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**A CASE STUDY OF THE CONTRACT CLOSEOUT
PROCESS AT DEFENSE CONTRACT MANAGEMENT
AGENCY LOCKHEED MARTIN MISSILES
AND FIRE CONTROL ORLANDO**

September 2022

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CONTRACT MANAGEMENT AGENCY LOCKHEED MARTIN MISSILES
AND FIRE CONTROL ORLANDO**

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Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN CONTRACT MANAGEMENT

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A CASE STUDY OF THE CONTRACT CLOSEOUT PROCESS AT DEFENSE CONTRACT MANAGEMENT AGENCY LOCKHEED MARTIN MISSILES AND FIRE CONTROL ORLANDO

ABSTRACT

The Department of Defense (DOD) uses contract management to ensure the successful management and execution of contracts throughout their life cycle; however, there are concerns about how appropriated funds are controlled and managed. The DOD uses the contract management process to obligate funds through the award of contracts for the procurement of goods and services. At the end of the contract period, when all services have been performed and products delivered, those contracts must be closed out, and the closeout will de-obligate any excess funds for other immediate agency requirements. The DOD's contracting deficiencies continue to be exacerbated by the inability to close contracts. Additionally, as the DOD and other federal agencies fail to pay enough attention to completed contracts, it has resulted in a large backlog of physically completed contracts pending closeout, many of which have unliquidated obligations remaining on them. This thesis investigated the contract closeout process at the Defense Contract Management Agency Lockheed Martin Missiles and Fire Control Orlando (DCMA LMMFC-ORL) and determined some of the causes of the backlog of contracts in the contract closeout process. Finally, recommendations were made to improve the contract closeout process by reducing the backlogs of contracts waiting to be closed out; hence, any funding due to DOD can be de-obligated.

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LIST OF ACRONYMS AND ABBREVIATIONS

ACO	Administrative Contracting Officer (includes DACOs and CACOs)
ANSI	American National Standard Institute
CACWS	Cumulative Allowable Cost Worksheet
CPFF	Cost-Plus-Fixed-Fee
CMBOK	Contract Management Body of Knowledge
CMS	Contract Management Standard
CMO	Contract Management Office
DAWIA	Defense Acquisition Workforce Improvement Act
DCAA	Defense Contract Audit Agency
DCMA	Defense Contract Management Agency
DFAS	Defense Finance and Accounting Service
DOD	Department of Defense
FAR	Federal Acquisition Regulation
FFP	Firm-Fixed-Price
FPI	Fixed-Price-Incentive
FPR	Fixed-Price-Redeterminable
FY	Fiscal Year
GAO	Government Accountability Office
IG	Inspector General
LMMFC	Lockheed Martin Missiles and Fire Control
MILSCAP	Military Standard Contract Administration Procedures
MOCAS	Mechanization of Contract Administration Services
NCMA	National Contract Management Association
OMB	Office of Management and Budget
T&M	Time-and-Material
ULO	Unliquidated Obligation

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I. INTRODUCTION

This chapter will help set the stage for this research and guide what to expect in the subsequent chapters. First, a background of the research will be provided. Next, the purpose of the research will be discussed. Research questions will then be presented along with the methodology of the research. Next, the benefits and limitations of the research will be provided, and then the organization of the report will be presented.

A. BACKGROUND

The United States Department of Defense (DOD) accounts for over half of federal government discretionary spending, over 3 percent of the United States (U.S) Gross Domestic Product and roughly half of all federal employees work for the DOD (Candrea, 2017). The annual budget for the DOD not only provides for employee salaries but also covers the baseline and wartime operating expenses of the four military services and hundreds of billions of dollars of investment in new capabilities and technologies (Candrea, 2017, p. 58). The nature of defense acquisition becomes more complex as the DOD increases its contracting for supplies and services that facilitate the development of new capabilities and technologies. Although the DOD budget has increased, the significant growth in weapon systems costs associated with new capabilities and technologies has resulted in the continuous scrutinization of DOD spending by Congress and the Office of Management and Budget (OMB). As a result, DOD has been forced to reexamine how it executes contract-related spending to maximize its return on the investment of critical budgetary resources while also providing warfighters with the needed capabilities at the best value for the taxpayer (United States Government Accountability Office [GAO], 2012).

The ability of the DOD to provide a credible justification for significant dollars for procurement depends on its capacity to manage and control appropriated funds. The DOD uses the contract management process to obligate funds through the award of contracts for the procurement of goods and services. At the end of the contract period, when all services

have been performed and products delivered, those contracts must be closed out, and the closeout will de-obligate any excess funds for other immediate agency requirements.

Once final deliveries and services under a contract are complete and accepted, the level of focus switches to planning and awarding new contracts or completing those that have already been awarded. As a result, there is little emphasis on the closeout process when contract performance is completed. The inadequate attention on completed contracts has resulted in a large backlog of physically completed contracts, many of which have unliquidated obligations remaining on them. This backlog of physically completed contracts results in a significant number of dollars that are not accessible to the DOD for future reinvestment and results in the misuse of taxpayer dollars (GAO, 2012). Therefore, closing contracts is a necessary action that allows funds to be used for investments in new capabilities and technologies.

B. PURPOSE OF RESEARCH

The purpose of this research is to analyze the contract closeout process and determine what is causing the backlog of contracts in the contract closeout process. Specifically, the contracts currently in closeout at Defense Contract Management Agency Lockheed Martin Missiles and Fire Control Orlando (DCMA LMMFC-ORL) will be analyzed to determine which activities are holding up the closeout process for those contracts. In addition, this research will determine what might be utilized to improve these contract closeout processes and make recommendations for improving the contract closeout process.

C. RESEARCH QUESTIONS

In pursuing this research purpose, this research will answer the following questions.

1. Based on the analysis of the contract closeout process at DCMA LMMFC-ORL, what are the reasons for the backlogs of contracts?
2. Based on the findings, how can DCMA LMMFC-ORL improve its contract closeout process to reduce the backlogs of contracts waiting to be closed out, and any funding due to DOD can be de-obligated?

D. METHODOLOGY

The methodology used in this research will consist of an analysis of the DCMA contract administration database that will consist of all of the contracts currently in the closeout process. In addition, the database will include the reasons why these contracts are still pending closeout and exceeding the time allotted by the Federal Acquisition Regulation (FAR). After establishing the reasons why some contracts are still pending closeout, the reasons will be analyzed and categorized by identifying if there is any trend or pattern on most contracts not being closed out because of a specific activity or whether some reasons are more common in a particular contract type. Finally, the findings will be analyzed, and recommendations will be developed for DCMA LMMFC-ORL to improve its contract closeout process.

E. BENEFITS AND LIMITATIONS OF THE RESEARCH

DCMA LMMFC-ORL will be the primary beneficiary of this research. First, the findings will provide recommendations for process improvements for contract closeout for DCMA LMMFC-ORL. This research will help DCMA LMMFC-ORL improve its contract closeout process by identifying the reasons for the backlog of contracts needing closeout and thus, allowing the deobligation of funds that the DOD can then use in further procurements. Second, the findings and recommendations for process improvements identified for DCMA LMMFC-ORL may also apply to other DCMA organizations. Additionally, the benefits and process improvements identified with DCMA LMMFC ORL may also apply to other DOD contracting organizations that perform contract closeouts.

There are some limitations with this research. First, the research is only limited to contract closeout and not the complete contract management process. It is limited to the contract closeout process to determine which activities identified in the database that keep contracts from being closed out promptly. Second, this research is limited to DCMA even though all DOD contracting organizations conduct contract closeouts. Third, this research focuses only on DCMA LMMFC-ORL's flexibly priced contracts, consisting of all "cost-type, fixed-price-incentive, and fixed-price-redeterminable contracts; orders issued under

indefinite delivery contracts where final payment is based on actual costs incurred; and portions of time-and-material and labor hour contracts” (GAO, 2012, p.1) identified in the contract administration database waiting contract closeout as of December 31, 2021.

F. ORGANIZATION OF REPORT

This report is divided into six chapters. The first chapter is the introduction which provides background, explanation of the purpose of the research, the research questions, and the methodology used. This chapter also discusses the benefits gained from conducting the study and the limitations of this research project. The second chapter of this report contains a literature review of the theoretical foundation that forms the basis of the research. A discussion of Auditability Theory because capable processes are a critical component of Auditability Theory and support auditability in organizations. Next, contract management processes using the National Contract Management Association (NCMA) Contract Management Standard (CMS), is presented followed by a discussion of contract closeout processes, significant reports, and audits applicable to contract closeout challenges, and past research conducted in this area of study. The third chapter provides an overview of DCMA LMMFC-ORL and discusses the organizational structure, its mission, and the services the organization provides its customers. The fourth chapter presents the methodology used to obtain and analyze the data. The fifth chapter provides the findings of the analysis of the data used in this research and provides recommendations to DCMA LMMFC-ORL for process improvement. Finally, the sixth chapter provides the summary, conclusion, and areas for further research.

G. SUMMARY

This chapter set the stage for this research and what to expect in the subsequent chapters. First, a background of the research was provided. Next, the purpose of the research was discussed. Research questions were then presented along with the methodology of the research. The benefits and limitations of the research were provided. Finally, the organization of the report was then discussed. The next chapter provides a literature review that serves as a foundation for this research.

II. LITERATURE REVIEW

A. INTRODUCTION

This chapter begins by discussing the theoretical foundation that forms the basis of the research. First, there will be a discussion of Auditability Theory because capable processes are a critical component of Auditability Theory and support auditability in organizations. After discussing Auditability Theory, contract management processes will be presented using the National Contract Management Association (NCMA) Contract Management Standard (CMS). The CMS is an industry standard developed by a third-party accredited program for contract management processes, along with specific emphasis on each phase of the contracting life cycle (NCMA, 2021). Next, a discussion of contract closeout processes will be presented, followed by a historical synopsis of significant reports and audits applicable to contract closeout challenges; past research conducted in this area of study will also be reviewed. Lastly, a summary of the chapter is provided.

B. AUDITABILITY THEORY

Power describes Auditability Theory as the process of “making things auditable” and requires “organizations to establish and actively manage an institutionally acceptable knowledge management system supporting its governance of processes and practices” (Power, 1996, p.289). Power’s Auditability Theory emphasizes the importance of auditability and verifiability, not necessarily accountability, in public sector organizations. In addition, Power argued that organizations undergo a transformation when auditable procedures and processes are developed and implemented (Power, 2007). According to (Rendon & Rendon, 2015), “Auditability is needed by procurement agencies to ensure the integrity, accountability, and transparency of its procurement programs and is an organization’s first line of defense in the battle against procurement fraud” (Rendon & Rendon, 2015, p.712).

Additionally, Rendon and Rendon state that “an effective internal control system, capable processes, and competent personnel are essential to ensuring auditability and value for money in DOD procurement organizations” (Rendon and Rendon, 2015, p. 712).

Further, Rendon and Rendon (2015) used the conceptual framework of the auditability triangle to discuss their theory. The auditability triangle consists of three main components, shown in Figure 1, consisting of “competent personnel, capable processes, and effective internal controls” (Rendon & Rendon, 2015, p.715-716). The components of the auditability triangle will be discussed throughout this section.

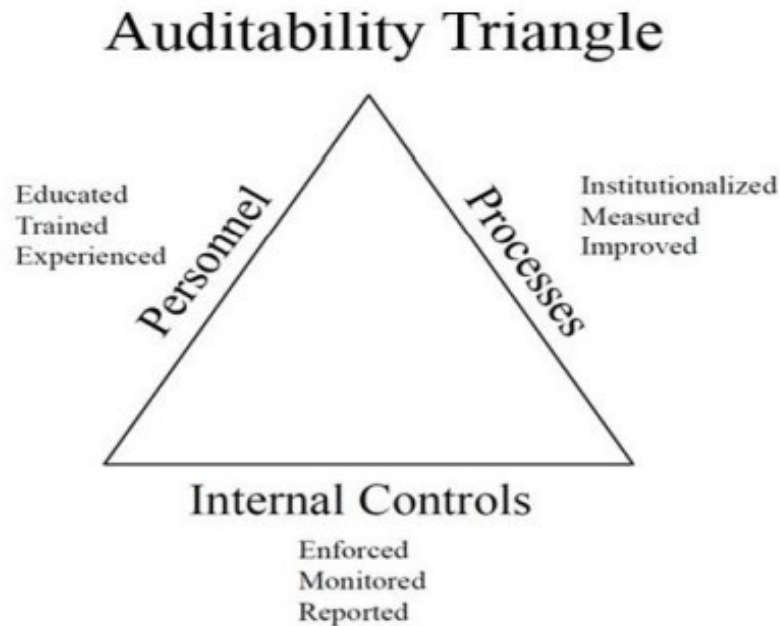


Figure 1. Auditability Triangle. Source: Rendon and Rendon (2015).

The first side of the auditability triangle will concentrate on the competent personnel component. Rendon and Rendon define the competent personnel as those who have the required “education, training, and experience to execute procurement activities” (2015, p.716). As organizations strive to remain competitive, technology changes, along with a changing workforce, require employees and potential employers to guarantee that the skill sets possessed by individuals are relevant (Ito & Brotheridge, 2005). Defense Acquisition Workforce Improvement Act (DAWIA) was enacted in 1990 by Public Law 101-510. This act was intended to improve the effectiveness of personnel responsible for overseeing and implementing defense acquisition programs through mandatory education,

training, and experience requirements, DAWIA mandates the development of DOD systems through personnel competency requirements (Rendon and Rendon, 2016). Each member of the Acquisition workforce must be competent in their respective roles in order to comply with DAWIA. Deputy Defense Secretary Kathleen Hicks, at the virtual 2021 Defense Acquisition Workforce Awards ceremony, stated that “The most important asset in the Defense Department is its people” (Vergun, 2021).

The next side of the auditability triangle focuses on effective internal controls. The effective internal controls component is explained by Rendon and Rendon as “compliance with laws and regulations, monitoring procedures to assess enforcement, and reporting material weaknesses” (Rendon & Rendon, 2015, p. 715). Effective internal control enables an organization to attain its operations, financial reporting, and compliance objectives. In a 2014 GAO report, the GAO found that “Management should establish and operate monitoring activities to scrutinize the internal control system and evaluate the results” (p. 65). The report further stated that “internal control can be accomplished through effective management and personnel playing essential roles throughout an entity in implementing and operating an effective internal control system” (GAO, 2014, p. 6). Rendon et al. stated that “An organization’s contract management processes rely extensively on effective internal controls to ensure the integrity, accountability, and transparency of procurement actions” (Rendon & Rendon, 2015).

