



ACQUISITION RESEARCH PROGRAM SPONSORED REPORT SERIES

The High Risk of Incurred Cost Low-Risk Memos

September 2022

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Naval Postgraduate School

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Prepared for the Naval Postgraduate School, Monterey, CA 93943.

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ABSTRACT

Despite the high risk of cost-reimbursement contracts to the government, it is a necessary contract type used in Department of Defense (DOD) acquisition. The high risks may be avoided with adequate contract administration oversight and proper auditing procedures. The purpose of this research was to analyze the impact of the DOD USD Class Deviation 2012-O0013—Defense Contract Audit Agency (DCAA) Policy and Procedure for Sampling Low-Risk Incurred Cost Proposals on the quantity of audits performed and amount of questioned costs identified, as well as analyze the impact of the low-risk memos (LRM) issued under this class deviation on incurred cost proposals not audited. This research highlights the possible risks of performing less incurred cost proposal audits on DOD contractors and the increased reliance of LRMs in the contract administration and closeout of high-risk cost-reimbursement contracts. The research findings indicate a significant reduction in the quantity of incurred cost proposal audits and the amount of questioned costs identified, existence of questioned costs in contracts subject to LRMs, and a major audit policy non-compliance. Recommendations include notifying senior contracting officials of a non-compliance in DCAA audit policy pertaining to Class Deviation 2012-O0013, revising the low-risk sampling criteria, and establishing additional procedures in the administration and closeout of cost-reimbursement contracts.



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TABLE OF CONTENTS

I.	INTRODUCTION.....	1
	A. BACKGROUND	1
	B. PURPOSE OF RESEARCH	2
	C. RESEARCH QUESTIONS	3
	D. METHODOLOGY	3
	E. LIMITATIONS OF RESEARCH	4
	F. IMPORTANCE OF RESEARCH	4
	G. ORGANIZATION OF REPORT	5
	H. SUMMARY	6
II.	LITERATURE REVIEW	7
	A. INTRODUCTION.....	7
	B. AUDITABILITY THEORY	8
	C. AGENCY THEORY	9
	D. CONTRACT MANAGEMENT PROCESS	11
	E. COST-REIMBURSEMENT CONTRACTS.....	12
	1. FAR 52.216-7 Allowable Cost and Payment, 2018.....	15
	F. DCMA CONTRACT ADMINISTRATION AND CLOSEOUT OF COST-REIMBURSEMENT CONTRACTS	17
	1. Payments	19
	2. Contractor Business Systems	21
	3. Final Indirect Cost Rates.....	22
	4. Contract Closeout	25
	5. Contract Audit Follow-Up	29
	G. DCAA AUDIT POLICY AND PROCEDURES	30
	1. Pre-award Surveys and Post-award Accounting System Audits	31
	2. Review/Testing of Interim Paid Vouchers.....	32
	3. Labor Floor Checks and Interviews.....	33
	4. Assistance to the ACO in the Final Voucher	33
	5. Adequacy Review of the Contractor’s Final Indirect Cost Rate Submission	33
	6. Incurred Cost Proposal Audit of the Contractor’s Final Indirect Cost Rate Submission	34
	H. DEFENSE CONTRACT MANAGEMENT AGENCY ADMINISTRATION OF PROGRESS PAYMENTS IN FIXED- PRICE CONTRACTS	38



I.	DEPARTMENT OF DEFENSE USD CLASS DEVIATION 2012-O0013	42
J.	GOVERNMENT REPORTS PERTAINING TO THIS RESEARCH	44
K.	SECTION 809 PANEL AND DCAA REPORTS TO CONGRESS.....	50
	1. Section 809 Panel.....	50
	2. DCAA Reports to Congress	52
L.	SUMMARY	53
III.	METHODOLOGY	55
A.	INTRODUCTION.....	55
B.	DCMA CAFU DATABASE	55
C.	LIMITATIONS OF RESEARCH	56
D.	DCAA LRM AND COST-REIMBURSEMENT CONTRACT SAMPLING.....	58
E.	EVALUATION OF POLICY AND PROCEDURES	58
F.	SUMMARY	59
IV.	FINDINGS, ANALYSIS, IMPLICATIONS, AND RECOMMENDATIONS.....	61
A.	INTRODUCTION.....	61
B.	FINDINGS.....	61
	1. Differences in Quantity of Audits and Questioned Costs Amounts.....	61
	2. Findings of Questioned Costs in Contracts Subject to Low- Risk Memorandums.....	63
	3. Findings of Analysis of Policy and Procedures	64
C.	ANALYSIS	66
D.	IMPLICATION OF FINDINGS AND ANALYSIS	71
E.	RECOMMENDATIONS BASED ON FINDINGS AND ANALYSIS	72
F.	SUMMARY	73
V.	SUMMARY, CONCLUSIONS, AND AREAS FOR FURTHER RESEARCH	75
A.	SUMMARY	75
B.	CONCLUSIONS	76
C.	AREAS FOR FURTHER RESEARCH.....	77



**APPENDIX A. SUMMARY OF QUESTIONED COSTS IDENTIFIED USING
ADDITIONAL FINAL INCURRED COST ANALYSIS METHODS IN
CONTRACTS NOT AUDITED DUE TO LRMS.....79**

**APPENDIX B. ADDITIONAL PROCEDURES FOR ACO VOUCHER
TRACKING AND FINAL INCURRED COST ANALYSIS.....85**

SUPPLEMENTAL.....89

LIST OF REFERENCES.....91



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LIST OF FIGURES

Figure 1.	Auditability Triangle. Source: Rendon and Rendon (2015).	8
Figure 2.	Five Domains of The Three Contract Life-Cycle Phases. Source: NCMA (2019; 2022).	11
Figure 3.	Spectrum of Contract Types and Risk. Source: Oakley (2020, p. 5).	13
Figure 4.	Key Features of Cost-Type and Fixed-Price-Type Contracts. Source: Oakley (2020, p. 4)	14
Figure 5.	Overview of the Contract Closeout Process Time Line (Cost Type). Source: DCMA (2018, Slide 4).	26
Figure 6.	DCAA’s 2020 Revised Policy for Sampling Low-Risk Incurred Cost Proposals Based on ADV. Source: DCAA (2019b, p. 3).	37
Figure 7.	DOD Procedures for the Process and Approval of Interim Vouchers. Source: Needham (2009, p. 31)	46



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DEPARTMENT OF DEFENSE MANAGEMENT
NAVAL POSTGRADUATE SCHOOL

LIST OF TABLES

Table 1.	DCMA Contract Administration Functions Pertaining to Cost-Reimbursement Contracts. Adapted from FAR 42.302(a) (2022).....	18
Table 2.	DCMA Payment Policy Manual Instructions for ACOs and CAs. Adapted from (DCMA, 2021d, pp. 63–68).	20
Table 3.	DCMA Payment Policy Manual Instructions for DCAA Auditors. Adapted from DCMA (2021d, p. 65).	21
Table 4.	DCMA’s Final Indirect Cost Rates Manual (DCMA-MAN 2201–03) ACO and Auditor Functions. Adapted from (DCMA, 2021c).....	23
Table 5.	DCMA’s Final Indirect Cost Rates Manual (DCMA-MAN 2201–03) Instructions and Guidance to ACOs for Determining FICRs Under LRMs. Adapted from DCMA (2021c, pp. 9–10).....	24
Table 6.	DCMA Contract Closeout Manual (DCMA-MAN 2501–07) Final Voucher Review Instructions for ACOs. Adapted from DCMA, 2019c (pp. 39–41).	27
Table 7.	DCAA CAM Ch 6–104 Audit Scope - Risk-Based Sampling of Incurred Cost Proposals, Effective January 1, 2020. Adapted from DCAA (2022c, pp. 16–19).....	35
Table 8.	Comparison of Progress Payment and Cost Voucher Contract Administration Procedures. Adapted from DCMA Payments Manual 2101–02 (2021d).....	40
Table 9.	DCAA Low-Risk Criteria Before and After Class Deviation 2012-00013.....	43
Table 10.	Percentage of Proposals Sampled under Previous and New Procedures. Adapted from DiNapoli (2012).....	48
Table 11.	List of Section 809 Panel Recommendations for DCAA. Adapted from Section 809 Panel (2020, p. 2; 2020, p. 10).	51
Table 12.	Quantity of Audits and Amount of Questioned Costs Before and After Class Deviation 2012-00013 for One DCMA CMO Region.	62
Table 13.	Findings from Analysis of Policy and Procedures.....	65
Table 14.	Average Questioned Costs Per Audit Before and After Class Deviation 2012-00013.....	68



Table 15. General Instructions for Using the “EXAMPLE_Vouchers-FIC-Analysis_Additional-Procedures.” See Supplemental for File Access.86



LIST OF ACRONYMS AND ABBREVIATIONS

ACO	Administrative Contracting Officer
ADV	Auditable Dollar Value
ASBCA	Armed Services Board of Contract Appeals
BBP	Better Buying Power
CACO	Corporate Administrative Contracting Officer
CACWS	Cumulative Allowable Cost Worksheet
CAFU	Contract Audit Follow-Up
CAM	Contract Audit Manual
CAS	Contract Administration Services
CAS	Cost Accounting Standards
CFAO	Cognizant Federal Agency Official
CLIN	Contract Line Item Number
COFD	Contracting Officer's Final Decision
COR	Contracting Officer's Representative
DACO	Divisional Administrative Contracting Officer
DCAA	Defense Contract Audit Agency
DCMA	Defense Contract Management Agency
DFARS	Defense Federal Acquisition Regulation Supplement
DMIS	DCAA Management Information System
DOD	Department of Defense
DODI	Department of Defense Instruction
DODIG	Department of Defense Inspector General
DOE	Department of Energy
DTIC	Defense Technical Information Center
EVM	Earned Value Management
FAR	Federal Acquisition Regulation
FICR	Final Indirect Cost Rate
GAO	Government Accountability Office
ICP	Incurred Cost Proposal
IHO	Intermediate Home Office



IPA	Independent Public Accountants
LOE	Level of Effort
LRM	Low-Risk Memorandum
MOCAS	Mechanization of Contract Administration Services
NDAA	National Defense Authorization Act
ODC	Other Direct Cost
OUSD	Office of the Under Secretary of Defense
PCO	Procuring Contracting Officer
PGI	Procedures, Guidance, and Information
PNM	Pre-Negotiation Memorandum
PNOM	Pre-Negotiation Objective Memorandum
PPG	Professional Practice Guide
PV	Public Voucher
QCO	Quick-Close-Out
RAM	Regional Audit Manager
USD	U.S. Dollar



I. INTRODUCTION

A. BACKGROUND

Despite the high risk of cost-reimbursement contracts in the Government, it is a necessary contract type used in Department of Defense (DOD) acquisition because of the numerous unique, complex, and technical requirements. In fiscal year 2020, the Government obligated \$665B on contracts, of which \$421.8B were DOD contract obligations (DiNapoli, 2021), and high-risk cost-reimbursement type contracts accounted for a significant amount of this total obligation. From 2010–2019, the amount spent using cost-reimbursement contracts fluctuated between 11 percent and 26 percent of total DOD obligations (Russell, 2021).

With such a large amount being spent using cost-reimbursement contracts comes a high risk of unallowable costs, cost discrepancies, and possible fraud (Bagdoyan, 2021). These high risks associated with cost-reimbursement contracts may be avoided with adequate contract administration oversight and proper auditing procedures, mainly, through the use of an audit of a contractor’s incurred cost proposal. Unfortunately, the DOD does not have enough resources to audit every contractor performing under high-risk cost-reimbursement contracts, and it has always been necessary for the DOD’s audit agency, the Defense Contract Audit Agency (DCAA), to apply risk-based sampling techniques. In 2012, due to a backlog of incurred cost proposal audits, DOD issued DOD Class Deviation 2012-O0013, DCAA Policy and Procedure for Sampling Low-Risk Incurred Cost Proposals (hereafter referred to as “Class Deviation 2012-O0013”), authorizing DCAA to significantly increase the auditable dollar value (ADV) that requires the audit of a contractor’s incurred cost proposal. This new policy changed the mandatory ADV threshold from \$15M to \$250M and revised the incurred cost proposal low-risk sampling criteria for lower ADVs, which reduced the number of incurred cost proposals audits performed by DCAA (DiNapoli, 2012). As of 2019, DCAA has been caught up with their incurred cost proposal audit workload (Defense Contract Audit Agency [DCAA], 2020a), but the Class Deviation 2012-O0013 low-risk audit threshold and sampling procedure continues to be in effect.



In accordance with the DOD 5105.64 and the FAR Part 42.302, the Defense Contract Management Agency (DCMA) performs the majority of Contract Administration Services (CAS) for DOD contracts (Defense Contract Management Agency [DCMA], 2021b). In the FY 2022 President’s Budget, DCMA reported administering the life-cycle of approximately 249,000 active contracts totaling \$4.96 trillion (DCMA, 2021b). In these contracts, DCMA Administrative Contracting Officers (ACOs) are typically responsible for performing all of the contract administration functions listed in FAR 42.302(a) (2022), which includes the establishment of final indirect cost rates for contractors used in the closeout of cost-reimbursement contracts as stated in FAR Subpart 42.7 (2022) and as required per FAR Allowable Cost and Payment clause 52.216-7 (2018). In order to establish annual final indirect cost rates and settle the final incurred costs for cost-reimbursement contracts, DCMA utilizes the services of DCAA to perform audits of a contractor’s annual final indirect cost rate submissions. DCAA refers to the audit of a contractor’s final indirect cost rate submission as a final incurred cost proposal audit. Per DFARS 242.705 Final Indirect Cost Rates (2022), since July 24, 2012, the DOD Class Deviation 2012-O0013, DCAA Policy and Procedure for Sampling Low-Risk Incurred Cost Proposals, has been in effect. As a result of Class Deviation 2012-O0013, for nearly ten years, DCMA ACOs have received less audits of incurred cost proposals and have had to rely on more DCAA Low-Risk Memorandums (LRMs) in the administration and closeout of high-risk cost-reimbursement contracts. The DCAA, who issues the LRM, approves a contractor’s claimed final indirect cost rates without performing an incurred cost proposal audit. The next section discusses the purpose of this research.

B. PURPOSE OF RESEARCH

The purpose of this research is to analyze the impact of the Department of Defense (DOD) USD Class Deviation 2012-O0013, Defense Contract Audit Agency (DCAA) Policy and Procedure for Sampling Low-Risk Incurred Cost Proposals, on the quantity of audits performed and amount of questioned costs identified, as well as analyze the impact of the Low-Risk Memorandums (LRMs) issued under this class deviation on incurred cost proposals not audited. This research highlights the possible risks of performing less incurred cost proposal audits on DOD contractors and the increased reliance of LRMs in



the contract administration and closeout of high-risk cost-reimbursement contracts. The next section discusses the research questions for this research study.

C. RESEARCH QUESTIONS

The research questions for this research study include the following:

1. In terms of quantity of audits, what is the impact of Class Deviation 2012-O0013 for incurred cost proposals?
2. In terms of amount of questioned costs, what is the impact of Class Deviation 2012-O0013 for incurred cost proposals?
3. What is the impact of questioned costs found in a sample of incurred cost proposals at a Defense Contract Management Agency (DCMA) for DOD contractors who were not audited and received a Low-Risk Memorandum (LRM) due to Class Deviation 2012-O0013?
4. What is the impact of Class Deviation 2012-O0013 on DOD, DCMA, and DCAA policy and procedures used in the administration and closeout of cost-reimbursement contracts?

The next section discusses the methodology used in this research study.

D. METHODOLOGY

The research in this study seeks to identify and make comparison of the quantity of incurred cost proposal audits performed and amount of questioned costs identified before and after Class Deviation 2012-O0013 was implemented. A database query will be created to extrapolate the necessary data from the DCMA Contract Audit Follow-Up (CAFU) system eTool. The DCMA CAFU system is fed with audit report data from the DCAA Management Information System (DMIS).

A sample of DCMA cost-reimbursement contracts and associated DCAA Low-Risk Memorandums (LRMs) from one location will be reviewed to evaluate questioned cost implications of LRMs. No personally identifiable information (PII) will be collected or reviewed in this research.



An analysis of associated policy and regulations, such as the FAR/DFARS, DOD Directives/Instructions, DCMA Policy Instructions, DCAA Contract Audit Management (CAM) Guidebook, will be performed to evaluate the implications of Class Deviation 2012-O0013 on the practices and procedures pertaining to the incurred cost proposal audit, as well as the contract administration and the contract closeout processes used for cost-reimbursements contracts. The next section discusses the limitations of this research.

E. LIMITATIONS OF RESEARCH

There may be limitations in this research associated with the data analysis. One limitation is possible missing or omitted audit data in the CAFU system, such as missing questioned costs and how the incurred cost proposal was selected for audit. These limitations may impact the analysis of questioned costs and also prevent determining if the incurred cost proposals were selected based on ADV, high-risk determination, or random selection under low-risk sampling procedures. Another limitation is that information to compare the number of contractors required to submit incurred cost proposals for each fiscal year with the number of audits performed is not available. Although this research has these limitations, the data will show at a high level the difference in the quantity of incurred cost proposal audits performed and the amount of questioned costs identified in these audits before and after Class Deviation 2012-O0013 went into effect. The next section discusses the importance of this research.

F. IMPORTANCE OF RESEARCH

By conducting this research, the impact of Class Deviation 2012-O0013 will be examined in terms of the number of audits performed and the amount of questioned costs identified before and after the policy went into effect. The research will also highlight the possible risks of performing less incurred cost proposal audits on DOD contractors and the increased reliance on Low-Risk Memorandums (LRMs) in the contract administration and closeout of high-risk cost-reimbursement contracts.

The analysis of the use and effects of Class Deviation 2012-O0013 is important because it was originally implemented as an emergency deviation in order to allow DCAA to reduce a growing and substantial backlog of incurred cost proposal audits. The Class



Deviation 2012-O0013 policy raised the mandatory auditable dollar value (ADV) threshold for incurred cost proposal audits from \$15M to \$250M and significantly reduced the number of incurred cost proposal audits performed on contractors with an ADV under \$250M (DiNapoli, 2017). Yet, nearly 10 years later, the policy continues to be used even though DCAA eliminated the backlog three years ago (DCAA, 2020a).

The incurred cost proposal audit is the primary safeguard used by the DOD contracting officers to identify whether all costs incurred are allowable, allocable, and reasonable, and to determine final indirect cost rates in order to close out high-risk cost-reimbursement contracts (DiNapoli, 2012). Therefore, this research will provide recommendations regarding whether or not the continued use of Class Deviation 2012-O0013 and the contract administration and closeout procedures currently in place are adequately protecting the Government against unallowable costs, claimed costs discrepancies, and possible fraud. The organization of this report is discussed in the next section.

G. ORGANIZATION OF REPORT

The report consists of five chapters including this introduction. Chapter I introduces the background, purpose of the research, research questions, methodology, limitations, importance of research, and the organization of the research report. Chapter II consists of a literature review that will provide information on auditability theory, agency theory, the contract management process, and cost-reimbursement contracts. Chapter II also provides information on the DCMA contract administration and closeout policy and procedures, DCAA audit policy and procedures, Class Deviation 2012-O0013, Government Accountability Office (GAO) reports, Section 809 Panel recommendations, and DCAA reports to Congress. Chapter III discusses the methodology used in this research in conducting the research and the data analysis. Chapter IV details the findings and analysis, implications of the findings, and provides recommendations for improvement based on the findings. Chapter V consists of a summary, conclusions, and areas for further research. Finally, the report includes two appendices referenced in Chapter IV. Appendix A provides a detailed listing of the findings pertaining to research question number three, and



Appendix B provides information on the ACO voucher tracking and final incurred cost analysis procedures referenced in recommendation number three. The next section provides a summary of this chapter.

H. SUMMARY

In this chapter, an introduction and overview of the research was provided. The background of this research topic was presented to explain the significance and use of the incurred cost proposal audit in the administration and closeout of high-risk cost-reimbursement contracts by DOD. In addition, it provided an overview of the roles of DCAA and DCMA. The purpose of this research was then presented, as well as the four research questions. An overview of the methodology used in the research was also provided. Furthermore, the limitations, the importance of the research, and the organization of this report were discussed. The following chapter builds on the foundation of this research by reviewing the literature on auditability theory, agency theory, the contract management process, cost-reimbursement contracts, DCMA contract administration and closeout policy and procedures, and DCAA audit policy and procedures. The next chapter also reviews the DCMA policy and procedures for progress payments used in fixed-price contracts, Class Deviation 2012-O0013, GAO reports, Section 809 Panel recommendations, and DCAA reports to Congress pertaining to this research topic.



II. LITERATURE REVIEW

A. INTRODUCTION

In this chapter, a literature review is presented to provide a background on the Department of Defense (DOD) Class Deviation 2012-O0013, Defense Contract Audit Agency (DCAA) Policy and Procedure for Sampling Low-Risk Incurred Cost Proposals (hereafter referred to as “Class Deviation 2012-O0013”), since it is the central topic of this research study. Class Deviation 2012-O0013 affects the audit policy and procedures used by DCAA and the contract administration and closeout policy and procedures used by the Defense Contract Management Agency (DCMA) for DOD cost-reimbursement type contracts.

The concepts of auditability theory, agency theory, and the contract management process are reviewed to form a foundation of this research. Since Class Deviation 2012-O0013 impacts cost-reimbursement contracts, this literature review explains the selection, use, and administration of cost-reimbursement contracts in DOD acquisitions. This review covers the policies and procedures of DCMA and the audit policy and procedures of DCAA to understand the significance of the incurred cost proposal audit in the administration and closeout of cost-reimbursement type contracts. A review of the differences in DCMA policy and procedures for progress payments used in fixed-price contracts is presented. A detailed review of Class Deviation 2012-O0013 is also discussed. A review of Government Accountability Office (GAO) reports relating to DCAA incurred cost proposal audits, DOD cost-reimbursement contracts, and use of incurred cost proposal audits in the administration and closeout of cost-reimbursement contracts is conducted. Finally, a review of Section 809 Panel reports and DCAA Annual Reports to Congress is discussed. The overall literature review provides a basis to understand the importance of the research, research purpose, research questions, and analysis of the results. The next section discusses auditability theory and explains the importance of audit readiness and being auditable in DOD contracting.



B. AUDITABILITY THEORY

Power's (1996) research establishes the negotiation of an acceptable knowledge base and creation of receptive environments as the two key components to a process wherein things are made auditable. Building on those early concepts, Rendon and Rendon (2015) state that auditability theory, "incorporates aspects of governance, emphasizing capable processes, effective internal controls, and competent personnel" (p. 715).

