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Analysis of DFARS 252.242-7006 Accounting System Administration Significant Deficiencies

June 2024

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Department of Defense Management

Naval Postgraduate School

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ABSTRACT

This capstone research study presents an analysis of Defense Federal Acquisition Regulation Supplement 252.242-7006 Accounting System Administration within the Department of Defense (DOD). Addressing the critical gap in existing literature, this research study evaluates factors leading to significant deficiencies in contractor accounting systems, crucial for the DOD, which allocated $1.3 trillion dollars to contractors from fiscal years 2020 through 2022. Employing both qualitative and quantitative methodologies, this research examines data from the Defense Contract Management Agency's Contractor Business System Determination Timeline and the Electronic Document Records Management System Integrated Workload Management System. This research addresses four questions regarding audit report factors that lead to significant deficiencies, their relationship to Section 809 Panel Recommendation 72, auditor improvement recommendations, and the comparison between contractors' response and contracting officers' determinations. This study's significance is twofold. It advances the understanding of accounting system administration in government contracting, and it provides actionable insights for policy and practice enhancements. The findings aim to guide contractors in refining their accounting systems to avoid disapproval and minimize associated costs. Recommendations are provided based on findings.

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ABOUT THE AUTHOR

Christina Joseph has been dedicated to the Department of Defense since June 2008. She began her career as a Branch Manager at the Defense Contract Audit Agency and is currently serving as a Supervisory Contract Specialist at the Defense Contract Management Agency (DCMA). Christina graduated with a Bachelor's Degree in Accounting in 2008 and obtained her Certified Public Accountant (CPA) certification in 2010. Her professional journey is marked by a commitment to excellence in financial oversight and contract management within the DoD. Upon graduating from the Naval Postgraduate School, Christina plans to continue advancing her career goals with DCMA, leveraging her extensive experience and education to contribute to the agency's mission.

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TABLE OF CONTENTS

LIST OF FIGURES

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LIST OF TABLES

LIST OF ACRONYMS AND ABBREVIATIONS

ACRN	accounting classification reference number
AICPA	American Institute of Certified Public Accountants
ARF	audit report factors
ARI	auditors' recommendations for improvement
AU-C	AICPA Codification of Statements on Auditing Standards
CAGE	commercial and government entity
CAFU	Contract Audit Follow-Up
CAP	corrective action plan
CAR	corrective action request
CAS	Cost Accounting Standards
CASB	Cost Accounting Standards Board
CBAR	Contract Business Analysis Repository
CFR	Code of Federal Regulations
CLIN	contract line item number
COSO	Committee of Sponsoring Organization of the Treadway Commission
DARS	Defense Acquisition Regulations System
DCAA	Defense Contract Audit Agency
DCMA	Defense Contract Management Agency
DFAS	Defense Federal Acquisition Regulation Supplement
DOD	Department of Defense
eDRMS	Electronic Document Records Management System
FAR	Federal Acquisition Regulation
FY	fiscal year
GAAP	Generally Accepted Accounting Principles
GAAS	Generally Accepted Auditing Standards
GAGAS	Generally Accepted Government Auditing Standards
GAO	Government Accountability Office
GAS	Government Auditing Standards
IWMS	Integrated Workload Management System
NCMA	National Contract Management Association

NDAA	National Defense Authorization Act
NATO	North Atlantic Treaty Organization
PHM	Patrol Hydrofoil Missile
PCAOB	Public Company Accounting Oversight Board
PGI	Procedures, Guidance, and Information
POC	point of contact
S809	Section 809 Panel
SDC	significant deficiency category
SOCAR	statement of conditions and recommendations
TINA	Truth in Negotiations Act
U.S.C.	United States Code

I. INTRODUCTION

This chapter provides an overview of the Defense Federal Acquisition Regulation Supplement (DFARS) 252.242-7006 Accounting System Administration, outlining this study's purpose and presenting the research questions to be addressed. The methodology for researching these questions is detailed, along with a discussion of this research study's limitations and benefits. The chapter concludes with an outline and a summary of this research study. The next section provides a background of this research study.

A. BACKGROUND

The Department of Defense (DOD) is entrusted with the critical responsibility of ensuring national security and maintaining global stability. During fiscal year (FY) 2020 through FY 2022, the DOD obligated $1.3 trillion dollars to contractors in support of its operations. (USAspending, n.d.). These contractors are vital to the DOD's success, but DOD must navigate a complex regulatory environment, including the Cost Accounting Standards (CAS), Federal Acquisition Regulation (FAR), and DFARS. Given the magnitude of this financial commitment, it is essential for the DOD to ensure that the contractors' accounting systems are operating effectively to safeguard taxpayer dollars.

Section 893 of the National Defense Authorization Act (NDAA) for FY 2011 directed the DOD to "develop and initiate a program for the improvement of contractor business systems to ensure that such systems provide timely, reliable information for the management of Department of Defense" (NDAA, 2011, Sec. 893). Following the NDAA for FY 2011, the DOD implemented DFARS 252.242-7005 (2012) Contractor Business Systems, which outlines the requirements for contractors to maintain an acceptable contractor business system with CAS contracts. The DFARS 252.242-7005 (2012) Contractor Business Systems also defines significant deficiencies and penalties related to contractor business system disapprovals. The DFARS 252.242-7005 (2012) Contractor Business Systems identified six contractor business systems, which are the accounting systems, estimating systems, purchasing systems, earned value management systems, material management and accounting systems, property management systems, and the applicable clauses for the terms and conditions for each business system. The implementation of effective contractor business systems is essential for the success of the DOD procurement programs.

According to Ahadiat and Ehrenreich (1996), government regulations encompass specific requirements for contractor business systems, with an emphasis on accounting systems that ensure accurate and timely financial information. Ahadiat and Ehrenreich (1996) further emphasized that contractors must ensure their accounting systems are compliant with regulatory requirements, as noncompliance can lead to severe penalties, contract price reductions, disqualifications from future contracts, and even legal action.

This research study focuses on the contractors' business systems for the accounting system under the DFARS 252.242-7006 Accounting System Administration clause. One critical aspect of the DFARS 252.242-7006 Accounting System Administration implementation is the adequacy of the accounting system based on 18 system criteria, which ensures that the DOD receives accurate and reliable financial information (DFARS 252.242-7006, 2012). The integrity and reliability of contractors' accounting systems are crucial for the DOD when making contracting decisions during the contract-award phase and subsequent post-award phase because it ensures the government receives the best value for its investments (FAR 1, 2024).

The problem that inspired this research study is that despite the importance of contractors' accounting systems, there has been limited research on factors contributing to significant deficiencies and the potential impacts of those deficiencies on both contractors and the DOD. This research study seeks to address this gap by examining the requirements outlined in the DFARS 252.242-7006 Accounting System Administration, identifying common factors leading to significant deficiencies, and exploring potential improvements to enhance contractors' accounting system administration processes and overall compliance.