The last side of the auditability triangle is the concentration of this research and consists of the capable processes. Capable processes are those “processes by which procedures and routines, paradigms of auditability, become institutionalized as the public face of practice” (Power, 1996, p. 312). According to Rendon & Rendon, “the capable processes represent DOD contract management processes and related activities performed by the contracting workforce” (Rendon & Rendon, 2015, p.754). With procurement agencies striving to maintain a high level of “accountability, integrity, and transparency” in daily procurement management operations, auditability will become increasingly important. (Rendon & Rendon, 2015, p. 726). Furthermore, Garrett and Rendon proposed that “to award and successfully manage effective contracts, organizations must have disciplined, capable, and mature contract management processes in place” (Garrett and

Rendon, 2005, p. 48). With an established contract management process in place, fewer errors are committed and seen during audits (Garrett & Rendon, 2015). In order to develop and implement a set of standard contract management processes, it is necessary to establish capable processes, implement effective internal controls, and employ competent personnel (Rendon & Rendon, 2015). The following section presents the contract management process.

C. CONTRACT MANAGEMENT PROCESS

The DOD adopted the National Contract Management Association (NCMA) Contract Management Standard (CMS) as its competency model, representing the DOD contract management process. The model discusses the Guiding Principles, Pre-Award, Award, and Post-Award phases within the contract management life cycle. In September 2002, the NCMA created the Contract Management Body of Knowledge (CMBOK) framework. The CMBOK includes the CMS in the framework for its training and certification programs. According to the NCMA website, the CMS is an American National Standards Institute (ANSI) accredited standard that defines the contract management process in terms of the “processes created through the integration and interaction of job tasks and skills and the purposes they serve,” (<https://www.ncmahq.org>). Also, CMS presents contract management as “an integrated, whole-systems design, where processes are intuitive and predictable and where potential problems are predictable and can be mitigated at their most fundamental level” (CMBOK, 2019, p. 20). Further, the CMS “provides stability by integrating and standardizing the common job task and competencies that produce significant contract management deliverables” (CMBOK, 2019, p. 21). As an added benefit, NCMA (2019) established the CMS “guiding principles and professional competencies that apply to all phases of the contracting life cycle.” The basic top-level structure of the NCMA CMS is illustrated in Figure 2 (NCMA, 2019). The contract management profession comprises two distinct functions: “buyer and “seller,” and both functions actively engage in DOD acquisition to have a standard set of contract management processes (CMBOK, 2019, p. 21). It is imperative to note that innovative contract management processes can only be implemented successfully when buyer and seller functions have a solid understanding of the complete contract life cycle. The intent

of the CMS is “to develop and fortify contract management practices, policies, and processes” (CMBOK, 2019, p. 22).

As detailed in Figure 2, the CMS begins with Guiding Principles: Skills and Roles, Contract Principles, Standards of Conduct, Regulatory Compliance, Situational Assessment, Team Dynamics, and Communication and Documentation (NCMA, 2019). The Guiding Principles are then followed by three phases of the contract life cycle: Pre-Award, Award, and Post-Award (NCMA, 2019). Each phase contains what the CMS refers to as domains: Develop Solicitation, Develop Offer, Form Contract, Perform Contract, and Close Contract (NCMA, 2019). Competencies are rooted within each domain: Plan Solicitation, Request Offers, Plan Sales, Prepare Offer, Price or Cost Analysis, Plan Negotiations, Select Source, Manage Disagreements, Administer Contract, Ensure Quality, Manage Subcontracts, Manage Changes, and Close Out Contract (NCMA, 2019). The contract’s pre-award, award, and post-award phases will be discussed next.

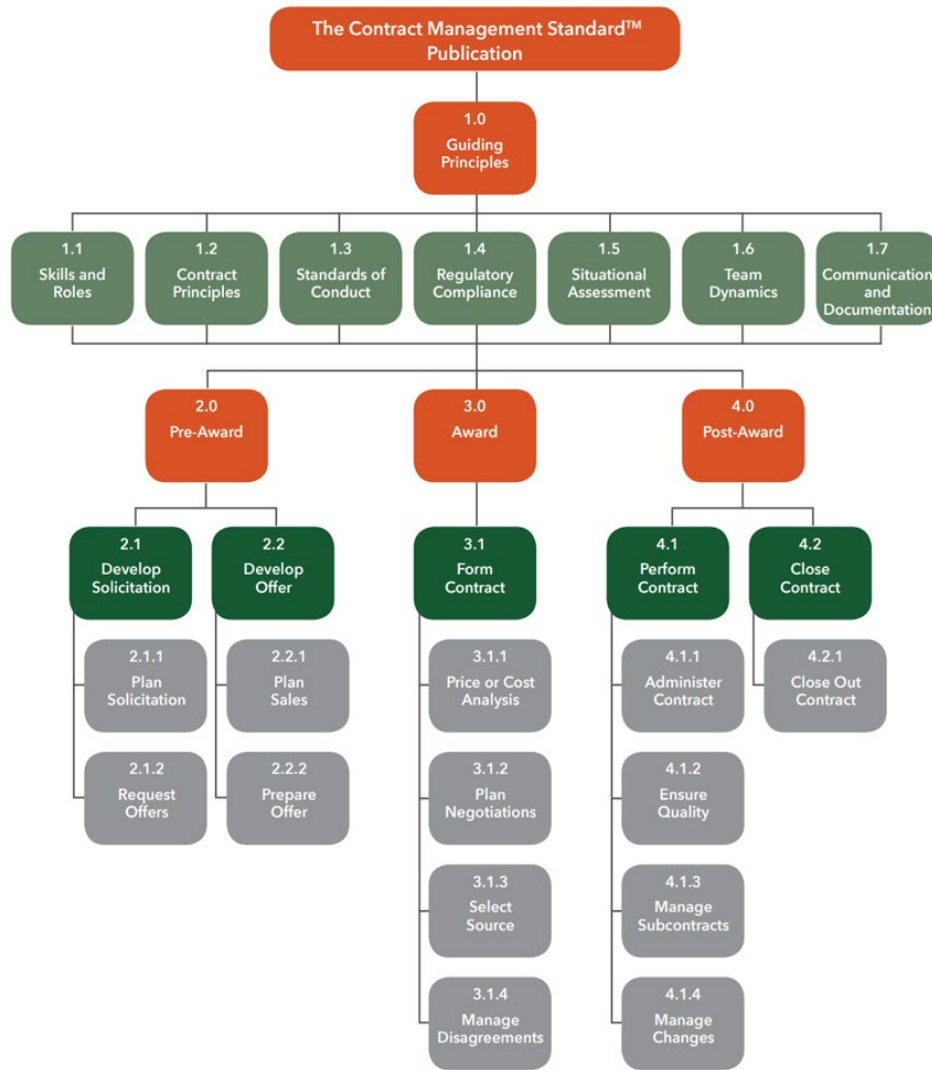


Figure 2. The CMS Publication Contract Management Standard. Source: NCMA (2019).

Pre-award Life Cycle Phase: In the first phase of the contract life cycle, contract specifications are developed, bids are solicited, and contractors’ proposals are received. From the buyer’s perspective, this phase includes the processes for buyers to plan and produce solicitation and sellers to prepare and request offers (CMBOK, 2019, p.126). The CMS defines Plan Solicitation as “the process by which efforts of all personnel responsible for acquiring goods or services are coordinated and integrated through a comprehensive plan for fulfilling the customer’s need in a timely manner at a reasonable cost” (CMBOK,

2019, p. 126). Request Offers, on the other hand, is “the process of executing the solicitation plan by soliciting responses from sellers in order to fulfill a customer need” (CMBOK, 2019, p. 155). Moreover, pre-award processes significantly affect both award and post-award performance and results, so it is imperative to ensure that the contract specifications are met because it allows interested bidders to assess their capacity (NCMA, 2019).

Award Life Cycle Phase: The award phase is the second phase of the contract life cycle. As part of the award phase, qualified contractors are selected, all stakeholders do the initial signing, and the contract is performed. In addition, this phase involves “all the work by both the buyer and seller that produces an awarded contract” (CMBOK, 2019, p.180). The award phase has one domain, which is Form Contract. Contracts are produced by the job tasks and competencies of the Form Contract domain. Form Contracts involve “determining fair and reasonable price /cost analysis, conducting negotiations, selecting the source, and managing protests and appeals” (CMBOK, 2019, p. 180). This stage is crucial to determine whether an offeror can perform the contract successfully.

Post-Award Life Cycle Phase: The last phase of the contract life cycle is the post-award. Once the award phase is complete, the post-award contract life cycle begins. The post-award life cycle comprises two domains that produce significant contract management outcomes: Perform Contract and Close Contract. The perform contract and close contract phase involves evaluating performance and deliverables by the contractor and all contract management functions known as contract administration and contract closeout. The complexity and size of the organization can determine how contracts are administered, which at times may be problematic in the post-award phase. According to the CMBOK, “the challenge and complexity of effective contract administration increases with the size and complexity of the buyer’s and seller’s organizations and the number of contracts to manage” (CMBOK, 2019, p.201). Without a well-functioning system, it is relatively easy to overlook an essential obligation in the contract that is meaningful to all parties. An active contract management system comes into play through consistent and effective communications between the buyer and seller (NCMA, 2019). Therefore, “both the buyers

and sellers must be actively involved in contract administration to ensure performance and successfully conclude the contract” (CMBOK, 2019, p. 200).

The close contract domain, involves both buyer and seller, verifying contract requirements are met, resolving unresolved disputes, and reconciling the contract to make final payments (CMBOK, 2019, p. 222). It is important to begin the closeout process as soon as possible after the contract has been physically completed; this means that the seller has delivered the required supplies and the buyer has inspected and accepted them. The close contract is composed of one competency, “close out contract” Figure 3 shows the competencies and tasks for the close contract domain, which consists of completing several procedural and administrative tasks to change the status of a contract from active to complete (CMBOK, 2019, p. 223). The following section discusses the DOD contract closeout processes.

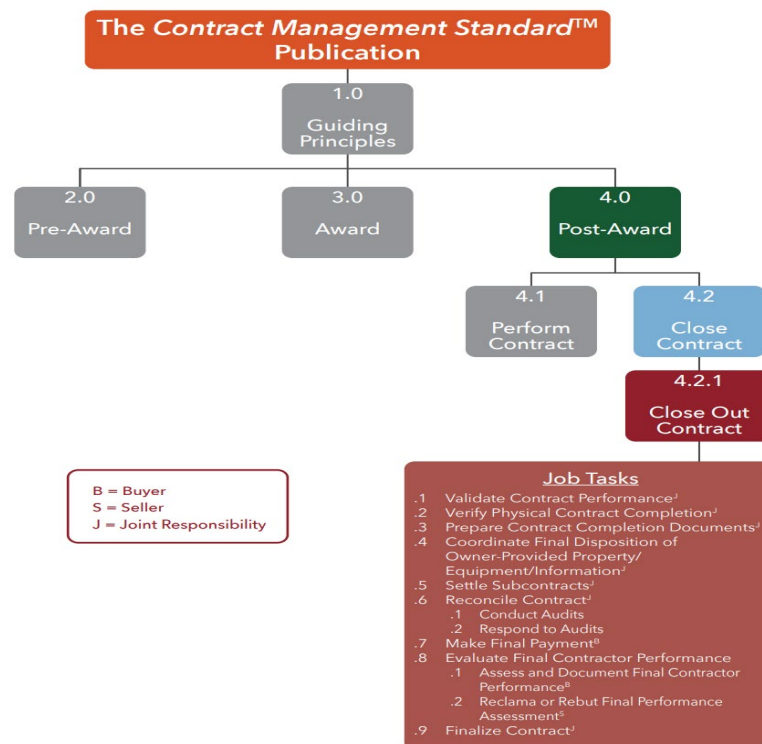


Figure 3. Competencies and Tasks for the Close Contract Domain Source: NCMA (2019).

D. CONTRACT CLOSEOUT PROCESSES

According to the DOD Contract Closeout Guidebook,

Contract Closeout is the final action taken on each DOD acquisition and establishes that each party has fully satisfied its obligation to the other. The contractor must have delivered everything the contract required (material, services, data, certifications, etc.), and the Government must have paid the contractor in full. Any excess funds on the contract must have been de-obligated. Property rights, both physical and intellectual, must have been settled to the satisfaction of the parties. Administrative actions must have been finalized, all necessary documentation must have been included in the contract file, and a Contract Completion Statement must have been generated. (DOD Contract Closeout Guidebook, 2019, p. 3)

The next section discusses the contract closeout processes as prescribed by the FAR.

1. FAR

The FAR outlines the rules, standards, and requirements related to the federal acquisition of goods and services with appropriated funds. Acquisition and contract management activities adhere to the FAR. Generally, contract closeout occurs only when contracts are physically complete (except in the case of terminated contracts). According to FAR 4.804-4,

Except for rentals, use, and storage agreements, a contract is considered to be physically complete when: (1) the contractor has completed the required deliveries or performed all the required services, and the Government has inspected and accepted the supplies or services; and (2) all option provisions (for extending or adding to the completed portion) have expired. Physical completion can also occur if the Government gives the contractor a notice of complete contract termination. Also, the contract shall not be closed if the contract is in litigation/appeal or when a termination is involved, but not all termination actions have been completed. (DOD Contract Closeout Guidebook, 2019, p. 4-5)

The assigned DOD contracting officer is responsible for closing out contracts within specific periods prescribed by FAR 4.804-1(a)(2) through (a)(4) and are usually dependent upon various concerns such as the complexity of the closeout process and time required to complete the tasks in order to close a completed contract properly. These

timelines are depicted in Table 1. Again, the responsibility for contract closeout can be delegated to DCMA in accordance with FAR 42.202(a)

Table 1. FAR Closeout Timelines. Source: Garrett (2009).

Type of Contract Action	Usual Time Frame	FAR Reference
Simplified Acquisition	When the KO receives evidence of receipt of property and final payment (unless agency regulations provide otherwise)	4.804-1(a)(1)
Firm Fixed Price	6 months from date KO receives evidence of physical completion	4.804-1(a)(2)
Contracts that require indirect cost rate settlement	36 months from the month the KO receives evidence of physical completion	4.804-1(a)(3)
All others	20 months from the month the KO receives evidence of physical completion	4.804-1(a)(4)

An illustration of the contract closeout process can be found in Figure 4. A DOD contract can be closed after it has been determined to be “physically complete” by the designated contracting officer. As part of closeout, the contracting officer must verify that all supplies or services have been received and accepted by the government (DOD Contract Closeout Guidebook, 2019). In addition, it is also the contracting officer’s responsibility to ensure that no option provisions remain open. The second step is when the contracting officer completes pre-closeout administrative tasks; the contracting officer settles indirect cost rates for flexibly priced contracts because additional steps are necessary to close out these contracts (GAO, 2012). The FAR also requires a contractor to provide information on all flexibly priced contracts entered into in that fiscal year as part of their proposal. As soon as a proposal is submitted, DCAA audits it in order to determine whether the costs are reasonable, allowable, and allocable to the contract, as well as whether they are compliant with contract terms and regulations (FAR part 31). The contracting officer may coordinate with DCAA and determine that an audit may not need a final voucher. For

example, if a Cumulative Allowable Cost Worksheet (CACWS) is submitted, then the final voucher does not have to be audited. The CACWS is an important closeout tool available to the contracting officer to ascertain allowable costs for closing contracts (DCAAM, 2012). If DCAA does not conduct an audit on time, contracting officers cannot effectively close out flexibly priced contracts within the FAR prescribed timeline.