The theory of auditability is a relevant part of the foundation of this research because this research is analyzing the impact of the Class Deviation 2012-O0013 policy which may be reducing the incurred cost proposal audits performed of a DOD contractor's final indirect cost rate submission. In their research of auditability in public procurement, Rendon and Rendon (2015) present the auditability triangle, as shown in Figure 1, to explain the significance of effective internal controls, competent personnel, and capable processes in the governance of auditability.

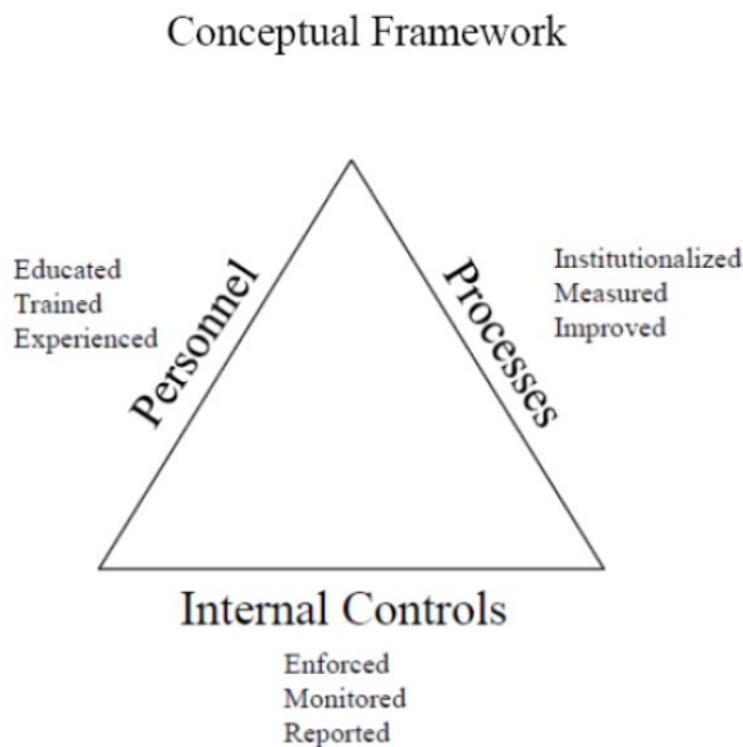


Figure 1. Auditability Triangle. Source: Rendon and Rendon (2015).

The incurred cost proposal audit area examined in this research is the DOD's internal control used to ensure that contractors performing under cost-reimbursement contracts are compliant with the allowable cost and payment requirements required under Federal Acquisition Regulations (FAR) clause 52.216-7 (2018). The incurred cost proposal audit, performed in accordance with this clause, ensures final indirect cost rates are established on actual costs and ensures the claimed costs are reasonable, allowable, and allocable to Government contracts (Government Accountability Office [GAO], 2012). Performing less incurred costs audits is a weakness in the DOD's internal control for monitoring high-risk cost-reimbursement contracts. Rendon and Rendon's (2015) auditability theory research finds that weak internal controls can cause an organization to be susceptible to procurement fraud. The concept of auditability theory affects the audit procedures utilized between the principal and agent in DOD contracting. This principal-agent relationship is discussed in the next section covering agency theory.

C. AGENCY THEORY

The principles of agency theory and the contrasting objectives between the principal and agent in achieving their respective purposes (Rendon, 2015) is used as an informed foundation in this research. Agency theory is used to analyze the impact of Class Deviation 2012-O0013 on the conflicting goals between the DOD's need to reduce an audit backlog, the contracting officer's need of the incurred cost proposal audit to effectively administer and closeout high-risk cost-reimbursement contracts, and the contractor's requirement to submit adequate incurred cost proposals.

In this research, there are a few principal-agent relationships. The DOD is the main principal who employs DCMA to perform contract administration services and DCAA to perform audit services as agents for their contracts. Additionally, DCMA functions as principal because it delegates the audit functions required for contract performance to its agent, DCAA. Finally, the contractor, performing under the cost-reimbursement contract, is an agent to DOD and DCMA. As the principal-agent theory explains, everyone has their own contrasting objectives.



For DOD, there is the overall objective to ensure that acquisitions meet contract cost, schedule, and performance goals, and are closed out on time. DCMA also has this overall objective, but the cost goal is even more detailed and specific for cost-reimbursement contracts. DCMA needs to ensure contractual requirements are performed pertaining to final indirect cost rates and incurred cost proposal audits. To do this, DCMA utilizes the services of DCAA, but DCAA also has an agent relationship to fulfill DOD's objective of closing out contracts on time. Under cost-reimbursement contracts, the contractor is agent to DOD, DCMA, and DCAA, and is trying to meet the DOD's overall objectives, but has its own overall objectives, which is generally to make a profit, increase market share, increase cash flow, and grow the business.

The principal-agent theory is significant to the foundation of this research because Class Deviation 2012-O0013, the subject of this research, was instituted by DOD to meet their principal objective to closeout cost-reimbursement contracts on time. DOD was not meeting this objective because their agent, DCMA, could not close out cost-reimbursement contracts, which was due to DCMA's agent, DCAA, inability to perform and complete the required incurred cost proposal audits.

In addition to the opposing goals of the principal and agent, agency theory is also concerned with the methods employed by the principal and agent to achieve their objectives (Rendon, 2015). In this research, DCMA, acting as the agent for DOD, utilizes the services of DCAA to perform the incurred cost proposal audit in order to make sure that fair, reasonable, and only allowable costs are incurred and paid under a cost-reimbursement contract. This is DCMA's method to ensure that their process used to obtain the contractor's actual allowable cost data, which includes the final indirect cost rate submission, is adequate, accurate, reliable, and does not include unallowable costs. Without the incurred cost proposal audit, DCMA's process used for fulfilling DOD's cost objective in the principal-agent relationship with the contractor is weakened. An effective principal-agent relationship is relevant to the functions and activities performed by the buyer and seller in the contract management process, which will be discussed in the next section.



D. CONTRACT MANAGEMENT PROCESS

The contract life cycle process consists of the pre-award, award, and post-award phases (National Contract Management Association [NCMA], 2019; NCMA, 2022). Each phase includes separate buyer and seller activities. Pre-award focuses on planning, proposals, and solicitations; award focuses on proposal analysis, negotiation, and source selection; and post-award focuses on contract administration, compliance, and eventually closeout (NCMA, 2019; NCMA, 2022).

These phases are also used as part of the informed foundation for this research study. As shown in Figure 2, there are five domains that fall under these phases.

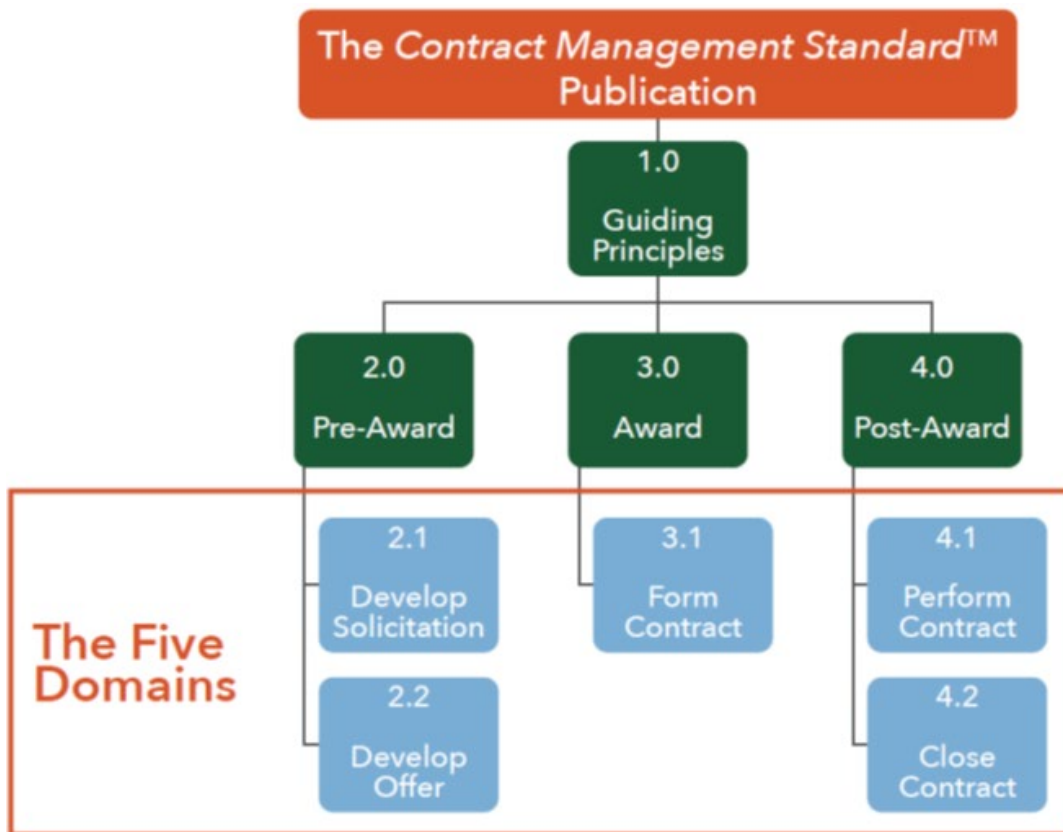


Figure 2. Five Domains of The Three Contract Life-Cycle Phases. Source: NCMA (2019; 2022).

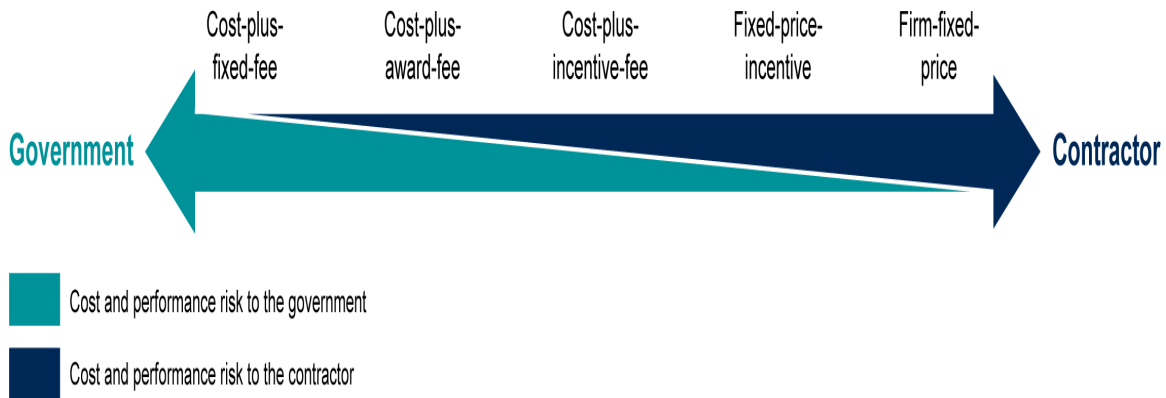
The subject of this research pertains to contract administration and closeout functions performed by contracting personnel in the post-award phase, within the Perform Contract and Close Contract domains. It is the execution of the functions within these domains that are most affected by overarching changes to the policies and procedures in DOD contracting. Understanding the correlation between the domain functions and the phase in the contract life cycle in which they occur is relevant in order to determine the areas impacted in this research. The contract administration and closeout functions are discussed in more detail later. The next section describes the cost-reimbursement contracts.

E. COST-REIMBURSEMENT CONTRACTS

In the perfect contracting world, the buyer and seller would both share equally in the risks of the contract, but there is no perfect world in contracting, and the type of contract selected plays a significant role in determining the amount of risk the buyer or the seller assumes. Although this research is mainly about analyzing the impact of Class Deviation 2012-O0013 pertaining to the audit of a contractor's incurred cost proposal, the reason for the audit as well as the contract risk, which is the contract type, needs to be understood.

FAR Part 16 (2022) describes the types of contracts that can be used in Government acquisitions and prescribes the policy and procedures contracting officers use in the contract type selection process. FAR Subpart 16.1 (2022) explains the wide range of contract types available to contracting officers in order to accommodate the variety of supplies and services the Government acquires, and how these types vary based on the contractor's assumption and responsibility of costs to perform and the amount of profit incentive. Per FAR 16.101 (2022), all contract types available fall into two broad categories; fixed-priced and cost-reimbursement contracts. These contract types span from firm-fixed price, wherein the contractor bears the majority of the risk of cost and profit/loss, to cost-plus-fixed-fee (a cost-reimbursement contract type), where the contractor has little accountability for costs and receives a guaranteed fixed-fee. This range of contracts is shown in Figure 3 (Oakley, 2020, p. 5).





Source: Defense Acquisition University. | GAO-20-352

Figure 3. Spectrum of Contract Types and Risk. Source: Oakley (2020, p. 5).

In DOD acquisitions, contracting officers must also follow the policy and procedures set forth in the Defense Federal Acquisition Regulation Supplement (DFARS) and Procedures, Guidance, and Information (PGI). The DFARS Subpart 216.1 (2022) and PGI 216.1 (2022) state that DOD contracting officers shall first use fixed-price contracts when selecting contract types. It also specifically instructs contracting officers to follow the principles and procedures in the Director, Defense Procurement and Acquisition Policy memorandum dated April 1, 2016, titled “Guidance on Using Incentive and Other Contract Types” (DFARS 216.104, 2022). This guidance was established as a part of the Under Secretary of Defense, Acquisition, Technology and Logistics (USD(ATANDL)) Better Buying Power (BBP) 3.0—Achieving Dominant Capabilities through Technical Excellence and Innovation initiative (OUSD, 2016). The purpose of this guidance is to ensure contracting officers select contract types that balance the risk evenly between the contractor and the Government and provide the contractor with the ability to earn a reasonable profit or fee.

Ideally, this is accomplished using fixed-price or fixed-price incentive type contracts, but many DOD acquisitions are for unique, complex, technical, urgent, and uncertain requirements in which the use of a fixed-price type contract is not possible. If the

government were to use a fixed-price type contract in these high-risk acquisitions, it would result in inflated proposals from contractors because they would be assuming all of the cost risk (OUSD, 2016). In these high-risk acquisitions when requirements are difficult to define and uncertainties in cost do not permit for the use of a fixed-price type contract, it is necessary for contracting officers to select cost-reimbursement type contracts (FAR Subpart 16.3, 2022). This is shown in Figure 4.

Feature	Cost-type	Fixed-price-type
Payment and incentive arrangements	<ul style="list-style-type: none"> Government pays allowable costs incurred by contractor, to the extent prescribed by the contract, such as certain compensation costs for work performed. Incentive arrangements included in the contract can allow the contractor to earn fees tied to performance, such as for performing at lower costs. 	<ul style="list-style-type: none"> Government pays a fixed price. Incentive arrangements included in the contract can allow government to share in cost savings and can also allow the contractor to earn fees tied to performance.
Risk assumption	<ul style="list-style-type: none"> Government generally assumes the risk of a cost overrun. 	<ul style="list-style-type: none"> Contractor generally assumes the risk of a cost overrun.
Expectations of contractor	<ul style="list-style-type: none"> Contractor is to make a good-faith effort to meet contract requirements within the estimated cost; however, government is not promised a completed item or service within that cost. 	<ul style="list-style-type: none"> Contractor must meet contract requirements, including specified schedules, at firm prices or, in some cases, an adjustable price.

Figure 4. Key Features of Cost-Type and Fixed-Price-Type Contracts.
Source: Oakley (2020, p. 4)

In cost-reimbursement contracts, the government assumes the risk of the performance costs, and the contractor is required to put forth a “best effort” and is reimbursed for allowable costs (Office of the Under Secretary of Defense [OUSD], 2016). Additionally, the reason that these cost-reimbursements contracts are high risk, is because, as defined in FAR 32.001 (2022), the interim payments under cost-reimbursement contracts are a form of contract financing where monies are disbursed prior to acceptance. In order to reduce the risk associated with cost-reimbursement contracts and in order to control costs, the government establishes a cost ceiling based on the estimated costs that the contractor may not exceed, but there is little to no incentive for a contractor to control costs unless an incentive is included in the contract (OUSD, 2016).

Besides the cost ceiling limitation, the government must ensure a contractor’s accounting system is adequate prior to awarding a cost-reimbursement contract and provide for appropriate surveillance during contract performance to ensure the contractor is



performing efficiently and using effective cost controls (Federal Acquisition Regulations [FAR] Subpart 16.3, 2022). Because of the high risk to the government, the application and use of a cost-reimbursement contract requires a contracting officer to get higher-level approval. FAR 16.301-2 (2022) stipulates that the use of this contract type must be approved one level above the contracting officer. Furthermore, in DOD acquisitions, the DFARS provides an additional limitation for the use of cost-reimbursement contracts which state, "...approval of the head of the contracting activity is required prior to awarding cost-reimbursement contracts in excess of \$25 million" (DFARS 216.301-3, 2022).

1. FAR 52.216-7 Allowable Cost and Payment, 2018

In addition to pre-award requirements ensuring the contractor has an adequate accounting system and appropriate surveillance is provided, when a cost-reimbursement contract is awarded, FAR 16.307 (2022) and DFARS 216.307 (2022) both prescribe that the FAR 52.216-7, Allowable Cost and Payment, (2018) clause shall be included in the contract. FAR 52.216-7 (2018) sets forth the terms and conditions for the payment of allowable costs under cost-reimbursement contracts and provides the contracting officer the authority to perform the policy and the procedures to establish indirect costs in accordance with FAR Subpart 42.7 (2022).

The FAR 52.216-7, Allowable Cost and Payment (2018), clause stipulates the requirements that the contractor and government must follow for invoicing and reimbursing allowable costs, establishing billing and Final Indirect Cost Rates (FICR), auditing the incurred cost proposal, and approving the final payment. The clause states that a contractor shall be reimbursed for allowable direct costs and indirect costs at approved provisional (estimated) billing rates during performance. The clause also requires the contractor to submit adequate FICRs within 6 months of completion of the contractor's fiscal year for each year of contract performance to the contracting officer (or cognizant Federal agency official) and auditor. The clause requires the contractor to include 15 specific data items in its FICR submission in order for it to be adequate. Two important data items to government contracting officers used in the administration and closeout of



cost-reimbursement contracts that will be discussed in this research are Schedule H and Schedule I. Schedule H lists all the direct costs elements for each contract and subcontract and shows the indirect costs applied using the contractors claimed rates. Schedule I provides a cumulative summary of claimed costs by contract and subcontract from Schedule H and also shows the cumulative billed amounts by contract and subcontract.

The FICR submission is based on the contractor's actual costs experienced during the fiscal year and is used to make adjustments to the indirect costs that were based on estimated billing rates during contract performance. The FICR requirement is the most significant part of the allowable cost and payment clause in preventing the risk of unallowable costs because it provides the government with the ability to review and audit the contractor's actual costs incurred. This ensures the government is only paying for the actual allowable costs and ensures the contractor is being reimbursed for their actual costs.

The FICR submission is the most complex and labor intensive requirement for both the contractor and the government. The FICR submission requires the contractor to submit an extensive and detailed report of all its annual costs for the fiscal year in order to provide both a justification and a summary of all claimed indirect expense rates and the final claimed costs by contract. For a contractor, the work involved is comparable to filing an annual tax return, which is why the allowable cost and payment clause, FAR 52.216-7 (2018), allows the contractor a 6-month period to submit FICRs after the end of the fiscal year. For the government, the work is just as difficult and time-consuming, which is why FAR 4.804-1 (2022) allows for 36 months to closeout contracts requiring settlement of indirect cost rates.

The incurred cost proposal audit and settlement of a contractor's FICRs in accordance with the allowable cost and payment clause is the biggest factor in a contracting officer's ability to prevent unallowable costs and to close out cost-reimbursement contracts (DiNapoli, 2012). The next section discusses the Defense Contract Management Agency (DCMA) functions, policy, and procedures in the administration and closeout of cost-reimbursement contracts.



F. DCMA CONTRACT ADMINISTRATION AND CLOSEOUT OF COST-REIMBURSEMENT CONTRACTS

As discussed in the previous section, the selection to use and award a cost-reimbursement contract type is carefully monitored with policies and procedures to ensure use of this contract type is only done if absolutely necessary. Once the contract is awarded, the office administering the contract carries out various contract administration requirements and functions to protect the government from the high risks associated with cost-reimbursement contracts. As previously discussed, for the large majority of DOD acquisitions, the contract administration and closeout functions for cost-reimbursement contracts are the responsibility of the DCMA.

When DCMA is assigned contract administration duties, DCMA Administrative Contracting Officers (ACOs) are typically responsible for performing all of the contract administration functions listed in FAR 42.302(a) (2022). There are many functions listed in FAR 42.302(a) that impact all types of contracts, but this research and literature review will focus on functions specific to cost-reimbursement contracts and specific to the functions impacted by Class Deviation 2012-O0013 to incurred cost proposal audits being analyzed in this research. DCMA also performs enhanced surveillance functions for cost-reimbursement contracts used in major system acquisitions, such as earned value management, but this research will not cover these functions since most major defense acquisitions are not impacted by Class Deviation 2012-O0013 being analyzed in this research.

When contract administration is delegated to DCMA, the specific functions listed in FAR 42.302(a) (2022) pertaining to cost-reimbursement contracts are listed in Table 1. Some of the key functions listed in Table 1 that are pertinent to this research are functions seven, nine, and twelve. Function seven provides the ACO authority for the final voucher approval, which is the final settlement and approval for all costs claimed under a cost-reimbursement contract. Function nine provides ACOs with the authority to establish final indirect cost rates, which the contractor is required to submit pursuant to the allowable cost and payment clause, FAR 52.216-7 (2018), used in cost-reimbursement contracts. Function twelve pertains to the review and approval of a contractor's accounting system, as well as ensuring a contractor performing under cost-reimbursement contracts maintains an adequate accounting system. All



of the functions listed in Table 1 have a significant purpose in the administration and closeout of cost-reimbursement contracts.

Table 1. DCMA Contract Administration Functions Pertaining to Cost-Reimbursement Contracts. Adapted from FAR 42.302(a) (2022).

