority of USAHCA's procurements are service-related acquisitions due to repetitive and routine operations in a hospital or clinical setting. The data set obtained for eligible closeouts for the time frame selected above has obligated \$89,698,115.00 (*VCE*, 2022).

The Gansler report's first observation for the Army was that contracting officers are underpaid and undervalued, and there aren't enough of them (McMahon & Sheftick, 2007). The USAHCA organization has authorized 261 employees with a fill rate of 95%.

We learned from The Gansler report that the government cut the oversight for acquisition in half. The lack of direction is true for USAHCA because 248 employees cannot close out 23,396 contracts within the time frame presented in the FAR. If 248 employees tried to realistically add the contracts for closeouts to everyone in the organization, each employee, regardless of position or title, would need to close out 94 contracts within the year along with new requirements, administrative workload, and more overaged contracts added to the system every 30 days. Therefore, staffing is still an ongoing issue with contracting agencies.

Another factor identified in the GAO report is that contract closeouts have low priorities within the contracting agencies. The driving force of a new requirement is developed by the customer's need for the stated service. But what is the driving force for a contract closeout? The analysis for eligible closeouts for USAHCA shows that 77% of these eligible contracts have purchase requests associated with canceled funding (VCE, 2022). Canceled funds have reached or are over five years old, and the government treasury considers the appropriated funds to be canceled (Department of the Army, 2014). To the contracting agency, that means KOs can no longer pay contractors if the government owes money. The KO in charge would need to request funding from another fiscal year if the government did owe money. Furthermore, the analysis showed that 21% of these contracts are within the five years but outside the current year funding (VCE, 2022). In other words, the KO could use the funding appropriated for the contract if the government owed money. The funding is still considered expired but not canceled. The last 2% are the contracts in the current year or the period of performance has ended but the contract is within their time frame for closeouts according to the FAR (VCE, 2022).

The trend analysis illustrates that USAHCA focuses on the 2%, the current year funding, and the 21% with expiring funds, then contracts with canceled funds. This priority makes sense for everyday operations with respect to how funding operates. The problem arises when the largest category of closeouts, the canceled funding, is the lowest priority and there is no measurable metric for progress, the category becomes larger.

The last factor identified earlier for delaying contract closeouts was incurred costs from delays in audits. The GAO report 13-131 mentioned that DCAA rallied for policy

change to increase the threshold for audit requirements from 15M to 250M, which decreased their workload (GAO, 2012). Also, the GAO report 17-738, during the time period of 2011 to 2016, DCAA still took on average 1,002 days, an average of 33 months or 2.7 years to complete an incurred cost audit (GAO, 2017a). Although USAHCA only has 43 cost-type contracts that are eligible for closeout, their incurred costs are small, but over time will increase (VCE, 2022).

6. Summary

In summary, the key challenges contracting agencies face are initiating the priority of closeouts, understanding how to manage closeouts, and establishing a tracking mechanism to illustrate progress for contract closeouts. The accumulating costs from audits are a challenge that is out of the control of an individual organization.

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III. RESEARCH DATA

A. INTRODUCTION

This chapter will describe the goals, the design, and the participants of the survey distributed to the population of USAHCA. The chapter will end with the limitations and summary of the survey about the USAHCA's management of contract closeouts.

B. SURVEY GOALS

This study aims to clearly state the object understudy to the rater, enabling explicit attributes in the survey questions to not confuse or deter the audience, and lastly, analyze the data collected from participants on the current closeout processes within the organization to answer the primary research question. The secondary research question will be answered in response to current accountability and techniques for the organization's management of contract closeout mechanisms. The survey will note the GAO's recommendations and pose relatable questions on whether the suggested recommendations are currently active within USAHCA. The analysis of those responses suggests improvements to the current process and mechanisms for tracking progress.

C. SURVEY DESIGN

To ensure clarity for this survey, the study introduces three specific elements within a good survey question. The elements that make up a valid question are "the rater, the object, and the attribute" (Dolnicar, 2013). These elements ensure the question is structurally sound, short enough not to lose the audience, but clear enough not to confuse the reader. The object is the item under study and the attribute that describes the object (Dolnicar, 2013). The object that is under investigation will be the contract closeout process and management within USAHCA. The attribute would be the degree of satisfaction with current closeouts procedures compared to the GAO recommendations. Also, analyzing the degree of the individual threshold for the recommendations identified in the GAO audits for everyday operations of closeouts in USAHCA.

Each question was guided by certain principles to lead toward answering why there are so many closeouts that are considered overage or aimed to prevent contract closeout backlog. The principles that guided the creation of each question include "plain everyday language, shortly pointed inquiries, and avoided acronyms" (Dolnicar, 2013, p. 569). Additionally, the parameters of the questions were "specific inquiries which avoided double-barreled queries, double negatives, strongly-agree answer scales" (Dolnicar, 2013, p. 570). Once the question was guided properly then the binary scale options responses were used to apply participant's experience threshold.

We asked a question within the participant's profession, so their ability or threshold to answer should be high (Corbetta, 2003). The binary scale allows for limited responses to a single answer option. It identifies the audience's threshold by choosing the best answer that fits its performance and satisfaction with the answer to the question (Corbetta, 2003).

D. SURVEY SUBJECTS

The survey questions are designed specifically for civilian and active duty service members within USAHCA. The USAHCA employees have expertise in contracting and are acquisition certified. The DOD acquisition civilians' job title is GS-1102 contracting officer, contracting specialist, or procurement analyst. USAHCA also has active duty professionals with an AOC in acquisition called 70K8X, and their title is acquisition branch chief (United States Army Medical Department, 2013).

E. SURVEY LIMITATIONS

The limitations of this study were the scope, time available, and limited resources. These survey limitations are significant because the DOD has standardized resources, systems, and procedures for contract closeouts, but organizations still operate differently. Time becomes a limiting resource because the survey was active for 14 days. The research team experienced limited resources because this topic did not have many scholarly studies compare to.

The survey's boundaries included limiting the audience, the answer responses, and the recommended outcome analysis. The employees within USAHCA are the only ones allowed to participate in the survey. To avoid participants rejecting the survey because of fear of being singled out on a negative connotation, the research team will not be collecting any demographics and the survey is anonymous. The questions were staged as the binary scale option, forcing the rater to answer the question that best fits the threshold of personal experience. The final restriction compares only GAO recommendations to the survey responses.