The third step involves resolving any payment discrepancies after ensuring that the actions in DOD FAR Supplement (DFARS) 204.804, “Closeout of Contract Files” and FAR 4.804-5, “Procedures for Closing Out Contract Files” have been completed. Table 2 and appendix A list the items in FAR 4.804-5, which the contracting officer must verify during the closeout process. The payment disparities in this step typically consist of the de-obligation of any excess funds that result when the amount obligated and accepted by the Government during the contract award phase surpasses the actual cost incurred on the invoice upon contract completion. For example, this can occur when the quantity of goods received is less than what was awarded. However, in a situation in which the excess funds are not de-obligated, the transaction results in an unliquidated obligation where the contractor has yet to be paid for the goods and services delivered.

Table 2. Procedures For Closing Out Contract Files. Source: FAR 4.804-5.

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

The final step occurs when payment disbursement is made to the contractor through the Defense Finance and Accounting Service (DFAS). Finally, the contracting officer signs or electronically annotates the DD Form 1594 “Contract Completion Statement,” certifying the contract has been officially closed, and then retires the contract files.

FAR 4–805 requires all contract files to be retained for a period of six years after final payment (including Foreign Military Sales (FMS) procurements). If there is a Contracting Officer’s Representative (COR) involved in the contract, the COR would deliver their COR files to the Contracting Officer for incorporation into the file prior to closeout (PGI 201.602-2). Within the Procurement Integrated Enterprise Environment (PIEE), the COR’s files will automatically be retained in the Surveillance and Performance Monitoring (SPM) and Electronic Award File (EAF) modules. (DOD Contract Closeout Guidebook, 2019)

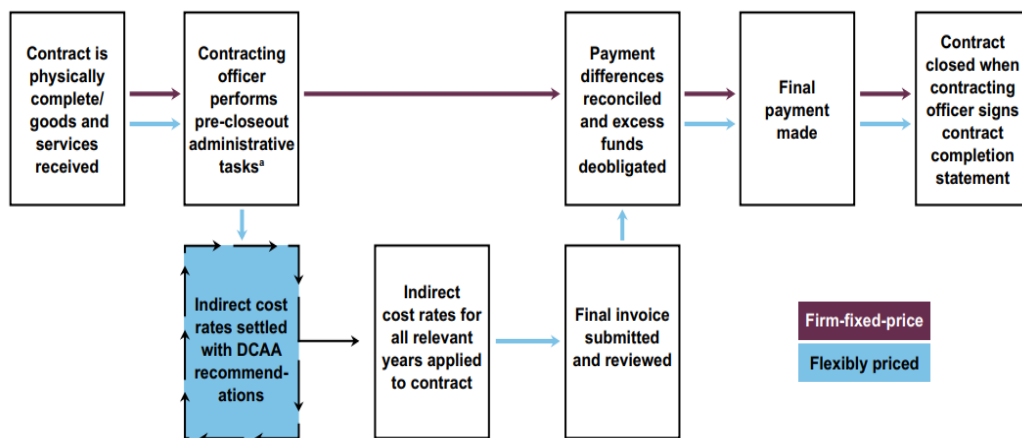


Figure 4. Contract Closeout Process. Source: GAO (2012).

Contracting officers may encounter a variety of issues during closeout, “depending on the nature of the contract (e.g., contract type, use of government property, security classification of documents)” (DAU, 2022). Contracts can be categorized as firm-fixed-price or flexibly priced contracts. The process for closing firm-fixed-price contracts is fairly straightforward to administer because this contract type is generally not subject to price adjustments (GAO, 2021b, p.23), FAR 4.804-5 lists many actions that are not applicable to closeout. Flexibly priced contracts have a higher risk since they include

contracts where the price is adjustable based on actual costs incurred or hours (DOD IG, 2018, p.7).

DCAA's final indirect cost determination may delay closing a flexibly priced contract after it has been physically completed (GAO, 2012, p.19), FAR 42.708 assigns a mandatory streamlined closeout process that may be used in certain conditions to effect a "quick-closeout" of a contract. A quick closeout method is a tool that can be used to expedite the closeout process. The quick closeout proposes an alternative to waiting for a contract's indirect rates to be settled (R. Knauer, 2007). According to FAR 42.708, Contracting officers are permitted to use quick-closeout procedures only after performing a risk assessment and determining that the amount of unsettled direct and indirect costs to be allocated to the contract does not exceed \$1,000,000 or 10% of the total contract value. For flexibly priced contracts that do not meet the conditions for a quick closeout, a contract audit may be needed to determine whether all costs incurred by the contractor are "allowable," "allocable," and "reasonable" (DOD IG, 2018, p. 8).

It is not difficult to close out a contract in its basic form. However, due to the numerous variables such as the contractual delegations, contract types, or when contracts are of high dollar value, the basic process becomes a more complex procedure. If contracts are not properly monitored and tracked, the contract closeout process becomes more complex. Contracts should be monitored to ensure they continue to move forward in the closeout process. Inadequate contract oversight increases the risk that closeout procedures will not be properly performed or documented, since other "real-time" procurement tasks will likely take priority. DOD agencies use various database systems for managing, monitoring, and tracking contracts. The Mechanization of Contract Administration System or "MOCAS" is the primary tool used to manage DOD contracts. Although other DOD agencies use different database systems for contract management, this research will focus on the MOCAS database since this research applies to DCMA. The following section will be a discussion of the MOCAS database.

2. MOCAS

“MOCAS is an automated system used primarily by DCMA and DFAS to administer, pay, and close major DOD contracts” (DOD IG, 2001, p. 1). The report further stated that MOCAS was developed in the early 1960s as a batch processing system, although, over the years, it has evolved to have an online and data warehousing capability (DOD IG, 2001). Additionally, MOCAS was designed to ease contracting personnel’s manual effort; the DOD IG report stated that the system was created to comply with Federal and Defense contracting regulations and ensure that the payment and administration system mirrors each contract’s requirements and contractual delegations per FAR and DFARS provisions and clauses (2001). As part of the MOCAS interface, some DOD logistics systems are updated with various logistics information. DFAS also uses it to initiate the contract payment process (DOD IG, 2001). MOCAS oversees more than 340,000 contracts and obligations valued at approximately \$1.3 trillion (Verma, 2017). MOCAS is used to manage and track contract deliverables, physically completed contracts, the final delivery date (FDD), and other valuable administration information. The tracking provides transparency of contract completion to the contract administration offices, payment offices, procurement managers, and administrative contracting officers (ACOs). MOCAS is designed to deliver DCMA with the information necessary to accomplish its mission as well as management, financial, and inventory data to its customers. Also, MOCAS is designed to process payments for contractors or their designee and provide reports to the military department for transmission to the Office of the Secretary of Defense (OSD), Treasury, or GAO. Finally, MOCAS is designed to automate the closure of contracts as prescribed in the FAR (U.S Air Force, 2005).

MOCAS Interacts with Other Electronic Systems, including 1) Wide Area Workflow (WAWF), a secure web-based system for electronic invoicing, receipt, and acceptance (<https://wawf.eb.mil/>). 2) The Shared Data Warehouse (SDW) is a database environment that provides standardized, shared, cross-functional contracting data to the DOD and its vendors for the purpose of improving military readiness (<http://www.sdw.dcma.mil/sdwhome.htm>). MOCAS provides three separate databases to hold DCMA contract information: MOCG, MOCH, and MOCL. In addition, contract

Management Offices (CMOs) are assigned to a database and are identified in MOCAS by organization codes (e.g., DCMA Manassas = Org Code WV). Figure 5 shows MOCAS Internal Databases.

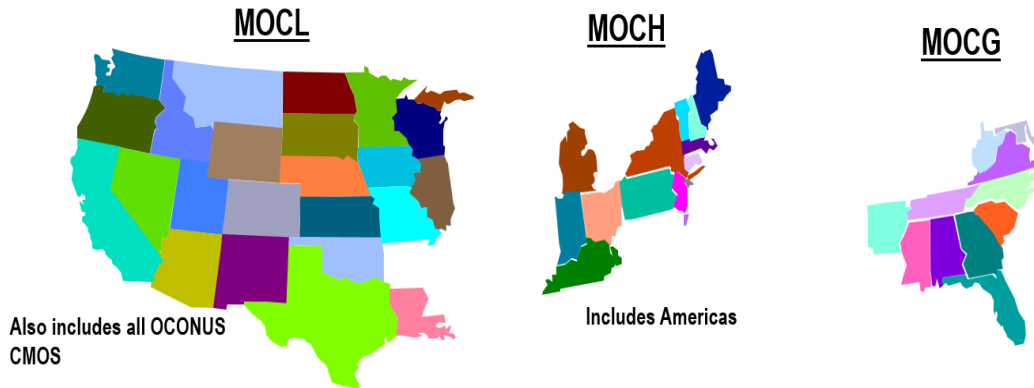


Figure 5. MOCAS Internal Databases. Source: (DCMA Contract Closeout, 2012).

DCMA administers all contracts through MOCAS. These contracts are divided into three sections (A, B, and C), and the status of those contracts is indicated in several Contract Administration Reports (CARs). DCMA is responsible for closing Part A contracts in MOCAS. The MOCAS Part is assigned according to the degree of attention and management expected for the contract.

The CAR's internal purpose at DCMA is to exhibit the status of a contract for tracking purposes. Closeout administration for DCMA administered contracts begins with the issuance of the automated Interim PK9 Indicator, an advisory notice that a contract is physically complete. This information is input into MOCAS by the ACO and generates an electronic notice. For example, contracts in Section 5 indicate that they are physically complete, the rates have been audited, and all payment issues settled (U.S Air Force, 2005). Table 3 shows the CAR Section coding.

Table 3. MOCAS CAR Section Coding. Source: U.S. Air Force MOCAS Contract Closeout Guide (2005).

MOCAS CAR Section Coding	
1	Active Contracts: delivery/acceptance, the performance of services, or work statement requirements have not been met; or the option period or ordering period has not expired
2	Physically Completed: prime contracts (and all task/delivery orders, if any) for which final payments and/or certifications of completion have not yet been made. All TO/DO's must be closed prior to closing the prime contract
3	Dormant: performance has ceased awaiting an investigation or litigation completion.
4	Payment/CLR Adjustments pending: contracts are entered into this section by DFAS and are retained there until reconciliation is completed
5	Contracts that were closed during the reporting period.
6	Computer assigned section number at end-of-month processing for all contracts that were assigned to CAR Section 5 during the month
7	Administrative Closeout: Every month, the system reviews all Section 9 contracts to determine if the closed date is older than six months. If so, the contract and inventory level data will be deleted from the MOCAS database

Whenever a contract is delayed during closeout and exceeds the FAR prescribed time for closeout, the ACO assigns a reason for delay (R2) code to each contract in MOCAS CAR Section 2 that indicates why the contract is still not closed. While it is not necessary to use reason codes until the contract is overaged, accurate status updates are essential to managing the closeout process. Therefore, the codes are encouraged to be utilized once a contract moves into MOCAS CAR Section 2. Because by reviewing the R2 codes, the buying office may be able to assist the ACO or the contractor in resolving the delay. Reason codes range from “A: Contractor has not submitted final invoice or voucher” through “Z+ 6: Fee withholds” and “7: Awaiting Removal from Excess Funds,” with every possible reason (U.S Air Force, 2005). The next section will discuss what DOD oversight organizations (GAO and DOD IG) have reported on DOD contract management and contract closeout.

Table 4. R2 Overage Delay Reason Codes. Source: U.S. Air Force MOCAS Contract Closeout Guide (2005).

Code	Description	Code	Description
A	Contractor has not submitted final invoice/voucher	M	Negotiation of overhead rates pending
B	Final acceptance not received	N	Additional funds requested but not yet received
C	Contractor has not submitted patent/royalty	P	Reconciliation with paying office and contractor being accomplished
D	Patent/royalty clearance required	Q	Armed Services Board of Contract Appeals case
E	Contractor has not submitted proposal for final price redetermination	R	P.L. 85-804 case
F	Supplemental agreement covering final price redetermination required, including negotiation of contingent VE payment	S	Litigation/investigation pending/bankruptcy/labor law determination
G	Settlement of subcontracts pending	T	Terminated for Default
H	Final audits in process	U	Warranty clause action pending
J	Disallowed costs pending	V	Disposition of government property pending
K	Final audit of Government property pending	W	Contract modification pending
L	Independent R&A rates pending	X	Contract release and assignment pending
Y	Awaiting notice of final payment	Z	Disposition of classified material pending
6	Fee withholds	7	Awaiting removal of excess funds

E. GAO AND DOD IG FINDINGS

The GAO acknowledges that the “scope and size of acquisition programs for DOD weapon systems are enormous.” According to the GAO report issued on August 2021, “DOD obligations increased from about \$320 billion in fiscal year 2016 to roughly \$422 billion in fiscal year 2020 on contracts for goods and services, including major weapon systems and information technology” (GAO, 2021c, p.1). DOD Inspector General’s report issued on October 15, 2021, stated that, “Those obligations were more than 59 percent of the DOD’s \$714 billion budget in FY 2020. Through the third quarter of FY 2021, the DOD had obligated \$272 billion toward contracts” (DOD IG, 2021, p.45). As DOD maintains such a large budget, it assumes a great deal of responsibility in managing it

effectively. As a result, DOD has encountered significant acquisition and contract management problems by appearing regularly in the DOD IG's *Top Management Challenges* and was added on the *GAO High-Risk List* since 1992 (DOD IG, 2021). The DOD IG and GAO have also published multiple reports identifying critical areas of DOD contract management that need improvement (Rendon, 2015). Also, several recommendations related to this high-risk issue have been made (GAO, 2021a, p.235).

DOD IG (2021) acknowledged that “DOD has significantly mitigated some key contract management risks, specifically those involving its acquisition workforce, and has been removed as a specific element within the high-risk area of DOD contract management. However, contracted services and operational contract support” still identify as high-risk areas that need to be addressed (p. 25). According to a GAO report issued in March 2021, DOD Contract Management (Acquisition Workforce) was removed due to the significant rebuilding of acquisition workforce (GAO, 2021a). Some of the challenges of contract management that attributed it to being placed on the high-risk list were identified on the DOD IGs (2019) list of *Top Management Challenges for Fiscal Year 2020* as Challenge 9 (p. 111). According to the report, “many DOD programs still fall short of cost, schedule, and performance expectations” and “acquisitions remain challenging because of the complexity of developing major systems” (p.111). Further, Rendon (2015) identified poor contract planning, poor contract administration, and inadequate contractor oversight as areas of DOD contract management that were significantly lacking. Contract administration activity involves monitoring contractor performance, managing the contract change process, and processing contractor payments (Rendon, 2015); these also link to deficient contract closeout. The following section will discuss audits and reports that provide a historical basis pertinent to the problems of contract closeout.