A potential factor that contributes to significant deficiencies could be that the 18 system criteria for the DFARS 252.242-7006 Accounting System Administration are subjective and immeasurable (Section 809 Panel, 2019). The Section 809 Panel (2019) recommended replacing the existing 18 system criteria with seven system criteria (p. 379). The Section 809 Panel (2019) recommendation considered the Committee of Sponsoring

Organizations of the Treadway Commission (COSO) *Internal Control – Integrated Framework* for the seven system criteria. This recommendation implies a more streamlined and objective approach to assessing system compliance. The ambiguity surrounding the existing 18 system criteria may pose challenges for contractors to effectively manage and maintain their accounting business systems, potentially resulting in disapprovals that could have been avoided.

In addition to replacing the existing 18 system criteria, the Section 809 Panel (2019) also recommended revising and aligning the business system deficiencies definitions with the private sector's Generally Accepted Auditing Standards (GAAS) definitions for *material weakness, significant deficiencies*, and *deficiencies*. According to the Section 809 Panel (2019),

> the definition of the term significant deficiency for contractor business systems in Section 893 of the FY 2011 NDAA and the DFARS does not align with generally accepted auditing standards for evaluating and reporting on internal control deficiencies. This lack of consistency creates confusion regarding the identification, severity, meaning, and resolution of deficiencies. (p. 381)

The DOD's deviation from significant deficiencies terminology can potentially create confusion in identifying, understanding, and addressing these deficiencies for both the contractors and the government.

Considering these challenges and the potential ramifications, this research study aims to analyze the DFARS 252.242-7006 Accounting System Administration to identify factors leading to significant deficiencies in the contractors' accounting systems, assess the potential adaption of the Section 809 Panel's recommendations, and ultimately propose recommendations to enhance the administration of contractor accounting systems and overall compliance. Given the background and complexities surrounding the DFARS 252.242-7006 Accounting System Administration, it becomes evident that a closer analysis of these issues is needed. The next section discusses the purpose of the research study.

B. PURPOSE OF RESEARCH

The purpose of this research study is to analyze the DFARS 252.242-7006 Accounting System Administration significant deficiencies with the 18 system criteria as identified in Defense Contract Audit Agency (DCAA) audit reports and Defense Contract Management Agency (DCMA) Administrative Contracting Officers' (hereafter referred to as "contracting officer") initial determination and final determination documents to identify possible reasons for significant deficiencies and identify trends or patterns that emerge. The next section discusses the research questions.

C. RESEARCH QUESTIONS

This research study includes the following four questions:

1. What are the most common audit report factors that result in significant deficiencies per the DFARS 252.242-7006 Accounting System Administration 18 system criteria?
2. How do the audit report factors resulting in significant deficiencies align or diverge with Section 809 Panel Recommendation 72 for seven system criteria in the context of the COSO *Internal Control – Integrated Framework*?
3. What are the most common auditors' recommendations for contractors to improve their accounting system administration processes and avoid disapproval in the future?
4. What do the comparisons between the contractors' responses to the contracting officers' initial determinations of significant deficiencies and the contracting officers' final determinations reveal?

The next section discusses the methodology used for this research study for the analysis of the DFARS 252.242-7006 Accounting System Administration.

D. METHODOLOGY

The methodology for this research study involves a qualitative and quantitative analysis of data obtained from the DCMA's Contractor Business System Determination Timeline Excel Tracking Tool (hereafter referred to as the "CBS Tracking Tool") and the Electronic Document Records Management System (eDRMS) Integrated Workload Management System (IWMS). Specifically, the primary sources of data used in this research study were the DCMA contracting officers' initial determination and final determination documents on the contractors' accounting system approval/disapproval based on significant deficiency findings from the DCAA audit reports.

The research study methodology involved collecting and analyzing data during the government FY 2020 through FY 2022, in which the DCMA Eastern Region received 465 accounting system audit reports. Of these audit reports, 47 contracting officers' initial determinations concluded that significant deficiencies existed within the contractors' accounting systems. For this research study, no personally identifiable information was collected or reviewed. Furthermore, the Institutional Review Board of the Naval Postgraduate School has determined that this research study does not include human subject research.

The data analysis used a mixed-method approach, integrating both qualitative and quantitative techniques, to address the four research questions. This approach facilitated the examination of the DCMA contracting officers' initial determinations and final determinations evaluation of the contractor's response to significant deficiencies within the DFARS 252.242-7006 Accounting System Administration. The methodology included data preparation, coding, and categorization to provide a comprehensive understanding of the identified significant deficiencies. Overall, the methodology provides a comprehensive approach for this research study. The limitations of the research study are discussed in the next section.

E. LIMITATIONS OF RESEARCH

This research study has several limitations. Firstly, the data collected from the DCMA Eastern Region might not be representative of the entire DOD or DCMA. Secondly, this research study only analyzed data from the government FY 2020 through FY 2022, which may not provide a complete picture of trends over time. Thirdly, this research study's reliance on the availability and quality of the DCAA audit reports and the DCMA contracting officers' initial determination and final determination documents may affect the validity of the findings if these documents are inaccurate or inconsistent. Lastly, this research study is limited to identifying significant deficiencies and does not explore potential impacts of these deficiencies on government operations or contractor performance. Despite these limitations, this research study offers valuable insights into the current state of accounting system administration processes in government contracting and serves as a foundation for future research seeking to expand upon these findings or explore other related areas. The next section discusses the benefits of this research study.

F. BENEFITS OF RESEARCH

This research study is important because it aims to enhance comprehension of the present state of the accounting system administration process in government contracting and to provide valuable insights into potential policy and practice improvements. This research aims to identify common trends or patterns leading to significant deficiencies in the contractors' accounting systems in accordance with the DFARS 252.242-7006 Accounting System Administration. It offers insight to help contractors improve their accounting system administration processes, avoid future system disapproval, and minimize associated costs. Moreover, it reviews auditors' recommendations for accounting system improvement, enabling contractors to proactively rectify deficiencies.

This research study can also help government organizations with their overall surveillance and evaluation of contractors' accounting systems to ensure adequacy and compliance with the DFARS clause. By examining the gaps and alignments between audit reports and the Section 809 Panel's seven system criteria recommendations, this study also contributes to government policy-making discussions. The analysis of DCMA contracting officers' initial determination and final determination documents sheds light on the effectiveness of corrective actions and highlights ongoing compliance issues. The organization of this research study is discussed in the next section.