F. SUMMARY

In summary, the analysis of the goals and the design of the survey will introduce answers to the research questions. The limitations will guide contracting activities to understand the current strategies better and apply them to everyday operations for contract closeouts. Studying the specified object of contract closeouts and the measured attribute of contract closeout procedures conducted will produce results in recommending improvements for the management and identify which GAO recommendations would be most effective for USAHCA.

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IV. DISCUSSION AND ANALYSIS

A. INTRODUCTION

GAO report 17-738 argued that contracting activities that have "the number and type of contracts to be closed, and where the contract closeout was in the process" compared to the goals and performance objectives set by the contracting activity "could help management address the causes as to why contracts remain open and reduce the contract closeout backlog" (GAO, 2017a). As mentioned in the literature review, USAHCA understands the number of contract closeouts that are needed within the organization and the type of closeout the contract requires. The lines are blurred when management wants to understand where in the process a particular contract closeout is to give the employees accurate information on performance metrics. The research conducted for this thesis includes a 20-question survey distributed to all of USAHCA's contracting professionals and a four-question interview tailored to the unit's leadership. The survey and interview responses give some clarity as to why the lines seem to be blurred.

The survey questions and answers analyze whether the questions pertain to how much priority the activity gives to the particular requirement and if their performance objectives are practical to meet the given objective. The survey had 60 participants. The survey was active for 14 days to give participants the flexibility to complete the survey. USAHCA's employees were the only ones allowed to participate in the survey, which means the research team received about 25% of their population to give responses. There were a total of five interviews completed with eight participants. Also, this is only a sample of USAHCA and is not the voice of the entire organization.

B. SURVEY QUESTIONS AND RESPONSES

Questions one through six, eleven, and twelve ask about regulatory information pertaining to operations and policies. Table Two below outlines these questions. These questions covered whether USAHCA was abiding by its own training and policy program.

Table 2. Survey Questions 1 through 6 and 11 through 12

	Table 2: Questions:
1	Has your organization provided closeout training within the last 6 or last 12 months?
2	In your opinion, is the training you received within the last 12 months useful for the everyday problems that are associated with closeouts?
3	Does your organization have a standard operating procedure (SOP) or a Guide for closeouts?
4	If yes, is it effective?
5	Does USAHCA have a closeout checklist?
6	If yes, is it effective?
11	Do you have closeout objectives or goals in your annual performance evaluation?
12	Are you held accountable for your contract closeout performance?

Questions one and two covered training requirements, and 85% of the surveyed population answered yes to receiving training on contract closeouts within the last 12 months. Question two covers how effective the training program is for contract closeouts. The responses said that 44% of the surveyed participants stated that the training program covered all the FAR-related requirements, but about 31% percent said that the training needed to be updated to provide solutions to the everyday problems that contracting specialists face. Due to the time requirements of this survey and research, the research team was not able to define all the training gaps.

Questions three and five asked about Standard Operating Procedures (SOP), or a guide and a checklist that would help USAHCA employees determine how to conduct a contract closeout. Again, 80% of the surveyed population answered yes to the knowledge of an SOP or guide when they conduct contract closeouts. Also, 74% responded, yes to the knowledge of a checklist. Questions four and six asked whether the established SOP or guide and the checklist for closeouts are effective. Of the surveyed population, 62%

stated that the SOP was either somewhat effective or not effective. For the SOP, 50% stated that the checklist was somewhat effective or not effective. Therefore, the conclusion drawn is that there is still missing information and both documents need to be updated.

Questions eleven and twelve pertain to annual evaluations and acknowledging accountability for contract closeout objectives. The interesting development with question eleven is that 67% of the participates acknowledged that contract closeouts were on their annual performance evaluation but 32% answered no or they didn't know. Question number twelve asked if individuals are held accountable for contract closeout performance objectives, and 72% of respondents said they are held accountable for completing contract closeouts, but 27% either didn't know or responded that they were not held accountable.

Table 3. Survey Questions 7 through 10

	Table 3: Questions:
7	As an organization, do you think you would benefit from leadership outsourcing contract closeouts?
8	If not outsourced, would you personally be interested in being assigned to the contract closeout department for six months?
9	If not outsourced, would you personally be interested in being assigned to the closeout department for 1 year?
10	If no, why?

Questions seven through ten, in Table 3, address alternatives that support contract closeouts. One alternate that supports contract closeouts is outsourcing to a private organization. The participants in the survey responded with 56% of respondents indicating outsourcing as a good option. Outsourcing the contract closeout requirement is a good option for organizations that do not have the resources available to complete the task themselves. Question eight asked the question, if outsourcing was not feasible would the participant consider working only closeouts for six months? While question nine

asked is employees would be willing to work closeouts for twelve months. USAHCA employees responded with 56% willing to complete a six-month duty of only contract closeouts, but only 36% of respondents said yes to a twelve-month duty of closeouts. On the other hand, 40% of the participants answered no to the completing closeouts for six months and 50% of the participants answered no to spending twelve months completing closeouts. The reasons for their not wanting to solely execute closeouts varied from closeouts being tedious and boring to 25% of the participants saying the task would hinder the career development of a KS.

Table 4. Survey Questions 13 through 20

	Table 4: Questions:
13	Are closeouts a priority over the year or only during certain fiscal year periods?
14	Do you consider it your responsibility to conduct contract closeout on contracts you have been assigned to award?
15	Do you consider it your responsibility to conduct contract closeout procedures on contracts that you have been assigned contract administration?
16	If you see a contract that you were assigned to do a modification of some sort, but you notice multiple de-obligations in past fiscal years or in the same fiscal year, what additional steps would you take before completing your assigned task?
17	Who's responsible for identifying funds that could be de-obligated for that fiscal year?
18	Did you know that the contracting database USAHCA uses for overaged contracts is the Virtual Contracting Enterprise (VCE)?
19	Are you aware of USAHCA's way of measuring progress with overaged contracts?
20	Are the incentives that USAHCA uses motivating enough for you to close more overaged contracts?