- 1. GAO 11–891: Improved Planning and Management Oversight Needed to Address Challenges with Closing Contracts**

A GAO report uncovered various closeout issues relating to a contingency contract awarded to support efforts in Iraq and Afghanistan. First, the GAO review revealed that only 5 percent of Iraq contracts were closed (GAO, 2011, p.2), and 90 percent were already overage (GAO, 2011, p.11). Contract management practices found an array of issues

related to contract closeout, such as insufficient oversight and visibility on contracts eligible for closeout; thus, data had numerous discrepancies, inadequate advance planning, DCAA had staffing shortages and unresolved accounting issues, which caused delays in auditing contractors' incurred costs. To remedy these issues, the Army created a Contract Closeout Task Force Office to handle the backlog. Nonetheless, due to the workload volume, it was later reassigned to the Army Contracting Command–Rock Island (ACC-RI) because ACC-RI had a workforce that could manage complex contract actions.

2. GAO 13–131: DOD Initiative to Address Audit Backlog Shows Promise, but Additional Management Attention Needed to Close Aging Contracts

According to a December 2012 GAO report, DOD components, including the Army, Navy, and Air Force, had limited data on backlogs of contracts awaiting closeout due to not prioritizing contract closeout. The report further stated that DCAA's backlog of approximately 25,000 incurred cost audits, some dating back as far as 1996, was identified as one of the significant contract closeout issues (GAO, 2012). Additionally, the backlog was enormous because DOD commands focus more on awarding contracts than closing contracts, and another issue uncovered was the visibility issues with the data collection system (MOCAS) and limited staffing at DCAA. As a result, a plan for assessing DCAA's incurred cost audit initiative was recommended by the GAO. As part of the initiative, it was expected that DCAA would prioritize incurred cost audits of high-value, high-risk proposals to minimize the number of audits conducted under the initiative. Using the risk-based approach, DCAA effectively minimized its backlog by reducing the number of contracts requiring audit while preventing contractors from reporting erroneous cost proposals (GAO, 2012, p.12).

Another issue related to inadequate data was also identified in the report. The problem was that the military departments lacked records of the contract closeout data; hence, it was impossible to determine the extent or nature of the backlog of contracts awaiting closeout. Further, the Navy and Air Force had no performance metrics regarding contract closeout (p.20), as well as DCMA, was missing important information that would permit it to identify contracts it could address (p.18). The GAO also recommended that

DCMA “improve data on over-age contracts”; and that “the military departments develop contract closeout data and establish performance measures” (GAO, 2012). To address the ongoing problems, the DOD agreed with the recommendation.

3. GAO-17-738: Additional Management Attention and Action Needed to Close Contracts and Reduce Audit Backlog

The GAO reviewed five agencies and identified a collection of issues. The issues are that the agencies did not have unified data resulting in a lack of insight regarding the number of contracts that were due for closeout, agencies could not track the contract status by identifying where they were in the closeout process, there was no recognized agency-wide contract closeout related goals and metrics in place to measure performance (GAO, 2017, p.10). In the absence of insight into contract closeout status, DOD’s oversight, and ability to address the backlog of contracts awaiting closeout are hindered.

Additionally, as of fiscal year 2016, DCAA had reduced the number of incurred cost proposals awaiting audit by about 14,000 from about 31,000 in fiscal year 2011. The DCAA, however, expressed concern about not meeting its original goal of eliminating proposals older than two years by fiscal year 2018. The reasons were that there were resource constraints, such as hiring freezes, as well as workforce shortfalls. Nevertheless, when comparing fiscal year 2015 to the end of fiscal year 2016, DCAA successfully decreased the inventory of audit proposals by approximately 16 percent, as shown in Figure 6. DCAA attributed its progress to management prioritizing incurred cost audits through its risk-based approach and multi-year audit approach, where DCAA merges two or more incurred cost proposals into a single audit. According to DCAA, this approach “reduced the average number of hours to conduct an audit by 40 percent over conducting separate single-year audits” (p. 26).

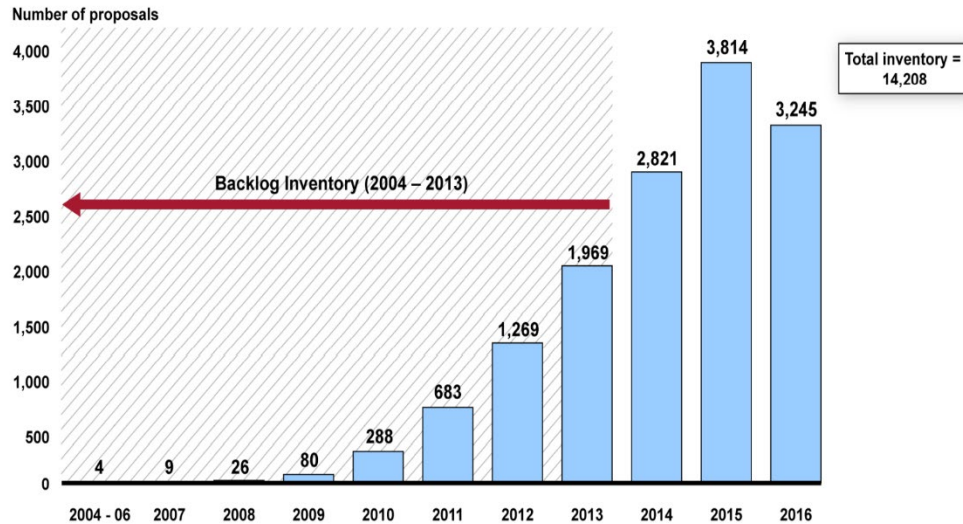


Figure 6. Number of Contractor Proposals in the DCAA’s Inventory as of September 30, 2016. Source: (GAO, 2017).

4. Report No. DOD IG-2020-049: Evaluation of DCMA Contracting Officer Actions on Penalties Recommended by DCAA

The DOD IG auditors expressed concern in their Report No. DODIG-2020-049, a redacted version issued on January 10, 2020. The DOD IG auditors criticized 18 of 28 DCAA audit reports; because the contracting officer failed to “adequately explain reasons for disagreeing with DCAA’s recommendations to assess penalties on \$43 million in unallowable indirect costs.” More specifically:

1. For \$32 million, the contracting officers decided that the costs were not subject to penalties. However, the DCMA contracting officers did not document an adequate rationale for disagreeing with DCAA that the costs were unallowable and subject to penalties.
2. For \$11 million, the contracting officers determined that the costs met the FAR criteria for waiving penalties. However, the DCMA contracting officer did not document adequate rationale to demonstrate that the DOD contractor met the FAR criteria for waiving penalties. (DOD IG, 2020, p.6)

Thus, according to the DOD IG auditors, “the contracting officers did not comply with the FAR 42.705-1(b)(5)(iii)(c) requirement that contracting officers document adequate rationale when they disagree with DCAA recommendations.” As a result, \$43 million of costs that could have been unallowable and subject to penalties were not

collected by contracting officers, as required by FAR 42.709(f). In the report, the noncompliance was attributed to the contracting officer's "lack of training with regard to determining when a cost is allowable by the contractor, waiving penalties, and interest, failing to obtain a legal review, failing to obtain DCAA's opinion on additional information received after the audit report was issued, and ineffective supervisory reviews" (p.30). Whenever penalties are not assessed and imposed, DOD contractors have less incentive to exclude expressly unallowable costs from incurred cost proposals and the risk of the DOD paying for costs that are unallowable increases. The following section will discuss some of the past research conducted on contract closeout processes.

F. PAST RESEARCH

A synopsis of the past research provides context to the subject of contract closeout and highlights its disparities, allowing this research to show how to address them. Even though there have been multiple studies and research on contract closeout, the following are especially relevant to this research focusing on contract closeout processes.

Motherway (1993) examined the contract closeout processes. This research was structured similarly to this research. Motherway sought to streamline the contract closeout process by applying continuous process improvement techniques. He gathered contract data from personal interviews to develop a contract closeout process model by identifying problems in the contract closeout process. Further, he applied a continuous improvement procedure to the contract closeout model and to the problems identified so that the problems could be reduced, and the process could be more efficient. Lastly, the researcher recommended giving more priority to closing DOD contracts, developing an automated closing process, developing a training program in the contract closeout process, improving communications between contract organizations, and implementing ongoing process improvements to help reduce the time it takes to close contracts.

Another example Bandy (1998) evaluated the contract closeout process at DCMC (Defense Contract Management Command) Lockheed Martin (LM). The researcher used "contract closeout policies and procedures at DCMC Headquarters to develop a basis of comparison for DCMC LM." The secondary purpose was to analyze the factors that

prevented timely contract closeout, both DCMC-wide and at DCMC LM, and compare metrics results to analyze DCMC LM's progress in contract closeout. The research generated several conclusions concerning contract closeout within DOD, the DCMC organization, and DCMC LM.

These conclusions were: “1) Timely contract closure depends on various factors such as the size, complexity, contract type, and other items often beyond the ACO's control. 2) DOD does not prioritize contract closeout during the pre-award procedure. 3) There were no penalties in place for contractors who submitted late final invoices or late submission of final overhead proposals. 4) The percent overage metric used by DCMC to track overage closeouts does not accurately represent the actual percentage of overage contracts. 5) Despite recent efforts and initiatives, DCMC's percent of overage contracts did not decrease. 6) Quick Closeout Procedures contained limitations that were too restrictive to provide acceptable use by large cost centers such as DCMC LM. 7) The inability of prime contractors to settle contracts with subcontractors was often the sole reason for overage contracts at large cost centers such as DCMC LM. Also, the inability of DCMC LM to settle indirect cost rates with Lockheed Martin Missiles and Space Company was primarily due to the late flow down of Lockheed Martin's corporate overhead rates. Finally, the researcher recommended the applicability of the DCMC LM initiatives to other organizations throughout DCMC” (Bandy, 1998).

Rendon carried out survey-based research (2015). A process capability maturity model was used to assess the maturity of contract management processes in the U.S Navy. Rendon utilized an assessment tool (Contract Management Maturity Model (CMMM)) and discovered that the pre-award contracting processes (Procurement Planning, Solicitation Planning, and Source Selection) reflected higher maturity levels when compared to post-award contracting processes (Contract Administration and Contract Closeout) which reflected a lower maturity level. The post-award processes of the Navy contracting organization were typically the lowest in terms of process capability. Research findings revealed higher mean scores for pre-award processes and lower mean scores for post-award processes related to process capability enablers. In Figure 7, mean scores are shown for each contract management process area in the CMMM summary-level survey. These

scores reflect the extent to which Navy contracting agencies enforce contracting best practices (Rendon, 2015).

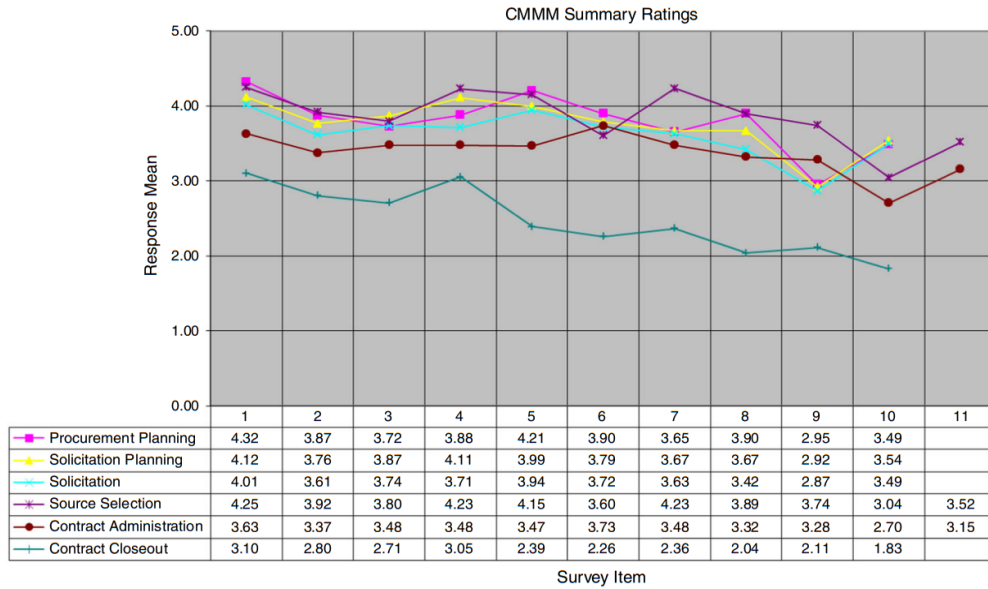


Figure 7. Navy CMMM Survey Response Mean Scores. Source: Rendon (2015).

Lastly, a review of the contract closeout process at the Marine Corps Installations National Capitol Region Regional Contracting Office (MCINCR-RCO) was conducted by Griffin (2018) to assess its adequacy and effectiveness. In this study, Griffin examined the MCINCR-RCO contract closeout process with reference to FAR Part 4 in order to identify appropriate contract closeout procedures and protocols. In addition, the researcher conducted an organizational analysis to identify areas of MCINCR-RCO’s contract closeout process that may have been overlooked. MCINCR-RCO was compared with other DOD best practices for contract closeouts in order to support its options for effectively managing the closeout process. Griffin’s research further had an in-depth examination of eligible contracts for closeout and dollar values of contracts. In the end, he presented

recommendations that would help the organization improve its closeout process. The following section will conclude with a summary of the chapter.

G. SUMMARY

This chapter discussed the theoretical foundation that forms the basis of the research. First, a discussion of Auditability Theory was presented because capable processes are a critical component of Auditability Theory and support auditability in organizations. Next, contract management processes using the National Contract Management Association (NCMA) Contract Management Standard (CMS), an industry standard developed by a third-party accredited program for contract management processes, were presented with specific emphasis on each phase of the contracting life cycle. Also, a discussion of contract closeout processes, followed by a historical synopsis of significant reports and audits applicable to contract management challenges (contract closeouts), was reviewed, along with past research conducted in the area of study. The next chapter provides an overview of the Defense Contract Management Agency Lockheed Martin Missiles and Fire Control Orlando (DCMA LMMFC-ORL), the organization that participated in the study.

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III. DEFENSE CONTRACT MANAGEMENT AGENCY LOCKHEED MARTIN MISSILES AND FIRE CONTROL (ORLANDO, FLORIDA)

A. INTRODUCTION

This chapter lays the foundation for this analysis by providing background information for DCMA and DCMA LMMFC-ORL Contract Management Office (CMO), including a brief discussion of DCMA and its mission followed by the history of DCMA LMMFC-ORL, along with an outline of the organizational structure. Organizational structure is essential for understanding how a command works and how it implements its vision. Next, DCMA LMMFC-ORL's scope of responsibility is discussed, and finally, its current performance management and measures are presented.