G. ORGANIZATION

This report is organized into five chapters. Chapter I introduced the relevant background for the DFARS 252.242-7006 Accounting System Administration. Also, included is the study's purpose and the four research questions to be addressed. The methodology for researching these questions is detailed, along with a discussion of the research limitations and benefits. Chapter II provides a literature review of the laws and regulations, Section 809 Panel recommendations, auditability theory, the COSO (2013) *Internal Control – Integrated Framework*, agency theory, contract management life cycle for accounting systems, and the DCAA and DCMA responsibilities in accounting system administration. Chapter III details the methodology used, data sources, and analysis techniques. It also includes a discussion of the limitations of this research study. Chapter IV presents the analysis, findings, implications, and recommendations based on findings for this research study. Chapter V concludes with a summary, conclusions, and suggestions for future research. The next section provides a summary of this chapter.

H. SUMMARY

Chapter I provided background information related to the analysis of the DFARS 252.242-7006 (2012) Accounting System Administration significant deficiencies. With the DOD allocating significant funding for their operations, this chapter described the importance of contractors maintaining an adequate accounting system for compliance with the DFARS 252.242-7006 Accounting System Administration. This chapter included a discussion of the purpose of this research study and a presentation of the specific research questions. There was also an overview of a mixed-method approach that integrated both qualitative and quantitative methodologies utilized in this research study to analyze data from the DCAA audit reports and the DCMA contracting officers' initial determination and final determination documents. In addition, the chapter included an acknowledgement of the limitations, including the scope of data used and potential inconsistencies in the data, and it also highlighted numerous benefits of the research study. Finally, the chapter outlined the organization of this research study. The next chapter reviews literature pertinent to the DFARS 252.242-7006 Accounting System Administration significant deficiencies.

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II. LITERATURE REVIEW

A. INTRODUCTION

This chapter reviews the literature on contractor accounting system administration, focusing on identifying significant deficiencies with the DFARS 252.242-7006 Accounting System Administration. Initially, this chapter provides the relevant laws and regulations, including the motivations for implementing the DFARS 252.242-7006 Accounting System Administration and the importance of adherence, along with insights from Section 809 Panel Recommendations 72 and 73. This chapter then introduces auditability theory as a foundational concept for this research study and discusses COSO's (2013) *Internal Control – Integrated Framework* to understand its role in accounting system governance.

Agency theory is also reviewed, establishing another theoretical base for this research study. The literature review discusses the contract management life cycle, detailing the specific implications for accounting system administration during the pre-award, award, and post-award phases. The subsequent section discusses the DCAA's audit process, particularly how it identifies and reports contractors' business systems significant deficiencies. Finally, this chapter reviews the DCMA's policies and procedures, highlighting the agency's role in oversight of contractors' compliance with the DFARS 252.242-7006 Accounting System Administration and its relationship with the DCAA. The following section presents the laws and regulations related to the DFARS 252.242-7006 Accounting System Administration and Section 809 Panel Recommendations 72 and 73.

B. LAWS AND REGULATIONS APPLICABLE TO ACCOUNTING SYSTEMS AND THE SECTION 809 PANEL RECOMMENDATIONS

The Truth in Negotiations Act (TINA) of 1962 played a crucial role in shaping the criteria for an acceptable contractor business system. TINA was enacted to address concerns regarding the accuracy of cost and pricing data provided by contractors during negotiations, ultimately ensuring that the government pays a fair and reasonable price for goods and services (Roback, 1968). TINA mandates contractors to disclose cost and pricing data, which includes both direct and indirect costs, for the negotiation of contracts exceeding a specified threshold (FAR 15, 2024). This requirement is intended to enable the government to assess the reasonableness of the proposed contract price, thus reducing the likelihood of overpayment (Feldman, 1988). By mandating accurate and reliable cost data from contractors, TINA has indirectly contributed to the development of contractor business system regulations.

In addition to TINA, the CAS, governed by the Cost Accounting Standards Board (CASB), also influenced contractors’ accounting systems within the defense contracting landscape. The CAS was established to promote uniformity and consistency in accounting practices for contractors engaging with the federal government (Contract Coverage, 2024). The CAS guidelines describe the allocation of costs for contracts and mandate the adherence to specified accounting methods, providing a foundation upon which contractor business system regulations are built (Contract Coverage, 2024). Furthermore, the CAS promotes a layer of financial transparency and integrity, safeguarding the government’s fiscal interests by ensuring that pricing and incurred costs are verifiable and aligned with agreed-upon accounting practices (Contract Coverage, 2024).

Another significant regulation that has influenced the need for contractor business system regulations is the FAR (FAR 1, 2024). The FAR provides a uniform set of policies and procedures for the acquisition of goods and services by federal agencies, including the DOD (FAR 1, 2024). Specifically, FAR Part 31 (2024) includes requirements for contractor accounting systems, such as the need to comply with CAS and Generally Accepted Accounting Principles (GAAP). By stipulating that contractors must comply with CAS and GAAP, FAR Part 31 (2024) lays the groundwork for the more detailed criteria for contractors to maintain an acceptable accounting system (DFARS 252.242-7005, 2012).

Building on the regulatory groundwork established by TINA, CAS, and the FAR, the NDAA of FY 2011 further emphasized the need for robust contractor business systems. Section 893 of the NDAA for FY 2011 introduced provisions that enhanced oversight, strengthened controls, and required the development of clear system criteria for evaluating the adequacy of contractors' business systems, leading to the creation of the DFARS 252.242-7005 Contractor Business Systems (NDAA, 2011).

The DFARS 252.242-7005 (2012) Contractor Business Systems clause applies to CAS contracts with the DOD. Presented in Table 1 are the six contractor business systems that require compliance with each contract clause's terms and conditions (DFARS 252.242-7005, 2012). This research study focuses on the DFARS 252.242-7006 Accounting System Administration clause.

Table 1. Six Contractor Business Systems. Source: DFARS 252.242-7005 (2012).

"(1) Accounting system, if this contract includes the clause at 252.242-7006, Accounting System Administration;
(2) Earned value management system, if this contract includes the clause at 252.234-7002, Earned Value Management System;
(3) Estimating system, if this contract includes the clause at 252.215-7002, Cost Estimating System Requirements;
(4) Material management and accounting system, if this contract includes the clause at 252.242-7004, Material Management and Accounting System;
(5) Property management system, if this contract includes the clause at 252.245-7003, Contractor Property Management System Administration; and
(6) Purchasing system, if this contract includes the clause at 252.244-7001, Contractor Purchasing System Administration." (DFARS 252.242-7005, 2012)

The DFARS 252.242-7005 (2012) Contractor Business Systems clause establishes requirements for contractor business systems to provide accurate, reliable, and timely information for the government. It also specifies the need for contractors to maintain internal controls that reasonably ensure system effectiveness, compliance with applicable laws and regulations, and protection of the government's interests (DFARS 252.242-7005, 2012). If a contractor's business system is found to be significantly deficient according to these requirements, the contracting officer will issue a "final determination with a notice to withhold payments" under the terms of the contract (DFARS 252.242-7005, 2012). The withholding of payment applies exclusively to CAS contracts containing the DFARS 252.242-7005 Contractor Business System clause. Table 2 identifies contracts that are exempt from the CAS requirements, and thus, the DFARS 252.242-7005 Contractor Business Systems payment withholds do not apply to these contracts.