(7) Determine the allowability of costs suspended or disapproved as required (see subpart 42.8), direct the suspension or disapproval of costs when there is reason to believe they should be suspended or disapproved, and approve final vouchers.
(8) Issue Notices of Intent to Disallow or not Recognize Costs (see subpart 42.8).
(9) Establish final indirect cost rates and billing rates for those contractors meeting the criteria for contracting officer determination in subpart 42.7.
(12) Determine the adequacy of the contractor’s accounting system. The contractor’s accounting system should be adequate during the entire period of contract performance. The adequacy of the contractor’s accounting system and its associated internal control system, as well as contractor compliance with the Cost Accounting Standards (CAS), affect the quality and validity of the contractor data upon which the government must rely for its management oversight of the contractor and contract performance.
(16) Ensure timely notification by the contractor of any anticipated overrun or underrun of the estimated cost under cost-reimbursement contracts.
(17) Monitor the contractor’s financial condition and advise the contracting officer when it jeopardizes contract performance. (FAR 42.302(a), 2022)

Per FAR 42.302(a) (2022), “The contracting officer may retain any of these functions, except those in paragraphs (a)(5), (a)(9), (a)(11) and (a)(12) of this section, unless the cognizant Federal agency (see 2.101) has designated the contracting officer to perform these functions.” FAR Part 2 Definitions of Words and Terms (2022) defines cognizant federal agency as, “the Federal agency that, on behalf of all Federal agencies, is responsible for establishing final indirect cost rates and forward pricing rates, if applicable, and administering cost accounting standards for all contracts in a business unit.” FAR Part 2 Definitions of Words and Terms (2022) defines and explains forward pricing rates, “...represent reasonable projections of specific costs that are not easily estimated for, identified with, or generated by a specific contract, contract end item, or task. These projections may include rates for such things as labor, indirect costs, material obsolescence and usage, spare parts provisioning, and material handling.” The FAR Part 2 (2022) definition explains that forward pricing rates are negotiated with contractors for use in the pricing of contracts and modifications. While final



indirect cost rates are based on actual cost incurred and not subject to change, forward pricing rates are just estimates based on future projections. For most contractors, DCMA is the cognizant Federal agency.

In order to carry out these contract administration functions, DCMA provides supplemental policies and procedures to instruct and guide ACOs when administering cost-reimbursement contracts. And, for many of these functions, DCMA ACOs utilize the audit services of the Defense Contract Audit Agency (DCAA). DCMA's policies specific for cost-reimbursement contracts include the administration of payments, contractor business systems, final indirect cost rates, contract closeout, and contract audit follow-up.

1. Payments

DCMA's Payment policy manual (DCMA-MAN 2101-02) (2021d), provides the instructions listed in Table 2 for ACOs and Contract Administrators (CAs) to perform in the contract administration oversight for cost-reimbursement contract payments. These instructions provide ACOs guidance to periodically review interim cost vouchers to ensure that limitation of costs, limitation of funding, and fee withholding are in compliance with contract requirements. The payment functions explain how ACOs should perform additional financial surveillance based on risk and monitor contractor business systems related to cost voucher billings (e.g., accounting system). The functions listed in Table 2 also relate to the procedures an ACO performs in reviewing final vouchers under cost-reimbursement contracts.



Table 2. DCMA Payment Policy Manual Instructions for ACOs and CAs.
Adapted from (DCMA, 2021d, pp. 63–68).

Review prime contracts and modifications to determine if they contain a requirement for Public Voucher (PV) submission or special payment instructions.
Ensure that the contractor complies with FAR 52.232-20, “Limitation of Cost” or FAR 52.232-22, “Limitation of Funds” requirements, when applicable to cost-type contracts as stated in the contract.
Ensure any problems involving fee withholding requirements are promptly identified and resolved by conducting periodic reviews of vouchers for fee withholdings. The ACO may randomly select vouchers to determine if fees are withheld and paid in compliance with the contract schedule and/or applicable regulations stated in the contract. However, DCAA is responsible for random sampling of interim vouchers based on a risk assessment of the contractor to determine the sampling size and frequency.
Ensure any problems associated with the withholding requirements are promptly identified by conducting periodic reviews of vouchers for withholdings commensurate with performance risk.
Obtain business system status updates and related concerns regularly from the DACO, CACO, and other ACOs. If necessary, the ACO must request additional system reviews with focus on areas of concern.
Periodically, obtain information on the contractor’s financial condition from the DACO, CACO, contract auditor, and other ACOs. If necessary, the ACO should plan additional financial surveillance reviews based on the risk related to the conditions and concerns identified.
Review requests for payment when necessary to check accuracy and provide recommendations to the ACO when discrepancies are identified or ACO signature is required.
Review and approve contractor business systems and key processes that influence contract billing.
Review and approve the completion/final voucher under cost-plus fixed fee or other cost-reimbursement contracts, including: <ul style="list-style-type: none"> a. Ensure final rates have been settled or quick closeout rates have been established. b. Verify that MOCAS obligation records accurately reflect funding shown in the contract and any subsequent funding modifications. Contract obligation records are reconciled to the contract and funding modifications. c. Verify that total amounts claimed for reimbursement represent allowable costs and fees in accordance with the contract (FAR 52.216-7 and FAR 52.232-7). d. Compare the total disbursements in MOCAS with the contractor’s previous paid amount stated on the final voucher. e. Ensure that all issues on suspended or disallowed costs are resolved (FAR 4.804-5(a)(7)). f. Validate. Assistance in validating final vouchers can be obtained from the supporting Cost Price Analyst for low and moderate risk vouchers and from DCAA for complex or high-risk vouchers. g. Sign, date, and forward the final voucher to the payment office. ACO approval of a final voucher signifies that all administrative contract settlement actions are complete (FAR 52.216-7 and FAR 52.232-7).

NOTE: Acronyms listed in Table 2 not previously defined include Divisional Administration Contracting Officer (DACO), Corporate Administrative Contracting Officer (CACO), Mechanization of Contract Administration Services (MOCAS).

DCMA’s Payment policy manual (DCMA-MAN 2101–02) (2021d) provides the instructions listed in Table 3 on the DCAA auditor’s role in the contract administration



oversight for cost-reimbursement contract payments. The policy instructions listed in Table 3 explain how the auditor is the ACO’s authorized representative and performs interim reviews and approvals of cost vouchers under cost-reimbursement contracts. The instructions clarify that these reviews are not an audit and do not determine if costs are allowable. Furthermore, the instructions also clarify that it is the ACO, not the auditor, who is responsible for reviewing and approving the final voucher, but auditor assistance may be requested for high-risk contracts.

Table 3. DCMA Payment Policy Manual Instructions for DCAA Auditors.
Adapted from DCMA (2021d, p. 65).

The contract auditor is the authorized representative of the ACO as stated in DFARS 242.803, “Disallowing Costs after Incurrence,” for the following actions:
Receiving, reviewing, and approving interim vouchers. NOTE: The auditor’s review of the interim voucher does not constitute an audit. Its purpose is to verify that the amounts claimed are not in excess of that which is due the contractor in accordance with the terms of the contract. The auditor’s interim public voucher review is limited to assuring the claimed cost does not exceed contract ceiling, funding limitations, or precluded by contract terms. The auditor does not determine FAR cost allowability during interim public voucher review. Contract cost incurred issues are resolved during overhead and direct cost audits.
Reviewing final/completion vouchers when requested by the ACO for contracts rated high risk (e.g., contractor business systems deficiencies, unsettled disallowances, defective pricing issues).
Issuing a DCAA Form 1 “Notice of Contract Cost Suspended and/or Disapproved,” to deduct costs where allowability is questionable.
The contract auditor performs a limited role in the PV process. The contract auditor does not: (a) Administer limitation of cost or funds requirements. (b) Make judgments on fee issues. (c) Approve final/completion vouchers. (d) Make decisions regarding appeals on the notice of contract costs suspended and/or disapproved.

2. Contractor Business Systems

DCMA’s Contractor Business Systems policy manual (DCMA-MAN 2301–01) (2019b) pertains to contract administration of cost-reimbursement contracts because DFARS 242.7503 prescribes the use of the DFARS clause, 252.242-7006 Accounting System Administration, in cost-reimbursement contracts. The DFARS 252.242-7006 Accounting Administration (2012) clause requires contractors performing under cost-reimbursement contracts to have an acceptable accounting system, provides the accounting system criteria



with which the contractor shall comply and provides the authority for the Administrative Contracting Officer (ACO) to make a determination on the acceptability of a contractor's accounting system. DCMA generally uses the audit services of the DCAA to audit a contractor's accounting system.

DCMA ACOs, in collaboration with the DCAA auditor, generally perform a pre-award review of the contractor's accounting system prior to award (unless the contractor already has an approved accounting system) to determine if the contractor's accounting system is capable of meeting the accounting system criteria (DCMA, 2019b). Post-award, DCMA ACOs, in collaboration with the DCAA auditor, perform full accounting system audits to determine if the contractor's accounting system meets all of the accounting system criteria (DCMA, 2019b).

If significant deficiencies are identified as a result of the accounting system audit or through other surveillance methods or audits, DCMA ACOs, in collaboration with the DCAA auditor, will make a final determination on the acceptability of the contractor's accounting system (DCMA, 2019b). Contractors who have had significant deficiencies, or disapproved accounting systems, are generally classified as high risk (DCAA, 2022c). A contractor with a high risk accounting system performing on cost-reimbursement contracts will receive enhanced system surveillance by the auditor, greater oversight of their interim cost vouchers, and will typically be classified as high risk by the DCMA ACO and DCAA auditor when evaluating and making determinations on the audit of the contractor's incurred cost proposal.

3. Final Indirect Cost Rates

The policy of the DCMA's Final Indirect Cost Rates manual (DCMA-MAN 2201-03) (2021c) instructs ACOs to monitor and ensure the contractor's effective management of contract costs by establishing FICRs, disallowing unallowable costs, and assessing penalties for unallowable costs. The manual covers the responsibilities of the ACO, auditor, and Contract Administrator (CA) in establishing the FICRs in accordance with FAR 42.705, Final Indirect Cost Rates, and FAR 52.216-7, Allowable Cost and Payment (2018).

When a contractor is performing under a cost-reimbursement contract, the contractor is required to submit FICRs, in accordance with the allowable cost and payment clause, FAR



52.16-7, to the cognizant ACO and auditor within a 6 month period after each fiscal year of contract performance. The manual covers the ACO and DCAA auditor functions involved in this process, which are listed in Table 4. The key functions listed in Table 4 include the adequacy review of the contractor’s FICR submission, the DCAA incurred cost proposal audit, and the DCAA low-risk memorandum (LRM). A contractor is required to submit an adequate FICR for each year of performance under a cost-reimbursement contract, and the adequacy review helps in determining the risk of a contractor. The DCAA LRM function listed in Table 4 is important because this research is analyzing the impact of Class Deviation 2012-O0013, which changed the low-risk sampling criteria that DCAA uses in performing low-risk determinations for the incurred cost proposal audit of a contractor’s FICR submission.

Table 4. DCMA’s Final Indirect Cost Rates Manual (DCMA-MAN 2201–03) ACO and Auditor Functions. Adapted from (DCMA, 2021c).

ACO extension to the 6 month period for exceptional circumstances.
ACO procedures for contractor’s failing to submit timely FICRs.
ACO and DCAA auditor FICR proposal adequacy review.
Procedures for contractors who cannot or do not submit a FICR.
Procedures for determining FICRs.
DCAA Audit (incurred cost proposal audit).
DCAA Low-Risk Memorandum.
Procedures for negotiating FICRs when they cannot be established under an incurred cost proposal audit.
Procedures for establishing FICRs unilaterally by issuance of a Contracting Officer’s Final Decision (COFD).
Procedures for the disallowance costs and determining penalties and interest.

For the purpose of this literature review, the focus is on the DCMA policy and procedures for determining FICRs under the issuance of a DCAA LRM. Section 3.3 of DCMA’s Final Indirect Cost Rates manual (DCMA-MAN 2201–03) (2021c), provides the instruction and guidance listed in Table 5 to DCMA ACOs for determining FICRs under DCAA LRMs. The instructions are specific to Class Deviation 2012-O0013, which is the subject of this research. The instructions explain how LRMs issued under Class Deviation 2012-O0013 include a fully executed FICR agreement and may include a Cumulative Allowable Cost Worksheet (CACWS). The most notable policy instruction listed in Table 5 states that an ACO is not required to prepare a Memorandum for Record (MFR), Pre-



Negotiation Objective Memorandum (PNOM), or Post-Negotiation Memorandum (PNM) for the establishment of final indirect cost rates when a DCAA LRM is issued approving the contractor's FICR submission. This means that the ACO can accept the rate agreement and the CACWS attached to the LRM, and the final voucher can be approved.

Table 5. DCMA's Final Indirect Cost Rates Manual (DCMA-MAN 2201-03) Instructions and Guidance to ACOs for Determining FICRs Under LRMs. Adapted from DCMA (2021c, pp. 9-10).

<p>b. DCAA Low-Risk Memorandum. Refer to DFARS 242.705 for the applicability of DOD Class Deviation 2012-O0013, "DCAA Policy and Procedure for Sampling Low-Risk Incurred Cost Proposals," issued on July 24, 2012, for establishing FICR.</p>
<p>(1) The memo typically includes a fully executed FICR agreement signed by the contractor and the DCAA auditor. Upon receipt of the memorandum and the signed FICR agreement, the CO must verify the DCAA auditor made the appropriate distribution of documents as prescribed in FAR 42.706. If DCAA did not make the appropriate distribution of documents, the CO must perform the distribution. If the low-risk memorandum does not include a FICR agreement, CO must contact the DCAA auditor concerning the FICR determination. The CO must also follow the records and database management requirements in Paragraph 3.9.</p>
<p>(2) When DCAA issues a low-risk memorandum at the business segment level of a large contractor prior to the final impact of corporate allocation or intermediate home office (IHO) settlements, the CO should provide written notification of the low-risk memo to the CACO, any applicable DACO, and any applicable ACO covering an IHO. The ACO should obtain CACO or DACO concurrence prior to settling the indirect costs at the business segment. If the CACO or IHO DACO complete the settlement of corporate or IHO costs prior to the ACOs resolution and disposition of the low-risk memorandum, the ACO must include the resulting final impact of the corporate or IHO cost allocations to the applicable business segment being settled by the ACO.</p>
<p>(3) If the low-risk memo did not include the FICR agreement letter or the cumulative allowable cost worksheet, the ACO must contact DCAA to request the missing documents. If the ACO cannot retrieve the requested FICR agreement document from DCAA in a reasonable amount of time (as determined by the ACO), the ACO must accept the proposed rates as the FICR for the applicable fiscal year for the contractor. The ACO must execute a FICR agreement with the contractor (using the template on the Resource Page) and explain the decision to accept the proposed rates in an MFR. Accepting the proposed FICR under a low-risk memo does not require the ACO to prepare a PNOM or PNM. The ACO must perform the appropriate distribution of documents as prescribed in FAR 42.706. The ACO must also document the date and method of transmittal of any documents sent to DCAA. The ACO must also follow the records and database management requirements in Paragraph 3.9.</p>



4. Contract Closeout

DCMA's Contract Closeout manual (DCMA-MAN 2501-07) (2019c) covers the numerous contract closeout functions for various contract types. Even though there are many aspects and actions involved in closing out a contract, for the purpose of this research, the focus is only on the specific functions related to using LRMs for the closeout of cost-reimbursement contracts.

Section 12 of DCMA's Contract Closeout manual (2019c) provides the instructions for ACOs to close out cost-reimbursement type contracts. Specific functions in this section pertaining to the use of LRMs are the determination and verification that FICRs have been settled for all the years of the contract's period of performance and the processing of the final voucher. In order to focus on the aspects of the LRMs role in this research, the literature review does not cover any circumstances in which a contractor does not have approved FICRs for all the years of contract performance or does not submit a timely final voucher. This review covers the use of LRMs in the ACOs review of a final voucher.

As depicted in Figure 5, once a cost-reimbursement type contract is physically completed, the closeout process begins. The steps in this process listed in Figure 5 display how the contractor is required to submit their FICR submission within six months after the completion of their fiscal year. Then, once the FICR submission is determined to be adequate, the incurred cost proposal audit may take anywhere from 12 to 24 months to complete (Table 5). FAR 4.804-1 (2022) allows for 36 months to close out contracts due to the time-consuming settlement of indirect cost rates. The last step in the process for DCMA ACOs is the review and approval of the final voucher.



Overview of the Contract Closeout Process Time-Line (Cost Type)

From Physical Completion to Closeout

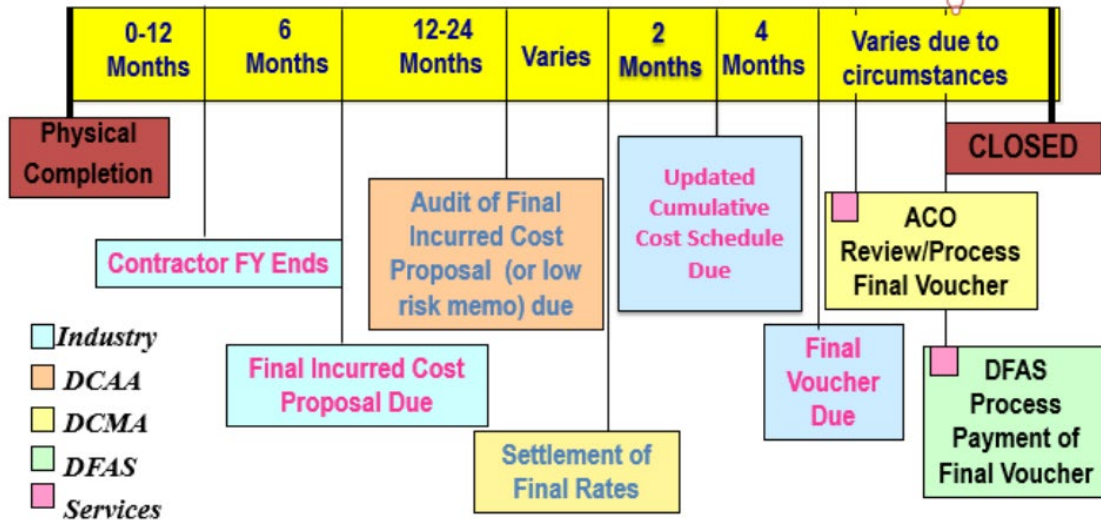


Figure 5. Overview of the Contract Closeout Process Time Line (Cost Type). Source: DCMA (2018, Slide 4).

The DCMA Contract Closeout manual (DCMA-MAN 2501-07) (2019c) provides ACOs with the instructions listed in Table 6 for review of a contractor’s final voucher. These instructions include an explanation to ACOs that DCAA review of a final voucher is not required for a low-risk contract. The instructions explain that high-risk factors include things such as, unsettled subcontract costs, inadequate business systems (e.g., accounting system), legal issues, previous cost disallowance, or defective pricing issues, and that larger dollar contracts have greater risks. Additionally, the instructions state that if a DCAA CACWS is provided, then an evaluation of the final voucher by DCAA is unnecessary, and the Contract Administrator (CA) and ACO can validate the amounts claimed in the final voucher with the amounts listed in the CACWS. As previously explained, LRMs, issued under Class Deviation 2012-00013, typically include a CACWS, which is a summary of the contractors claimed costs by contract listed in their FICR submission. Table 6 instructions provide detailed steps for the ACO to verify that the amounts and rates in the final voucher are mathematically correct and are compliant with

contractual cost and funding limitations. The instructions also suggest that a DCMA Price/Cost analyst assist with the review.

Table 6. DCMA Contract Closeout Manual (DCMA-MAN 2501–07) Final Voucher Review Instructions for ACOs. Adapted from DCMA, 2019c (pp. 39–41).

<p>(1) ACOs may review final vouchers instead of requesting a DCAA review if the ACO determines that the contract is low risk. The ACO will conduct a risk assessment of the contract, and review the FV for those contracts determined to be low risk with Contract Price/Cost Analyst assistance. DCMA will continue to request DCAA review the FV for those contracts that are determined to be higher risk, See Table 9, Final Voucher Review Criteria:</p>
<p>Table 9, Final Voucher Review Criteria: Following are items that must be considered when reviewing a Final Voucher (FV):</p> <ul style="list-style-type: none"> • If a Cumulative Allowable Cost Worksheet (CACWS) has been prepared, and approved by DCAA, an evaluation of the FV is not needed by DCAA, the CA/ACO can review the voucher to confirm that the amounts on the FV match the CACWS. • There will be times when DCAA cannot timely review the voucher. However, if funds are at risk of cancelling, DCAA will schedule and conduct the review. If DCAA is unavailable to conduct review, DCMA Pricing can perform the review if available.
<p>(2) When conducting a risk assessment, the ACO must take into consideration low risk criteria as identified in Tables 10 and 11:</p>
<p>Table 10. Risk Assessment for Final Vouchers</p> <ul style="list-style-type: none"> • No subcontract costs on the contract or subcontractor costs have been settled • Consider the dollar value of the contract. Higher dollar contracts may result in higher risk. • Consider business systems to be either adequate or inadequacies do not impact the FV. Business systems that impact a FV are: Accounting, and Purchasing. • No identified unsettled disallowances, outstanding legal actions, open insurance claims, defective pricing issues, ASBCA cases, or other unresolved items affecting the contract.
<p>Table 11. Final Voucher Review</p> <p>Overhead rates must be established for all years covered by the contract period of performance. Overhead rates can either be negotiated, determined using QCO rates, or the contracting officer can accept the Contractor’s proposed rates after receipt of a DCAA adequacy review. DCMA Price/Cost Analyst are recommended to perform the Steps for FV Review:</p> <p>Step 1. Verify accuracy of arithmetic - Coordinate with the Contractor to reconcile differences</p> <p>Step 2. Review Contract file and identify</p> <ol style="list-style-type: none"> a. Funding by CLIN b. Cost restrictions, e.g., limits on travel or overtime costs c. Level of Effort (LOE)



Step 3. Verify period of performance on the FV agrees with the period of performance per contract and latest modification. If dates do not agree, coordinate with the Contractor to reconcile differences.

Step 4. When applicable, the ACO may request Contractor Cost Ledgers by CLIN for the contract.

Step 5. Verify that amounts incurred by CLIN on the Contractor Cost Ledgers agree with amounts by CLIN on the FV. If amounts do not agree, coordinate with the Contractor to reconcile differences.

Step 6. Verify amounts per CLIN on the FV do not exceed contractual funding limits. Coordinate with the Contractor to reconcile differences if funding amounts have been exceeded.

Step 7. Review Cost Ledgers and FV Support Schedules and verify that cost restrictions have not been exceeded, (e.g., limits on travel or overtime). Coordinate with the Contractor to reconcile differences if contractual amounts were exceeded.

Step 8. Obtain from Contractor the top-level Labor Distribution Report and verify that LOE was met. If not met, verify that the fee on the FV was adjusted. If fee was not adjusted, coordinate with the Contractor to reconcile differences.

Step 9. Verify accuracy of rates used by Contractor to calculate costs in the FV.

a. Obtain cost reports from Contractor that identify rates used to compute costs.

b. Verify that costs in total on Rate Reports agree with total costs on the FV.

c. Verify rates used to compute costs in the FV agree with final negotiated QCO rates.

Step 10. Verify that the fee on the FV agrees with contractual terms.