B. DCMA MISSION

DCMA is the federal arm responsible for overseeing product delivery for equipment, products, and components that the U.S. military and related warfighters use. As part of its contract administration services, DCMA oversees and manages procurement-related activities that enhance the lethality of warfighters. By performing these activities, DCMA ensures that high-quality products are delivered on time, customer satisfaction is met, and provides "relevant acquisition insight supporting affordability and readiness to the DOD, authorized Federal agencies, foreign governments, and other international organizations" (DOD IG, 2022, p. 2). DCMA's mission is to be the "independent eyes and ears of DOD and its partners, enhancing warfighter lethality by ensuring timely delivery of quality products and providing relevant acquisition insight supporting affordability and readiness" (<https://www.dcmamil/>). Although DCMA does not award contracts, it is only responsible for the management of contracts after they have been awarded. "DCMA is integral to the acquisition process from pre-award to sustainment by providing contract administration services for DOD, other federal organizations, and international partners" (<https://www.dcmamil/>). DCMA LMMFC-ORL's history and organization are provided in the next section.

C. DCMA LMMFC-ORL HISTORY

DCMA LMMFC-ORL, prior to October 1966, was an Army Plant Office under the U.S. Army's Birmingham Procurement District and the U.S. Army Missile Command, with 130 personnel assigned at its peak. From October 1966 to October 1976, the designation was changed to Defense Contract Administration Services (DCAS) Office. In October 1976, the designation was again changed to a Resident Office, with 40 personnel assigned. The DCAS Residency was established in April 1979 under Defense Contract Management Area Operations (DCMAO) Orlando. Then Defense Contract Administration Services Plant Representative Office (DCASPRO), independent of DCMAO Orlando; thereby recognized as a separate command, reporting directly to the District Headquarters in Marietta, Georgia.

In August 1990, as a result of a comprehensive reorganization of Defense Contract Management, the office was designated as the Defense Plant Representative Office (DPRO). Lockheed Martin Marietta, GA and Orlando was assigned to Defense Contract Management District South (DCMDS) under the Defense Contract Management Command (DCMC) of the Defense Logistics Agency (DLA). In February 1996, DCMDS South was merged with District Northeast and became DCM District East. All Defense Contract Management Command offices assumed the same DCMC designation regardless of geography or plant location during this same period. Effective March 27, 2000, DCMC was renamed as the Defense Contract Management Agency. In November 2002, DCMA Lockheed Martin Orlando was consolidated as a subordinate command reporting to DCMA Orlando.

In April 2006, as part of a product-based realignment of DCMA offices, DCMA LMMFC-ORL was realigned as a "tertiary" Contract Management Office beneath the DCMA Missile Operations Command, which was based in Tucson, Arizona. The Command operated under this context for four years. In June 2010, at the onset of a major reorganization and growth period for the Agency, DCMA LMMFC-ORL was restored to its current status as a "primary" Contract Management Office, reporting to the Eastern Regional Command, located in Boston, Massachusetts (<https://www.dcma.mil>).

D. DCMA LMMFC-ORL ORGANIZATIONAL STRUCTURE

DCMA LMMFC-ORL provides contract management services to DOD Agencies for contracts awarded to Lockheed Martin Missiles and Fire Control and Lockheed Martin Mission Systems and Training in Orlando, Florida. DCMA LMMFC-ORL has a highly detailed organizational structure that identifies the contracting office and its participants. A major part of the DCMA LMMFC-ORL’s mission is to assist its customer base with contracting, and this involves long-term support in the following areas: contract administration, quality assurance, engineering, program management, cost monitoring, financial services, and property administration.

The organization is led by a director or commander, whom a deputy director assists, followed by mission support, and three branch chiefs, as shown below; the branch chiefs manage each buying team. Furthermore, the director supervises the chiefs of contracts administration, engineering and manufacturing, and quality assurance (DCMA LMMFC-ORL mission support, 2022). Figure 8 displays the participants in the DCMA LMMFC-ORL organizational structure.

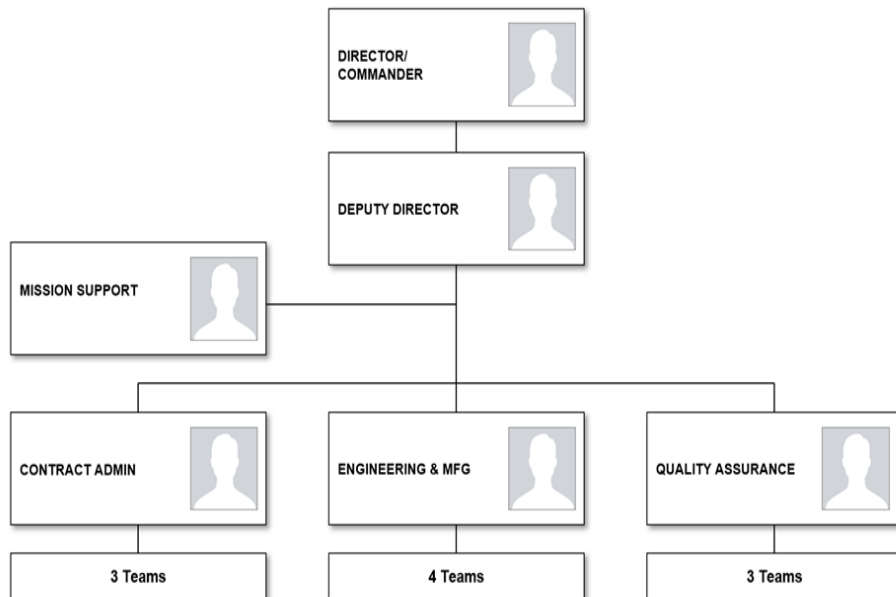


Figure 8. DCMA LMMFC-ORL Organizational Structure. Source: DCMA LMMFC-ORL Mission Support (2022).

E. SCOPE OF RESPONSIBILITY

DCMA LMMFC-ORL is currently responsible for 23 Acquisition Category (ACAT) Programs, with 16 Major Defense Acquisition Programs. It collaborates with approximately 25 program offices within 10 different buying commands and is geographically dispersed, with five locations in a two-state region as reflected in Figure 9. The staff is responsible for Missiles and Fire Control contract performance at the Sand Lake Road Complex in Orlando and at production facilities in Ocala, Florida and Troy, Alabama, and for Lockheed Martin Rotary & Mission Systems contracts at the Lake Underhill Road Complex in East Orlando. Additionally, the Fleet Ballistic Missile Program workload is currently transitioning from DCMA Sunnyvale to DCMA LM Orlando at the Titusville facility (<https://www.dema.mil>, 2022).

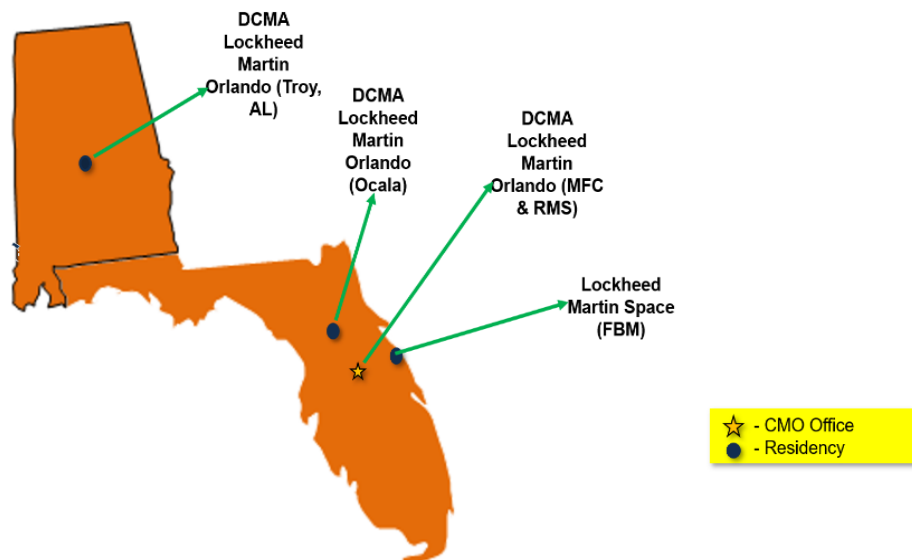


Figure 9. DCMA LMMFC-ORL Area of Responsibility. Source: DCMA LMMFC-ORL Command-Overview-Brief (2021).

The face value of contracts since May 1984 has grown from \$3 billion to the present \$27 billion, covering the complex contract administration of major missile weapons systems, electro-optical navigational guidance/target acquisition systems, automated test stations, logistic information systems, and military simulators (<https://www.dema.mil>, 2022). DCMA LMMFC-ORL currently manages approximately 640 contracts with an

overall total obligated amount of \$23.9 billion (DCMA LMMFC-ORL Command-Overview-Brief, 2021). Table 5 reflects DCMA LMMFC-ORL contract workload.

Table 5. Contract Workload. Source: DCMA LMMFC-ORL Command-Overview-Brief (2021).

CMO Contract Workload			
CONTRACT COUNT			
	Contracts	Obligated	Unliquidated
Active	448	\$17.4B	\$7.8B
Closeout	187	\$6.3B	\$69.2M
Other	5	\$226M	\$8.7M
TOTAL	640	\$23.9B	\$7.9B
CONTRACT TYPE			
Fixed	241	\$4.9B	\$2.0B
Cost	327	\$19.0B	\$5.9B
Other	72	\$0	\$0
TOTAL	640	\$23.9B	\$7.9B

F. CURRENT PERFORMANCE MANAGEMENT AND MEASURES

DCMA LMMFC-ORL employs a wide range of management control processes and controls to ensure success. Some of the ones most responsible for that success include various senior leadership and management meetings, all of which are structured to help ensure things don't "slip through the cracks." Local Operating Procedures (LOP) is implemented only when deemed necessary to provide additional local guidance on how DCMA LMMFC-ORL implements key policy(s) and manual(s), e.g., who does what and when, where we store the data, etc. Also, DCMA LMMFC-ORL utilize Suspense Management process which is particularly important to ensure on-time accomplishment of key tasks and mission requirements, as well as Performance Management Process, to include: (1) Organizational Commitment Plan (OCP) flowed down from East Region, based on the Agency Strategic and Performance Plans; (2) OCP tracking tools which track

CMO/group/team progress/performance against the OCP; (3) supervisor Acquisition Workforce Personnel Demonstration (AcqDemo) Contribution Plans (CP) flowed down/derived as appropriate from the OCP; (4) Employee Performance Plans (DPMAP) derived to support the supervisor CPs and key policy requirements; and; (5) periodic performance discussions.

DCMA LMMFC-ORL use a Program Priority Planner (“3P”) to assess programs monthly, assessing their priority (Program Status, Acquisition phase, In-House Inspection, Special Focus), Issue Scoring (Program Issues, CARs, Prime Control of Subcontractor Assessment (PCSA), etc.), and the Risk (Likelihood, Impact, Mitigation). These are rolled into an overall score that provides a relative look between programs. Figure 10 is an example of the 3P cover page.

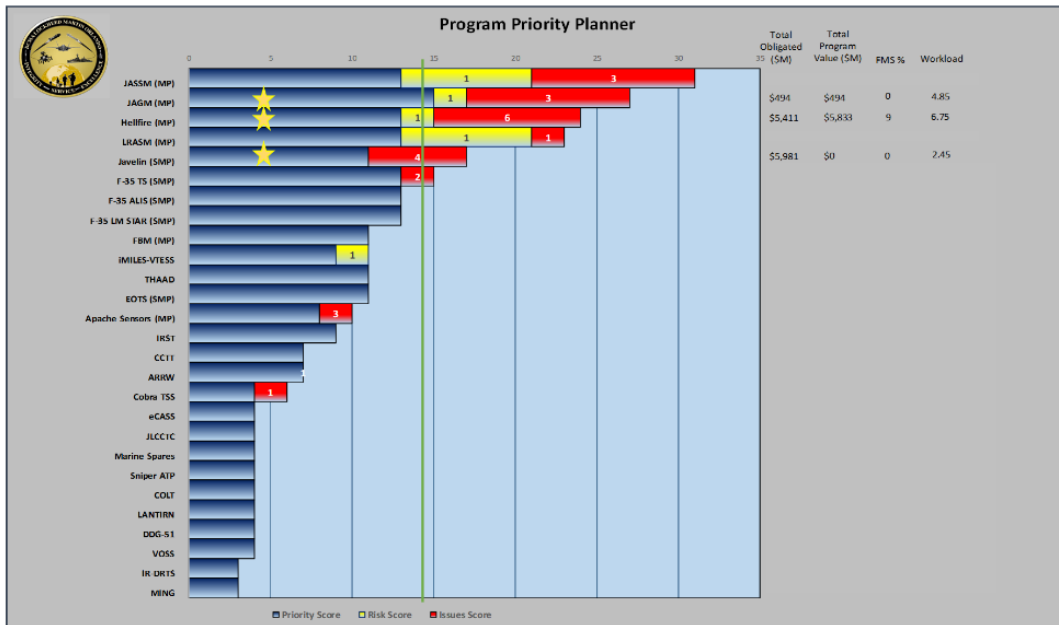


Figure 10. DCMA LMMFC-ORL Program Priority Planner (“3P”). Data current as of 05/17/2021. Source: DCMA LMMFC-ORL Director’s Engagement Brief (2021).

G. SUMMARY

This chapter provided an overview of DCMA LMMFC-ORL as an organization. It discussed its mission, history, organizational structure, scope of responsibility, current performance management, and measures with the aim of providing context and relevance along with historical details. Furthermore, understanding the mission of DCMA LMMFC-ORL provides a sense of purpose on their core organizational mission and priorities. The next chapter will provide the research methodology used in this research.

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IV. RESEARCH METHODOLOGY

A. INTRODUCTION

This chapter discusses the methodology utilized in this research, as well as the source of the data, the data fields/types, and explains how the data will be analyzed data.

B. SOURCE OF DATA

The MOCAS database manages all DCMA contracts; therefore, the MOCAS database will be the data source for this analysis. MOCAS, as mentioned earlier, is designed to help DCMA and DFAS achieve their contract and payment administration mandate by providing them with electronic information necessary to accomplish their mission (U.S Air Force, 2005). “MOCAS is accessed through Mainframe Internet Access Portal (MIAP) and hosted by Defense Information Systems Agency (DISA)” (DCMA, 2012). The next section presents the data fields and types required to meet research objectives.

C. DATA FIELDS AND TYPES

The required data fields are the specific categories utilized in analyzing the data. The data fields will consist of MOCAS Part A administrative data. The MOCAS administrative data consist of contract type, contract kind/contract nature, contract section indicator (CAR Section 2), cage code (04939), final delivery date (FDD), contract obligated amount, unliquidated obligations (ULOs), overage date, reason codes (R2 Codes), and the estimated closing date. Figure 11 shows an example of the MOCAS administrative data screen print, which provides general information about the contract, including functional specialist codes.