Table 2. CAS Exempt Contracts. Source: Contract Coverage (2024).

"(1) Sealed bid contracts.
(2) Negotiated contracts and subcontracts not in excess of the Truth in Negotiations Act (TINA) threshold, as adjusted for inflation (41 U.S.C. 1908 and 41 U.S.C. 1502(b)(1)(B)). For the purposes of this paragraph (b)(2), an order issued by one segment to another segment shall be treated as a subcontract.
(3) Contracts and subcontracts with small businesses.
(4) Contracts and subcontracts with foreign governments or their agents or instrumentalities or, insofar as the requirements of CAS other than 9904.401 and 9904.402 are concerned, any contract or subcontract awarded to a foreign concern.
(5) Contracts and subcontracts in which the price is set by law or regulation.
(6) Contracts and subcontracts authorized in 48 CFR 12.207 for the acquisition of commercial items.
(7) Contracts or subcontracts of less than $7.5 million, provided that, at the time of award, the business unit of the contractor or subcontractor is not currently performing any CAS-covered contracts or subcontracts valued at $7.5 million or greater.
(8) (12) [Reserved]
(13) Subcontractors under the NATO PHM Ship program to be performed outside the United States by a foreign concern.
(14) [Reserved]
(15) Firm-fixed-price contracts or subcontracts awarded on the basis of adequate price competition without submission of certified cost or pricing data." (Contract Coverage, 2024)

Note: Acronyms listed in Table 2 not previously defined include United States Code (U.S.C.), Code of Federal Regulations (CFR), and North Atlantic Treaty Organization (NATO) Patrol Hydrofoil Missile (PHM).

This research highlights the importance of the "contracts and subcontracts with small businesses" exemption under the CAS (Contract Coverage, 2024). The government is precluded from withholding payments from small businesses based on significant deficiencies in their accounting systems because of this CAS exemption (DFARS 252.242-7005, 2012). Instead, small businesses risk not being awarded contracts identified in Table 3 if their business systems are deemed inadequate (DFARS 252.242-7005, 2012). This exemption is particularly relevant to this study's fourth research question, which investigates how contractors responded to the DCMA contracting officers' initial determinations and final determinations that resulted in a disapproval of the accounting system.

This research focuses on analyzing significant deficiencies in the 18 criteria of the DFARS 252.242-7006 Accounting System Administration, a key regulation alongside the

DFARS 252.242-7005 Contractor Business Systems. The DFARS 252.242-7006 (2012) Accounting System Administration clause mandate contractors to maintain an adequate accounting system that meets the 18 system criteria when awarded DOD contracts listed in Table 3.

Table 3. Contract Types for DFARS 252.242-7006 Accounting System Administration. Source: DFARS 242.7503 (2024).

"(a) A cost-reimbursement, incentive type, time-and-materials, or labor-hour contract; or
(b) A contract with progress payments made on the basis of costs incurred by the contractor or on a percentage or stage of completion." (DFARS 242.7503, 2024)

The DFARS 252.242-7006 (2012) Accounting System Administration 18 system criteria cover various aspects of a contractor's accounting system, including internal controls, cost segregations, cost accumulation and allocation, timekeeping, labor distribution, cost accounting information, billing, and adherence to relevant accounting standards. Compliance with these criteria is essential for contractors, as failure to comply could result in significant deficiencies leading to payment withholding or disqualification from contract award types identified in Table 3 (DFARS 252.242-7005, 2012). Specifically, the 18 system criteria of DFARS 252.242-7006(c) are listed in Table 4. The DFARS 252.242-7006 (2012) Accounting System Administration 18 system criteria form the basis for this research study to analyze significant deficiencies as they relate to the research questions and review of the DCAA audit reports and the DCMA contracting officers' initial determination and final determination documents.

Table 4. DFARS 252.242-7006 Accounting System Administration 18 System Criteria. Source: DFARS 252.242-7006 (2012).

"(1) A sound internal control environment, accounting framework, and organizational structure;
(2) Proper segregation of direct costs from indirect costs;
(3) Identification and accumulation of direct costs by contract;
(4) A logical and consistent method for the accumulation and allocation of indirect costs to intermediate and final cost objectives;
(5) Accumulation of costs under general ledger control;
(6) Reconciliation of subsidiary cost ledgers and cost objectives to general ledger;
(7) Approval and documentation of adjusting entries;

(8) Management reviews or internal audits of the system to ensure compliance with the Contractor's established policies, procedures, and accounting practices;
(9) A timekeeping system that identifies employees' labor by intermediate or final cost objectives;
(10) A labor distribution system that charges direct and indirect labor to the appropriate cost objectives;
(11) Interim (at least monthly) determination of costs charged to a contract through routine posting of books of account;
(12) Exclusion from costs charged to Government contracts of amounts which are not allowable in terms of Federal Acquisition Regulation (FAR) part 31, Contract Cost Principles and Procedures, and other contract provisions;
(13) Identification of costs by contract line item and by units (as if each unit or line item were a separate contract), if required by the contract;
(14) Segregation of preproduction costs from production costs, as applicable;
(15) Cost accounting information, as required— (i) By contract clauses concerning limitation of cost (FAR 52.232-20), limitation of funds (FAR 52.232-22), or allowable cost and payment (FAR 52.216-7); and (ii) To readily calculate indirect cost rates from the books of accounts;
(16) Billings that can be reconciled to the cost accounts for both current and cumulative amounts claimed and comply with contract terms;
(17) Adequate, reliable data for use in pricing follow-on acquisitions; and
(18) Accounting practices in accordance with standards promulgated by the Cost Accounting Standards Board, if applicable, otherwise, Generally Accepted Accounting Principles." (DFARS 252.242-7006, 2012)

Building on the foundation set by the DFARS 252.242-7006 Accounting System Administration and the growing recognition of the need to address significant deficiencies in contractor business systems, the DOD sought further enhancements to its acquisition process. Section 809 of the NDAA for FY 2016 marked a substantial development in the DOD's approach to acquisition regulations, policies, and procedures by establishing the Section 809 Panel (NDAA, 2015). As an independent advisory body, the Section 809 Panel was tasked with reviewing and making recommendations on the DOD's acquisition process with the objective of "streamlining and improving the efficiency and effectiveness of the defense acquisition process" (Section 809 Panel, 2017, p. 38). This research study reviewed two key Section 809 Panel Recommendations, 72 and 73, which recommended improvement to the DFARS 252.242 7006 Accounting System Administration criteria and the definition of significant deficiency (Section 809 Panel, 2019).