Questions thirteen through twenty ask about prioritizing contract closeouts, administrative responsibility, and tracking mechanism awareness. Table 4 above outlines these questions. Question 13 asks if contract closeouts are a priority throughout the fiscal

year, at certain times of the year, or not at all. The responses state that 60% of the respondents feel that closeouts are a priority all year, 28% believe that closeouts are only prioritized at certain times, and 12% do not think contract closeouts are a priority for USAHCA. Budgets are approved on fiscal year bases. If physically completed contracts with excess funding are deobligated at their earliest opportunity, it is more likely that those funds can be used towards a new requirement. The organization would benefit if closeouts were treated as a priority year-round.

Questions 14, 15, 16, and 17 address an aspect of responsibility for administrative tasks related to contract closeouts. Question 14 inquires whether or not the respondent considers it their responsibility to conduct closeouts on the contracts they have been assigned to award, with 84% saying that they do consider it their responsibility. Similarly, to question 15, 86% of the survey population agreed that it was their responsibility to conduct contract closeouts for contracts for which they are assigned contract administration.

Question 16 queries how much of an effort the contract administrator is willing to make to improve contracting administration efficacy. The questions asks if the contracting administrator were assigned to do a modification of some sort but noticed multiple deobligations in past fiscal years or in the same fiscal year, what additional steps would they take before completing your assigned task? One person responded by saying that they would not reach out to the assigned COR and instead focus on the task at hand. Twenty-nine respondents stated that they would reach out to the COR, educate them on the importance of deobligating funds during the appropriate fiscal year, and ask if more needed to be completed. Eight people said they would email the COR to determine if any additional actions are required for the contract, while twelve people responded that they would just complete the assigned tasks. The number and type of modifications to an award can signal that an award is eligible for closeout. Sometimes the COR is not familiar enough with contract administration to forecast when a closeout may be appropriate. Question 17 asks who is responsible for identifying funds that are eligible to be de-obligated during the fiscal year. This question allowed survey participants to select more than one answer choice. The answer options include the KS, BA, and COR. The KS received a score of 21.82 %, the BA received a score of 35%, and the COR received a score of 38.18%. These results signify that the survey recipients believe that identifying funds eligible for deobligation is a shared responsibility.

Questions 18 and 19 addressed USAHCA's ability to track the organization's overaged contracts. According to question 18, 54% of the respondents were aware that USAHCA uses the VCE as a tool to track overaged contracts, while 39% are unaware of USAHCA's use of VCE, and 6% have never used the system. Meanwhile, Question 19 highlights that 36% of the responders are aware that they can review the closeout metrics themselves and 63% are not aware of the capability. Organizations can benefit from leadership and subordinates' understanding of the various tools available to gauge contract closeouts metrics for their organization.

Lastly, Question 20 examines whether incentives are motivating enough to reduce the number of overaged contract closures. Over 81% of the survey participants feel that current company incentives are not motivating enough to increase their current workload with closeouts.

C. INTERVIEW QUESTIONS AND RESPONSES

The interview consisted of four questions querying various leaders within USAHCA on their opinions about current contract closeout practices and potential strategies moving forward to address the prioritization of overaged contracts and ways to prevent a backlog of contracts requiring closeout requirements. Table 5 below outlines these questions.

Table 5. Interview Questions 1 through 4

	Table 5: Questions:
1	How does USAHCA routinely track contract closeouts
2	What do you think is the biggest issue with overaged contracts?
3	What types of incentives does USAHCA use to motivate their employees?
4	Any thoughts or challenges with outsourcing closeouts workload?

The first question we asked the interviewees was how contract closeouts were tracked on a routine basis. The interviewees confirmed that various methods for obtaining statistical data on contract closeouts are used. The majority of the respondents stated that they waited for a weekly spreadsheet to be published by one of the unit's procurement analysts before they tracked the progress of closeouts for their respective sections. One respondent pulled the data itself from Procurement Data (PD). Leaders using different systems and reports for tracking closeouts, results in their not analyzing the same type of information. Based on the responses provided during the interviews, multiple people are sending out the same type of spreadsheet filtered differently for different people. Without reviewing the specific spreadsheets referred to within the interviews, it can be concluded that the information is tailored for specific contracting branches.

According to the data pulled from VCE, overaged contracts have been a problem for USAHCA for years (VCE, 2022). We requested that each of the leaders interviewed give us their views as to what they think is the biggest issue causing such a large number stockpile of overaged contracts. Interview answers included a perceived low priority from leadership, minimum leadership involvement, the workload focused on pre-award tasks, and contractors not submitting final payments in a timely manner. There was a recurring theme throughout every interview that, until recently, there was never a significant focus on contract closeouts by leadership. According to interview participants, there has been an increase in contract closeout oversight in the past few years within the organization. The increased oversight is felt by the increased number of spreadsheets distributed and the number of meetings held to brief updates on closeout status. Like many organizations, USAHCA is constrained by resources. It was mentioned in every interview conducted that KSs are given an abundance of pre-award tasks to complete, and there isn't enough time to make a significant impact on the current backlog of contracts awaiting closeout. One factor that contributes to the number of overaged contracts is contractors not submitting final invoices in a timely manner. While this only represents a small portion of overages contracts within the organization, it is still a chokepoint for contract administrators.

In the survey, we asked the contracting professionals if the incentives provided by leadership were motivating enough for them to complete more closeouts. In contrast, during the interviews, we asked the leadership what incentives they used to motivate their employees to complete more contract closeouts. According to the responses provided, apart from a closeout competition hosted within one region, leadership is not offering incentives just for closing out contracts. The expectation for USAHCA contracting professionals is that they manage contracting actions from cradle to grave. Completing contract closeouts is a post-award task, and closeouts should not be specifically incentivized.

According to survey responses, a very popular recommendation for solving this problem is outsourcing the contract closeouts support. USAHCA has outsourced closeouts in the past through Ability One contracts. The research team wanted to know how current leadership members felt about how outsourcing closeout support could help or hinder the organization. The responses we received differed based on how long the leader had been in the organization and the professional background of the leader. Some of the leaders interviewed were in the organization when contract closeouts were outsourced. These leaders mentioned that the contract was not the most efficient way to address the problem due to the amount of time it took to gain access to contracting systems. Another disadvantage to outsourcing mentioned was how using an outside agency to close contracts reduces customer relations for the contracting activity. In contrast, some interviewees felt that outsourcing would be a great tool for USAHCA. As contracting requirements continue to grow, the KSs administering awards are going to have more pre-award work to complete to ensure requirements are being met. To set up specialists for success, they will need additional support to focus on the areas that are most important to leadership. Contract closeouts are an excellent area in which to provide relief since it doesn't affect a contract's period of performance or delivery date.