Figure 11. MOCAS Administrative Data Screen Print. Source: DCMA Price Cost Analysis & Contract Closeout Course (2013).

Further, DCMA LMMFC-ORL generated MOCAS download reports will identify the dollar amount representing the highest percentage of the backlog or high dollar amount within MOCAS. It is important to note that the MOCAS database utilizes codes in identifying the types of contracts. The flexibly priced contract codes utilized are R, S, T, U, V, Y, Z, and L. Table 6 displays FAR-mandated time standards in relation to MOCAS contract type codes.

Table 6. FAR-mandated Time Standards in Relation to MOCAS Contract Type Codes. Source: DCMA Contract Closeout (2012).

FAR-Mandated Time Standard (FAR 4.804)	
Timeframes	MOCAS Codes and Contract Types
3 Months	J - Fixed Price Unilateral Purchase Orders
6 Months	J - FIRM FIXED PRICE
36 Month	R - COST-PLUS AWARD FEE S - COST CONTRACT T - COST SHARING U - COST-PLUS-FIXED-FEE V - COST PLUS INCENTIVE FEE Y - TIME AND MATERIALS Z - LABOR HOUR
20 Months	A - FIXED PRICE REDETERMINATION K - FIXED PRICE W/ECONOMIC PRICE ADJUSTMENT L - FIXED PRICE INCENTIVE O - OTHER – BASIC ORDERING AGREEMENT/INDEFINITE DELIVERY CONTRACTS/BLANKET PURCHASE AGREEMENT (BOA/ITCs/BPA)

D. DATA ANALYSIS

This research aims to determine the reasons for the backlogs of contracts at DCMA LMMFC-ORL. Descriptive analysis will be used to summarize and organize the features of the data collected by describing what the data displays. In addition, the data will be used to identify any trends or patterns on most contracts not being closed out because of a specific activity or whether some reasons are more common in a particular contract type that hinders the contracts from closing on time. Finally, recommendations will be developed for DCMA LMMFC-ORL to improve its contract closeout process.

E. SUMMARY

This chapter discussed the methodology utilized in this research, as well as the source of the data, the data fields, and types, and explained how the data was analyzed. The next chapter provides the research findings, the discussion of the findings, the implications of the findings, and recommendations for reducing the backlog of contracts that need to be closed out.

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V. FINDINGS, ANALYSIS, IMPLICATIONS, AND RECOMMENDATIONS

A. INTRODUCTION

This chapter will first present the findings of this research on the contract closeout process at DCMA LMMFC-ORL using the data obtained from MOCAS CAR Section 2, followed by a discussion of the findings and the implications of the findings. Lastly, the analysis will lead to recommendations that will help reduce the backlog of contracts awaiting closeout based on insights gained from the analysis.

B. FINDINGS

MOCAS CAR Section 2 has approximately 182 physically complete contracts pending closeout with approximately \$77,000,000 in unliquidated obligation amount tied to those contracts. Cost plus fixed fee (CPFF) contracts account for 80% of the 182 contracts analyzed as reflected in Table 7.

Table 7. DCMA LMMFC-ORL Flexibly Priced Contracts Pending Closeout as of December 31, 2021.

Contracts Pending Closeout	Count	%
Cost Plus Fixed Fee (U)	146	80%
Cost Contract (S)	16	9%
Time and Material (Y)	12	7%
Cost Plus Incentive Fee (V)	6	3%
Fixed Price Incentive Fee (L)	1	1%
Cost Sharing (T)	1	1%
Total Contracts Pending Closeout	182	100%

Of the 182 contracts pending closeout identified in MOCAS CAR section 2, twenty-eight (28) or 15.38% are overaged as shown in Table 8.

Table 8. DCMA LMMFC-ORL Overage and Non-Overage Contracts Pending Closeout as of December 31, 2021.

Overage/Non-Overage Contracts Pending Closeout	Count	%
Overage Contracts Pending Closeout	28	15.38%
Non-Overage Contracts Pending Closeout	154	84.62%

Table 9 shows that approximately 70% (127 out of 182) of the contracts were not assigned a reason code and had no estimated closing date. Missing reason codes were discovered when data was pulled from MOCAS CAR Section 2, and blank data cells were generated, indicating no reason codes were assigned on those contracts pending closeout.

Table 9. DCMA LMMFC-ORL Reason Codes for Contracts Pending Closeout as of December 31, 2021.

Reason Codes for Contracts Pending Closeout	Count	%
Contracts with Reason Codes Assigned	55	30%
Contracts without Reason Codes Assigned	127	70%

CPFF contracts account for the highest percentage (80%) of contracts pending closeout. Likewise, CPFF contracts account for the majority of overage contracts in the backlog of contracts pending closeout residing in MOCAS CAR Section 2. Figure 12 shows the breakdown of the reviewed contracts, which indicates that 80% are CPFF contracts (U), 9% are Cost Contracts (S), 3% are CPIF contracts (V), and 7% are T&M contracts (Y). Other types of contract account for less than 2% of the total contracts.

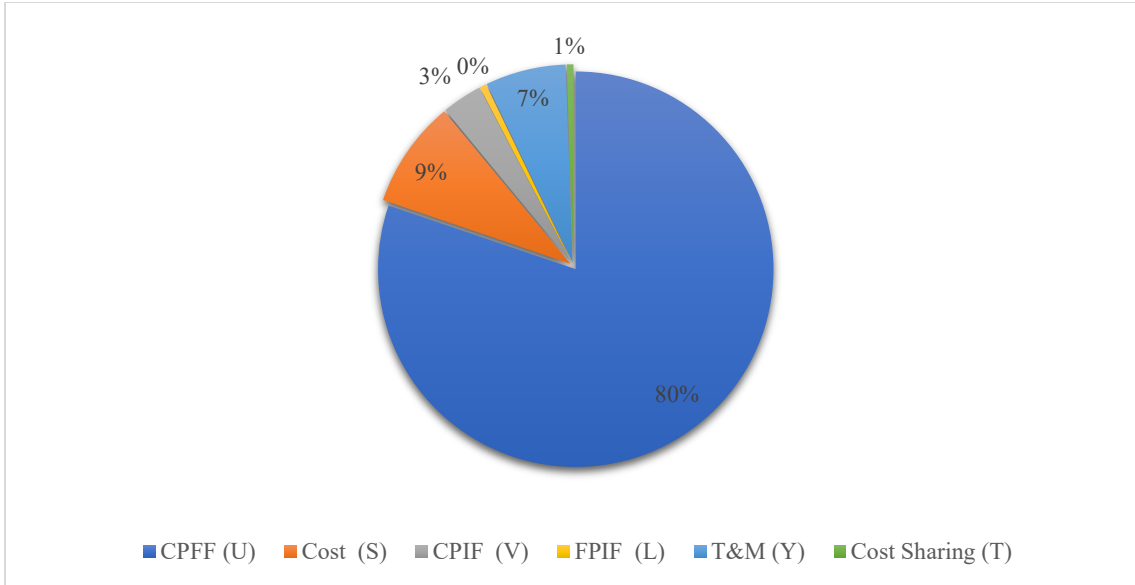


Figure 12. DCMA LMMFC-ORL Flexibly Price Contract Types Pending Closeout as of December 31, 2021.

Of the 182 contracts reviewed over a six-year period, the trend shows an increase year over year in the number of contracts pending closeout from 2019 through 2023, with the exception of 2024 which had a slight decrease, as shown in Table 10 and Figure 13. Additionally, Table 10 and Figure 13 reflect that from 2019 through 2021, twenty-eight (28) contracts pending closeout are overaged (**highlighted in red**).

Table 10. DCMA LMMFC-ORL Flexibly Price Contract Count by Year as of December 31, 2021.

Year Eligible for Closeout	Number of Contracts Pending Closeout	%
2019	1	0.55%
2020	4	2.20%
2021	23	12.64%
2022	32	17.58%
2023	65	35.71%
2024	55	30.22%



Figure 13. DCMA LMMFC-ORL Flexibly Price Contract Count by Year as of December 31, 2021.

Figure 14 shows that “no reason codes assigned” accounts for the highest number of reason codes residing in MOCAS CAR section 2, with approximately 70%. Additionally, as reflected in Figure 14, the reason codes (other than “no reason codes assigned”) that count for the contracts with the highest percentage are reason codes A and M. Further, the analysis revealed that 12% of the backlog of contracts pending closeout are due to reason code A, which implies that the contractor has not submitted final invoice or voucher. Likewise, reason code M also accounts for 12% of the backlog of contracts pending closeout. Reason code M signifies that the negotiation of overhead rates is pending audit by DCAA. Reason code G implies that contracts are pending the subcontractor’s settlement, reason code V signifies those contracts pending the disposition of government property, and reason code H indicates that contracts are in the final audit process.

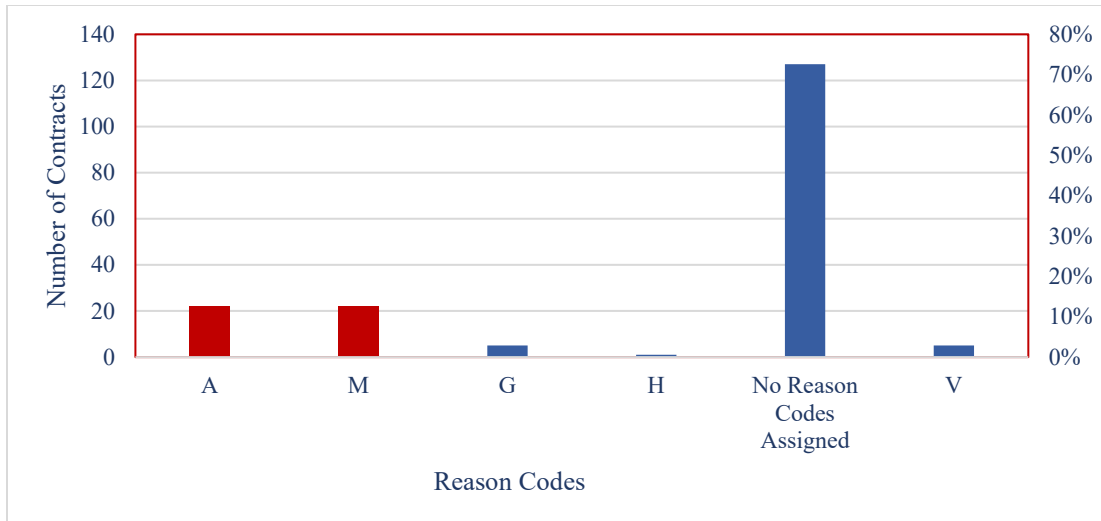


Figure 14. DCMA LMMFC-ORL Flexibly Price Contracts Reason Codes as of December 31, 2021.

As previously mentioned, CPFF contracts account for the highest percentage (80%) of contracts pending closeout. Likewise, CPFF contracts account for most overage contracts; Table 11 and Figure 15 shows that Reason Code M accounts for 42.86% of overaged contracts, followed by Reason Code A, which accounts for 28.57% of overaged contracts pending closeout.

Table 11. DCMA LMMFC-ORL Overage Contracts by Reason Codes as of December 31, 2021.

Reason Code	Count	%
A	8	28.57%
M	12	42.86%
G	4	14.29%
H	1	3.57%
No Reason Code	3	10.71%
V	0	0.00%

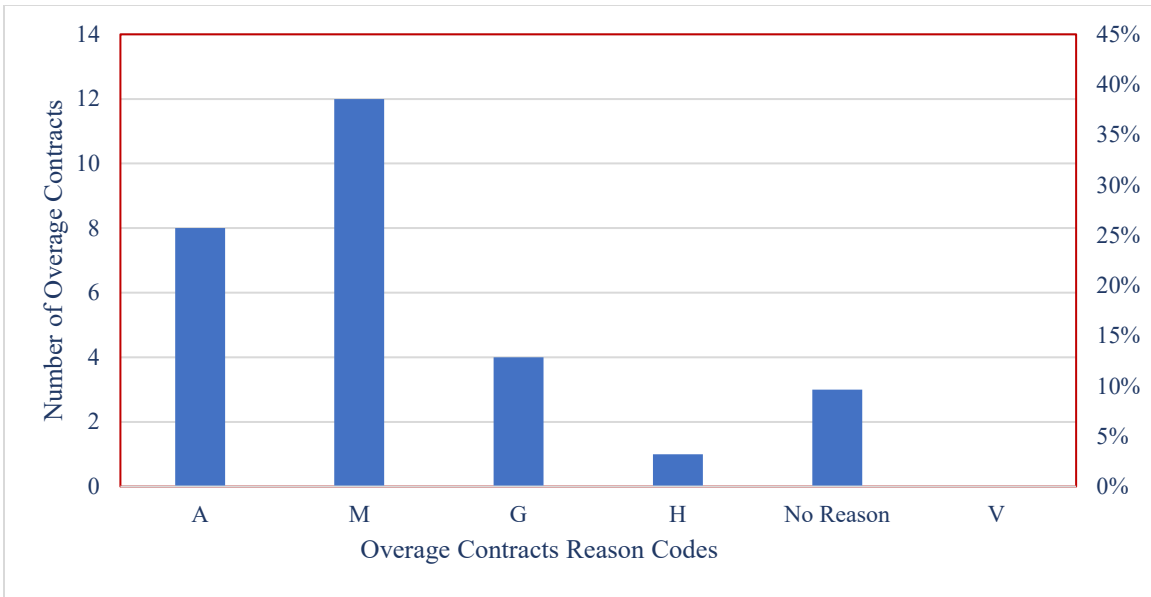


Figure 15. DCMA LMMFC-ORL Overage Contracts by Reason Codes as of December 31, 2021.

Further review of the data shows a trend where the majority of the overaged contracts for all contract types occurred in 2021, as shown in Table 12 and Figure 16.

Table 12. DCMA LMMFC-ORL Overage Contracts Reason Codes by Year as of December 31, 2021.