Section 809 Panel (2019) Recommendation 72 aims to reform the DOD acquisition process by reducing the existing 18 accounting system criteria to seven, outlined in Table 5. This change is intended to simplify the accounting system evaluation process, reduce the burden on contractors, and improve the overall efficiency of the acquisition system (Section 809 Panel, 2018). These system criteria form the basis of this research study to align the Section 809 Panel Recommendation 72 for seven system criteria with the DFARS 252.242-7006 Accounting System Administration 18 system criteria with the significant deficiencies identified in the DCAA audit reports.

Table 5. Section 809 Panel Recommendation 72: Seven System Criteria. Source: Section 809 Panel (2019).

"(1) Direct costs and indirect costs are classified in accordance with contract terms, FAR, Cost Accounting Standards (CAS) and other regulations, as applicable.
(2) Direct costs are identified and accumulated by contract in accordance with contract terms, FAR, CAS and other regulations, as applicable.
(3) Methods are established to accumulate and allocate indirect costs to contracts in accordance with contract terms, FAR, CAS and other regulations, as applicable.
(4) General ledger control accounts accurately reflect all transactions recorded in subsidiary ledgers and/or other information systems that either integrate or interface with the general ledger including, but not limited to, timekeeping, labor cost distribution, fixed assets, accounts payable, project costs, and inventory.
(5) Adjustments to the general ledger, subsidiary ledgers, or other information systems bearing on the determination of contract costs (e.g., adjusting journal entries, reclassification journal entries, cost transfers, etc.) are done for reasons that do not violate contract terms, FAR, CAS, and other regulations, as applicable.
(6) Identification and treatment of unallowable costs are accomplished in accordance with contract terms, FAR, CAS, and other regulations, as applicable.
(7) Billings are prepared in accordance with contract terms, FAR, CAS, and other regulations, as applicable." (Section 809 Panel, 2019, pp. 380–381)

The inclusion of Section 809 Panel Recommendation 72 adds an important layer to this research study. Recommendation 72 utilize COSO's (2013) *Internal Control – Integrated Framework* (Section 809 Panel, 2018, 2019). For the private sector, the Public Company Accounting Oversight Board (PCAOB; 2023) Auditing Standards 2201 requires an integrated audit approach using the COSO (2013) *Internal Control – Integrated Framework*. The Government Accountability Office (GAO, 2014) adopted the COSO (2013) *Internal Control – Integrated Framework* into its *Standards for Internal Control in the Federal Government,* also known as the Green Book.

As previously mentioned, the Section 809 Panel's recommendation of the seven system criteria is based on the private sector COSO's *Internal Control – Integrated Framework* (Section 809 Panel, 2018, 2019). The Section 809 Panel proposed seven system criteria could be valuable with the NDAA for FY 2017 (2016) amendment of Section 893 of the NDAA for FY 2011, which called for the DOD to provide ''clear and specific business system requirements that are identified and made publicly available'' to allow for "third-party independent auditor reviews" of the contractors' business systems (Sec. 893).

Integrating COSO's (2013) *Internal Control – Integrated Framework* into DFARS 252.242-7006 (2012) Accounting System Administration can potentially enhance the reliability and efficiency of contractors' accounting systems by ensuring robust internal control mechanisms. The government's adoption of COSO's (2013) *Internal Control – Integrated Framework*, as reflected in the GAO's (2014) Green Book, signifies the framework's practicality and effectiveness in ensuring financial control and accountability. The second research question of this study, examining how audit report factors resulting in significant deficiencies align or diverge from Section 809 Panel (2019) Recommendation 72 for seven system criteria within the COSO *Internal Control – Integrated Framework*, can provide valuable insights. Specifically, it may reveal how the implementation of Section 809 Panel Recommendation 72 could streamline compliance processes and reduce the risk of significant deficiencies by exploring the implications of adopting COSO's (2013) *Internal Control – Integrated Framework* within the defense contracting environment. Building on the potential benefits of integrating COSO's (2013) *Internal Control – Integrated Framework* into the DFARS contractor business system, this research next considers how the simplification recommended by the Section 809 Panel (2019) aligns with industry perspectives on regulatory burden by reviewing Husband and Nicholls' (2015) examination of current DFARS requirements and their impact on innovation and cost-effectiveness within the defense sector.

Husband and Nicholls (2015) argued that the DFARS contractor business system requirements can stifle innovation, impede the adoption of commercial technologies, and increase acquisition costs, ultimately affecting the DOD's ability to achieve its mission.

Section 809 Panel (2019) Recommendation 72 offers a more efficient and focused approach to assessing contractors' accounting systems, aligning with the insights provided by Husband and Nicholls (2015). By reducing the number of criteria from 18 to seven, the recommendation streamlines the evaluation process, thereby possibly reducing the administrative burden on contractors and potentially speeding up the acquisition process. This change can encourage innovation and competitiveness among contractors, as it allows them to focus more on their core competencies rather than on meeting an extensive list of requirements (Husband & Nicholls, 2015).

In addition to Recommendation 72, the Section 809 Panel (2019) also proposed changes to Recommendation 73 to further streamline the defense acquisition process by revising the definition of business system deficiencies to align with the private sector's GAAS, which was acknowledged in Section 806 of the William M. (Mac) Thornberry NDAA for FY 2021 (NDAA, 2021). The NDAA for FY 2021 amended Section 806 of the NDAA for FY 2011 to replace the term *significant deficiencies* with *material weaknesses* and provided clearer definitions (NDAA, 2021). Specifically, Table 6 presents Section 806 of the NDAA for FY 2021 definition of material weakness for contractor business systems.

Table 6. FY 2021 NDAA Material Weakness Definition. Source: NDAA (2021).