D. SUMMARY

In summary, USAHCA employees are knowledgeable about training opportunities and standard operating procedures. Although the research team could not

identify the gaps within the SOP, checklist, and annual performance objectives, the consensus is that the employees are not getting all the information they feel they need to close out contracts effectively. Not having all the required information when conducting the necessary tasks will increase the administrative burden and increase the chances of the contract missing the timeline requirements outlined in the FAR.

Outsourcing the contract closeout requirement would be a welcomed form of support by many within the organization. The alternate idea to outsourcing is creating a contract closeout taskforce. This alternate idea was met with some resistance in the survey due to feelings surrounding the overwhelming number of closeouts and lack of career progression within the task force. After reviewing the survey and interview responses, the sentiment is that the proposed incentives granted by leadership were not motivating enough for contract administrators to do more with limited resources.

Overall USAHCA is increasing its level of prioritization for contract closeouts, but it lacks strategic planning to sustain closeout operations will hinder success.

Management's approach to enhancing performance lacks the ability to track progression due to the use of spreadsheets and the various analytical databases that source the information. USAHCA needs a central method for tracking contract closeout progression

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V. CONCLUSION AND RECOMMENDATIONS

A. INTRODUCTION

This section of the research will discuss recommendations for the current problems facing USAHCA and the Army regarding the contract closeout process and reducing overage contracts. After comparing the audits of the GAO reports during the literature review with the analysis of the survey and interview results, the research team has developed conclusions and recommendations.

B. CONCLUSION

The conclusion that is drawn from the research is there is a lack of accountability and audibility for contract closeouts. The Army does have different procurement systems that will track and modify contracts, but the conclusion drawn from this study is that most of these systems have the focus on pre-award, and contract administration. Therefore, management does not have the education nor the training to effectively track closeouts. The systems lack accountability once a contract has reached the end of the period of performance. For example, in PCF a new requirement is physically assigned to an individual. The individual is accountable to establish and meet the milestones for that contract award. There is not a similar accountability system in place for contract closeouts. The contract specialist is not required to be accountable for specific closeouts. This is the root cause of why USAHCA seems to have a low priority on contract closeouts.

The lack of auditability within the contract closeout process is the lack of strategic planning for the contract closeout operation since the USAHCA has so many overage contracts. The research revealed that the USAHCA's management is uncertain to where any particular contract closeout is in the process without using an excessive number of spreadsheets.

C. RECOMMENDATIONS

The first research question is, "how can contracting activities prepare and prioritize the number of overage contracts for closeouts?"

A recommendation to close this gap for current leadership is to train branch chiefs in VCE and other systems of record for pulling analytical data. According to the survey and interview responses, participants did not understand what system the data was pulled from or how to pull it for themselves. For example, USAHCA's management will require multiple spreadsheets and metrics to be completed on a weekly and monthly basis for contract closeouts, but there are no performance measures or any goals set by the leadership besides the obvious of completing all on the never-ending list of contract closeouts

Leadership must have accountability applications in place to support their priorities. Some accountability measures mentioned in the interviews were acknowledging the contract closeout function is in the annual performance evaluations but there is not a measured goal associated to it. A recommendation is to compare the number of awards procured by the contracting specialist to the number of contract closeouts they conduct. For example, reports can be pulled from analytical databases to know exactly how many awards are completed by a contract specialist. The measured goal for the annual performance might be a range to say individuals need to be within 10% of the number of awards compared to the number of contract closeouts.

Another recommendation would be for the contracting specialist to create cabinets in PCF for each closeout. Cabinets are created for each award and all modifications throughout the contracting life-cycle. Creating a cabinet with each closeout will ensure accountability and will measure how long it took for the individuals to close the contract. Also, each contracting specialist is required to report on their workload assignment each week. If closeouts are on the individual's workload then they will have more of a priority to be completed. Another process improvement recommendation would be for USAHCA to train all employees to use the automatic contract closeout module in PIEE. As mentioned in the literature review, this module is used by many organizations and is

meant to streamline the contract closeout process to enable the organization to focus on other items.

The secondary research question is, "how contracting activities can prevent a backlog of contracts requiring closeout requirements in the future?"

Overall USAHCA must have more priority toward closeouts until they have a strategic plan in place for the future contract closeouts. Some short-term applications can be imitating a contract closeout branch or outsourcing when appropriate. Then using some of the recommendations for improving accountability mentioned in the first research question. If USAHCA was able to outsource their oldest amount of overage contract closeouts this would allow them to focus on their recovery plan for the contracts that are within their expiration of funds timeline. Also, USAHCA already has a small detail called the Contracting Administrative Support - Branch (CAS-B). The CAS-B's primary role is to conduct deobligations for assigned unliquidated obligations (ULO). This small team cannot accomplish all the ULOs for the entire organization. However, if this team accomplishes the ULOs but not the closeout this reveals why USAHCA has a high number of overaged contracts.

Another recommendation would be to assign volunteers from the organization for a six-month rotation to help with the overwhelming amount of overage contract closeouts. According to the survey responses, about 49% of the participants are willing to fill this rotation. The research team understands that if the contracting specialist is not awarding contracts, then someone else will have to fill in that need. Therefore, the alternative to this recommendation would be to outsource this requirement. Outsourcing this requirement will depend on whether USAHCA is able to request funding to enact this recommendation. The administrative burden that would be relieved from outsourcing can benefit morale and help the leadership get a better strategy for the overall management of contract closeouts.

Another recommendation would be to change federal policy. According to FAR Part 32.904, which determines payment due dates and 32.905 payment documentation and process, the government is required to pay the contractor within a certain number of

days. In our example for most common contracts, FFP-type, 30 days to pay invoices. Yet, there is no requirement for the contractor to receive payment. Currently, contractors can make a claim for payment within a six-year window.

Leadership also must be held accountable for the priorities set or the lack of priorities. It was noted by many survey and interview responses that over the past year's leadership has taken a more active role in prioritizing contract closeout, but there are still challenges. Using the ACE database within VCE is a good source from which to gather information, but without the measurable and quantifiable goals to tailor the mission, success will be low.