Step 11. Verify the subcontract costs (if applicable) have been settled, and the ACO to the subcontractor take no exception to the costs. In some instances, the qualified audit opinion (due to another pending assist audit report) may relate to subcontract costs that are a type of ODCs. Subcontract costs typically have no impact relative to settling a prime Contractor's final indirect rates. However, the assist audit (covering subcontract costs) will likely be needed to settle specific contract costs with the prime Contractor.

NOTE: Acronyms listed in Table 6 not previously defined include Armed Services Board of Contract Appeals (ASBCA), Contract Line Item Number (CLIN), Other Direct Cost (ODC), Quick-Close-Out (QCO).

As noted in the DCMA contract closeout policy instructions, DCAA LRMs typically include a Cumulative Allowable Cost Worksheet (CACWS). The DCMA Contract Closeout manual (DCMA-MAN 2501-07) (2019c) provides the following explanation of the CACWS:

Cumulative Allowable Cost Worksheet (CACWS) summarizes total cumulative allowable costs for all open flexibly priced contracts. The CACWS is designed to expedite contract closeout by eliminating the need for DCAA to evaluate the FV and prepare a separate contract evaluation closing statement. This saves time and resources for both the contractor and Government. The ACO can ensure that the total payment amount stated in



the CACWS equals the total amount requested for each contract as stated in the FV payment support documentation. However, if the ACO cannot determine the cumulative allowable costs by contract using the CACWS, ACO should request DCAA to evaluate the FV. (p. 39)

The CACWS is prepared by DCAA using the contractor's claimed costs listed in Schedule I in its FICR submission. Schedule I is one of the required data items a contractor must provide in accordance with the FAR 52.216-7, Allowable Cost and Payment (2018), clause. Schedule I provides a cumulative summary of claimed costs by contract and subcontract derived from the Schedule H in the FICR submission, and also shows the cumulative billed amounts by contract and subcontract. Schedule H provides a detailed listing of all the various direct cost elements for each contract and subcontract and shows the indirect costs applied using the contractor's claimed rates. As explained in the manual, ACOs are instructed to use the CACWS to validate the contractor's final claimed costs in the final voucher with the claimed amount for the contract listed in the CACWS. Once the ACO approves the final voucher, the closeout of the cost-reimbursement contract is complete.

5. Contract Audit Follow-Up

DCMA's Contract Audit Follow-Up (CAFU) manual (DCMA-MAN 2201-04) (2019a) prescribes the policies and procedures DCMA utilizes to keep track of the status and actions performed in the resolution and disposition of DCAA audits in accordance with DOD Instruction (DODI) 7640.02. This DODI 7640.02 instruction requires DCMA to resolve DCAA audits within 6 months and requires disposition of DCAA audits within 12 months of receipt. In order to comply with DODI 7640.02, DCMA's automated CAFU system provides a report on the status of open and closed DCAA audits to the Department of Defense Inspector General (DODIG) for a semi-annual report to Congress.

Although the DCMA CAFU system and policy and procedures pertain to functions performed by DCMA ACOs when a DCAA audit is received, these functions will not be detailed in this study because the purpose of this research is to analyze the impact of the DCAA LRM, which is when an incurred cost proposal audit is not performed. Data from the DCMA CAFU database is used in this research study to answer the research questions



pertaining to the quantity of incurred cost proposal audits and the amount of questioned costs identified in these audits received by DCMA before and after the issuance of Class Deviation 2012-00013.

There are several main functions an ACO must perform in the CAFU system, as listed in DCMA’s Contract Audit Follow-Up (CAFU) manual (DCMA-MAN 2201–04) (2019a). ACOs must ensure all DCAA audits are properly entered into the CAFU system and establish resolution and disposition target dates. Actions taken in the resolution and disposition of audits must be documented. ACOs are required to resolve audits within 6 months and to disposition audits within 12 months. ACOs must report questioned direct and indirect costs, sustained amounts, penalties, and interest in the CAFU system. Finally, ACOs have to provide a copy of the final disposition document to DCAA (DCMA, 2019a). In the next section, DCAA’s audit policies and procedures pertaining to cost-reimbursement contracts and the incurred cost proposal audits are discussed.

G. DCAA AUDIT POLICY AND PROCEDURES

DOD Directive 5105.36, “establishes the mission, organization and management, administration, responsibilities and functions, relationships, and authorities of the Defense Contract Audit Agency (DCAA), pursuant to the authority vested in the Secretary of Defense by Sections 113 and 191 of Title 10, United States Code (U.S.C.)” (DOD, 2021, p. 1). This DOD Directive states that the mission of DCAA is to provide all audit services for DOD components. The directive also provides an overview of DCAA’s responsibility, functions, and authorities. Chapter 1 of the DCAA Contract Audit Manual (CAM) provides further details on this DOD Directive, explaining that the purpose of DCAA auditing is to provide financial information and advice to government procurement personnel in contractual matters (DCAA, 2022b, Chapter 1–104.2, para. a.). These auditing services provide contracting officers with information of a contractor’s operations used in the negotiation and award of contracts, accounting, and financial matters. DCAA performs audits to validate that a contractor has adequate accounting and financial controls to ensure government contracts are not vulnerable to waste. These audits review contractor policies



and procedures to evaluate and identify inadequacies which can impact incurred costs applicable to government contracts (DCAA, 2022b, Chapter 1–104.2, para. a.).

Although the DOD Directive states that the mission of DCAA is to provide all audit services, the performance of these audit functions for every contractor/contract is not possible due to limited resources, as explained in DCAA’s Fiscal Year 2020 annual Report to Congress, which states, “The extent of auditing performed is based on risk and materiality considerations” (DCAA, 2021, Ch. 1, p. 5).

Relative to this research, and as previously explained regarding the review of DCMA administration and closeout policy and procedures, DCAA performs various functions for DCMA ACOs to support the administration and closeout of cost-reimbursement contracts. The next subsections refer back to the DCAA functions previously listed in the DCMA policy reviewed and are now presented in more detail with DCAA policy and procedures pertaining to each function.

1. Pre-award Surveys and Post-award Accounting System Audits

Prior to award, DCAA performs an examination of the contractor’s accounting system so DOD contracting officers can determine the acceptability of the contractor’s accounting system for the award of a cost-reimbursement type contract (DCAA, 2022a). The pre-award accounting system review is not a full audit and just helps contracting officers determine if a contractor’s accounting system has the ability to meet the requirements of accumulating and processing costs under a cost-reimbursement type contract (DCAA, 2022a).

Post-award accounting system audits are performed after award, performed periodically based on risk, performed to follow-up on a pre-award accounting system review, or conducted if a pre-award accounting system review was not performed (DCAA, 2012). Unlike a pre-award review that just determines the ability of a contractor’s accounting system, the post-award accounting system determines if the accounting system is compliant with all 18 of the criteria listed in DFARS 252.242-7006 Accounting Administration (DCAA, 2022a). The audit provides contracting officers with the



information necessary to make a determination on the acceptability of the contractor's accounting system in accordance with DFARS 252.242-7006 (DCAA, 2022a).

2. Review/Testing of Interim Paid Vouchers

Chapter 6–1000, Section 10, of the DCAA CAM states that auditors are the contracting officer's authorized representative to review and approve a contractor's interim cost voucher under cost-reimbursement contracts (DCAA, 2022c). This CAM chapter section states that the purpose of the auditor review is to ensure that the voucher is prepared in accordance with the contract terms and conditions and to ensure that there are no overbillings or overpayments. According to this policy instruction, all first interim vouchers are routed to the auditor for review, and subsequent interim vouchers may be selected for review based on high-risk sampling methods in accordance with DFARS 242.803(b), but not all interim vouchers are reviewed. Interim vouchers not selected are sent directly to the disbursement office for payment, but the policy explains these vouchers are provisional and subject to retroactive adjustment in accordance with FAR 52.216-7 Allowable Cost and Payment clause, which allows for the final audit of actual costs incurred (DCAA, 2022c).

DCAA's Master Audit Program Testing of Paid Vouchers document (DCAA, 2020b) provides the instructions and documentation requirements for performing tests on selected vouchers. This document explains that the purpose of the voucher testing is to verify that costs billed are reasonable, allocable, and allowable and in accordance with contract terms and conditions. For non-major contractors, the testing is done annually on one voucher, and for major contractors, it is performed at least quarterly (DCAA, 2020b). The testing is an audit of the interim voucher's current billing and does not evaluate the cumulative costs billed (DCAA, 2020b). The testing includes verification that the contractor is current in payments of costs incurred and includes a review of all costs billed with the contractor's accounting records, time-keeping, and other documentation to ensure costs are valid and allowable (DCAA, 2020b). In addition to validating the costs claimed in the voucher, the results of the paid voucher testing are used by DCAA to determine a contractor's risk and to support the incurred cost audit (DCAA, 2020b).



3. Labor Floor Checks and Interviews

For contractors performing under cost-reimbursement type contracts, DCAA may perform reviews of a contractor to determine if the contractor has adequate and accurate systems for timekeeping and recording labor costs (DCAA, 2012). These reviews are periodic and unannounced, and the auditor performs them at the contractor's location (DCAA, 2012). The reviews entail interviews of employees and a review of the accounting system and timekeeping records (DCAA, 2012).

4. Assistance to the ACO in the Final Voucher

Chapter 6–1006 of the DCAA CAM explains that the final voucher for cost-reimbursement contracts is routed to the Cognizant Federal Agency Official (CFAO), usually the Administrative Contracting Officer (ACO), for approval (DCAA, 2022c). This CAM chapter explains that auditors may be requested to provide additional support to the ACO. This additional support includes providing documentation from the contractor's final indirect cost rate submission, audit reports, and LRMs (DCAA, 2022c). If there is missing documentation and the ACO identifies specific risks or concerns, the policy states that the auditor may be able to provide additional assistance (DCAA, 2022c).

5. Adequacy Review of the Contractor's Final Indirect Cost Rate Submission

Chapter 6–707 of the DCAA CAM explains DCAA's adequacy review process and procedures of the contractor's final indirect cost rate (FICR) submission (DCAA, 2022c). As previously explained, contractors performing under cost-reimbursement type contracts are required to submit their FICRs to the government within 6 months after the end of their fiscal year in accordance with FAR 52.216-7 Allowable Cost and Payment clause (FAR, 2018). The DCAA CAM Chapter 6–707 states that the auditor's role is to evaluate the contractor's FICRs to ensure it is adequate with the FAR 52.216-7 requirements (DCAA, 2022c). The policy states that the receipt of an adequate FICR generally establishes the audit requirement.

This literature review does not discuss policy and procedures pertaining to situations in which contractors are unable to submit FICRs, or when submissions are



determined to be inadequate, because this research is focused on analyzing the impacts of LRMs issued for contractors with adequate FICR submissions.

6. Incurred Cost Proposal Audit of the Contractor’s Final Indirect Cost Rate Submission

After the FICR submission is determined to be adequate, the next step in DCAA’s incurred cost policy is to determine if an audit should be performed. DCAA CAM Chapter 6–708 states, “The auditor will perform an audit of all incurred cost rate proposals classified as high risk or meeting certain high dollar ADV thresholds and issue an incurred cost audit report to the cognizant CFAO. The low-risk proposals selected for audit during the sampling process, the auditor will issue a low-risk memorandum (see 6–104.1)” (DCAA, 2022c, Ch. 6–708, para. a.).

Since the subject of this research pertains to analyzing the impact of Class Deviation 2012-O0013 of DCAA’s policy and procedures for sampling low-risk incurred cost proposals, this literature review focuses on DCAA’s LRM policy. Therefore, this literature review does not examine the many aspects and details involved in the performance of an incurred cost proposal audit.

DCAA CAM Ch 6–104 (2022c) provides the instructions listed in Table 7 to auditors for risk-based based sampling of incurred cost proposals based on auditable dollar value (ADV). The first thing to note in Table 7 is that none of the current DCAA policy for low-risk sampling of incurred cost proposal is in line with the low-risk sampling criteria required by Class Deviation 2013-O0013. The policy in Table 7 states that the ADV for a mandatory audit of an incurred cost proposal is \$1 billion dollars. Additionally, the policy instructions provide new strata and low-risk sampling criteria for ADVs valued between \$500M to \$1B and \$250M to \$500M and eliminate the Class Deviation 2013-O0013 strata for ADVs valued at \$1M or less, \$1M to \$50M, and \$50M to \$100M.



Table 7. DCAA CAM Ch 6–104 Audit Scope - Risk-Based Sampling of Incurred Cost Proposals, Effective January 1, 2020.
Adapted from DCAA (2022c, pp. 16–19)

<p>a. Adequate incurred cost proposals (ICPs) with Sampling ADV of \$1 billion or greater will be audited each year.</p>
<p>b. Adequate ICPs with Sampling ADV less than \$1 billion will be assessed for sampling eligibility, with the exception of those that meet the criteria listed below: (1) The following types of proposals / assignments are excluded from the risk-based sampling process:</p> <ul style="list-style-type: none"> • Corporate/Intermediate Home Office (IHO)/Shared Services • 100% subcontract only • Field Detachment (FD) direct cost only assignments • Assignments on the Operations Investigative Support Division (OIS) do not sample list. • ICPs that contain 100% reimbursable contracts for agencies that do not participate. <p>(2) If the ICP is not randomly selected for audit, a risk-based sampling memorandum will be issued to the contracting officer indicating the ICP was eligible for sampling and not selected for audit.</p>
<p>a. Sampling ADV less than \$5 million. ICPs with sampling ADV less than \$5 million that meet all of the following criteria are eligible for sampling:</p> <ul style="list-style-type: none"> • There were no significant questioned costs in the last completed incurred cost audit, and • There are no Department (ACO, PCO, COR, DCAA, etc.) concerns with a significant impact on the ICP. <p>(1) If the ICP does not meet the criteria above, RAM / CAM approval is required prior to commencing an audit of ICPs with sampling ADV less than \$5 million.</p>
<p>b. Sampling ADV of \$5 million but less than \$100 million. If all of the following criteria are met, the ICP is eligible for sampling:</p> <ul style="list-style-type: none"> • There were no significant questioned costs in the last completed incurred cost audit; • There are no Department (ACO, PCO, COR, DCAA, etc.) concerns with a significant impact on the ICP; and • The contractor does not have a pre-award accounting system survey that resulted in an unacceptable opinion, or a disapproved accounting system based on a postaward accounting system audit.
<p>c. Sampling ADV of \$100 million to \$250 million. The proposals with sampling ADV in this range must be audited every 5th year. The ICP is eligible for sampling if all of the following criteria are met:</p> <ul style="list-style-type: none"> • The last four incurred costs years were not closed with a low-risk memo or a risk-based sampling memo; • There were no significant questioned costs in the last completed incurred cost audit; • There are no Department (ACO, PCO, COR, DCAA, etc.) concerns with a significant impact on the ICP; and



<ul style="list-style-type: none"> • The contractor does not have a pre-award accounting system survey that resulted in an unacceptable opinion, or a disapproved accounting system based on a postaward accounting system audit; • The contractor does not have any business system deficiencies relevant to the incurred cost year subject to audit; • The contractor does not have any significant accounting practice changes in the year subject to audit; and • The contractor had not experienced any significant organizational changes in the year subject to audit.
<p>d. Sampling ADV of greater than \$250 million to \$500 million. The proposals with sampling ADV in this range must be audited every 4th year. The ICP is eligible for sampling if all of the following criteria are met:</p> <ul style="list-style-type: none"> • The last three incurred costs years were not closed with a low-risk memo or a risk-based sampling memo; • There were no significant questioned costs in the last completed incurred cost audit; • There are no Department (ACO, PCO, COR, DCAA, etc.) concerns with a significant impact on ICP; • The contractor does not have a pre-award accounting system survey that resulted in an unacceptable opinion, or a disapproved accounting system based on a postaward accounting system audit; • The contractor does not have any business system deficiencies relevant to the incurred cost year subject to audit; • The contractor does not have any significant accounting practice changes in the year subject to audit; and • The contractor had not experienced any significant organizational changes in the year subject to audit.
<p>e. Sampling ADV of greater than \$500 million to less than \$1 billion. The proposals with sampling ADV in this range must be audited every other year. The ICP is eligible for sampling if all of the following criteria are met:</p> <ul style="list-style-type: none"> • The last incurred costs year was not closed with a low-risk memo or a risk-based sampling memo. • There were no significant questioned costs in the last completed incurred cost audit; • There are no Department (ACO, PCO, COR, DCAA, etc.) concerns with a significant impact on the ICP; • The contractor does not have a pre-award accounting system survey that resulted in an unacceptable opinion, or a disapproved accounting system based on a postaward accounting system audit; • The contractor does not have any business system deficiencies relevant to the incurred cost year subject to audit; <p>The contractor does not have any significant accounting practice changes in the year subject to audit; and</p> <ul style="list-style-type: none"> • The contractor had not experienced any significant organizational changes in the year subject to audit. (pp. 16–19)

NOTE: Acronyms listed in Table 6 not previously defined include Contracting Officer's Representative (COR), Procuring Contracting Officer (PCO), Regional Audit Manager (RAM).



DCAA’s risk-based sampling policy of incurred costs proposals states that it is effective January 1, 2020. It is based on an internal DCAA policy memo (19-PIC-005(R)), dated December 2, 2019, which states that the agency will be revising their sampling procedures for determining which incurred cost proposals are eligible for sampling (DCAA, 2019b). This memo states, “The revised risk-based sampling framework is generally based on the contents of the DOD Professional Practice Guide (PPG). Section 809 of the FY 2016 National Defense Authorization Act (NDAA) established the 809 Panel who developed the PPG and included recommendations related to audit of government contracts” (DCAA, 2019b, p. 2). Figure 6 (DCAA, 2019b, p. 3) is included in the memo to provide a summary of the new risk assessment mandatory audit policy for incurred cost proposals based on a contractor’s ADV. Figure 6 also shows that there is still no mandatory audit for ADVs less than \$100M, which is in line with the Class Deviation 2012-O0013 policy. Figure 6 also displays how DCAA’s new policy changed the mandatory audit year criteria for contractors with ADVs between \$100M to \$250M to every 5th and 4th year. In Class Deviation 2012-O0013, the mandatory audit is every three years for contractors with an ADV between \$100M to \$250M and every year for contractors with an ADV over \$250M.

Low	<\$5M	
	\$5M to <\$100M	
Medium	\$100M to \$250M	Mandatory audit every 5 th year.
	>\$250M to \$500M	Mandatory audit every 4 th year.
High	>\$500M to <\$1B	Mandatory audit every other year.
	\$1B or more	Audit must be performed each year.

Figure 6. DCAA’s 2020 Revised Policy for Sampling Low-Risk Incurred Cost Proposals Based on ADV. Source: DCAA (2019b, p. 3).

The DCAA policy memo (19-PIC-005(R)) change is not in accordance with the current DFARS 242.705 policy instructing the implementation and use of DOD Class Deviation 2012-O0013, DCAA Policy and Procedure for Sampling Low-Risk Incurred Cost Proposals, which is the topic of this research. This is discussed further in the findings



section of Chapter IV of this research. The next section discusses DCMA's policy and procedures used in the administration of fixed-price contracts with progress payments based on costs and compares it with policy and procedures used in the administration of cost-reimbursement contracts.

H. DEFENSE CONTRACT MANAGEMENT AGENCY ADMINISTRATION OF PROGRESS PAYMENTS IN FIXED-PRICE CONTRACTS

The high-risk of cost-reimbursement contract types and the preference for the use of lower cost risk fixed-price type contracts was previously discussed. This review will compare the administration policy and procedures used by DCMA for firm-fixed price contracts utilizing progress payments based on costs, which as defined in FAR 32.001 (2022), are contract financing payments just like cost-reimbursement contracts.

DCMA Payments Manual 2101-02 provides the policy, procedures, and instructions for the contract administration functions pertaining to both cost vouchers under cost-reimbursement contracts and progress payments vouchers for costs issued under fixed-price contracts. Progress payments are issued under fixed-price contracts in which the contractor assumes the risk associated with the costs of performance. Although, the government considers fixed-price contracts with progress payments high-risk because, as FAR 32.102 (2022) states, the government is paying the contractor before work is completed/delivered. This progress payment before delivery is considered a form of contract financing, just like cost vouchers under cost-reimbursement contracts, and the DOD and DCMA have a significant amount of policy and procedures dedicated specifically to provide for enhanced surveillance and contract administration functions when progress payments are used.

The DCMA Payments Manual 2102-02 has a total of 81 pages, and 20 pages are dedicated to progress payments, compared to 6 pages for cost vouchers under cost-reimbursement contracts. Some of the lengthiness is due to the complexities associated with liquidating progress payments, but it is also because of the increased oversight requirements associated with high-risk contract financing. The DCMA Payments policy page has many documents pertaining to the administration of progress payments, and there



is even a separate 120-page guidebook, Progress Payment Multifunctional Administration Guidebook (DCMA, 2021d), to provide DCMA contract management functional specialists with specific instructions and procedures for administering contracts with progress payments. In the introduction of this guidebook it states, “The Government’s assumption of risk is why it is important to periodically review progress payments to be made or made to contractors. Remember, we’re paying them a percentage of their costs incurred before any work is delivered. Therefore, the Government has a vested interest in a contractor’s financial condition and work progress” (DCMA, 2022, p. 3). The guidebook further explains this risk stating, “...too often, progress payments are treated as a pro forma exercise. Progress payment requests are approved as a matter of course, with little to no validation of contractor data, under the assumption that they are “low-risk.”” (DCMA, 2022, pp. 3–4).

Table 8 (DCMA, 2021d) provides a high-level comparison of DCMA’s contract administration payment functions listed in DCMA’s Payments Manual 2101–02 (2021d) for these high-risk progress payments for costs under fixed-price contracts and high-risk cost vouchers under cost-reimbursement contracts. Table 8 compares key contract administration functions used in the administration of payments for progress payments and cost vouchers to protect the government from risk of increased and unallowable costs, such as accounting system reviews, assessment of a contractor’s financial condition, and cost voucher and technical reviews.



Table 8. Comparison of Progress Payment and Cost Voucher Contract Administration Procedures. Adapted from DCMA Payments Manual 2101-02 (2021d).

	Cost Vouchers under Cost-Reimbursement Contracts	Progress Payments for Costs under Fixed-Price Contracts
Adequate Accounting System Required AND Accounting System Administration Performed	YES	YES
Assessment of the Contractor's Capability to Perform	If necessary, the ACO may conduct financial surveillance reviews based on risk.	ACO completes DCMA Form 325 to document and determine the contractor's capability to perform and risk assessment in accordance with FAR 32.503-2(a) requirements:
		Financial strength
		Adequacy of accounting system AND controls
		Past performance
		Experience
		Quality of management Reliability
Cost Voucher Reviews	Only the first interim voucher (performed by DCAA).	Every voucher is reviewed AND approved by the ACO.
	Subsequent cost voucher reviews are based on DCAA risk assessment.	
	DCAA reviews do not constitute an audit or determine allowability of costs.	
	All Final Vouchers reviewed and approved by the ACO.	
	ACOs randomly select billings to monitor fixed-fee withholding and limitation of costs/funds requirements.	All cost voucher billings are tracked.