"(1) by striking 'significant deficiencies' both places it appears and inserting 'material weaknesses';
(2) by striking 'significant deficiency' each place it appears and inserting 'material weakness'; and
(3) by amending subsection (g)(4) to read as follows:
(4) The term 'material weakness' means a deficiency or combination of deficiencies in the internal control over information in contractor business systems, such that there is a reasonable possibility that a material misstatement of such information will not be prevented, or detected and corrected, on a timely basis. For purposes of this paragraph, a reasonable possibility exists when the likelihood of an event occurring— (A) is probable; or (B) is more than remote but less than likely.'' (NDAA, 2021, Sec. 806)

The DFARS 252.242-7006 Accounting System Administration and the private sector's GAAS present contrasting definitions of significant deficiency. The DFARS

252.242-7006 (2012) Accounting System Administration defines a significant deficiency as “a shortcoming in the system that materially affects the ability of officials of the Department of Defense to rely upon information produced by the system that is needed for management purposes.” In contrast, the private sector’s GAAS, as incorporated into the GAO’s (2021) *Government Auditing Standards* (GAS) or *Generally Accepted Government Auditing Standards* (GAGAS; commonly referred to as the Yellow Book), offers a definition aligned with Table 6 (DCAA, 2023; GAO, 2019; NDAA, 2021). The GAO’s GAS (2021) embraces the private sector’s GAAS for auditing contractors’ accounting systems (DCAA, 2023), a standard that the DFARS does not currently meet, according to the Section 809 Panel (2019). This inconsistency is important to understand for this research study because it can reveal potential disparities in interpretation among the contractors, DCAA auditors, and DCMA contracting officers.

As of March 15, 2024, DFARS Case Number 2021-D006, which pertains to Section 806 of the NDAA for FY 2021 (2021) draft proposed rule, has been under review since December 31, 2021, by the Defense Acquisition Regulations System (DARS) Regulatory Control Officer (DARS, 2024, p. 11). Consequently, the current DFARS definition of significant deficiency remains inconsistent with the definition provided by GAO’s GAS and the private sector’s GAAS (GAO, 2021, p. 137), a point of potential confusion in compliance between contractors and the government.

Moving from the regulatory inconsistencies to practical implications, Krieger (2015) presented the perspective of a small business owner in the defense industry and the challenges faced in becoming a prime contractor. The author outlined the complex regulations for an adequate accounting system mandated by government contracts. In contrast with the less demanding commercial sector, federal government contracting requirements are notably more rigorous, posing significant hurdles, particularly for smaller businesses. Krieger (2015) concluded that the stringent conditions for federal contracts act as deterrents for small enterprises aiming to take on a prime contractor status.

Krieger’s (2015) perspective and the Section 809 Panel (2019) recommendations shed light on the potential reasons behind the difficulties contractors face in maintaining compliance with the relevant laws and regulations. Moreover, Krieger's (2015) perspective emphasizes the need for simplifying and streamlining the government requirements to make the regulations more accessible for businesses of all sizes. By considering the challenges faced by contractors, particularly small businesses, in complying with extensive federal government contracting requirements, this research study may identify potential factors contributing to significant deficiencies in contractors' accounting systems. Furthermore, it may offer insights to both contractors and government organizations for improving the overall acquisition process and addressing the complexities associated with the requirement to maintain an acceptable accounting system with federal government contracts. The next section discusses auditability theory and explains the relationship between effective internal controls, competent personnel, and capable processes as it relates to this research study.

C. AUDITABILITY THEORY

The auditability triangle, as proposed by Rendon and Rendon (2015) in Figure 1, demonstrates the synergy between effective internal controls, competent personnel, and capable processes. Examining the three components of the auditability triangle helps frame the underlying issues contributing to significant deficiencies in the application of the DFARS 252.242-7006 Accounting System Administration.

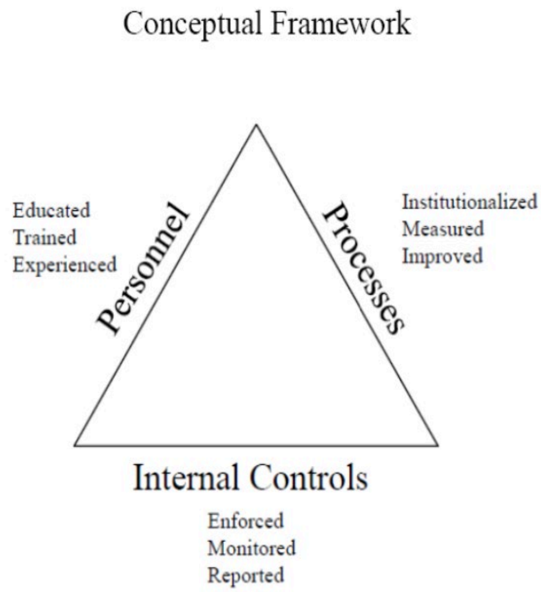

Figure 1. Auditability Triangle. Source: Rendon and Rendon (2015).

The first component, effective internal controls, is primary for ensuring that contractors' accounting procedures and financial practices adhere to the required government regulations (Rendon & Rendon, 2015). The COSO (2013) *Internal Control – Integrated Framework* is a model for establishing, assessing, and improving internal controls (Rendon & Rendon, 2015). It consists of five interconnected components: control environment, risk assessment, control activities, information and communication, and monitoring activities (COSO, 2013). These components align well with the principles supporting the auditability triangle, offering an integrated perspective on effective internal control systems (Rendon & Rendon, 2015). These controls guard against fraud and errors, and their effectiveness directly impacts the accuracy and reliability of the financial information generated by contractors (Rendon & Rendon, 2015). A lack of or weakness in these controls could potentially lead to significant deficiencies, thereby inhibiting the intended role of the DFARS 252.242-7006 Accounting System Administration.

The second component of the auditability triangle is competent personnel. The people involved in the administration of the accounting systems, who are primarily the DCAA auditors and the DCMA contracting officers, need to have a solid understanding of the DFARS 252.242-7006 Accounting System Administration, as well as the skills and knowledge to ensure compliance with system criteria (Rendon & Rendon, 2015). Such competence ensures that the contractors' system criteria are applied appropriately, and that the data generated for audits is reliable and accurate. The Defense Acquisition Workforce Improvement Act establishes the training and certification of DOD personnel (Rendon & Rendon, 2015). The competence of personnel plays a crucial role in preventing and reporting significant deficiencies and is integral to the study of the DFARS 252.242-7006 Accounting System Administration.

The third component of the auditability triangle, capable processes, refers to the effective accounting system procedures that the contractor has in place (Rendon & Rendon, 2015). Specifically, contractors need to be aware of the system criteria required for federal government contract requirements established by the CAS, FAR, and DFARS when they are awarded contracts that are listed in Table 3. The auditability triangle provides a comprehensive framework for the exploration of significant deficiencies in the DFARS 252.242-7006 Accounting System Administration. It highlights the interconnectedness of internal controls, personnel competence, and process capability, and emphasizes the necessity of these elements in ensuring compliance with regulations and avoiding significant deficiencies. The following section discusses the COSO (2013) *Internal Control – Integrated Framework*.