D. AREA OF FUTURE RESEARCH

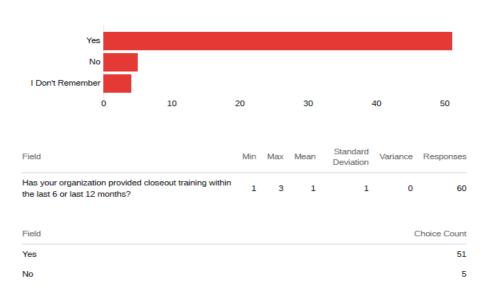
The area of research that would be beneficial is if the research team has more time and resources to understand the full effect of outsourcing contract closeout operations. The full effect of outsourcing would be understanding the true cost and pricing that the government currently uses for this process. Also, leadership understands the additional training and administrative burden this type of contract may cause. An additional area of research that can benefit organizational leadership is if the use of the automatic contract closeout module in PIEE can improve contract closeout rates. This is a system that has been around for a long time and was recommended in 2015 by the Director of Acquisition, Technology, and Logistics as an effective means of closing out contracts quickly, but not all contracting activities are using it (Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics, 2015).

APPENDIX A. SURVEY RESULTS

Q21 - You are invited to participate in a research study entitled The Analysis Of the Contract Closeout Process and Recommendations for Reducing Backlogs. Please understand that this survey is voluntary and is anonymous. Also, the research team will limit access to research data to those approved for the study. Please only take this survey if you are assigned to the United State Army Health Contracting Agency USAHCA. Please answer each question to the best of your ability. Do you consent to the terms of the survey?



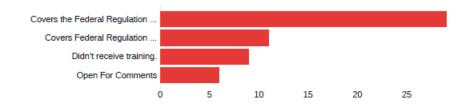
Q1 - Has your organization provided closeout training within the last 6 or last 12 months?



4 60

I Don't Remember

Q2 - In your opinion, is the training you received within the last 12 months useful for the everyday problems that are associated with closeouts?



Field	Choice Count
Covers the Federal Regulation requirements and applicable to everyday use.	29
Covers Federal Regulation requirements but missing resolutions to everyday problems	11
Covers Federal Regulation requirements but missing resolutions to everyday problems	10
Didn't receive training.	9
Open For Comments	6
Total	65

Open For Comments - Text

Training was via written guidance and instruction. Providing screen shots and step-by-step for the required closeout actions in multiple databases. If all actions are not complete the contract will show on most reports as open.

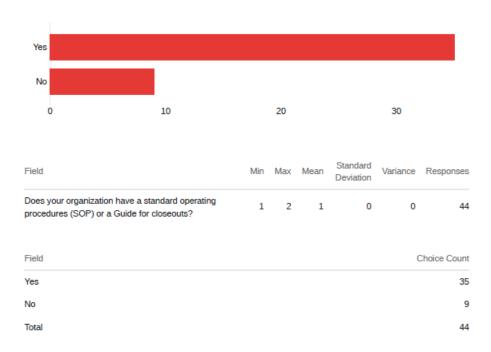
It has been a big transition for me learning a new skillset without much training in the 1102 series.

The training received dealt with utilizing the DD Form 1594 to de-obligate excess funds and close the contract or task order in one process verses the normal two step process of completing a de-obligation modification, then complete the DD Form 1594.

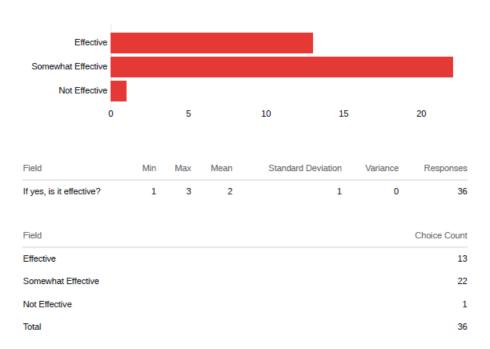
I have not performed a Closeout, to date.

Lack of Contract Specialist having access to GFEBS continually have to wait for someone to provide a GFEBS report. Plus with workload deadlines we do not have time to work on closeouts.

$\ensuremath{\mathsf{Q3}}$ - Does your organization have a standard operating procedures (SOP) or a Guide for closeouts?



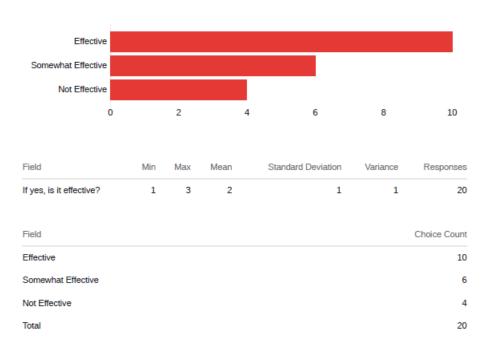
Q4 - If yes, is it effective?



Q5 - Does USAHCA have a closeout checklist?



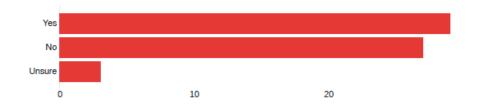
Q6 - If yes, is it effective?



$\ensuremath{\mathsf{Q7}}$ - As an organization, do you think you would benefit from leadership outsourcing contract closeouts?



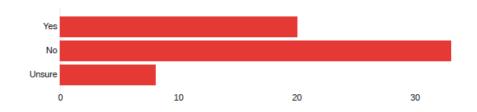
Q8 - If not outsourced, would you personally be interested in being assigned to the contract closeout department for six months?



Field	Min	Max	Mean	Standard Deviation	Variance	Responses
If not outsourced, would you personally be interested in being assigned to the contract closeout department for six months?	1	3	2	1	0	59

Field	Choice Count
Yes	29
No	27
Unsure	3
Total	59

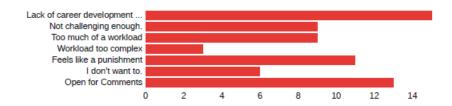
 $\mbox{Q9}$ - If not outsourced, would you personally be interested in being assigned to the closeout department for 1 year?