	Cost Vouchers under Cost-Reimbursement Contracts	Progress Payments for Costs under Fixed-Price Contracts
Technical Reviews	Only in major system acquisition contracts in which earned value management requirements apply based on the following contract values listed below:	Performed initially for every contract using progress payments (no dollar value limitation).
	<ul style="list-style-type: none"> Contractors shall comply with earned value management systems for major system acquisition cost type contracts valued at \$20M or more. 	ACOs develop periodic review schedule and surveillance plan based on the initial DCMA Form 325 risk assessment.
	<ul style="list-style-type: none"> DCMA earned value management system administration and oversight for cost type contracts valued at \$50M or more. 	The review includes a baseline or physical progress review performed by the Industrial Specialist (IS) or Engineer to verify costs expended/billed are commensurate with physical progress.
	<ul style="list-style-type: none"> Program Managers may implement earned value management on contracts valued at less than \$20M (based on cost-benefit analysis) (DFARS PGI 234.201, 2022) 	The ACO documents the review using DCMA Form 325. The frequency of the review is based on risk.

Although both are forms of high-risk contract financing, as depicted in this comparison, there are significant differences in the contract administration functions performed for progress payment vouchers based on costs under low-risk fixed-price contracts compared to cost vouchers under high-risk cost-reimbursement contracts. One of the key differences in the DCMA enhanced oversight performed for progress payments is that an initial assessment of the contractor’s capability to perform is required. In addition, every progress payment voucher is reviewed and approved by the ACO, and every progress payment voucher billing is tracked. Furthermore, additional periodic reviews/surveillance



are performed based on risk to verify costs expended/billed are commensurate with physical progress.

In contrast, the DCMA contract payment administration functions for cost vouchers under cost-reimbursement contracts differ from progress payments in several ways, one of the differences is that there is no initial evaluation and risk assessment of the contractor's capability to perform. Furthermore, additional financial surveillance is only performed if risks are identified, and DCAA only reviews the first cost vouchers. Also, additional interim reviews are only performed based on risk, and ACOs only perform random reviews of cost vouchers to monitor limitation of cost/funds and fixed-fee withholding requirements. In addition, there is no tracking requirement for every cost voucher billing, and there is no review performed by DCAA or ACO to determine the allowability of costs. Another difference is that no type of technical review is performed unless the contract is of high-dollar value where earned value management is applicable. Finally, the ACO only performs review and approval of the final voucher. In the next section, a detailed review of Class Deviation 2012-O0013 is discussed.

I. DEPARTMENT OF DEFENSE USD CLASS DEVIATION 2012-O0013

The impact of the DOD USD Class Deviation 2012-O0013 - DCAA Policy and Procedure for Sampling Low-Risk Incurred Cost Proposal is the central focus of this research. Class Deviation 2012-O0013 was issued by the Office of the Undersecretary of Defense (OUSD) on July 24, 2012, to implement and approve the Defense Contract Audit Agency's (DCAA) modification to the policy and procedures used for audit sampling of low-risk incurred cost proposals (OUSD, 2012). The DCAA memo stated that they believed the modification to the low-risk sampling would provide more effective oversight without increasing the risk to the government.

The audit of a contractor's incurred cost proposal is required, in accordance with FAR 4.804-5(a)(12), 42.705-1(b)(2), and 42.705-2(b)(2)(i) (OUSD, 2012), to establish a contractor's final indirect cost rates in order to complete the closeout cost-reimbursement contracts. Although the FAR policy requires this audit, it is not feasible for the government



to audit every contractor every year, and DCAA has always utilized a form of risk sampling in order to effectively allocate their limited audit resources.

Class Deviation 2012-O0013 approved DCAA’s modification to low-risk sampling policy and procedures, which significantly increased the auditable dollar value (ADV) threshold used to require mandatory audits from \$15M to \$250M and changed the sampling policy and procedures used in selecting audits of incurred cost proposals below this threshold for audit. Table 9 presents the changes to the low-risk sampling criteria resulting from Class Deviation 2012-O0013. The most significant change listed in Table 9 from Class Deviation 2012-O0013 is the large increase to the ADV threshold, from \$15M to \$250M, which is used for requiring a mandatory incurred cost proposal audit. Table 9 also shows how Class Deviation 2012-O0013 increased the amount of previous audit exception amounts from a flat \$10,000 to amounts ranging from \$15,000 to \$100,000 based on ADV.

Table 9. DCAA Low-Risk Criteria Before and After Class Deviation 2012-O0013.

Low-Risk Criteria Before the Class Deviation 2012-O0013		Low-Risk Criteria After the Class Deviation 2012-O0013	
Prior incurred cost audit experience (not a new contractor).		Prior incurred cost audit experience (not a new contractor).	
No contracting officer identified risk.		No significant audit leads or no significant risk has been identified. (business system deficiency that would impact final indirect cost rates or contracting officer identified risk).	
Not identified as low-risk for two consecutive years.		NO prior significant total exception dollar reported in the last year audited, per the following ADV:	
ADV	Amount of Previous Exception	ADV	Amount of Previous Exception
\$15M or less	Amount of previous exception amount had a \$10,000 or less cost impact on government contracts	\$1M or less	\$15,000 or less
		\$1M to \$15M	\$25,000 or less
		\$15M to \$50M	\$55,000 or less
		\$50M to \$250M	\$100,000 or less

Adapted from Office of the Under Secretary of Defense (2012, June 24). Class Deviation 2012-O0013 - DCAA Policy and Procedure for Sampling Low-Risk Incurred Cost Proposals and Defense Contract Audit Agency (DCAA) (2011, June 9). Contract Audit Manual (CAM), Ch 6-104. DCAA FOIA Case I-22-034-H.



Also of significance is the revision to the low-risk criteria used in the selection of incurred cost proposals for audit. Class Deviation 2012-O0013 completely removed the requirement for every contractor, regardless of ADV, to be audited at least every three years. Because of Class Deviation 2012-O0013, the policy now states that contractors with incurred cost proposals having an ADV between \$100M - \$250M will be audited at least once every three years. There is no longer a mandatory incurred cost proposal audit time period for contractors with ADVs less than \$100 million. In the next section, a review of government reports pertaining to the incurred cost proposal audit, Class Deviation 2012-O0013, and the high-risk associated with cost-reimbursement contracts are discussed.

J. GOVERNMENT REPORTS PERTAINING TO THIS RESEARCH

The government's concern for the use of high-risk cost-reimbursement contracts and the need for auditing is well known and documented in numerous reports. The U.S. government Accountability Office (GAO) is an independent agency which performs audits for Congress to provide oversight of how taxpayer dollars are spent and to improve the performance and accountability of the federal government. The GAO has covered this topic thoroughly over the years in various reports to Congress. This literature review examines a few of these reports on the high-risk in the administration and audit of cost-reimbursement contracts and the implementation of Class Deviation 2012-O0013 on the low-risk sampling of incurred cost proposal audits.

In a September 2009 report, GAO examined the amount of obligations spent using high-risk cost-reimbursement contracts, the rationale for using this type of contract, and the methods used to monitor contractor's costs (Needham, 2009). Cost-reimbursement contracts are high risk because there is a higher chance of costs increasing, and the government pays the contractor even if the work is not completed (Needham, 2009). The report includes a President Obama quote from a March 2009 memo to agency heads stating that the use of cost-reimbursement contracts, "creates a risk that taxpayer funds will be spent on contracts that are wasteful, inefficient, subject to misuse, or otherwise not well designed to serve the needs of the Federal Government or the interests of the American taxpayer" (Needham, 2009, p. 7). The report examines how the government monitors and



performs surveillance for these high-risk contracts to ensure the government, “pays only allocable, allowable and reasonable costs applicable to the contract” (Needham, 2009, p. 28).

The GAO (2009) report analyzed the cost surveillance procedures used by various agencies. At the Department of Energy (DOE), contract invoices are examined by Contracting Officer’s Representative’s (CORs) to determine if the costs being invoiced are in line with the work being completed as a surveillance measure (Needham, 2009). The report cites an example when DOE failed to do this invoice cost surveillance, and instead relied on DCAA’s review of the contractor’s financial systems, which resulted in the exposure of hundreds of millions of dollars to high risks of improper payments (Needham, 2009). This incident resulted in DOE changing how they monitored cost-reimbursement contracts and requiring contracting officers to analyze and review invoices before payment is approved (Needham, 2009). In its examination of DOD agencies, the report states that the surveillance and monitoring of costs relies largely on the Earned Value Management (EVM) system and audits (Needham, 2009). EVM is contractor supplied data comparing, measuring, and estimating the value of the work planned and completed to the work remaining to be completed (Needham, 2009). As previously explained, EVM is not applicable to all cost-reimbursement contracts; only those valued over \$20M.

In DOD contracts, CORs do not perform approval of cost voucher invoices because DOD policy states that only contracting officers and DCAA can approve cost voucher invoices (Needham, 2009). Generally, DOD CORs review invoices and/or rely on the EVM data or other contractor provided monthly reports to perform cost surveillance, but this level of data does not meet the FAR requirements to perform cost surveillance (Needham, 2009). The main safeguard used by DOD for monitoring cost-reimbursement is DCAA, and DOD relies on DCAA to review a contractor’s vouchers and make risk determinations for audit (Needham, 2009). The report explains that DCAA reviews the first cost voucher for all cost-reimbursement contracts, and afterward the contractor may be eligible for direct billing if they have an adequate accounting system (Needham, 2009). If a contractor is on direct billing, their cost vouchers are sent directly to the pay office for payment (Needham, 2009). Figure 7 (Needham, 2009, p. 31) provides an overview of the DCAA’s process for



reviewing interim cost vouchers. As shown in Figure 7, the adequacy of the contractor's accounting system is a significant factor in DCAA's determination to approve a contractor for direct billing.

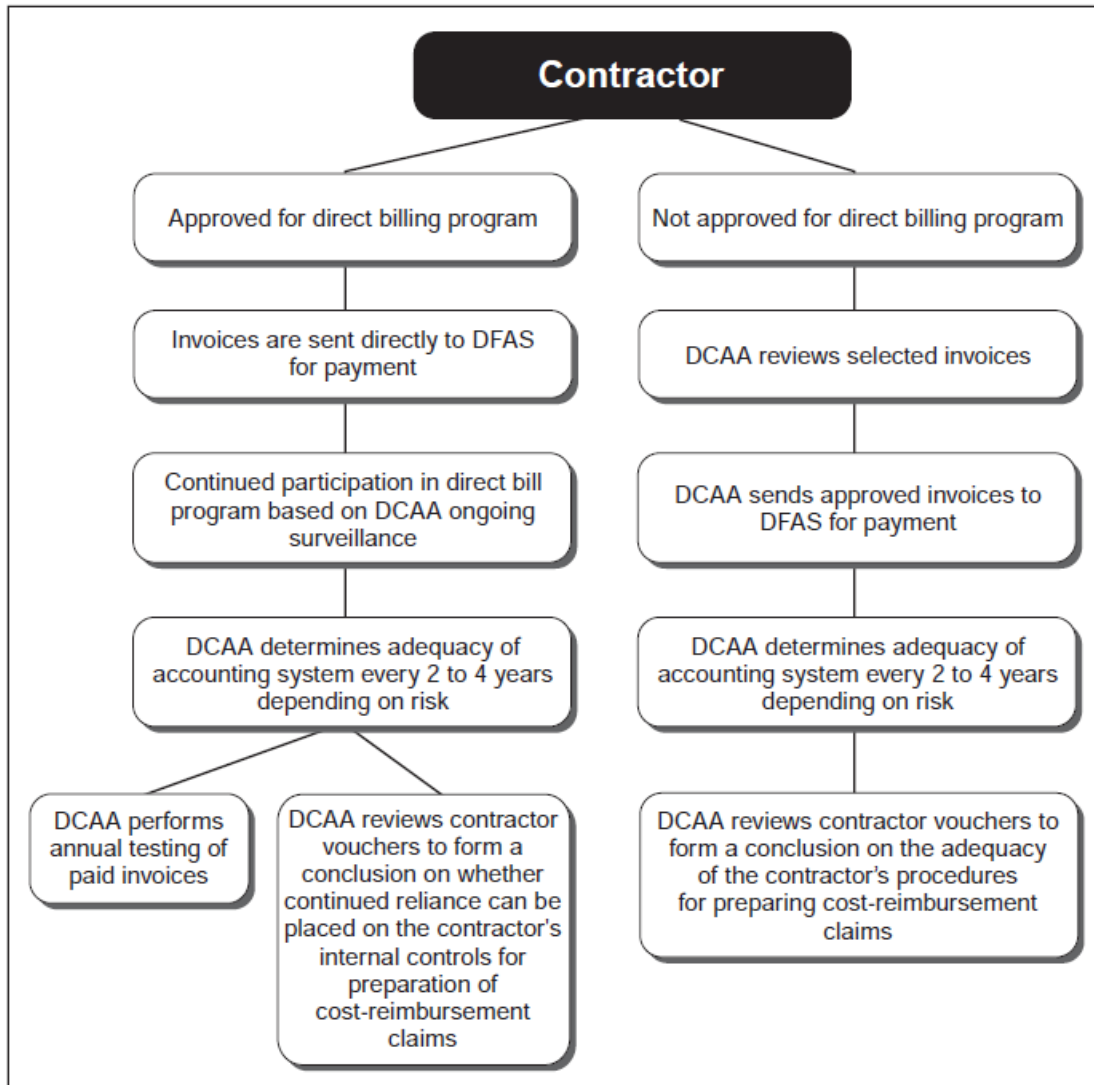


Figure 7. DOD Procedures for the Process and Approval of Interim Vouchers. Source: Needham (2009, p. 31)

DOD's cost monitoring relies heavily on the audit procedures performed by DCAA for cost-reimbursement contracts, and inadequate DCAA audit procedures can increase risks (Needham, 2009). One example of this from the report explains how a DCAA auditor

only reviewed 3 cost vouchers with a total value of \$88K out of 222 invoices valued at just over a billion dollars. Even though this testing performed was minimal, DCAA issued a memo stating that the government could rely on the contractor's billing procedures and approved the contractor for continued involvement in the direct billing program.

Another GAO report relevant to this research was released shortly after the implementation of Class Deviation 2012-O0013 which is being analyzed in this research. This GAO report is titled, "DOD Initiative to Address Audit Backlog Shows Promise, but Additional Management Attention Needed to Close Aging Contracts" (DiNapoli, 2012). This report analyzes the DCAA incurred cost proposal audit backlog and the implementation of the DOD Class Deviation 2012-O0013 raising the audit dollar threshold to allow DCAA to get caught up with incurred cost audits so DOD can close out a backlog of overage contracts. In 2011, there were roughly 25,000 incurred cost audits on the backlog (DiNapoli, 2012). The backlog presents a huge challenge to closing out cost-reimbursement contracts because DCAA incurred cost proposal audits are needed to determine if costs incurred are allowable, allocable, and reasonable, and to provide contracting officers with final indirect cost rates to establish the final indirect costs.

DOD addressed the backlog by implementing Class Deviation 2012-O0013, which modified DCAA's low-risk incurred cost proposal sampling policy and procedures (DiNapoli, 2012). DCAA's low-risk sampling procedures use a contractor's auditable dollar value (ADV), which is the total value of all costs incurred for a contractor's flexibly priced (cost-reimbursement) contracts in a fiscal year. Before the implementation of Class Deviation 2012-O0013, DCAA's policy was to perform an audit of all contractors with an ADV of \$15M or more. The report explains that by changing the ADV to \$250M, along with the change to the low-risk sampling percentages of proposals selected for audit below the threshold, this change will reduce the number of incurred cost proposal audits that DCAA performs. These changes are presented in Table 10 (DiNapoli, 2012) and display the significant change in low-risk sampling caused by Class Deviation 2012-O0013. Although the change to the ADV requiring mandatory audit stands out prominently, Table 10 clearly shows there is also a significant impact to the number of incurred cost proposal audits being performed after Class Deviation 2012-O0013 was implemented. Prior to Class



Deviation 2012-O0013, 33% of incurred cost proposal with ADVs below \$15M would still be randomly selected for audit. As can be seen in Table 10, after Class Deviation 2012–00013, this now ranges from 1% to 5% of incurred cost proposals with an ADV below \$15M, which was previously 33%, and the highest random sampling is now only 20% for contractors with an ADV between \$100M to \$250M.

Table 10. Percentage of Proposals Sampled under Previous and New Procedures. Adapted from DiNapoli (2012).

Auditable Dollar Value	Sampling percentages for low risk proposals under previous criteria	Sampling percentages for low risk proposals under new criteria
\$1 million or less	33%	1%
>\$1 million to \$15 million	33%	5%
>\$15 million to \$50 million	All proposals were audited	5%
>\$50 million to \$100 million	All proposals were audited	10%
>\$100 million to \$250 million	All proposals were audited	20%
More than \$250 million	All proposals were audited	All proposals were audited

In addition to the change in low-risk sampling, DCAA also eliminated performing desk reviews and revised how it performs incurred cost proposal adequacy reviews (DiNapoli, 2012). Previously, any incurred cost proposals not selected for audit received a desk review. Desk reviews included various methods to evaluate incurred cost proposals, such as checking for unusual items and prior year proposal changes. Since the new policy eliminated desk reviews, DCAA revised their policy for performing adequacy reviews of a contractor’s incurred cost proposal, which DCAA states includes many of the same functions previously performed in the desk review process. Now, if a contractor’s incurred



cost proposal is determined to be adequate and low-risk, and it is not selected for audit, contracting officers receive a LRM approving the contractor's final indirect cost rates.

Furthermore, DCAA prioritizes forward pricing audit work over incurred cost proposal audits because they claim incurred cost proposal audits do not provide as much financial benefits in terms of return-on-investment (DiNapoli, 2012). DCAA officials found the resources spent on incurred cost proposal audits with an ADV less than \$1M cost more than the benefits gained in an audit, and the return on investment of audit resources increases as the value of the ADV increases over \$1M.

In 2011, DCAA estimated that this change would reduce the backlog by 2016, but they did not have a plan to measure the results of this initiative to help determine its effectiveness for future adjustments (DiNapoli, 2012). The tentative plan is to track the number of audits completed and the number of low and high-risk determinations. In addition, DCAA is planning to reassess the low-risk sampling change a year after its implementation and recommends DCAA establish a plan to measure the effects of this change to ensure taxpayer dollars are still being adequately protected (DiNapoli, 2012).

In a 2017 follow-on GAO report issued on this topic, DCAA did not meet its 2016 goal to reduce the audit backlog and only eliminated about half of the backlog of incurred cost proposal audits (DiNapoli, 2017). Since the implementation of the Class Deviation 2012-O0013 low-risk sampling policy, DCAA has issued 18,292 LRMs and performed 9,641 incurred cost audit reports (DiNapoli, 2017). As in the 2012 GAO report, DCAA continues to state greater benefits are derived in auditing incurred cost proposals with higher ADVs. DCAA reports that it spent \$18M more in resources than the unallowable/questioned costs identified on 767 audits with ADVs of \$1M or less during a two-year period. At the time of this report, DCAA projected to meet its goal by 2018. In their FY 2018 report to Congress, DCAA reported they successfully eliminated the incurred cost audit backlog (DCAA, 2019a).

DCAA's incurred cost proposal audit backlog, its position on incurred cost proposals being lower priority, and the risks of audits not being performed is nothing new. In a 1992 GAO report examining contract audits problems for the Department of Energy



(DOE), DCAA officials gave lower audit priority to small-dollar contracts in both the DOE and DOD, and there was a backlog of incurred cost proposal audits valued at \$161.3 billion at the end of 1990 (Peach, 1991). This audit report states problems in contract administration and increased costs occur when contract audits are not performed, or not performed timely. These problems create a higher potential for contract overpayments because the government has little assurance that the costs claimed are accurate and allowable without an audit. Without an audit, the government is susceptible to fraud, waste, and abuse (Peach, 1991). This sentiment is echoed 30 years later in another GAO report pertaining to fraud risk management in DOD, which explains how cost-reimbursement contracts pose the highest risk, and audits by DCAA help identify fraud and ensure that the government pays fair and reasonable prices (Bagdoyan, 2021). The next section reviews the Section 809 Panel recommendations and DCAA annual reports to Congress.

K. SECTION 809 PANEL AND DCAA REPORTS TO CONGRESS

1. Section 809 Panel

The Section 809 Panel was established in accordance with the FY 2016 National Defense Authorization Act with the purpose to develop recommendations to change the defense acquisition system to meet the demands of the future (Defense Technical Information Center [DTIC], n.d.). Over a period of three years, the Section 809 Panel submitted 98 recommendations to Congress and the Department of Defense (DTIC, n.d.). In the April 14, 2020, List of Section 809 Panel Recommendations, shown in Table 11 (2020, p. 2; 2020, p. 10), 12 recommendations pertain to DCAA and/or incurred cost proposals. Recommendation number 9 in Table 11 includes allowing DCAA to use Independent Public Accountants (IPAs), which would help DCAA in performing more audits and help reduce audit backlogs. Another recommendation in Table 11, number 15, relates to incurred cost proposals and suggests DOD examine its oversight and define the purpose and requirements associated with an adequate incurred cost proposal. There is also a recommendation, number 71, to develop a professional practice guide (PPG) for use in DOD auditing and to provide guidance to IPAs performing audit services for DCAA. All



of the recommendations listed in Table 11 were made under the Section 809 Panel’s mission, which was to help improve the DOD acquisition system for the future.

Table 11. List of Section 809 Panel Recommendations for DCAA. Adapted from Section 809 Panel (2020, p. 2; 2020, p. 10).

(5) Align DCAA’s mission statement to focus on its primary customer, the contracting officer.
(6) Revise the elements of DCAA’s annual report to Congress to incorporate multiple key metrics.
(7) Provide flexibility to contracting officers and auditors to use audit and advisory services when appropriate.
(7a) Prior to requesting field pricing/audit assistance, contracting officers should consider other available internal resources and tailor their request for assistance to the maximum extent possible.
(7b) Define the term audit.
(7c) DCAA should use the full range of audit and nonaudit services available.
(7d) Direct a review of the roles of DCAA and DCMA to ensure appropriate alignment and eliminate redundancies.
(9) Permit DCAA to use IPAs to manage resources to meet time limits.
(12) Require DCAA to obtain peer review from a qualified external organization.
(13) Increase coverage of the effectiveness of contractor internal control audits by leveraging IPAs.
(15) Clarify and streamline the definition of and requirements for an adequate incurred cost proposal to refocus the purpose of DOD’s oversight.
(71) Adopt a professional practice guide to support the contract audit practice of DOD and the independent public accountants DOD may use to meet its contract audit needs, and direct DOD to establish a working group to maintain and update the guide.