Reason Code	Count	%	2019	2020	2021
A	8	28.57%	1	2	5
M	12	42.86%	0	1	11
G	4	14.29%	0	1	3
H	1	3.57%	0	0	1
No Reason	3	10.71%	0	0	3
V	0	0.00%	0	0	0

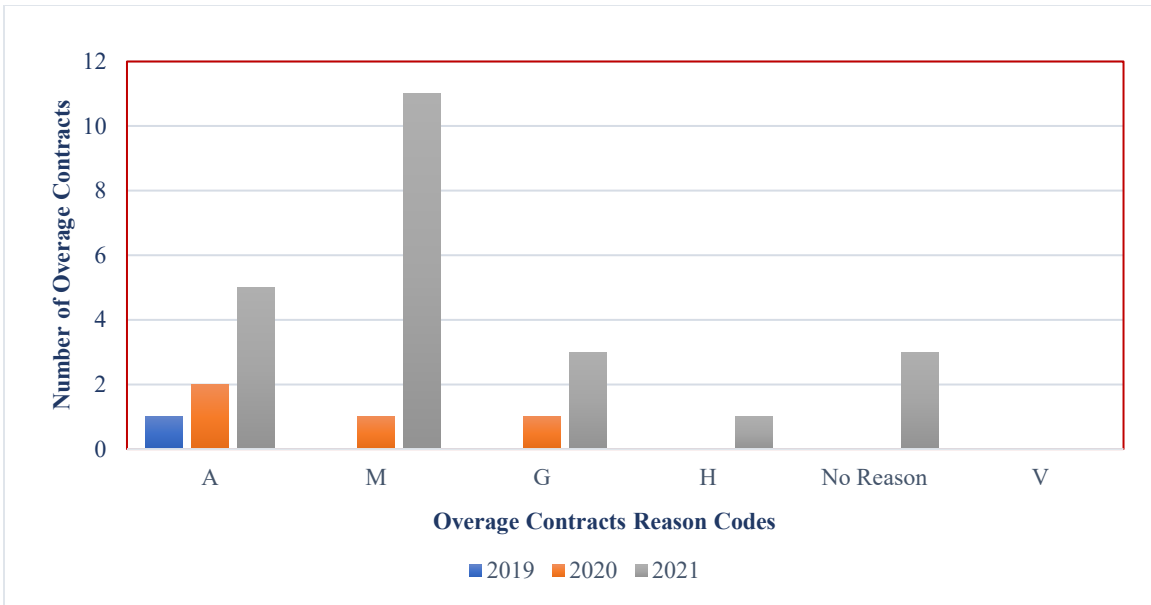


Figure 16. DCMA LMMFC-ORL Overage Contracts Reason Code Trends as of December 31, 2021.

C. DISCUSSION OF FINDINGS

The majority of overaged contracts pending closeout with reason codes A and M, are CPFF contracts and as such, the discussions in this section will focus on reason codes A and M. Reason code A (Contractor has not submitted final invoice or voucher), Reason Code M (negotiation of overhead rates is pending audit by DCAA), and Contracts with No Reason Codes Assigned will be discussed in this section.

1. Reason Code A (Contractor Has Not Submitted Final Invoice or Voucher)

There are 182 contracts in MOCAS CAR Section 2 that are not closed out but are physically completed. Among those contracts, 55 had valid reason codes that indicated closeout status. Within this population, 22 showed a status of reason code A. Therefore, over 12 % of the contracts with a reason code are pending closeout because the contractor has not submitted final invoices or vouchers. There are various reasons uncovered as to why the contractor delays submitting final invoices on time.

First, the contractor's costs incurred after the contract's period of performance (PoP) has ended, for example, costs incurred such as labor, material, and other direct costs (ODCs). These lagging costs may cause physically completed contracts to need further year-settled rates. Although FAR 42.708 provides quick closeouts (QCO) rates that ACOs can lean on to help reduce the contract closeout backlog, it is not a guaranteed "right" for contractors to use them, but only when circumstances warrant the consideration of using the QCO rates. In numerous cases, the contractor perhaps is reluctant to utilize the QCO rates on most contracts but limits the quick closeout mainly due to issues relating to material, Intra-work transfer agreements (IWTA's), and subcontractor's cost transfers.

Second, the prime contractor may also have issues or problems with subcontractors that prevent them from submitting final invoices on time. Several factors can delay a large subcontract, including flow-down of corporate overheads, rate disagreements between the prime contractor and government, erroneous or insufficient information about subcontractors, and property issues. Numerous tasks must be completed before prime contractors submit final invoices. For example, the prime contractor ensures that all subcontract's accounting system reports, subcontractor costs associated with contract line-item numbers (CLINs), or accounting classification reference numbers (ACRNs) are settled, and final invoices are paid. This procedure can be complex, making it difficult for the prime contractor to audit subcontractor costs on time.

Third, the absence of Cumulative Allowable Cost Worksheet (CACWS) delays the contractor from submitting final invoices on time. The CACWS is important because ACOs can use the CACWS to unilaterally close contracts instead of using settled rates. The CACWS is a "summary schedule of cumulative allowable contractor costs for each open flexibly priced (cost type) contract through the last contractor fiscal year for which indirect cost rates have been settled" (U.S Air Force, 2005). Besides tracking physically completed contracts awaiting closeout, the CACWS provides other vital information required to verify final bills. The CACWS is usually submitted as a schedule in the contractor's incurred cost submission and is audited as part of the incurred cost audit. The CACWS are prepared using the contractor's claimed indirect rates and therefore, if necessary, is updated for the settlement of the rates. Closeout time can be reduced if the ACO determines an audit of the

final voucher isn't necessary because the contractor's allowable costs were already audited and included on the CACWS. Although the contractor is not required to submit a CACWS for its incurred cost proposal to be adequate, they are urged to do so due to the benefits and efficiencies gained by closing contracts on time.

Lastly, pending QCO rates and settled rates could have contributed to the backlog of contracts awaiting closeout. LMMFC 2019 QCO and settled rates are yet to be negotiated by the Divisional Administrative Contracting Officer (DACO) and may not likely be settled before the on-time closeout (OTC) date of September 30, 2022.

2. Reason Code M (Negotiation of Overhead Rates is Pending Audit By DCAA)

Data found from MOCAS CAR Section 2 uncovers that one of the reasons for contracts not closing within FAR mandated time standards is that the negotiation of final overhead rates is pending audit by DCAA. Reason code M includes the following pending actions: "Awaiting the contractor's final indirect cost proposal, audit of indirect costs, and negotiations of the final overhead rates" (U.S Air Force, 2005). Agencies responsible for these actions include the contractor, DCAA, and DCMA (or the Contract Management Office - CMO). As mentioned earlier, 182 contracts in MOCAS CAR Section 2 were physically completed but awaiting closeout. Out of those 182 contracts, 55 had a reason code indicating closeout status. Of the 55 contracts with a closeout status, 22 had a reason code M, so over 12 % of the contracts with a reason code are awaiting closeout because negotiation of final overhead rates is pending. Overhead cost submissions are used to establish final overhead rates. The final overhead rate is crucial when determining the actual contractor costs for flexible priced contracts. For overhead submissions, the cost principles of FAR require contractors to identify and exclude unallowable costs. Contractors must also certify that their overhead claims do not include unallowable costs to the best of their knowledge.

Nevertheless, there have been instances where defense contractors have included unallowable or questionable costs in their overhead submissions. For example, a GAO report published in 1994 stated that in November 1992, "six smaller defense contractors

included about \$2 million in unallowable and questionable costs in their overhead submissions” (GAO, 1994, p.1). Also, the same report stated that “in October 1993, McDonnell Douglas Corporation, a large defense contractor, submitted overhead costs totaling \$1.6 million that were unallowable and questionable” (GAO, 1994, p.1). Based on the examples provided, it is apparent how final overhead rate determination plays a crucial role in the contract closeout process. Therefore, the contractor’s overhead submissions must be thoroughly reviewed.

3. Contracts with “No Reason Codes Assigned”

MOCAS CAR Section 2 consisted of 182 physically complete contracts pending closeout. Of those contracts, 127 had no reason codes indicating closeout status. In other words, approximately 70% of the contracts were not assigned a reason code, as reflected in Figure 15 above. During the analysis, data was pulled from MOCAS CAR Section 2. However, blank data cells were generated, indicating missing reason codes and estimated closing dates.

Further, this finding reveals that data analysis will not give accurate results because the reason code is needed to determine the status of each physically complete contract pending closeout by knowing what is causing these contracts not to be closed out. Also, it is essential to note that it is not required to provide a reason code until the contract has become overaged, hence the term “MOCAS OVERAGE - REASON FOR DELAY CODES. Despite this, supervisors and managers are increasingly dependent on accurate closeout status throughout the closeout process to enable them to identify what exactly is preventing the contract from closing within the FAR-mandated time frame. Additionally, the analysis revealed that overaged contracts appear to have a significantly more reliable status compared to when pending closeout. The delayed entry of reason codes on contracts slated for closeout means that ACOs place greater emphasis on entering reason codes as contracts mature and become overaged in MOCAS CAR Section 2.

D. IMPLICATIONS OF FINDINGS

This section discusses the implications of those findings discovered related to the CPFF contract, which consists of late final invoices and final overhead rates pending audit

by DCAA. Additionally, these findings identify a possible problem in the contract closeout process of CPFF contracts. Furthermore, the implications of the ACOs not assigning a reason code on most contracts residing in MOCAS CAR Section 2 will be discussed.

1. Reason Code A (Contractor Has Not Submitted Final Invoice or Voucher)

There is a significant impact associated with late final invoices. First, late final invoices affect the final payments because the final invoice must be submitted by the contractor before payment can be made. The final invoice requires the most complex and critical closeout steps, such as the settlement of interim or disallowed costs, final overhead negotiations, etc. Also, it creates a more significant problem when late invoices are inaccurate or incomplete, resulting in non-payment. An example of this is the case between PROTEC (contractor) and the government, where “PROTEC failed to comply with its contract and lost its entire claim for unpaid invoices due to compliance issues” (Lieberman, 2019). The report further stated that the board held a meeting and concluded that the government had correctly refused to pay PROTEC’s invoices, and the justifications offered by PROTEC were without merit (Lieberman, 2019). See appendix B for a complete summary of the case between PROTEC and the government.

Second, late final invoices on contract closeout may result in funds being canceled. DCMA LMMFC-ORL’s priority is resolving 90% of all canceling funds by fiscal year end (DCMA LMMFC-ORL Director’s Engagement Brief, 2021); if the contractor does not use the funds, they are de-obligated. Many contracts expire in the fourth year, and the funds cannot be used for new requirements. However, they can still be used to pay the bills associated with the contract. In any case, funds that are not invoiced by the end of the cancellation year cannot be used to pay any bills related to the contract.

Lastly, a contractor’s delay in submitting an invoice is an internal control weakness according to Public Law 97-255, OMB Circular A-123, and DOD Directive 5010.38, particularly “weaknesses in the controls for closing contracts on time, identifying and deobligating excess funds from physically complete flexibly priced contracts pending closeout, and recovering overpayments on cost-type contracts.”

2. Reason Code M (Negotiation of Overhead Rates is Pending Audit By DCAA)

Negotiation of final overhead rates can delay contract closeout. The impact of final overhead rates pending audit by DCAA on contract closeout is unfavorable. For example, when contracts are in dispute or litigation accounts for one of the reasons for late overhead negotiations. Since all litigation issues must be resolved before the contract can be closed, the dispute clause may be used by the contractor to appeal the contracting officer's decision directly to the Court of Federal Claims. It should also be noted that subcontractors may also sue or be sued by prime contractors in connection with alleged damages arising from their involvement in a contract. Prior to closing the contract, the Procuring Contracting Officer (PCO) and the ACO must resolve any litigation and its cost impact.

Another common cause of late overhead negotiations is the prolonged and complicated process of determining final overhead rates and the contractor's late submission of the overhead proposal. Within 180 days of their fiscal year's end, contractors are required to submit a final indirect cost rate proposal (based on incurred costs) per FAR clause 52.216-7 (d) (2) (i). If these issues are not adequately handled, DCMA LMMFC-ORL and other contracting agencies may continue to struggle with this situation.

3. Contracts with "No Reason Codes Assigned"

Since many contracts pending closeout in MOCAS CAR, Section 2 do not have a reason code assigned, it will be problematic to do any analysis when there are no reason codes assigned. The reason code is needed to determine the status of each physically complete contract pending closeout. Further, the reason codes are needed to know the exact cause of delays and why those contracts are pending closeout. If contracts in MOCAS CAR section 2 are not constantly monitored and updated with status codes, it will slow contracts from moving smoothly in the closeout process.

Based on the analysis, perhaps the lack of specific standards in the ACOs' performance appraisal related to contract closeout actions may be contributing to why there are a significant number of contracts without a status or reason code residing in the MOCAS CAR section 2. ACO appraisal related to closeout actions do not include

performance standards that require inputting reason codes in MOCAS CAR section 2. As a result, maybe the ACOs are not being held accountable for inputting a reason code on contracts in MOCAS CAR section 2 except when overaged. Appendix C summarizes the three elements from DCMA LMMFC-ORL ACO performance appraisal related to closeout actions.

E. RECOMMENDATIONS FOR REDUCING THE BACKLOG

Based on the reported findings, the discussion of those findings and the implications of the findings, below are the recommendations to DCMA LMMFC-ORL for reducing the backlog of contracts pending closeout.

1. Recommendation # 1: Address DCAA's Workforce Shortages

The first recommendation is to address DCAA's workforce shortages. Perhaps DCAA is understaffed and often under pressure to deliver audit findings to ACO's prematurely and, on numerous occasions, late. For example, a GAO report published in 2017 reported that "according to DCAA policy officials, staff availability is the primary factor for the delay before starting audit work. For example, proposals closed in fiscal year 2016 waited in DCAA's queue an average of 747 days before the start of audit work" (GAO, 2017, p.27). Further, the report highlighted a prior GAO report published in 2009. The report uncovered that "DCAA's workload increased, and resources remained relatively constant, auditors prioritized time-sensitive activities, such as audits to support new awards, and incurred cost audits were not completed, creating a backlog" (GAO, 2017, p. 8). Maybe the shortage in the DCAA workforce is the primary reason for untimely audit completion that continues to undermine DCMA LMMFC-ORL's and other services' ability to close out contracts on time.

The recommended approach to address DCAA staffing shortages is creating a task force group that would coordinate its efforts with DCAA to expedite the final overhead rates negotiations and reduce over-age contracts. This group's only objective will be to aid the field offices in reviewing the closeout actions in order to accelerate the closeout process. The task force group would add additional focus on closing audits on the oldest, high risk, and high-dollar proposals, complimenting DCAA's risk-based audit approach.

In theory, this would further ease workload pressure on other efforts to reduce the backlog of proposals, enabling DCAA to focus on incoming proposals and ensure taxpayers receive the best value for their money and that government auditing standards are followed.

2. Recommendation # 2: Address ACO's Workforce Shortages

Perhaps the ACOs' workforce shortages contribute to many contracts without a reason code assigned. Therefore, to address the ACO's workforce shortages, it will be beneficial for higher officials or the Commander to establish a working group to assist with contracts pending closeout, overage contracts pending closeout and other contract closeout requirements. As previously shown in Figure 14, the trend shows that the number of contracts pending closeout increased from one (1) in 2019 to sixty-five (65) in 2023. ACOs could perhaps use the support of a working group to assist with contract closeout and other contractual delegations with this expected increase in the backlog of contracts pending closeout.

Further, the working group will review funds to identify excess monies, recommend deobligation to ACOs, and initiate the collection of overpayments. Also, the working group can be trained to carry out other closeout requirements, for example, property admin closeouts, etc. Finally, the working group will receive quarterly reports on the development of reducing the backlog of contracts requiring closeout, as well as a required established milestone or contract closeout overage metric.