Field	Min	Max	Mean	Standard Deviation	Variance	Responses
If not outsourced, would you personally be interested in	1	3	2	1	0	61

Field	Choice Cour	it
Yes	2	0
No	3	3
Unsure		В
Total	6	1

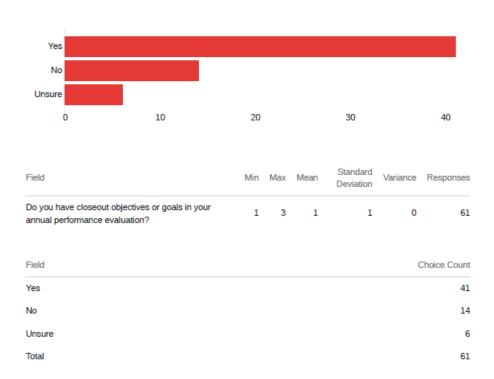
Q10 - If No, why not? (check all that apply)



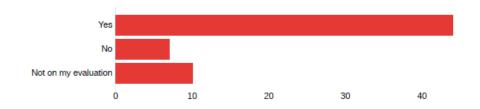
Field	Choice Count
Lack of career development within the time period of assignment.	15
Not challenging enough.	9
Too much of a workload	9
Workload too complex	3
Feels like a punishment	11
I don't want to.	6
Open for Comments	13
Total	66
Open for Comments - Text	
Too difficult closing someones elses contract	
Closeout function should be with Resource Management and the customer. They are receive the make the last payment. Then a report should be sent to contracting to complete the closeout in P	
No possible due to my position.	
I am our office's only PA and would be unable to take on the task without jeopardizing my current	responsibilities.

KOs and KSs need to continually monitor the contracts they administer. Contract closeout is a part of contract administration. Although I am a team player, I don't feel it's fair to have thousands of actions to closeout at one time. This is especially true if we claim to be trure KSs and KOs.

 $\ensuremath{\mathsf{Q}11}$ - Do you have closeout objectives or goals in your annual performance evaluation?



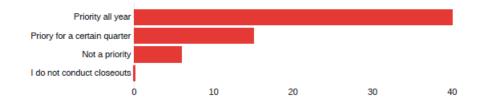
Q12 - Are you held accountable for your contract closeout performance?



Field	Min	Max	Mean	Standard Deviation	Variance	Responses
Are you held accountable for your contract closeout performance?	1	3	1	1	1	61

Field	Choice Cour			
Yes	44			
No	7			
Not on my evaluation	10			
Total	61			

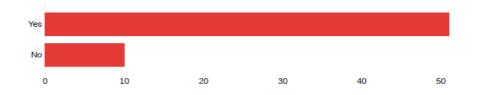
Q13 - Are closeouts a priority over the year or only during certain periods of the Fiscal year?



Field	Min	Max	Mean	Standard Deviation	Variance	Responses
Are closeouts a priority over the year or only during certain periods of the Fiscal year?	1	3	1	1	0	61

Field	Choice Count
Priority all year	40
Priory for a certain quarter	15
Not a priority	6
I do not conduct closeouts	0
Total	61

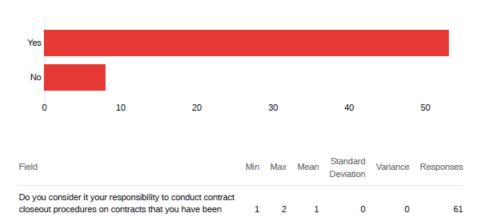
Q14 - Do you consider it your responsibility to conduct contract closeout on contracts that you have been assigned to award?



Field	Min	Max	Mean	Standard Deviation	Variance	Responses
Do you consider it your responsibility to conduct contract closeout on contracts that you have been assigned to award?	1	2	1	0	0	61

Field	Choice Count
Yes	51
No	10
Total	61

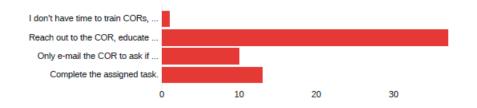
Q15 - Do you consider it your responsibility to conduct contract closeout procedures on contracts that you have been assigned contract administration?



Field	Choice Count
Yes	53
No	8
Total	61

assigned contract administration?

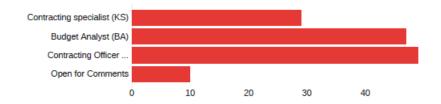
Q16 - If you see a contract that you were assigned to do a modification of some sort, but you notice multiple de-obligations in past fiscal years or in the same fiscal year, what additional steps would you take before completing your assigned task?



Fie	eld	Min	Max	Mean	Standard Deviation	Variance	Responses
obi wh	you see a contract that you were assigned to do a odification of some sort, but you notice multiple de- ligations in past fiscal years or in the same fiscal year, nat additional steps would you take before completing ur assigned task?	1	4	3	1	1	61

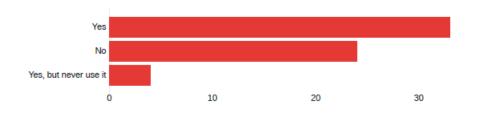
Field	Choice Count
I don't have time to train CORs, focus on assigned task	1
Reach out to the COR, educate them on the importance of de-obligating funds during the appropriate fiscal year and ask if more are needed.	37
Only e-mail the COR to ask if any additional actions are required for this contract.	10
Complete the assigned task.	13
Total	61

Q17 - Who's responsible for identifying funds that could be de-obligated for that fiscal year? (check all that apply)



Field	Choice Count
Contracting specialist (KS)	29
Budget Analyst (BA)	47
Contracting Officer Representative (COR)	49
Open for Comments	10
Total	135

Q18 - Did you know that the contracting database USAHCA uses for overaged contracts is the Virtual Contracting Enterprise (VCE)?



Field	Min	Max	Mean	Standard Deviation	Variance	Responses
Did you know that the contracting database USAHCA uses for overaged contracts is the Virtual Contracting Enterprise (VCE)?	1	3	2	1	0	61

Field	Choice Count
Yes	33
No	24
Yes, but never use it	4
Total	61

Q19 - Are you aware of USAHCA's way of measuring progress with overaged contracts?



Q20 - Are the incentives that USAHCA uses motivating enough for you to do more overaged contracts?