According to the Section 809 Panel tracker on the Defense Technical Information Center (DTIC) website, of these 12 recommendations, only two recommendations have been officially enacted by Congress and the Department of Defense (Section 809 Panel, 2020). Recommendation number 7 (Table 11) was enacted in part in Section 803 of the FY 2018 NDAA, and recommendation number 7d (Table 11) was enacted in Section 925 of the FY 2019 NDAA. Additionally, in the Section 809 Panel volume 3 (2019) report for recommendation 71 (Table 11), the professional practice guide (PPG) was developed which sets forth materiality guidelines and provides necessary guidance to Section 803 of the FY 2018 NDAA. The FY 2018 NDAA states, “Not later than October 1, 2020, the



Secretary of Defense shall comply with commercially accepted standards of risk and materiality in the performance of each incurred cost audit of costs associated with a contract of the Department of Defense” (National Defense Authorization Act [NDAA], 2017, sec. 803). The Section 809 Panel volume 3 report for recommendation 71 further clarifies in its implementation guidance, “As part of this direction, the PPG does not take the place of federal regulations or auditing standards” (2019, p. 2). This guidance clearly states that federal acquisition regulations take precedence in the institution of the PPG as directed by the FY 2018 NDAA.

2. DCAA Reports to Congress

The Fiscal Year 2012 NDAA implemented Section 805, which required DCAA to submit annual reports to Congress. The reports provide an overview of DCAA’s activities, including information on the number of audits completed, the time it takes to perform audits, and the priority of the various audits. The first report was submitted to Congress on March 30, 2012. In addition to reporting on the status of its audit activities, these reports include a summary of recommended actions, resources to improve the audit process, and outreach actions towards industry.

In the FY 2018 report to Congress, DCAA states that they look forward to implementing the Section 809 Panel recommendations for the use of independent public accounts and other recommendations (DCAA, 2019a). In a subsection of this report, DCAA reports further on their engagement with the Section 809 Panel and explains how they are including the risk and materiality recommendations in the establishment of the professional practice guide. In the FY 2019 report to Congress, DCAA explains in the summary of improvement to audit processes that they are implementing the Section 809 Panel recommendations (DCAA, 2020a). In this report, they specifically explain how they are addressing materiality thresholds and risk-based sampling used for incurred cost audits beginning on January 1, 2020. In the FY 2020 report to Congress, DCAA reported they officially implemented revisions used in the sampling parameters for incurred cost audits (DCAA, 2021). The next section will provide a summary of the topics covered in this literature review chapter.



L. SUMMARY

This chapter presented a review of literature topics pertinent to this research. Auditability theory, agency theory, and the contract management process were reviewed to provide a foundation for the research. An overview of the selection, use, and risks associated with cost-reimbursement contracts was presented to understand the significance of risk and need for enhanced contract administration and audit procedures. The policy, procedures, and functions performed by DCMA and DCAA for the administration, audit, and closeout of cost-reimbursement contracts were reviewed to provide specific detail on the contract administration, contract closeout, and audit functions. A review of DCMA payment oversight functions pertaining to fixed-price contracts with progress payments was presented to review the similarities and differences of contract administration functions performed when contract financing comparable to cost-reimbursement contracts is used. A detailed review of Class Deviation 2012-O0013 changing DCAA low-risk sampling for incurred cost proposals was explained because its use and impact is the focal point of this research. A review of GAO reports highlighting the risks associated with cost-reimbursements contracts, the importance of the incurred cost proposal audit, and the use of Class Deviation 2012-O0013 changing the low-risk sampling were reviewed to further illustrate the significance of this research. Finally, a summary of the Section 809 Panel reports was covered pertaining to recommendations for improvements to DCAA and the incurred cost proposal audit process. Along with this, DCAA reports to Congress with Section 809 Panel recommendations and DCAA implementation and policy changes to incurred cost audits were discussed. The next chapter discusses the methodology used in conducting this research.



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III. METHODOLOGY

A. INTRODUCTION

This chapter explains the methodology used in conducting this research. It provides details on the data used in the research and describes how it is used to answer the research questions in order to analyze the impact and use of Department of Defense (DOD) Class Deviation 2012-O0013, Defense Contract Audit Agency (DCAA) Policy and Procedure for Sampling Low-Risk Incurred Cost Proposals (hereafter referred to as “Class Deviation 2012-O0013”) for incurred cost proposal audits. This chapter presents the methodology used in the research of the Defense Contract Management Agency (DCMA) Contract Audit Follow-Up (CAFU) database. An overview of possible limitations of the research is described. The methodology used in the research of the impact of questioned costs found in a sample of cost-reimbursement contracts subject to incurred cost proposals not audited in which DCAA Low-Risk Memorandums (LRM) were issued is explained. Then the methodology used to research the impact of Class Deviation 2012-O0013 on DOD, DCMA and DCAA policy and procedures in the administration and closeout of cost-reimbursement contracts is discussed. Finally, a summary of the topics discussed in this chapter is reviewed. The next section explains the methodology used in the research of the DCMA CAFU database.

B. DCMA CAFU DATABASE

The first two research questions in this research study seek to identify and make comparison of the quantity of final incurred cost audits performed and the amount of questioned costs identified before and after Class Deviation 2012-O0013 was implemented. To conduct this research, a query was made of unclassified data available in the DCMA CAFU database. The DCMA CAFU tool was implemented by Department of Defense Instruction (DODI) 7640.02 and is the designated electronic tracking system for all DOD components to document and report on the status of open and closed DCAA audits to the Department of Defense Inspector General (DODIG) for a semi-annual report to



Congress (DOD, 2015). As previously mentioned, the DCMA CAFU system is fed with audit report data from the DCAA Management Information System (DMIS).

The database query conducted in this research study will provide a report with the following data fields: Audit Year, Audit Report Date, Received Date, and Questioned Costs. At a high level, the CAFU database information will be used to identify the quantity of incurred cost proposal audits performed and the amount of questioned costs identified. The data query will include incurred cost proposal audits in the CAFU database pertaining to contractors' final indirect cost rate (FICR) submissions during the eight fiscal years before and eight fiscal years after the Class Deviation 2012-O0013 implementation. Since contractors submit their FICR submissions within the 6 months after the end of their fiscal year, FICR submission for fiscal year 2012 would be received by the government in calendar year 2013, which is the first year after Class Deviation 2012-O0013 was implemented. The eight years of data before the implementation of Class Deviation 2012-O0013 will pertain to contractor FICR submissions for fiscal years 2004 through 2011, and the eight years after will cover fiscal years 2012 through 2019. The database query report will only use data and present results from one DCMA contract management office (CMO) region. Only the quantity of audits performed and the amount of questioned costs identified will be reviewed. No personally identifiable information (PII) will be collected or reviewed, contractor names will not be used, and the findings in this research will not be generalizable. The next section addresses the limitations in this research.

C. LIMITATIONS OF RESEARCH

There may be limitations associated with the data analysis due to the possibility of an audit report not being loaded into the CAFU system, and/or missing data fields, such as questioned costs amount. The first limitation pertains to missing questioned cost amounts. The questioned costs amount is typically missing because the DCAA audit report includes a disclaimer of opinion, which means they identified questioned costs, but the audit report cannot express an opinion on the total amount of questioned costs due to insufficient contractor records during the course of the audit. In these cases, the Administrative Contracting Officer (ACO) would have negotiated the final indirect cost rates and



established the final questioned costs associated with the audit. The CAFU data does not capture these final ACO sustained amounts for the majority of the incurred cost proposal audits.

The second limitation relates to the date when the contractor's FICR submission was received by DCAA because the data does not provide information to determine if the audit was performed based on the low-risk sampling policy before or after Class Deviation 2012-O0013 implementation. For example, if a contractor did not submit an adequate FICR for its fiscal year 2010 until after Class Deviation 2012-O0013 went into effect in July 2012, the contractor's FICR would have been subject to the low-risk incurred cost proposal audit Class Deviation 2012-O0013 even though it is for a fiscal year before Class Deviation 2012-O0013 went into effect. The analysis in this research will assume FICR submissions for fiscal years through 2011 were received before the Class Deviation 2012-O0013 went into effect, and FICR submissions received for fiscal years 2012 and after were subject to the Class Deviation 2012-O0013 policy.

The third limitation is that Class Deviation 2012-O0013 stated that all FICR submissions received prior to October 1, 2011, with an auditable dollar value (ADV) of \$1M or less will not be audited or sampled. The CAFU data does not provide information on the contractor's FICR submission of ADV. Therefore, the research will not be able to evaluate the impact of this on the number of audits performed.

The fourth limitation is that the CAFU system data also does not provide information on how or why the incurred cost proposal was selected for audit. This, along with the third limitation of no ADV data, limits the research from being able to distinguish if the audit was performed as a result of the ADV, randomly selected, or selected based on high-risk. As a result, the research will not be able to determine the reason for the incurred cost proposal audit.

Finally, the fifth limitation is that there is no information to identify and compare the number of contractors required to submit FICRs for each fiscal year because they are performing under cost-reimbursement type contracts. Therefore, some fiscal years may have less incurred cost proposal audits because there are fewer contractors performing



under contracts requiring submission of FICRs. Although this research does face these limitations, the data will show at a high level the difference in the quantity of incurred cost proposal audits performed and the amount of questioned costs identified in these audits before and after Class Deviation 2012-O0013 went into effect. The next section discusses the methodology used to analyze a sample of contractors and contracts that were subject to the Class Deviation 2012-O0013 low-risk sampling policy.

D. DCAA LRM AND COST-REIMBURSEMENT CONTRACT SAMPLING

For the third research question, DCMA contract file information on cost-reimbursement contracts, such as, final indirect cost rate submissions, cost voucher billing information, and DCAA LRMs will be reviewed. No personally identifiable information (PII) will be collected or reviewed, contractor names will not be used, and the findings in this research will not be generalizable. This information and data are specific to a selection of contractors with cost-reimbursement contracts assigned to one ACO at one DCMA regional contract management office.

The data research evaluates contractors' claimed costs under incurred cost proposals where DCAA LRMs were issued and compares it to the DCMA ACO's final incurred cost analysis for cost-reimbursement contracts. The data covers the ACOs final incurred cost analysis work during the time period from 2015 to April 2022 and samples eight contractors and 18 cost-reimbursement contracts covering 11 fiscal years all subject to DCAA LRMs. Part of the analysis will present and explain the ACOs additional procedures for performing a more thorough and comprehensive final incurred cost analysis than the current policy and procedure instructions provide. The next section discusses the methodology used for the evaluation of policy and procedures related to the administration and closeout of cost-reimbursement and the incurred cost proposal audit.

E. EVALUATION OF POLICY AND PROCEDURES

The fourth research question evaluates the DOD policies and procedures used in the administration and closeout of cost-reimbursement contracts and the incurred cost proposal audit. The evaluation will be accomplished using the policy and procedure information presented in the literature review chapter. The research will examine key



policy changes implemented in Class Deviation 2012-O0013 and identify DOD regulations to highlight the high-risk associated with cost-reimbursement contracts. The research will examine DCMA and DCAA policy and procedures to identify possible weaknesses, issues, and problems pertaining to the administration and closeout of cost-reimbursement contracts. The next section provides a summary of the methodology topics discussed in this chapter.

F. SUMMARY

This chapter explained the methodology used to perform the research to answer the four research questions. A description of the DCMA CAFU system and database used in research questions one and two was provided. A review of the limitations of this research was discussed. The methodology used in the research of the impact of questioned costs found in a sample of cost-reimbursement contracts subject to incurred cost proposals not audited in which DCAA Low-Risk Memorandums (LRM) was reviewed. Finally, this chapter discussed how the literature review information will be used in the evaluation of the policies and procedures for research question number four. The next chapter presents and discusses the findings, analysis, implications, and recommendations based on the research.



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IV. FINDINGS, ANALYSIS, IMPLICATIONS, AND RECOMMENDATIONS

A. INTRODUCTION

In this chapter, the findings from the results of the data query and analysis used to answer the four research questions are presented. An analysis of the findings for each of the four research questions is discussed. Then the implications based on the findings and analysis are examined. Finally, recommendations are provided based on the findings, analysis, and implications discovered in this research.

B. FINDINGS

1. Differences in Quantity of Audits and Questioned Costs Amounts

The purpose of the first two research questions is to assess the quantity of the incurred cost proposal audits performed and the amount of questioned costs identified before and after the implementation of the Department of Defense (DOD) Class Deviation 2012-O0013, Defense Contract Audit Agency (DCAA) Policy and Procedure for Sampling Low-Risk Incurred Cost Proposals (hereafter referred to as “Class Deviation 2012-O0013”) changing DCAA’s low-risk sampling procedures for incurred cost proposal audits. As explained in the methodology chapter, a query of the Defense Contract Management Agency (DCMA) Contract Audit Follow-Up (CAFU) database was performed to gather the necessary data to answer these questions. The data query was run and extracted from the DCMA CAFU system on March 8, 2022. The findings presented from this analysis represent one specific DCMA contract management office (CMO) region. Table 12 presents the results of the DCMA CAFU data analysis findings. Table 12 covers the eight fiscal years before the implementation of Class Deviation 2012-O0013 (2004-2011) and the eight fiscal years after the implementation of Class Deviation 2012-O0013 (2012-2019). For each fiscal year, Table 12 shows the quantity of audits performed and questioned costs identified. Table 12 also shows if the CAFU Data was missing questioned costs for an audit and provides this as a percentage as well. This percentage is calculated by dividing the number of CAFU data missing questioned costs amount by the quantity of audits performed. At the bottom of Table 12 are the cumulative totals of the data for



the eight years before and after the implementation of Class Deviation 2012-O0013. The cumulative percentages of CAFU data missing questioned costs is calculated by dividing the cumulative total CAFU data missing questioned costs amount by the cumulative quantity of audits performed.

Table 12. Quantity of Audits and Amount of Questioned Costs Before and After Class Deviation 2012-O0013 for One DCMA CMO Region.

Fiscal Year of Incurred Cost Proposals	Quantity of Audits Performed	Questioned Costs Identified	CAFU Data Missing Questioned Costs Amount	Percentage of CAFU Data Missing Questioned Costs
2019	16	\$ 34,936,151.00	0	0%
2018	24	\$ 19,562,690.00	0	0%
2017	17	\$ 18,553,115.00	1	6%
2016	16	\$ 8,148,751.00	1	0%
2015	19	\$ 26,001,667.00	0	0%
2014	27	\$ 17,021,164.00	5	19%
2013	79	\$ 18,672,560.00	52	66%
2012	87	\$ 24,485,113.00	59	68%
2011	102	\$ 27,780,158.00	64	63%
2010	124	\$ 195,367,262.00	70	56%
2009	127	\$ 284,080,015.00	63	50%
2008	133	\$ 264,374,087.00	50	38%
2007	121	\$ 113,975,487.00	34	28%
2006	84	\$ 115,600,422.00	22	26%
2005	69	\$ 63,262,845.00	7	10%
2004	92	\$ 210,513,820.00	1	1%
2012 -2019	285	\$ 167,381,211.00	118	41%
2004 - 2011	852	\$1,274,954,096.00	311	37%



The next section presents the findings for research question number three, which analyzes the impact of the questioned costs in cost-reimbursement contracts subject to low-risk memorandums (LRM) as a result of Class Deviation 2012-O0013.

2. Findings of Questioned Costs in Contracts Subject to Low-Risk Memorandums

The third research question analyzes the impact of questioned costs found in a sample of incurred cost proposals for DCMA contractors who were not audited and received a LRM due to Class Deviation 2012-O0013. This analysis is specific to the workload of one ACO in one DCMA contract management office. It includes a sample of eight contractors and 18 cost-reimbursement contracts covering 11 fiscal years in which LRMs were issued and no DCAA incurred cost proposal audits were performed. The analysis shows questioned costs identified by the ACO when using additional final incurred cost analysis procedures.

The additional procedures used in the ACOs final incurred cost analysis method include a more detailed and thorough review than the DOD and DCMA policy and procedures. It includes detailed tracking of all individual cost elements for every cost voucher submitted and approved throughout performance. This detailed cost voucher tracking is used to analyze the specific final costs claimed by contract listed in Schedule H of the contractor's final indirect cost rate (FICR) submission. As previously discussed, Schedule H provides a detailed listing of all the various direct costs elements for each contract and subcontract and shows the indirect costs applied using the contractor's claimed rates. The analysis also verifies that final indirect cost rates are applied correctly, final claimed direct costs are in accordance with the contractor's approved billings, and final fee amounts due are accurate. Appendix A provides a summary of the questioned costs and other cost discrepancies identified and prevented from being paid out to contractors in the closeout of contracts in which no incurred cost proposal audit was performed because they were subject to DCAA LRMs received during the period of 2015 to April 2022. A small amount of the questioned costs or cost discrepancies benefit the contractor. A positive questioned cost means the contractor was claiming more than allowed (contractor could have been overpaid), and a negative questioned cost means a contractor was claiming less (contractor could have been underpaid).



The results listed in Appendix A include all contractors and contracts subject to LRMs issued after Class Deviation 2012-O0013, and every contractor in this sample had an ADV less than \$250 million, which made their final incurred cost proposal subject to the Class Deviation 2012-O0013 low-risk sampling method. Although some of the questioned costs identified during the researcher's final incurred cost analysis uncovered additional payments owed to the contractor, the amount of questioned costs identified and not paid to the contractor was significantly greater. In this sample of contractors' cost-reimbursement contracts, 2015 through April 2022, the researcher's additional final incurred cost analysis method saved the government nearly \$1.3 million dollars.

The types of questioned costs identified in these cost-reimbursement contracts subject to LRMs mainly include unallowable direct costs. For example, in contractor 1, contract A, approximately \$22K in unallowable direct labor costs was identified. This unallowable cost was due to a contractor error in Schedule H of the final indirect cost rate (FICR) submission. The contractor erroneously claimed some direct manufacturing costs as direct labor. Another example from the results in Appendix A is contractor 4, contract A, which had approximately \$110K in unallowable other direct costs. This unallowable amount was not part of the contractor's approved billings, but was an additional unsupported other direct costs listed in the contractor's FICR submission Schedule H. The contractor could not provide support for the amount and claimed it was an error. The majority of the unallowable costs identified in Appendix A are related to direct costs amounts, but there are some questioned costs due to misapplication of indirect cost rates, and the questioned direct costs also impact the indirect cost rate application and final indirect cost amounts. In the next section, the findings from the analysis of the policies and procedures pertaining to the incurred cost proposal audit and administration and closeout of cost-reimbursement contracts are presented.

3. Findings of Analysis of Policy and Procedures

The fourth research question analyzes the impact of Class Deviation 2012-O0013 on DOD, DCMA, and DCAA policy and procedures used in the administration and closeout of cost-reimbursement contracts. Table 13 provides a summary of the key findings from the analysis of the policy and procedures presented in the literature review that are significantly



relevant to the impact of Class Deviation 2012-O0013 in the administration and closeout of cost-reimbursement contracts. For example, FAR and DFARS regulations, DOD policy, DCMA and DCAA policy and procedures, and GAO reports from the literature review were utilized. The findings in Table 13 include highlighting the significance of the high-risks of cost-reimbursement contracts and the importance of the incurred cost proposal audit. Table 13 also lists the significant impacts from Class-Deviation 2012-O0013 and weaknesses identified in the policy and procedures used in the administration and closeout of cost-reimbursement contracts subject to Class Deviation 2012-O0013.

Table 13. Findings from Analysis of Policy and Procedures

Cost-reimbursement contracts are susceptible to the high risk of increased costs, unallowable costs, and possible fraud.
The allowable cost and payment clause requiring the contractor to submit adequate final indirect cost rates is the government's mechanism in the auditability process to verify the contractor's final claimed actual costs.
The incurred cost proposal audit of the contractor's final indirect cost rate submission is the contracting officer's most important tool used to ensure the government is only paying allocable, allowable, and reasonable costs.
Class Deviation 2012-O0013 was originally put into effect to help DCAA reduce the backlog of incurred cost audits and significantly adjusted the low-risk sampling method and audit dollar value threshold for performing audits from \$15M to \$250M.
Class Deviation 2012-O0013 also eliminated the policy to perform an incurred cost proposal audit for all contractors at least every three years; instead changing this to apply only for contractors with ADVs between \$100M-\$250M.
DCAA eliminated the incurred cost proposal audit backlog in FY 2018, but Class Deviation 2012-O0013 still remains in effect.
DCMA payment policy (DCMA, 2021d) for cost-reimbursement contracts requires substantially less oversight compared to other forms of contract financing like progress payments, which require ACO approval and enhanced tracking and monitoring of interim cost vouchers.
DCMA final voucher (DCMA, 2021c) and closeout (DCMA, 2019c) policy guidance instructs contracting personnel to accept contractors' claimed costs under DCAA low-risk memorandums.
DCMA policy and procedures do not require ACOs to perform tracking of interim costs billed under cost-reimbursement contracts and/or to use the contractor's approved interim billed and approved costs in the final incurred cost analysis of the FICR schedule H, CACWS, or final voucher.
DCAA has taken initiatives to implement Section 809 Panel recommendations that have not been formerly approved or enacted.
As of January 1, 2020, DCAA revised its low-risk sampling policy and procedures for incurred cost proposals resulting in significant changes to the low-risk sampling, and resulting in a substantial change to the dollar threshold requiring an automatic audit for contractors with an ADV from \$250M to \$1B. This policy revision is not in accordance with the current DFARS 242.705 policy instructing the implementation and use of DOD Class Deviation 2012-O0013.
DCAA's revised, and current, low-risk sampling policy still has no mandatory audit requirement for contractors with an ADV under \$100M, and it changed the minimum audit time requirement mandatory audits to every 5th year for contractors with an ADV between \$100M-\$250M, every 4th year for contractors with an ADV between \$250M-\$500M, and every other year for contractors with an ADV between \$500M - \$1B.



The most notable policy finding shown in Table 13 pertains to DCAA's revised incurred cost audit policy. DCAA's current policy, which went into effect in January 2020 significantly changed the low-risk sampling policy and procedures used for incurred cost proposal audits. These changes included substantial increases to the low-risk sampling ADV thresholds and changes to the mandatory audit requirements. This finding, along with the other findings listed in this section, are discussed further in the next section, which presents a detailed analysis of the research findings presented in this section.