3. Recommendation # 3: DOD Should Streamline Payment Allocations

Among the more confusing aspects of government contracts are CLINs (contract line item numbers). The terms of contracts and payment instructions can be complicated, and they frequently seem to have nothing to do with the task that are being requested. They consequently demand that contractors break out their invoices in a way that increases the cost and complexity of their accounting records. CLINs are specified in the FAR part 4.10 to serve two purposes: "(1) Contracts are broken down based on the item purchased (labor hours of services, funding information, the quantity of product A, the quantity of product B, etc.) and (2) To improve the accuracy and usability of procurement data, they provide traceable accounting classification citations" (FAR Part 4.10). The second purpose may be

unclear to observers from outside the government since it is based on internal accounting standards including fiscal years and appropriations; as a result, contracts with outside vendors must be compliant with the accounting system.

4. Recommendation # 4: DOD Should Reduce Excess Accounting Classification Reference Numbers (ACRNs)

The fourth recommendation is for payment terms to be simplified by reducing excess accounting classification reference numbers (ACRNs), which add significant issues in final reconciliation. In addition, when developing the solicitation, if the ACRNs structure is developed in a way that will support the contract closeout process, that will go further in streamlining the contract closeout process. By reengineering business processes and financial management systems, DOD could reduce many of the time-consuming and costly reconciliations needed to correct mistakes associated with contract payment allocations.

The GAO report published in 2003 gave a great example of how CLINs/ACRNs created a complex situation. The report stated that a \$565 million Army missile contract had 74 ACRNs and was funded by eight different appropriation accounts. It also reported sales to three foreign countries. Out of the 74 ACRNs, 24 were created to conform to legal obligations for reporting appropriations used to finance the contract and the type of obligated requirements such as personnel, supplies, and asset acquisition. The remaining 50 ACRNs were created to comply with DOD requirements. Further, the GAO's report revealed that the contracts were complicated because legal and DOD requirements for tracking and reporting funds used to finance the contracts made the contracts complex. As a result of the complexity, 1,458 adjustment transactions were required to reappportion the payments to the correct ACRNs because the Army made a mistake in accounting for obligations, resulting in an adjustment to payment allocations of about \$127 million (GAO, 2003).

5. Recommendation # 5: Update the ACOs Performance Appraisal Related to Closeout Actions

The fifth recommendation is to update the ACOs performance appraisal related to closeout actions to include providing a status report on physically complete contracts in

MOCAS CAR Section 2 and not only when overaged or in MOCAS CAR Section 1 (Active status). Updating Status reports throughout the contract closeout process serve as a communication tool that will help supervisor or management analyst better understand why contracts are pending closeout.

6. Recommendation 6: Modernize MOCAS

MOCAS is so old and convoluted and understandably difficult to maintain. MOCAS codes have become highly coupled, fragmented, and shielded from new technology and standards through complicated external gateways and filters. For example, periodic reconciliation can be problematic for the buying office even after the ACO has reconciled the data in MOCAS since a contract should not close until both the MOCAS/entitlement system and the accounting systems are in balance. Data in the procurement, administration/payment, or accounting systems may not match because, though related, these systems are not fully integrated and use varied formats. Each system is driven by individual functional area requirement needs (financial management versus contracting versus entitlement) and contains different data element structures and data entry methods. In addition, many of these interfaces are still primarily manual and keystroke errors cause discrepancies and time lags. Also, because of system glitches, transactions periodically will not flow from one system to the other as they should. As a result, the MOCAS system will not automatically allow closeout of either procurement or accounting system records without reconciliation.

Modernizing MOCAS may be invasive and represent a cost, schedule, and mission success risk. However, DOD may benefit by developing a more advanced database and contract writing system that would be useful for all buying activities. DCMA would be able to help more with contractual delegations if there were widespread improvements in information technology (IT) throughout the DOD.

F. SUMMARY

This chapter presented the findings and discussed the findings followed by the implications of the findings. Lastly, recommendations for reducing DCMA LMMFC-ORL's current backlog of contracts pending closeout were presented. The next chapter presents the research summary, conclusions, and areas for further research.

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VI. SUMMARY, CONCLUSIONS, AND AREAS FOR FURTHER RESEARCH

A. INTRODUCTION

This chapter will summarize the background, the problem statement, and the purpose of this research, followed by a conclusion of this research by summarizing the answers to the research questions. Lastly, areas for further research and investigation will be provided.

B. SUMMARY

The DOD spends billions of dollars in obligations in government contracts (Candrea, 2017, p. 58). These billions of dollars equate to hundreds of thousands of contracting actions. These contracting actions involve closing the contract once final deliveries and services on the contract are made and accepted. However, the emphasis drifts from the completed contracts to the planning and awarding of other new contracts or the continued performance of active contracts. As a result, the inadequate attention to completed contracts has resulted in a large backlog of physically completed contracts, many of which have unliquidated obligations remaining on them. Therefore, closing contracts is a necessary action that allows funds to be used for investments in new capabilities and technologies. The purpose of this research was to analyze the contract closeout process and determine what is causing the backlog of contracts in the contract closeout process. Specifically, the contracts currently in closeout at DCMA LMMFC-ORL were analyzed to determine which activities are holding up the closeout process for those contracts. In addition, this research determined what might be utilized to improve these contract closeout processes and make recommendations for improving the contract closeout process.

C. CONCLUSIONS

Based on the analysis of the MOCAS data, the following conclusions are provided in the form of the answers to the research questions.

1. **Based on the analysis of the contract closeout process at DCMA LMMFC-ORL, what are the reasons for the backlogs of contracts?**

The analysis revealed that of the 182 contracts evaluated, CPFF contracts consist of the contract with the top two reason codes, the highest percentage (80%) of contracts in the backlog, and the highest percentage of overage contracts (15.38%). The majority of the contracts analyzed consist of Reason code A (Contractor has not submitted final invoice or voucher) and Reason Code M (negotiation of overhead rates is pending audit by DCAA).

Further, approximately 70% of the contracts were not assigned a reason code and had no estimated closing date. Missing reason codes were discovered when data was pulled from MOCAS CAR Section 2, and blank data cells were generated, indicating missing reason codes.

2. **Based on the findings, how can DCMA LMMFC-ORL improve its contract closeout process to reduce the backlogs of contracts waiting to be closed out, and any funding due to DOD can be de-obligated?**

Based on the analysis of the data and findings, six recommendations are provided to DCMA LMMFC-ORL.

The first recommendation is to address DCAA's possible workforce shortages by creating a task force group that would coordinate its efforts with DCAA to speed the negotiation of final overhead rates and reduce over-age contracts. The second recommendation is to address a possible ACO workforce shortage by creating a working group to assist with contracts eligible for closeout, overage contracts, and other contract closeout requirements. The third recommendation is for DOD to streamline payment allocations, as it is very complex. The fourth recommendation is for payment terms to be simplified by re-engineering the ACRNs structure to help support a more streamlined contract closeout process. The fifth recommendation is for a higher authority to update the ACOs performance appraisal related to closeout actions. Finally, the sixth recommendation

is to modernize MOCAS so that the DCMA contracting workforce can assist more with contractual delegations.

D. AREAS FOR FURTHER RESEARCH

Following the conclusion of this research, there are areas within this research that could use follow on research and further investigation.

My first area for further research would be for future researchers to expand this analysis on DCMA LMMFC-ORL to include the other 20% contract types that are pending closeout (Cost Contract 9%, T&M 7%, CPIF 3%, FPIF 1%, and Cost Sharing 1%).

Second, this research only analyzed contract data from one specific DCMA Lockheed Martin organization. Further research could be carried out on other DCMA Lockheed Martin commands (e.g., Lockheed Martin Missiles and Fire Control Dallas, Texas (LMMFC-D)). Further analysis could include DCMA and other DOD agencies, including organizations that are not directly related to defense. Therefore, a better understanding of this topic could be gained at the enterprise level based on a more comprehensive data set. In general, incorporating other organizations into future research will help understand the current government trends in terms of contract closeout and potentially convince program offices across the enterprise of the value of timely contract closeout.

Third, this research used an overage contract data set of three fiscal years (2019 through 2021). Further research could be expanded to capture a more complete and reliable overage data set for analysis. In addition, analyzing a broader scope of contract data will result in a more accurate picture of overage contracts that are pending closeout. In general, the more data there are to analyze, the more accurate the review will be in understanding the contract closeout process discussed throughout this research.

Fourth, based on the analysis, perhaps there are DCAA or ACO workforce shortfalls. Research could be conducted to further investigate whether DCAA or ACO workforce shortfalls impact contract closeout.

Lastly, further research could be conducted by interviewing ACOs based on their performance appraisal by asking if they are incentivized to put reason codes in MOCAS CAR section 2 or if it is not essential to input the reason codes on contracts that are pending closeout but not overaged.

APPENDIX A. PROCEDURES FOR CLOSING OUT CONTRACT FILES

Table 13. FAR 4.804-5, Procedures for Closing Out Contract Files. Source: FAR 4.804-5 (n.d.).

1. Disposition of classified material is complete
2. Final patent report is cleared
3. Final royalty report is cleared
4. There is no outstanding value engineering change proposal
5. Plant clearance report is received
6. Property clearance report is received
7. All interim or disallowed costs are settled
8. Price revision is completed
9. Subcontracts are settled by the prime contractor
10. Prior indirect costs are settled
11. Termination docket is completed
12. Contact audit is completed
13. Contract's closing stated is completed
14. Contacts final invoice has been submitted
15. Contract's fund review is completed, and de-obligation of any excess funds is recommended.

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APPENDIX B. “PROTEC GMBH, ASBCA NO. 61185, MAY 15, 2019”

The case between PROTEC (contractor) and the government. Where PROTEC failed to comply with its contract and lost its entire claim for unpaid invoices due to compliance issues. the board held that the government had correctly refused to pay PROTEC’s invoices, and the justifications offered by PROTEC were without merit (PROTEC GmbH, ASBCA No. 61185, May 15, 2019).

PROTEC was awarded a contract by the Army’s Regional Contracting Office to maintain and repair equipment at the Army Garrison in Wiesbaden. The contract required PROTEC to submit emergency repair reports within two days of providing emergency services. The contract also required PROTEC to file invoices for each previous month within the tenth working day of the following month. Unfortunately, the Government refused to pay some 19 invoices. As a result, PROTEC missed this submission deadline by months and years in some of these invoices. PROTEC did not dispute that it submitted the unpaid invoices late but explained that there were two reasons for the lateness:

1. Delays in receiving signed work certificates from the Government, but the Board held that PROTEC did not even include the government work certificates, making it impossible for the Government to track the invoices to the work. Also, the Board found that work certificates had been provided in a timely manner to PROTEC.
2. Delays in PROTEC’s receipt of supplier invoices. However, PROTEC never showed that supplier invoice delays justified the late invoices because delays by a supplier only excuse a contractor’s delay if the supplier’s delays are excusable—and PROTEC did not show this.

The Board held that the Government correctly refused to pay the 19 invoices because PROTEC did not submit timely electronic reports or invoices, as required by its contract. While PROTEC argues that the late submissions of reports and invoices did not prejudice the Government, the Board held otherwise, as explained above. The Government did not delay sending the work certificates to PROTEC, and there were no excuses offered for the supplier invoice delays. As a result, the Board denied the appeal entirely. (Lieberman, 2019)

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APPENDIX C. ELEMENTS FROM THE DCMA LMMFC-ORL ACO'S APPRAISAL RELATED TO CLOSEOUT ACTIONS

Contract Closeout

FULLY SUCCESSFUL: (1) Achieve 30% On Time Closeout (OTC) rate f/ flexibly priced contracts (2) Upload completed Closeout Checklist (w/ ACO signature & date) w/n 14 calendar days of contract closeout date, 90% of time to correct IWMS RSC "7CAQ01" & KT file (3) Ensure 90% of all contracts in Section 3/4 have all actions resolved except those related to a litigation/Recon, appropriately coded in MOCAS (4) Ensure contractor prepares/submits all final vouchers (FV) NLT 120 days after settlement of Physically Complete Years Final Settled Rates. If a FV submittal extension is requested by contractor, ACO reviews contractors supporting documentation & rationale provided in a timely manner, makes an accurate assessment of determination (FAR 42.705(b)(1)-(5) criteria. Must provide written determination to contractor and establish a specific time period of extension.

OUTSTANDING: Respectively (1) 40% OTC rate (2) 7 calendar days (3) 95% of all contracts in Section 3/4. In addition to (4) (5) Proactively mitigates contractor Closeout challenges by achieving LR-QCO Agreements, Negotiate/Establish QCO Listings-Agreements, closeout inventory issues resolution (e.g., Subcontract Settlement, Open POs, IWTA, Material, Property Closeouts). Identify Lagging Costs, resolve by utilizing alternate closeout methods. Must provide supporting data that documents all items outlined in the outstanding criteria above have been met.

Completed Contract Actions

FULLY SUCCESSFUL: ACO (1) Ensures 90% of all physically completed contracts are moved from MOCAS Section 1 to 2 w/n 90 days of completion (2) Ensures 90% of all contracts have an FDD, not blank within 30 Days of receiving contracts. (3) Actively mitigates 90% of all MOCAS Section 1 contracts >179 Days Past FDD (4) Ensures 90% of all MOCAS Section 1 contracts past FDD 180 days have been reviewed, root cause / reason detail have been identified with appropriate actions taken. Provides updated monthly status report to Supervisor / Management Analyst until resolved and moved to MOCAS Section 2. (5) Coordinates mitigation of FDD 180 contracts with IS Team proactively.

OUTSTANDING: ACO (1) Ensures 95% of all physically completed contracts are moved from MOCAS Section 1 to 2 within 60 days of completion (2) Ensure 95% of all contracts have an FDD, not blank within 20 Days of receiving contracts (3) Provides status to Supervisor

/Management Analyst (self-identifies) w/n 10 business days before contract reaches FDD 90 Day. Proactively provides status of contracts within 5 business days before the beginning of each month of contracts moving to FDD 120, 150, 180, 180< status respectively. In order to be considered fully Outstanding, the employee must provide supporting data that documents all items outlined in the outstanding criteria above have been met.

Agency Material Weakness Metrics

FULLY SUCCESSFUL: Fixed Priced Contracts are closed before going overage 90% of the time. FFP contracts approaching overage by 60 days will be required to provide status within 3 business days. FFP contracts approaching overage by 30 days will be required to provide status within 1 business day.

OUTSTANDING: Exceeds all of the Fully Successful Material Weakness Metrics as indicated below. Fixed Priced Contracts are closed before going overage 95% of the time. When a Contract Administrator proactively provides status (self-identifies) 90 days, 61–75 days, and 31 - 45 days from FFP contracts approaching overage. In order to be considered fully Outstanding, the employee must provide supporting data that documents all items outlined in the outstanding criteria above have been met. (DCMA, 2022)

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