D. COSO INTERNAL CONTROL – INTEGRATED FRAMEWORK

Internal controls play a crucial role in ensuring the adequacy of contractors' accounting systems and their compliance with the DFARS 252.242-7006 Accounting System Administration. One widely accepted and applied framework for designing, implementing, and evaluating internal controls is the COSO (2013) *Internal Control – Integrated Framework*. The government's adoption of COSO's *Internal Control Framework*, as reflected in the GAO's (2014) Green Book, signifies the framework's practicality and effectiveness in ensuring financial control and accountability. This section of the literature review discusses the relevance of the COSO *Internal Control – Integrated Framework* in the context of the DFARS 252.242-7006 Accounting System Administrations.

The COSO (2013) *Internal Control – Integrated Framework* is a comprehensive approach to designing, implementing, and evaluating internal controls within an organization. The framework consists of five interrelated components: control environment, risk assessment, control activities, information and communication, and monitoring activities (COSO, 2013). The primary objective of the COSO (2013) *Internal Control – Integrated Framework* is to provide reasonable assurance that an organization's objectives are being achieved across three categories: operations, reporting, and compliance, which are displayed in Figure 2.

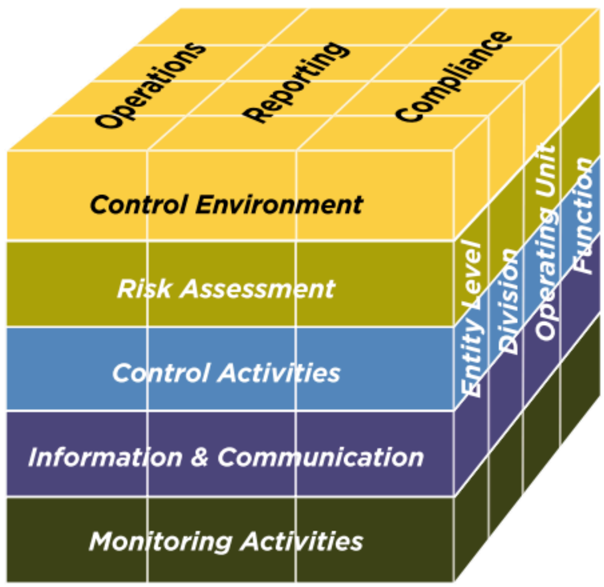

Figure 2. Relationship of Objectives and Components. Source: COSO (2013).

The framework outlines 17 principles that are linked to each component (COSO, 2013). Since these principles are derived from the components themselves, a contractor can establish robust internal controls by implementing all 17 principles listed in Table 7. These principles are relevant to operational, reporting, and compliance goals.

Table 7. 17 Principles of the COSO Internal Control – Integrated Framework. Source: COSO (2013).

Component	**Principle**
Control Environment	“1. The organization demonstrates a commitment to integrity and ethical values.
	2. The board of directors demonstrates independence from management and exercises oversight of the development and performance of internal control.
	3. Management establishes, with board oversight, structures, reporting lines, and appropriate authorities and responsibilities in the pursuit of objectives.
	4. The organization demonstrates a commitment to attract, develop, and retain competent individuals in alignment with objectives.
	5. The organization holds individuals accountable for their internal control responsibilities in the pursuit of objectives.
Risk Assessment	6. The organization specifies objectives with sufficient clarity to enable the identification and assessment of risks relating to objectives.
	7. The organization identifies risks to the achievement of its objectives across the entity and analyzes risks as a basis for determining how the risks should be managed.
	8. The organization considers the potential for fraud in assessing risks to the achievement of objectives.
	9. The organization identifies and assesses changes that could significantly impact the system of internal control.
Control Activities	10. The organization selects and develops control activities that contribute to the mitigation of risks to the achievement of objectives to acceptable levels.
	11. The organization selects and develops general control activities over technology to support the achievement of objectives.
	12. The organization deploys control activities through policies that establish what is expected and procedures that put policies into action.
Information and Communication	13. The organization obtains or generates and uses relevant, quality information to support the functioning of internal control.
	14. The organization internally communicates information, including objectives and responsibilities for internal control, necessary to support the functioning of internal control.
	15. The organization communicates with external parties regarding matters affecting the functioning of internal control.
Monitoring Activities	16. The organization selects, develops, and performs ongoing and/or separate evaluations to ascertain whether the components of internal control are present and functioning.
	17. The organization evaluates and communicates internal control deficiencies in a timely manner to those parties responsible for taking corrective action, including senior management and the board of directors, as appropriate.” (COSO, 2013, pp. 12–14)

The COSO (2013) *Internal Control – Integrated Framework* can be applied to contractor business systems to ensure compliance with the DFARS 252.242-7006 Accounting System Administration requirements and minimize the risk of significant deficiencies. The five components and 17 principles of the COSO (2013) *Internal Control – Integrated Framework* can be mapped to specific aspects of Table 4, DFARS 252.242-7006 Accounting System Administration 18 System Criteria, and Table 5, Section 809 Panel Recommendation 72: Seven System Criteria. This mapping serves as a critical aspect of this research study in understanding the audit factors that result in significant deficiencies and how they align or diverge with Section 809 Panel Recommendation 72. The following section discusses the concepts of agency theory to form a foundation for this research study.

E. AGENCY THEORY

In this research study, the agency theory (Rendon & Rendon, 2015) is used to understand the different objectives between the DOD, the DCMA, the DCAA, and contractors. These organizations interact in multiple principal–agent relationships, each with distinct objectives. The DOD, as the primary principal (Rendon & Rendon, 2015), relies on the DCMA for contract administration services (FAR 42.302, 2024) and the DCAA for audit services (FAR 42.1, 2024). Additionally, the DCMA acts as a principal when it requests audit functions from the DCAA (Rendon & Rendon, 2015). The contractor serves as an agent to both the DOD and the DCMA (Rendon & Rendon, 2015).

The DOD aims to ensure that contracts are effectively managed and closed out on time (FAR 42.302, 2024). The DCMA shares this goal and focuses on contracts requiring the DFARS 252.242-7006 Accounting System Administration compliance. The DCMA relies on the DCAA's auditing services to meet the DOD's objective of effectively managing contractors' compliance with the DFARS 252.242-7006 Accounting System Administration and timely contract closure (DCMA, 2019a). Without the audit, the DCMA's method of fulfilling the DOD's objective is weakened (Rendon & Rendon, 2015). Meanwhile, the contractor must balance the objectives of the DOD, the DCMA, and the DCAA with its own goals, which usually include profit-making, market share growth, cash flow increase, and business expansion (Cohen & Eimicke, 2008). A functioning principal–agent relationship is crucial to the contract management life cycle for accounting systems and is discussed further in the next section.

F. CONTRACT MANAGEMENT LIFE CYCLE FOR ACCOUNTING SYSTEMS

In the realm of accounting systems, contract management unfolds through a contract life cycle phase process, starting with the Pre-award phase, transitioning through the Award phase, and concluding with the Post-Award phase (National Contract Management Association [NCMA], 2019). This section of the research study explores these fundamental phases and their importance under the DFARS 252.242-7006 Accounting System Administration.