C. ANALYSIS

This section provides a detailed analysis of the findings for each of the four research questions. It includes four subsections to present a separate analysis for each research question. The analysis references the findings previously discussed, topics covered in the literature review chapter, and the appendices.

- (1) In terms of quantity of audits, what is the impact of Class Deviation 2012-O0013 for incurred cost proposals?

As depicted in Table 12, the results of the research show a significant reduction in the number of incurred cost proposal audits performed after the DOD Class Deviation 2012-O0013 was implemented which changed the low-risk sampling policy and procedures used by DCAA for incurred cost proposal audits. For the eight fiscal years before Class Deviation 2012-O0013 was implemented, DCAA performed 852 incurred cost proposal audits. For the eight fiscal years after Class Deviation 2012-O0013 was implemented, DCAA only performed 285 incurred cost proposal audits. As a result, there were 567 less incurred cost proposal audits performed for one DCMA CMO region in the eight years after Class Deviation 2012-O0013 was implemented compared to the eight years before Class Deviation 2012-O0013 was implemented. This is a 67% percent reduction in the quantity of incurred cost proposal audits performed. This significant drop in the quantity of incurred cost proposal audits performed after the implementation of Class Deviation 2012-O0013 is likely be due to the significant change to ADV requiring a mandatory audit, which changed from \$15M to \$250M as a result of Class Deviation 2012-



O0013. In the next section, an analysis of the findings for research question number two is discussed.

- (2) In terms of amount of questioned costs, what is the impact of Class Deviation 2012-O0013 for incurred cost proposals?

As depicted in Table 12, the amount of questioned costs identified also significantly reduced for incurred cost proposal audits performed after the implementation of Class Deviation 2012-O0013. For the eight fiscal years before Class Deviation 2012-O0013 was implemented, the amount of questioned costs identified in incurred cost proposal audits was \$1,274,954,096.00. For the eight fiscal years after Class Deviation 2012-O0013 was implemented, the amount of questioned costs identified in incurred cost proposal audits was \$167,381,211.00. As a result, there was \$1,107,572,885.00 less questioned costs identified for one DCMA CMO region in the eight years after Class Deviation 2012-O0013 was implemented compared to the eight years before Class Deviation 2012-O0013 was implemented. This is an 87% reduction in the amount of questioned costs identified in incurred cost proposal audits. In addition to the large reduction of questioned costs identified in incurred cost proposal audits before and after Class Deviation 2012-O0013, the average amount of questioned costs per audit performed decreased significantly.

As depicted in Table 14, the average questioned cost identified per audit significantly decreased after the implementation of Class Deviation 2012-O0013. This is calculated by dividing the total amount of questioned costs identified by the number of audits performed. Before the implementation of Class Deviation 2012-O0013 the average questioned cost identified per audit is \$1,496,425.00. The average questioned cost identified per audit after the implementation of Class Deviation 2012-O0013 is \$587,302.49. As a result, the average questioned cost per audit is \$909,122.50 less for one DCMA CMO region in the eight years after Class Deviation 2012-O0013 was implemented compared to the eight years before Class Deviation 2012-O0013 was implemented. This is a 61% reduction in the average questioned costs identified per audit.



Table 14. Average Questioned Costs Per Audit Before and After Class Deviation 2012-O0013

Fiscal Years	Quantity of Audits Performed Before the Low-Risk Sampling Class Deviation	Amount of Questioned Costs Identified in Audits Performed Before the Low-Risk Sampling Class Deviation	Average Questioned Costs Per Audit
2004-2011	852	\$ 1,274,954,096.00	\$ 1,496,425.00
Fiscal Years	Quantity of Audits Performed After the Low-Risk Sampling Class Deviation	Amount of Questioned Costs Identified in Audits Performed After the Low-Risk Sampling Class Deviation	Average Questioned Costs Per Audit
2012-2019	285	\$ 167,381,211.00	\$ 587,302.49

This decrease in the amount of questioned costs identified after the implementation of Class Deviation 2012-O0013 is significant and not likely due to a limitation associated with missing questioned costs identified amounts in the CAFU data. The findings in Table 12 depict the number of incurred cost proposal audits in the CAFU data that are missing questioned costs identified data for the eight fiscal years before and after Class Deviation 2012-O0013 was implemented. The percentage of incurred cost proposal audits missing questioned costs identified in the CAFU data is similar; 37% missing for fiscal years 2004–2011 before Class Deviation 2012-O0013, and 41% missing for fiscal years 2012–2019 after Class Deviation 2012-O0013. This is calculated by dividing the total number of incurred cost proposal audits missing questioned costs identified amounts in CAFU by the total number of incurred cost proposal audits performed for each eight year period. Since there is only a 4% difference in the average number of incurred cost proposal audits missing the questioned costs identified amount in the CAFU data, it is unlikely that the research limitation of the missing data is impacting the significant decrease in the amount of questioned costs identified after the implementation of Class Deviation 2012-O0013. In the next section, an analysis for the findings related to research question number three is presented.



- (3) What is the impact of questioned costs found in a sample of incurred cost proposals for Defense Contract Management Agency (DCMA) contractors who were not audited and received a Low-Risk Memorandum (LRM) due to Class Deviation 2012-O0013?

All of the questioned costs listed in Appendix A were identified by conducting a more detailed and thorough final incurred cost analysis for cost-reimbursement contracts in which DCAA LRMs were issued after Class Deviation 2012-O0013 was implemented. When contractors receive LRMs, the DCAA approved FICR submission is used to create the Cumulative Allowable Cost Worksheet (CACWS), which reflects the claimed contract amounts by contract from Schedule I of the contractor's FICR submission. An ACO, following policy, would normally assume the claimed amounts are valid because these contractors were all classified as low-risk and the LRM approved the claimed rates and the associated claimed contract amounts. As displayed in Appendix A, there are often questioned costs in the claimed contract amounts that may never get discovered due to the DCAA low-risk policy and procedures and the ACO's impression of the LRM as an approval for the claimed amounts reflected in the CACWS attached to the DCAA LRM (which is a reflection of the contractor's FICR schedule I). Despite the DCAA LRM/CACWS, the researcher identified questioned costs and prevented the overpayment of these amounts to the contractor. The DCAA adequacy review of the contractor's FICR did not discover any of these questioned costs or cost discrepancies. The identified questioned costs were a result of the additional voucher tracking and final incurred cost analysis procedures performed beyond the scope of current policy instructions for payment administration/final voucher/closeout of cost-reimbursement contracts. The additional ACO procedures were briefly discussed in the findings section, and a more detailed overview can be found in Appendix B. The next section discusses the analysis related to research question number four.

- (4) What is the impact of Class Deviation 2012-O0013 on DOD, DCMA and DCAA policy and procedures used in the administration and closeout of cost-reimbursement contracts?

The findings listed in Table 13 demonstrate that the policy and procedures clearly support the importance of the incurred cost proposal audit in the administration and



closeout of high-risk cost-reimbursement contracts. Although, the literature review also demonstrated the inability for DOD to audit every contractor and the need to use risk-based sampling in order to focus resources appropriately and meet acquisition regulation requirements for contract closeout, the importance of the incurred cost proposal audit is still well documented.

The findings of the analysis of the policy and procedures in Table 13 also show that despite the significant change to the low-risk sampling policy and procedures caused by Class Deviation 2012-O0013, which resulted in less incurred cost proposal audits, the DOD and DCMA policy and procedures used in the administration and closeout of high-risk cost-reimbursement contracts did not change. Additionally, the findings demonstrate DCMA policy and procedures provide for less oversight of high-risk cost-reimbursement contracts than firm-fixed-price contracts using progress payments, which are a high-risk form of financing like cost-reimbursement contracts. Also, the DCMA policy and procedures indicate ACOs should rely and accept DCAA LRMs and the claimed costs listed in the CACWS attachment, which is based on the contractor's unaudited FICR submission.

DCMA policy and procedures instruct ACOs to perform a final incurred cost analysis using the DCAA LRM and CACWS and to compare it with the contractor's FICR submission. Since a contractor's final voucher submission is based on its FICR submission, this procedure is just a validation of the same information and not a thorough final incurred cost analysis of the contractor's approved allowable costs based on billings. Unless an ACO determines a risk associated with a contractor or contract, which is unlikely if DCAA issues an LRM, the DCMA policy and procedures do not provide for any further analysis of indirect cost rate application, and there are no procedures for tracking billings under cost-reimbursement contracts and for comparing billing amounts with the a contractor's claimed costs in its FICR submission.

The policy and procedure findings also demonstrate that despite DCAA eliminating the backlog of incurred cost proposal audits in FY 2018, the DOD did not discontinue or reevaluate the continued use of Class Deviation 2012-O0013, which was originally instituted to help DCAA eliminate the significant and growing backlog of incurred cost



proposal audits. Furthermore, the policy and procedure findings identified that the DCAA instituted new low-risk sampling policy and procedures for incurred cost proposal audits that is not compliant with Class Deviation 2012-O0013, which is still in effect and required to be used in accordance with DFARS 242.705 Indirect Cost Rates policy. The next section discusses the implications of the findings and analysis.

D. IMPLICATION OF FINDINGS AND ANALYSIS

Based on the findings and analysis, it is evident that DOD Class Deviation 2012-O0013 significantly reduced the number of incurred cost proposal audits performed and the amount of questioned costs identified after its implementation. As a result, this has caused an increased issuance of DCAA LRMs instead of incurred cost proposal audits for contractors performing under high-risk cost-reimbursement contracts. Without the incurred cost proposal audit, the DOD compromises the auditability in the contract management process for cost-reimbursement contracts and weakens a key control mechanism used by the government to ensure compliance in the principal-agent relationship with the contractor. Additionally, the research showed that the other contract administration and audit functions performed for contractors with cost-reimbursement type contracts do not sufficiently supplement the oversight lost from the incurred cost proposal audit.

Since Class Deviation 2012-O0013 was first implemented nearly ten years ago, the DCMA has not instituted any supplementary contract administration or closeout requirements for contractors who receive LRMs and have not been audited. A sample of contractors performing under cost-reimbursement contracts in which LRMs were issued found nearly \$1.3M in questioned costs for the period between 2015 and April 2022. If not for the use of a more thorough final incurred cost analysis tracking contractor billings, these questioned costs would not have been identified, and the government would have paid nearly \$1.3M in unallowable costs.

The other DCAA audit functions used to protect the government from risk under cost-reimbursement type contracts, such as the accounting system audit, review/testing of interim voucher reviews, floor checks, and the adequacy review of the FICR, did not provide sufficient supplementary oversight to protect the government in this sample of



contractors. None of the current DCMA or DCAA oversight functions applicable to low-risk contractors were able to detect the deficiencies and questioned costs in the sample of the contracts subject to LRMs because there is no tracking and final incurred cost analysis of the costs billed and approved. All analyses, reconciliations, and validations are focused on comparison of the contractor's claimed costs from the FICR submission against the claimed costs in the contractor's final voucher submission. Since the contractor's final voucher is based on the FICR submission claimed costs, a review and comparison of the two will not detect questioned costs that are not in accordance with approved billed costs under the contract. DCMA's final voucher review policy for LRMs does review fee payments and total disbursements in comparison to the final voucher and claimed costs based on the contractor's FICR submission, but, again, this does not validate the contractor's final claimed costs. It just validates the amount claimed in the final voucher compared to what has been paid (disbursed).

Finally, although DFARS 242.705 requires DOD contracting officers to use and rely on Class Deviation 2012-O0013 for the establishment of final indirect cost rates, the DCAA has revised their policy and is using a low-risk sampling procedure that is not compliant with the DFARS and DOD Class Deviation 2012-O0013. The only place outside the DCAA internal policy guidance and memos where this change to the low-risk sampling has been mentioned is in DCAA's annual report to Congress. Based on the research, it does not appear that any DOD acquisition agencies are aware of this revised policy that DCAA has been operating under since January 2020. As a result, DOD contracting officers are not receiving the audit support required per DFARS regulations. The next section presents recommendations based on the findings and analysis.

E. RECOMMENDATIONS BASED ON FINDINGS AND ANALYSIS

The following are the recommendations based on the findings and analysis of this research.

1. **Notification.** The first recommendation is to notify GAO, DOD, and DCMA senior contracting officials of the non-compliant policy and



procedures being used by DCAA in the low-risk sampling of incurred cost proposal audits since January 2020.

2. **Review and Revise.** The second recommendation is to request DOD senior contracting officials to review the continued use of Class Deviation 2012-O0013 and to revise it in order to ensure that all contractors are audited at least every 4th or 5th year regardless of ADV. This review should consist of a team of subject matter experts from DCAA, DCMA, and DOD with working-level experience in the administration and closeout of cost-reimbursement contracts and the incurred cost proposal audit functions.
3. **Require Additional ACO Procedures.** The third recommendation is to request DCMA senior contracting officials to revise the policy and procedures for cost-reimbursement contracts to require ACO review and approval of interim cost vouchers on a quarterly basis, perform tracking and monitoring of interim cost vouchers, and implement the additional final incurred cost analysis procedures discussed in this research and presented in Appendix B.

The next section provides a summary of this chapter.

F. SUMMARY

In this chapter, the findings were discussed. The research questions were answered based on the analysis of the findings. In addition, the implications from the findings and analysis were discussed. Finally, several recommendations were presented. The next chapter provides a summary and conclusions regarding the research and provides areas for further research.



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V. SUMMARY, CONCLUSIONS, AND AREAS FOR FURTHER RESEARCH

A. SUMMARY

Every year the Department of Defense (DOD) obligates billions of dollars using high risk cost-reimbursement contracts because of the many unique, complex, and highly technical requirements being acquired. The high-risk of unallowable costs associated with cost-reimbursement contracts may be avoided with adequate contract administration oversight and proper auditing procedures; mainly through the use of an audit of a contractor's incurred cost proposal. Unfortunately, the DOD does not have sufficient resources to audit every contractor performing under high-risk cost-reimbursement contracts. Therefore, DOD contracting officials need to consider implementing additional policies and procedures to compensate for the significant reduction in the quantity and frequency of incurred cost proposal audits in order to reduce the high risks associated with cost-reimbursement contracts.

This research highlights the possible risks of performing less incurred cost proposal audits on DOD contractors and the increased reliance of Low-Risk-Memorandums (LRM) in the contract administration and closeout of high-risk cost-reimbursement contracts. The research showed Department of Defense (DOD) Class Deviation 2012-O0013, Defense Contract Audit Agency (DCAA) Policy and Procedure for Sampling Low-Risk Incurred Cost Proposals (hereafter referred to as "Class Deviation 2012-O0013") had a significant impact on the reduction of incurred cost proposal audits performed and the amount of questioned costs identified. It also revealed a weakness in the government's reliance of LRMs issued under Class Deviation 2012-O0013 because a significant amount of questioned and unallowable costs were identified in contracts subject to LRMs in which contractors were not audited. Finally, the research revealed a policy non-compliance in the DOD's audit agency, DCAA, which revised its internal policy for low-risk sampling of incurred cost proposals in January 2020, and is not operating in accordance with the DFARS 242.705 requirement to utilize Class Deviation 2012-O0013. The next section presents the conclusions regarding this research.



B. CONCLUSIONS

In high-risk cost-reimbursement type contracts, the main safeguard in place for Defense Contract Management Agency (DCMA) Administrative Contracting Officers (ACOs) to ensure all contract costs are allocable, allowable, and reasonable has always been the incurred cost proposal audit of a contractor's final indirect cost rate submission. The incurred cost proposal audit ensures that the government is paying a fair and reasonable price, and the audit helps to prevent unallowable costs and the possibility of fraud. However, due to DCAA resource capacities, DOD changed the DCAA low-risk sampling policy in July 2012, which raised the automatic auditable dollar value (ADV) threshold from \$15M to \$250M, and it also changed the number of contractors below the threshold randomly selected for audit. With this change, significantly less final incurred cost proposal audits are performed for DOD contractors performing under high-risk cost-reimbursement contracts, and instead LRMs approving a contractor's claimed final indirect rates are issued without an audit.

This leaves the burden on the ACO to protect the government from paying excessive and unallowable costs, but the ACO is following contract administration and closeout policies based on DCAA performing incurred cost proposal audits that have not been adapted to supplement less audit oversight due to Class Deviation 2012-O0013. These policies essentially provide for unquestioned acceptance of the claimed costs under LRMs. Because of this, there are contractors who have been performing under high-risk cost-reimbursement contracts since Class Deviation 2012-O0013 was implemented who have never been audited. In a sample of contractors receiving LRMs, the research findings show a significant amount of questioned costs were identified and were prevented from being paid by the ACO to the contractor using a more thorough and in-depth payment administration and final incurred cost analysis procedure (see Appendix B).

By implementing the recommendations listed in this research, the auditability of the DOD can be improved which will reduce the high risks of increased and unallowable costs associated with cost-reimbursement contracts. Senior DOD, DCAA, and DCMA contracting officials need to consider changing the low-risk sampling method or provide additional supplemental audit oversight of contractors receiving LRMs. At a minimum,



senior contracting officials need to consider instituting new policies and procedures which provide for more oversight in the administration and closeout of high-risk cost-reimbursement contracts. The next section discusses areas for further research.

C. AREAS FOR FURTHER RESEARCH

There is no question regarding the high risks associated with cost-reimbursement contracts and the importance of the incurred cost proposal audit in protecting the government from increased costs, unallowable costs, and possible fraud. The research findings and analysis demonstrate that the current policy and procedures may not be providing the government with adequate safeguards, but further research should be performed on the use and impact of LRMs.

The first area for further research is to perform additional research on DOD contractors with an ADV under \$100M to evaluate the impact of LRMs where no incurred cost proposal audits are being performed. This additional research could expand on the same methods used in this research by evaluating a larger universe of data. This research could provide further information to help determine the risks of LRMs for the various ADV strata below \$100M.

The second area for further research is to analyze industry perceptions and evaluate the contractor's accountability performing under cost-reimbursement contracts without the incurred cost proposal audit oversight. This further research could perform a survey of contractors using questions designed to gather various data about their perceptions of the government's audit oversight. It could also ask contractors about the measures that they take to ensure compliance with audit and other requirements associated with cost-reimbursement contracts in order to ensure that no unallowable costs are charged to the government.

The third area for further research is to examine the use of ADV as a key indicator of risk and to take a deeper look into the triggers that make a contractor high-risk. For example, rather than having a policy focused on identifying low-risk contractors, further research might reveal it would be more beneficial to improve DOD policy and procedures for identifying high-risk contractors. This research could try to identify factors that make



a contractor high risk and identify possible correlations to various contractor metric data that could allow DOD to make targeted high-risk determinations for the contractor's incurred cost proposal audits.

The fourth area for further research is to analyze and evaluate how DCAA measures and evaluates the return on investment (ROI) of various audits. In the DCAA annual reports to Congress, the incurred cost proposal audit is typically rated low in terms of ROI in comparison to the forward pricing rate (FPR) audits. The audit of a contractor's FPR proposal is used to establish a forward pricing rate agreement (FPRA). FAR Part 2 Definitions of Words and Terms (2022) defines forward pricing rate agreements as, "a written agreement negotiated between a contractor and the government to make certain rates available during a specified period for use in pricing contracts or modifications. These rates represent reasonable projections of specific costs that are not easily estimated for, identified with, or generated by a specific contract, contract end item, or task. These projections may include rates for such things as labor, indirect costs, material obsolescence and usage, spare parts provisioning, and material handling."

Since FPR audits are forward looking and typically savings associated with this type of audit are based on the questioned costs identified in a contractor's FPR proposal, the questioned costs identified in FPR audits do not reflect savings in contracts awarded. Additionally, a contractor's FPR proposal typically estimates rates for the next four to five fiscal years. Whereas, incurred cost proposal audits reflect questioned cost amounts that have already been incurred for contracts awarded and only cover one fiscal year. Therefore, comparing the ROI of an FPR audit to the incurred cost proposal audit may not be the best method in determining which audit provides more value to the government. Especially, since FPRAs are used in the negotiation of fixed-price contracts, and there is no data to measure if the FPRs used in the contract award resulted in savings when compared to the actual rates experienced by the contractor after award. Further research in this area could examine if the current methods used by DCAA to analyze audit value provide an accurate depiction of the questioned costs and dollars saved for the various audits, particularly, the incurred cost proposal audit, which seems to be valued oddly low in terms of ROI for the government.



APPENDIX A. SUMMARY OF QUESTIONED COSTS IDENTIFIED USING ADDITIONAL FINAL INCURRED COST ANALYSIS METHODS IN CONTRACTS NOT AUDITED DUE TO LRMS

Contractor / Contract	Fiscal Year	ADV	Questioned Cost / Cost Discrepancies	Description
1 / A	2020	\$584K	\$22,000.71	Contractor claimed more in direct labor in FICR submission schedule H than amount approved in billings. Error in claiming total manufacturing costs as direct labor.
1 / B	2015	\$60M	\$20,154.08	Incorrect overhead rate application. The contractor applied the Engineering Services Overhead Rate in their FICR schedule H, but should have applied Manufacturing Overhead Rate.
1 / C	2008	\$19.12M	-\$283.83	Contractor applied Facilities capital cost of money overhead head (FCCOM-OH) incorrectly in FICR submission schedule H.
1 / C	2008	\$19.12M	\$262,568.55	Contractor claimed amounts for direct labor and subcontracts in their FICR schedule H is significantly greater than approved billings. Also, claimed travel costs, which were not approved in billings.
2 / A	2019	\$1.33M	-\$38,014.70	Contractor error in FICR schedule H and I for direct labor, the DCAA LRM CACWS amount shorted the contractor's actual amount due by \$38,000.
2 / A	2018	\$843K	\$28,358.00	Direct Subcontractor costs invoiced in voucher billings missing in contractor's FICR schedule H; contractor error in billing.
2 / B	2019	\$1.33M	-\$22,607.02	Contractor error in FICR Schedule H and I for direct labor, the DCAA LRM CACWS amount shorted the contractor's actual amount due by \$22,600.
3 / A	2018	\$7.47M	-\$1,118.08	Contractor's FICR schedule H claims slightly less direct travel costs than approved billing amount.