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APPENDIX B. INTERVIEW NOTES

Questions:

1.	How does USAHCA routinely track contract closeouts?
2.	What do you think is the biggest issue with overaged contracts?
3.	What types of incentives does USAHCA use to motivate their
employees?	
4.	Any thoughts or challenges with outsourcing closeouts workload?

Interview: April 27, 2022 at 1400.

The participant answered about routinely tracked contract closeouts as a spread-sheet in excel. The participant would then have to filter through the spreadsheet to find the contracts that pertain to that particular contract cell. The spreadsheets have to be updated on a weekly basis, but only during this quarter. The participant uses PD (procurement data) to verify contract closeouts, but USAHCA uses VCE. The participant never used VCE. Visibility of closeouts is only to that participant's section. The leadership uses on-the-spot-award for motivating employees on closeouts and it seems effective. The participant estimated about 20% of the required closeouts will not happen this year. Participants didn't see any challenges with outsourcing as an option.

Interview: April 28, 2022 at 0800

There were three participants present for this interview. All three participants said that USAHCA Routinely tracks closeouts on a spreadsheet published by one of the unit's procurement analyst. None of them pull the data directly, and they were not aware that the units could obtain data from VCE or PIEE.

The consensus among the group is that the biggest issues with overaged contracts is employee workload and lack of leadership prioritization. One of the participants stated that most KSs have too large of a workload to prioritize closeouts. While they do believe that contract administration should be cradle to grave, leadership is not going to lighten a person's workload to accommodate closeouts. Until recently, closeouts have not been a priority for leadership. With the increased focus on closeouts, the office has been able to reduce their overaged contract amount by over 90%, which means 10% is still pending closeout. They also mentioned employee turnover as a reason why closeouts do not happen a quickly as possible.

For question three. They mentioned the typical time off awards are available to give, but didn't state that they actually have given any in the past to award progress made on completing closeouts.

Two of the three participants were in the organization when closeouts were outsourced. They stated that the program was not very successful. They were not closing out contracts at a faster rate than before. They attributed to the people conducting the

closeouts lacked familiarity with the customer, the contract, and the process. The one participant that was not around to see how outsourcing went for the organization in the past stated that they felt with the right oversight the unit could benefit from outsourcing overaged contracts.

Interview: 28 April 2022 at 1115

- When employee first got to the unit no one was tracking closeouts.
- Over 10K Needed closing in local office
- One Solution was to run a script to close them out. The script runs at the DASAP level. It would close all the overaged contracts in all of the systems.
- The script closed over 60% of the overage contracts for the organization
- Now there is a system in place to track contract closeouts
- pulls a spreadsheet of all awards at the FY. Focused on closeouts closing within 180 days. Prioritized the youngest contracts.
- Biggest obstacle with overage contracts is that priority is on the preaward side. We lack post award focus.
- KS's lack the initiative to closeout contracts without being told.
- Agrees that closeout metrics need to be accountable to sets goals/levels for closing out contracts
- Hasn't personally seen incentives directly linked to closeouts. Mentioned that once you incentives one particular area that other areas will lose focus.
- Disadvantage to outsourcing closeouts is you lose an aspect of the relationship with the customer. Doesn't think USAHCA needs to outsource closeouts or a closeout staff.
- Believes that contract administration should be cradle to grave.
- USAHCA doesn't understand the resources needed to complete its mission in terms of KS workload capability.

Interview Notes 29 April 2022 at 0900

USAHCA

The employees receive closeout reports from PAMD. Then pushed to the teams. Only closes out the contracts from core customers. Updates monthly bases. 1594 list spreadsheet is updated monthly. This report is fluid because of the different reasons 1594s are created.

The employee never used the quick closeout module. Only through PD2 and PCF. USAHCA may lack the education or willingness to switch over to more automated processes. The MICC and ACC have processes that they were using long before USAHCA started.

Our workload is the number one issue for overaged contracts. We are so focused on pre awards so that there is no break in service.

Closeouts go in the original award cabinet. Estimated 30 to 40 more during the remaining fy. Closeouts are prioritized at the beginning of the FY through the spring.

Incentives for closeouts was conducted last November. The KS to close out 50 or more received 4 hours' time off or 59 mins at the branch level and Regional level. The was motivating for the branch that won. USAHCA level- no specific closeout incentive. We are a cradle to grave organization- why reward you for doing your job.

Ability one contract for outsourcing was a good idea but not well executed. Limited access to systems. Only utilized 3-4 months of a yearlong contract due to system access

Because of our PALT goals and tight workloads we would benefit from a contract closeout team. Hire new GS employees for closeouts. CASB- fall under HRCO

Interview: 29 April 1000 interview

Closeouts are currently a higher priority than ever before. USAHCA is pushing meeting FAR requirements for closeouts. Employee receives a list monthly from the Deputy. Must report back weekly and monthly on open and overaged contracts.

Biggest issue is prioritization. We don't have the resources to meet the administration demand. Not enough time and personnel. RHCO-C last November used incentives for closing out contracts. Nothing at the USAHCA level. The November competition was fun and motivating. Low level management sets goals for their sections. If leadership wasn't tracking it and reporting it on a frequent and routine basis, the closeout blackload would be worse.

Believes outsourcing would be a great tool for USAHCA. Useful resources. As contracting continues to grow. The levels of contracting requirements will continue to grow as well. We are setting up our specialist for failure by not trying to provide support.

USAHCA needs an actual plan for closeouts, not just sending out spreadsheets for awareness. If this is a metric that really matters.