Contractor / Contract	Fiscal Year	ADV	Questioned Cost / Cost Discrepancies	Description
3 / A	2018	\$7.47M	\$23,971.50	Contractor's FICR schedule H claims more direct material than approved billing amount.
3 / A	2018	\$7.47M	-\$10,157.20	Contractor's FICR schedule H claims less Other Direct Costs (ODC) than approved billing amount.
3 / A	2018	\$7.47M	\$43,579.35	Contractor's FICR schedule H claims subcontract costs that were not approved in billings.
3 / A	2018	\$7.47M	-\$32,527.56	Contractor's FICR schedule H missing defense base act insurance costs from approved billings.
3 / A	2018	\$7.47M	\$6,737.87	Unallowable direct costs claimed in FICR/LRAM/CACWS caused claimed incorrect general and administrative indirect costs.
3 / A	2019	\$11.4M	-\$386.28	Contractor's FICR schedule H claims less direct travel costs than approved billings.
3 / A	2019	\$11.4M	\$453.48	Contractor's FICR schedule H claims more direct material than approved billing amount.
3 / A	2019	\$11.4M	\$25,613.70	Contractor's FICR schedule H claims incorrect ODC than approved billings.
3 / A	2019	\$11.4M	-\$25,613.70	Contractor's FICR schedule H does not list defense base act insurance costs that were included in billings.
3 / A	2019	\$11.4M	\$24.06	Unallowable direct costs claimed in FICR/LRAM/CACWS cause claimed incorrect general and administrative indirect costs.
4 / A	2019	\$74.5M	\$110,700.20	Contractor's FICR schedule H claimed more ODC than approved billing amount.
4 / B	2018	\$56.6M	\$24,477.11	Contractor's FICR schedule H claimed more direct subcontract costs than approved billing amount.
4 / B	2020	\$77.4M	\$115,936.44	Contractor's FICR schedule H claimed more direct subcontract costs than approved billing amount.



Contractor / Contract	Fiscal Year	ADV	Questioned Cost / Cost Discrepancies	Description
4 / B	2020	\$77.4M	\$51,089.21	Contractor's FICR schedule H claimed direct intercompany costs that were never approved in billings.
4 / B	2018-2020	\$56.6 - \$77.4M	\$23,745.65	Unallowable direct costs claimed in FICR/LRAM/CACWS caused claimed incorrect general and administrative indirect costs.
4 / C	2018	\$56.6M	\$18,136.31	Contractor's FICR schedule H claimed more in direct material than approved billing amount.
4 / C	2019	\$74.5M	-\$6,606.60	Contractor's FICR schedule H claimed less in subcontract costs than approved billing amount.
4 / C	2019	\$65.5M	\$14,298.25	Contractor's FICR schedule H claimed more in direct labor than approved billing amount.
4 / D	2014		\$18,100.00	Contractor's FICR schedule H claimed more in direct labor and travel costs in the Schedule H than approved billing amounts. Error also increased overhead and general and administrative costs.
5 / A	2019	\$257K	\$16,588.00	Contractor's FICR schedule H claimed more in direct material than approved billing amount. Error also increased indirect cost.
5 / A	2020	\$257K	\$1,431.17	Contractor's FICR schedule H claimed more in direct material than approved billing amount. Error also increased indirect cost.
6 / A	2009	\$1.1M	\$8,037.00	Contractor's FICR schedule H claimed more in direct labor than approved billing amount. Error also increased indirect cost.
6 / A	2009	\$1.1M	\$1,773.00	Contractor's FICR schedule H claimed more in direct material than approved billing amount. Error also increased indirect cost.
6 / A	2009	\$1.1M	\$3,201.00	Contractor's FICR schedule H claimed more in direct subcontract costs than approved billing amount. Error also increased indirect cost.
6 / A	2011	\$1.3M	\$5,239.81	Error in DCAA CACWS attached to LRM (derived from FICR Schedule I) is more than final actual cost.



Contractor / Contract	Fiscal Year	ADV	Questioned Cost / Cost Discrepancies	Description
6 / B	2009	\$1.1M	-\$1,734.00	Contractor's FICR schedule H claimed less in direct labor than approved billing amount. Error also impacted indirect cost.
6 / B	2009	\$1.1M	-\$767.00	Contractor's FICR schedule H claimed less in direct material than approved billing amount. Error also impacted indirect cost.
6 / B	2009	\$1.1M	\$765.00	Contractor's FICR schedule H claimed less in direct travel than approved billing amount. Error also impacted indirect cost.
6 / B	2010	\$878K	\$1,727.00	Contractor's FICR schedule H claimed more in direct labor than approved billing amount. Error also increased indirect cost.
6 / B	2012	\$679K	-\$3,325.00	Contractor's FICR schedule H claimed less in direct material than approved billing amount. Error also impacted indirect cost.
6 / B	2013	\$787k	\$20,021.00	Contractor's FICR schedule H claimed more in direct labor than approved billing amount. Error also increased indirect cost.
6 / C	2013	\$787k	\$20,800.50	Contractor's FICR schedule H claimed more in direct subcontract costs than approved billing amount. Error also increased indirect cost.
6 / D	2010	\$878K	\$1,803.00	Contractor's FICR schedule H claimed less in direct material than approved billing amount. Error also impacted indirect cost.
6 / D	2013	\$787k	\$5,123.00	Contractor's FICR schedule H claimed more in direct labor than approved billing amount. Error also increased indirect cost.
7 / A	2015	\$275K	\$2,467.89	Contractor claimed \$2,000 more in direct labor than what was invoiced (approved). Error also impacted fringe and general and administrative cost.
7 / A	2015	\$275K	\$12,739.42	Contractor's FICR schedule H claimed more in direct labor than approved billing amount. Error also increased indirect cost.



Contractor / Contract	Fiscal Year	ADV	Questioned Cost / Cost Discrepancies	Description
8 / A	2008	\$511K	\$387.39	Contractor claimed numerous different, and more, direct cost amounts in their FICR submission; as a result, the DCAA LRM CACWS amount was greater than the actual allowable final indirect costs.
8 / A	2009	\$715K	\$6,662.11	Contractor claimed numerous different, and more, direct cost amounts in their FICR submission; as a result, the DCAA LRM CACWS amount was greater than the actual allowable final indirect costs.
8 / A	2010	\$3.75M	\$3,909.57	Contractor claimed numerous different, and more, direct cost amounts in their FICR submission; as a result the DCAA LRM CACWS amount was greater than the actual allowable final indirect costs.
8 / A	2011	\$1.7M	\$473,263.83	Contractor claimed numerous different, and more, direct cost amounts in their FICR submission; as a result the DCAA LRM CACWS amount was greater than the actual allowable final indirect costs.
8 / B	2010	\$3.75M	\$40,321.80	Contractor's FICR schedule H claimed more direct labor, material and ODC costs than approved billing amount. Error also increased indirect cost.
			\$1,436,205.96	Total Questioned Costs (unallowable costs)
			-\$143,140.98	Total Questioned Costs (owed to Contractor)
			\$1,293,064.98	Total (savings for government)



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APPENDIX B. ADDITIONAL PROCEDURES FOR ACO VOUCHER TRACKING AND FINAL INCURRED COST ANALYSIS

The additional ACO voucher tracking and final incurred cost analysis referenced in this research are explained at a high level in Table 15. The Excel template referenced provides an example of how the additional process is executed. Details on accessing the Excel template are in the Supplemental section of this report. The basis of this process, which makes it “additional,” and also why it provides a better method for performing the final incurred cost analysis, is the tracking of the contractor’s interim vouchers. Current DCMA policy and procedures do not provide instructions for the tracking of billings under cost-reimbursement contracts and provide very limited oversight of these payments during contract performance. As discussed in this research, this is mainly because DCMA policy and procedures rely on DCAA to perform this necessary oversight and the audit for cost-reimbursement contracts. DCMA policy and procedures require ACOs to review and approve the final voucher under cost-reimbursement, and the costs and fee amounts from the contractor billings are necessary for ACOs to accurately validate a contractor’s claimed amounts in the final voucher and in Schedule H of their final indirect cost rate (FICR) submission. Under current policy instructions, ACOs are validating claimed amounts in the final voucher against the contractor’s claimed amounts in the Cumulative Allowable Cost Worksheet (CACWS) or FICR Schedule H. Since a contractor’s final voucher and CACWS are based on its FICR data, this process is just a validation of the same information, and does not provide an analysis of the fixed-fee and direct costs amounts claimed, approved, and paid during contract performance.

Using this additional process will help identify questioned direct costs claimed in the FICR submission that were never properly introduced and approved by the government in a voucher billing during performance. As shown in this research, there is evidence of questioned costs existing in a contractor’s FICR submission when DCAA does not audit and issues a Low-Risk Memorandum (LRM) and CACWS. This additional process also ensures indirect cost rates are applied accurately by mathematically checking the application of the final approved rates with the approved direct costs amounts.



Furthermore, this additional process provides for the active tracking and monitoring of the limitation of costs/funds and fixed-fee withholding. In addition to improving the final voucher review process by actively using these additional procedures, ACOs will be able to promptly determine excess funds available for de-obligation at the time of physical completion and when FICRs have been established for all years of performance. The steps listed in Table 15 provide a basic overview for performing the additional voucher tracking and final incurred cost analysis using the example Excel file titled “EXAMPLE_Vouchers-FIC-Analysis_Additional-Procedures.” See Supplemental for instructions to access this Excel file.

Table 15. General Instructions for Using the “EXAMPLE_Vouchers-FIC-Analysis_Additional-Procedures.” See Supplemental for File Access.

The Contract Administrator (CA) / Administrative Contracting Officer (ACO) shall establish a mod log, voucher tracker, and final incurred cost analysis document upon contract award and assignment of contract administration functions.
The contract and mod log information will be linked to the voucher tracker and final incurred cost analysis documents. The mod log will contain the contract cost and fee amounts and track the funding obligations and changes to the contract price (cost and fee amounts).
The CA/ACO will build a voucher tracker that mirrors the contractors cost voucher submission and contains all the cost elements billed in the contractors cost vouchers (see Voucher billings worksheet). The voucher tracker will also track disbursements paid for each cost voucher.
Monthly or quarterly, throughout contract performance, the CA/ACO will review contractor cost vouchers and load the cost elements for a cost voucher billing into the voucher tracker and update the disbursements.
During this monthly review and tracking procedure, the CA/ACO will monitor the limitation of funds, limitation of costs, and fixed-fee limitations pursuant to the contract requirements. The CA/ACO will also validate correct application of the provisional billing rates used (a rate check formula can easily be built into the voucher tracker).
The voucher tracker procedure will track the cost vouchers by fiscal year, month, and voucher number. See the “Voucher billings” worksheet in the example Excel file attached for a suggested method for building the voucher tracker. To the right side of the cost element data, the CA/ACO logs all the cost voucher info, and the left side sorts the cost vouchers into columns to track the fiscal year cumulative totals. This is necessary because final indirect cost rates are established for each fiscal year.
As fiscal years are completed and final indirect cost rates are established, the CA/ACO merges the cumulative data (using formulas) from the “Voucher billings” worksheet into the “FIC Detailed” worksheet.



<p>The “FIC Detailed” worksheet provides a detailed incurred cost analysis comparing the cumulative amounts billed/claimed and approved in the interim vouchers with the contractor’s Schedule H from their FICR submission, which lists the direct costs by contract and indirect costs applied at their claimed rates.</p>
<p>The “FIC Detailed” worksheet provides a column titled “ACO Calculation,” where the CA/ACO can mathematically check the application of the final indirect cost rates and direct cost amounts.</p>
<p>The “FIC Detailed” worksheet provides the ability for the CA/ACO to analyze each fiscal year separately and the total cumulative costs for all fiscal years. The CA/ACO should notate any questioned costs or discrepancies discovered.</p>
<p>The “FIC Summary” worksheet provides the CA/ACO with a high-level summary of the costs and fee billed, paid, and claimed by fiscal year with cumulative totals. It also provides for a summary of the ACO FIC Analysis amounts if questioned costs or discrepancies are identified during the CA/ACO final incurred cost analysis.</p>
<p>The “FIC Summary” worksheet also calculates and provides the total amount due the contractor or government for the subject contract. The CA/ACO can provide this worksheet to the contractor when requesting submission of a final voucher. NOTE: If the CA/ACO final incurred cost analysis identifies questioned costs or discrepancies, this worksheet along with the “FIC Detailed” worksheet can be sent to the contractor for review and used in meetings/discussion with the contractor in the settlement of final incurred costs for the contract.</p>
<p>The CA/ACO should save the voucher tracker-FIC analysis in the official contract file when completed and closing out the contract.</p>
<p>For further instructions and questions regarding the use of this template and the additional voucher tracking and final incurred cost analysis procedures, see the point of contact (POC) worksheet in the “EXAMPLE_Vouchers-FIC-Analysis_Additional-Procedures” Excel template.</p>



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SUPPLEMENTAL

This supplemental is included for those interested in gaining access to the Excel file template titled “EXAMPLE_Vouchers-FIC-Analysis_Additional-Procedures” referenced in Appendix B. The high-level overview of the instructions and the procedures explaining how to use this template are provided in Appendix B. The instructions explain how to track the cost vouchers and perform the final incurred cost analysis for cost-reimbursement contracts. For those interested in obtaining the supplemental Excel file, please contact the NPS library.



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LIST OF REFERENCES

- Bagdoyan, S.J. (2021, August). *DOD -fraud risk management—actions needed to enhance department-wide approach, focusing on procurement fraud risks* (GAO-21-309). Government Accountability Office.
- Defense Contract Audit Agency. (2011, June 9). Incurred cost audit procedures. *Contract audit manual* (DCAAM 7640.1). DCAA FOIA Case I-22-034-H
- Defense Contract Audit Agency. (2012, June 26). *Information for contractor's pamphlet* (DCAAM 7641.90). <https://www.dcaa.mil/Guidance/Audit-Process-Overview/>
- Defense Contract Audit Agency. (2019a, March 31). *Report to Congress on FY 2018 activities defense contract audit agency.*
- Defense Contract Audit Agency. (2019b, December 2). *Revised policy and procedures for sampling incurred cost proposals* (19-PIC-005(R)). [https://www.dcaa.mil/Portals/88/Documents/Guidance/MRDs/19-PIC-005\(R\)%20Risk%20Based%20Sampling%20Revisions.pdf?ver=2020-02-28-111832-093](https://www.dcaa.mil/Portals/88/Documents/Guidance/MRDs/19-PIC-005(R)%20Risk%20Based%20Sampling%20Revisions.pdf?ver=2020-02-28-111832-093)
- Defense Contract Audit Agency. (2020a, March 31). *Report to congress on fy 2019 activities defense contract audit agency.*
- Defense Contract Audit Agency. (2020b, July). *Master audit program - testing of paid vouchers, version 6.0.* <https://www.dcaa.mil/Portals/88/11015%20Testing%20of%20Paid%20Vouchers%20AP%20%28508F%29.pdf>
- Defense Contract Audit Agency. (2021, March 31). *Report to congress on fy 2020 activities defense contract audit agency.*
- Defense Contract Audit Agency. (2022a, January). Audit of contractor compliance with Defense Federal Acquisition Regulation supplement for contractor business systems and subsystems *Contract audit manual* (DCAAM 7640.1) https://www.dcaa.mil/Portals/88/Documents/Guidance/CAM/Chapter%205%20DFARS%20Business%20Sys%2001_06_2022.pdf?ver=gYwaCBN1Ydp_L_8mpWPF1w%3d%3d
- Defense Contract Audit Agency. (2022b, Feb). Introduction to contract audit *Contract audit manual* (DCAAM 7640.1). <https://www.dcaa.mil/Guidance/CAM-Contract-Audit-Manual/>
- Defense Contract Audit Agency. (2022c, March). Incurred cost audit procedures *Contract audit manual* (DCAAM 7640.1). <https://www.dcaa.mil/Guidance/CAM-Contract-Audit-Manual/>



- Defense Contract Management Agency. (2018, June). *Final voucher overview and cumulative allowable costs on final vouchers*. <https://360.intranet.dcm.mil/Sites/Policy/PA/SitePages/2101-02r.aspx>
- Defense Contract Management Agency. (2019a, March 3). *Contract audit follow-up policy manual* (DCMA-MAN 2201–04). <https://360.intranet.dcm.mil/Sites/Policy/IC/SitePages/DCMA-MAN%202201-04r.aspx>
- Defense Contract Management Agency. (2019b, April 28). *Contractor business systems policy manual* (DCMA-MAN 2301–01). <https://360.intranet.dcm.mil/Sites/Policy/CE/SitePages/2301-01r.aspx>
- Defense Contract Management Agency. (2019c, December 19). *Contract closeout policy manual* (DCMA-MAN 2501–07). <https://360.intranet.dcm.mil/Sites/Policy/CM/SitePages/2501-07r.aspx>
- Defense Contract Management Agency. (2021a, February). *Progress payment multifunctional guidebook*. <https://360.intranet.dcm.mil/Sites/Policy/PA/SitePages/2101-02r.aspx>
- Defense Contract Management Agency. (2021b, May). *Fiscal year 2022 president's budget*. <https://comptroller.defense.gov/Budget-Materials/FY2022BudgetJustification/>
- Defense Contract Management Agency. (2021c, December 20). *Final indirect cost rates policy manual* (DCMA-MAN 2201–03). <https://360.intranet.dcm.mil/Sites/Policy/IC/SitePages/DCMA-MAN%202201-03r.aspx>
- Defense Contract Management Agency. (2021d, December 20). *Payments* (DCMA Manual 2101–02). <https://360.intranet.dcm.mil/Sites/Policy/PA/SitePages/2101-02r.aspx>
- DFARS 216.1, Selecting Contract Types (2022). <https://www.acquisition.gov/dfars/part-216-types-contracts>
- DFARS 234.201, Earned Value Management System Policy. (2022). <https://www.acquisition.gov/dfars/part-234-major-system-acquisition#DFARS-234.201>
- DFARS 242.705, Final Indirect Cost Rates (2022). <https://www.acquisition.gov/dfars/part-242-contract-administration#DFARS-242.705>
- DFARS 252.242-7006, Accounting System Administration (2012, Feb). <https://www.acquisition.gov/dfars/part-252-solicitation-provisions-and-contract-clauses#DFARS-252.242-7006>



- DFARS PGI 216, Selecting Contract Types (2022). <https://www.acquisition.gov/dfarspgi/pgi-part-216-types-contracts>
- DFARS PGI 234.201, Earned Value Management System Policy. (2022). https://www.acquisition.gov/dfarspgi/pgi-234.201-policy.#DFARS-PGI_PGI_234.201
- Department of Defense. (2015, April 15). *Policy for follow-up on contract audit reports* (DOD Instruction 7640.02). <https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/764002p.pdf>
- Department of Defense. (2021, December 1). *Defense contract audit agency* (DOD Directive 5105.36). <https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodd/510536p.pdf>
- Defense Technical Information Center. (n.d.a). *Section 809 panel*. <https://discover.dtic.mil/section-809-panel/>
- DiNapoli, T.J. (2012, December). *Defense contracting: DOD initiative to address audit backlog shows promise, but additional management attention needed to close aging contracts* (GAO-13-131). Government Accountability Office.
- DiNapoli, T.J. (2017, September). *Federal contracting: additional management attention and action needed to close contracts and reduce audit backlog* (GAO-17-738). Government Accountability Office.
- DiNapoli, T.J. (2021, June 22). *A snapshot of government-wide contracting for fy 2020 (infographic)*. <https://www.gao.gov/blog/snapshot-government-wide-contracting-fy-2020-infographic>
- FAR Part 2, Definitions of Words and Terms (2022). <https://www.acquisition.gov/far/part-2>
- FAR 4.804-1, Closeout by the office administering the contract (2022). https://www.acquisition.gov/far/part-4#FAR_4_804_1
- FAR 16.1, Selecting Contract Types (2022). <https://www.acquisition.gov/far/part-16>
- FAR 16.3, Cost-Reimbursement Contracts (2022). https://www.acquisition.gov/far/part-16#FAR_Subpart_16_3
- FAR 32.001, Contract Financing - Definitions (2022). https://www.acquisition.gov/far/part-32#FAR_32_001
- FAR 32.102, Contract Financing - Definitions (2022). https://www.acquisition.gov/far/part-32#FAR_32_102



- FAR 42.302, Contract administration functions (2022). https://www.acquisition.gov/far/part-42#FAR_42_302.
- FAR 42.7, Indirect Cost Rates (2022). https://www.acquisition.gov/far/part-42#FAR_Subpart_42_7
- FAR 52.216-7, Allowable Cost AND Payment (2018, August). https://www.acquisition.gov/far/part-52#FAR_52_216_7
- National Contract Management Association. *Contract management body of knowledge* (6th edition). (2019).
- National Contract Management Association. *Contract management standard* (3rd edition). (2022). <https://ncmahq.org/Web/Web/Standards---Practices/Contract-Management-Standard-Publication.aspx>
- Needham, J. (2009, September). *Extent of federal spending under cost-reimbursement contracts unclear and key controls not always used* (GAO-09-921). Government Accountability Office.
- Oakley, S.S. (2020, May). *Cost-type-contracts - procedures needed for sharing information on contract choice among military departments* (GAO-20-352). Government Accountability Office.
- Office of the Under Secretary of Defense (OUSD) (2012, June 24). *Class deviation 2012-00013 - dcaa policy and procedure for sampling low-risk incurred cost proposals*. <https://www.acq.osd.mil/dpap/policy/policyvault/USA004064-12-DPAP.pdf>
- Office of the Under Secretary of Defense (OUSD). (2016, March). *Guidance on using incentive and other contract types*. <https://www.acq.osd.mil/dpap/policy/policyvault/USA001270-16-DPAP.pdf>
- Peach, J.D. (1991, October). *Energy management - contract audit problems create the potential for fraud, waste, and abuse* (GAO/RCED-92-11). Government Accountability Office.
- Power, M. (1996) Making things auditable *Accounting, organizations and society*, Vol. 21, No. 2, pp. 289–315. <https://www-sciencedirect-com.libproxy.nps.edu/journal/accounting-organizations-and-society/vol/21/issue/2>
- Rendon, J. M., and Rendon, R. G. (2015), Auditability in public procurement: An analysis of internal controls and fraud vulnerability, *International Journal of Procurement Management*, 8(6), 2015, pp 710–730.
- Rendon, R.G. (2015, July). Benchmarking contract management process maturity: A case study of the U.S. Navy. www.emeraldinsight.com/1463-5771.htm



Russell, W.W. (2021). *Fixed-price-incentive contracts: DOD has increased their use but should assess contributions to outcomes* (GAO-21-181). Government Accountability Office.

Section 809 Panel (2020, April 14). *List of section 809 panel recommendations*. <https://discover.dtic.mil/wp-content/uploads/809-Panel-2019/Promo-Outreach/ImplementationTracker.pdf>

Section 809 Panel (2019, January). *Report of the advisory panel on streamlining and codifying acquisition regulations*, Volume 3 of 3. https://discover.dtic.mil/wp-content/uploads/809-Panel-2019/Volume3/Recommendation_71.pdf

United States. Congress. House. Committee on Armed Services. (2017, December 12). *National defense authorization act for fiscal year 2016: Report of the committee on armed services, House Of Representatives On H.R. 2810*. <https://www.congress.gov/bill/115th-congress/house-bill/2810>





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