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LIST OF REFERENCES

- The Army Lawyer. (2008). Headquarters, Department of the Army, 2007-The Year in Review (DAPAM 27-50-416), 146.
- Bandy, L. M. (1998). A case study of the contract closeout process at Defense Contract Management Command Lockheed Martin Missiles and Space. [Master's Thesis, Naval Postgraduate] NPS archive: Calhoun. http://edocs.nps.edu/npspubs/scholarly/theses/1998/Jun/98Jun_Bandy.pdf.
- Corbetta, P. (2003). *Social research: theory, methods and techniques*. SAGE Publications, Ltd. https://doi.org/10.4135/9781849209922
- Defense Acquisition University. (n.d.). *Functional area certification standards*. https://icatalog.dau.edu/onlinecatalog/CareerCertGuides.aspx?lvl=4&cfld=3.
- Defense Contract Management Agency. (2019). *DCMA manual 2501-07 contract closeout*. https://360.dcma.mil/sites/policy/CM/SitePages/2501-07r.aspx
- Department of Defense. (2011). *Guidebook for the acquisition of services*. https://efaidnbmnnnibpcajpcglclefindmkaj/https://apps.dtic.mil/sti/pdfs/ADA6062 06.pdf
- Department of Defense. (2019). Contract Closeout Guidebook. https://dodprocurementtoolbox.com/cms/sites/default/files/resources/2019-11/contract%20closeout%20guidebook 20191025 final.pdf
- Department of Logistics Agency. (n.d.). Wide Area Workflow (WAWF) https://www.dla.mil/Energy/Business/Wide-Area-Workflow/
- Department of the Army. (2014). *Financial management* (FM1-06). https://armypubs.army.mil/epubs/DR pubs/DR a/pdf/web/fm1 06.pdf
- Department of the Army. (2017). *Army position description* [Fact Sheet]. (https://acpol2.army.mil/FASCLASS/search_fs/search_fs_output.asp?fcp=zutpk3 eFRtaToL2jorZGuam0buidbYKfl6RZhmC7hLBpZYCXlaM%3D).
- Dolnicar, S. (2013). Asking good survey questions. *Journal of Travel Research*, *52*(5), 551–574. https://doi.org/10.1177/0047287513479842
- Federal Acquisition Regulation (FAR). (2022). https://www.acquisition.gov/browse/index/far

- Government Accountability Office. (1992). Analysis of agency authority to pay over obligations in expired accounts and comments On DOD Deputy IG's proposal to amend The Antideficiency Act. (Report B-24586.7). Government Accountability Office
- Government Accountability Office. (2011). Contingency Contracting: improved planning and management oversight to address challenges with closing contracts. (GAO-11-891). Government Accountability Office.
- Government Accountability Office. (2012). Defense Contracting: DOD initiative to address audit backlog shows promise, but additional management attention needed to close aging contracts. (GAO-13-131). Government Accountability Office.
- Government Accountability Office. (2017a) Federal Contracting: additional management attention and action needed to close contracts and reduce audit backlog. (GAO-17-738) Government Accountability Office.
- Government Accountability Office. (2017b) Army Contracting: leadership lacks information needed to evaluate and improve operations. (GAO-17-457) Government Accountability Office.
- Hühn, P. (1987). The detective as reader: narrativity and reading concepts in detective fiction. *Modern Fiction Studies*, *33*(3), 451–466. http://www.jstor.org/stable/26282385
- Jeanfreau, S. G., & Jack, L. (2010). Appraising qualitative research in health education: guidelines for public health educators. *Health Promotion Practice*, 11(5), 612–617. https://doi.org/10.1177/1524839910363537
- Keating, E., Gates, S., Pace, J., Paul, C., & Alles, M. (2001). *Improving the DOD's Defense Finance and Accounting Service*. (Report No. RB-7541-DFAS). RAND. https://doi.org/10.7249/RB7541
- McMahon, L., & Sheftick, G. (2007, November 1). *Gansler Commission cites systemic problems in Army contracting*. U.S. Army. https://www.army.mil/article/5906/gansler_commission_cites_systemic_problems_in_army_contracting
- Nair, L. B. (2021). From 'whodunit' to 'how': detective stories and auditability in qualitative business ethics research. *Journal of Business Ethics: JBE*, 172(2), 195–209. http://dx.doi.org/10.1007/s10551-020-04479-4
- National Contract Management Association. (2019). *Contract Management Body of Knowledge* (6th ed) [Handbook]. ISBN-13:978-0-940343-92-4.

- Office of Inspector General U.S. Government Accountability Office. (2018) GAO has taken steps to strengthen contract closeout controls, but additional actions are needed. (OIG 18-5) Government Accountability Office.
- Office of Personnel Management (n.d.a). *Contracting Series*, 1102. Retrieved March 1, 2022, from https://www.opm.gov/policy-data-oversight/classification-qualifications/general-schedule-qualification-standards/1100/contracting-series-1102/.
- Office of Personnel Management. (n.d.b). *Policy, data, and oversight: questions and answers concerning revised 1102 qualification standard.* OPM.GOV. Retrieved March 1, 2022, from https://www.opm.gov/policy-data-oversight/classification-qualifications/general-schedule-qualification-standards/1100/questions-and-answers-concerning-revised-1102-qualification-standard/.
- Office of the Under Secretary of Defense for Acquisition and Sustainment. (2021).

 Defense acquisition of services (DoDI 5000.71). Department of Defense.

 https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/500074p.pdf
- Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics (2015, Sept 14) *Automated Contract closeout Capability*. Department of Defense. https://www.acq.osd.mil/dpap/policy/policyvault/USA004951-15-DPAP.pdf
- Procurement Integrated Enterprise Environment (PIEE). (n.d.) *Functional information*. Retrieved March 1, 2022, from https://piee.eb.mil/xhtml/unauth/web/homepage/functionalInfo.xhtml
- Suits, D. L. (2019). New Army Contract Writing System pilot to launch in 2020. Army News Service. Retrieved on March 22, 2022, from https://www.army.mil/article/230719/new_army_contract_writing_system_pilot_t o launch in 2020
- System of Award Management. (2022, March 5). [Unpublished raw data]. www.sam.gov
- U.S. House of Representatives (n.d.). *Office of the Law revision counsel, title 41, public contracts United stated code.* Retrieved April 5, 2022 from http://uscode.house.gov/
- United States Army Acquisition Support Center. (n.d.) *Army Acquisition Professional Course (AAPC)*. Retrieved 2022, March 5 from https://asc.army.mil/web/organization/aacoe/aapc/
- United States Army Health Contracting Agency (USAHCA). (n.d.) Regional offices. Retrieved 2022, March 1 from https://usahca.medcom.amedd.army.mil/

- United States Army Medical Department. (2013). *Medical Service Corps handbook* [Handbook]. https://docplayer.net/5950997-Medical-service-corpshandbook.html.
- Virtual Contracting Enterprise (VCE). (2022, March 10). [Unpublished raw data]. Army Contracting Enterprise (ACE). www.vce.army.mil
- Yin, R. K. (2014). Case study research: Design and methods. (fifth). SAGE.

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