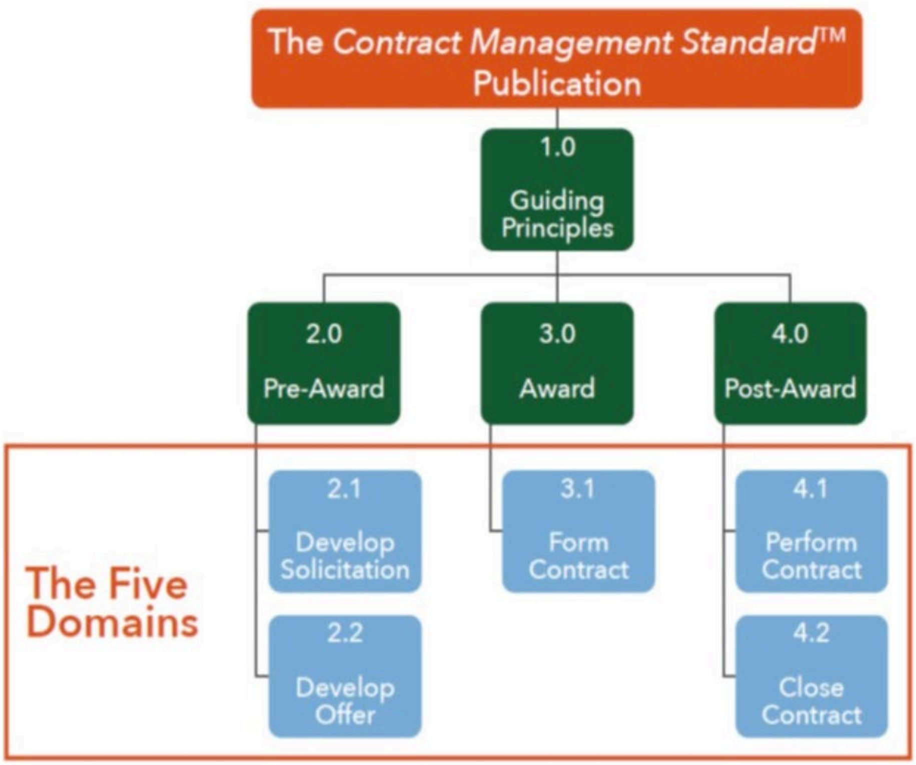

Figure 3. Five Domains of Contract Life-Cycle Phases. Source: NCMA (2019).

As described in the *Contract Management Body of Knowledge* (NCMA, 2019), the Pre-award phase encompasses activities preceding contract signing. The DOD, acting as the buyer, generates solicitations, with contractors serving as sellers preparing offers (NCMA, 2019, p. 126). Solicitations from the DOD will incorporate the DFARS 252.242-7006 Accounting System Administration clause when considering the certain types of contracts previously discussed in Table 3 (DFARS 242.7503, 2024). The Pre-award phase concludes with the DOD publicizing solicitation (FAR 5, 2024). The contract management process then transitions to the Award phase, where further evaluations of the contractor offer are conducted by the DOD and the status of the contractor's accounting system is assessed (NCMA, 2019).

In the Award phase, the DOD formally selects a contractor and negotiates the contract's terms, conditions, and obligations (NCMA, 2019). A critical activity during this phase is the assessment of the contractor's accounting system, conducted through the DCAA's pre-award survey using standard form 1408 (FAR 53.209-1, 2024). This survey examines the design of the prospective contractor's accounting system, focusing on cost segregation, cost allocation, and timekeeping compliance, as regulated by FAR and DCAA guidelines (DCAA, 2023; FAR 53.209-1, 2024). However, it does not evaluate the operational effectiveness, which is under the purview of the DFARS 252.242-7006 Accounting System Administration (DCAA, 2023). While essential for contract preparation, the Award phase itself is not the central subject of this research study.

The Post-Award phase incorporates contract administration activities such as monitoring contractor performance, ensuring compliance with terms and conditions, and contract closeout (NCMA, 2019). During this phase, contractors are required to maintain compliance with the DFARS 252.242-7006 (2012) Accounting System Administration 18 system criteria. Therefore, this phase is relevant to this research study. According to the *Contract Management Body of Knowledge* (NCMA, 2019), the contract award is followed by a post-award meeting, where both contract parties review the contract terms and conditions to ensure a shared understanding of roles and responsibilities. In the context of the DFARS 252.242-7006 Accounting System Administration, this meeting is critical to discuss the accounting system criteria and the roles of the DCAA and the DCMA. The DCAA, as designated by FAR 42.1 (2024), conducts the requisite audits, while the DCMA, according to FAR 42.302 (2024), oversees contract administration, ensuring compliance with DFARS 252.242-7006 Accounting System Administration.

Regular audits of the contractor's accounting systems are conducted by the DCAA and the DCMA during the Post-Award phase, specifically the Perform Contract domain (DCMA, 2019a). The objective of these audits is to determine ongoing compliance with the DFARS 252.242-7006 Accounting System Administration and identify potential risks or noncompliance issues (DCMA, 2019a). For instance, the contractor's accounting systems are checked for proper assignment of costs to cost objectives, the consistent application of direct and indirect costs, and the adequacy of labor distribution (DCAA, 2023). If significant deficiencies are found during these audits, the DCMA (2019a) contracting officers will assess the audit findings and determine if the contractor may face penalties, including but not limited to financial fines. DCAA and DCMA responsibilities are discussed in more detail in subsequent sections.

G. DCAA AUDIT OF CONTRACTORS' ACCOUNTING SYSTEMS

The DCAA, as the primary auditing agency for the DOD (FAR 42.1, 2024), plays a critical role in the implementation of the DFARS 252.242-7006 Accounting System Administration by ensuring the contractor accounting systems are adequate for cost accounting, estimating, and billing (DCAA, 2023). The DCAA utilizes GAO's GAGAS to guide their audits and may also use the private sector's GAAS (American Institute of Certified Public Accountants [AICPA], 2001; GAO, 2021).

Chapter 5 of the *DCAA Contract Audit Manual* provides specific guidance on performing audits of contractors' compliance with the DFARS 252.242-7005 Contractor Business Systems and the DFARS 252.242-7006 Accounting System Administration (DCAA, 2023). Section 5–110 within the chapter outlines the reporting requirements and emphasizes the importance of a well-written statement of conditions and recommendations (SOCAR) for identifying significant deficiencies (DCAA, 2023). The SOCAR, as detailed in the DCAA audit reports, aids the DCMA contracting officers in identifying noncompliance and requesting corrective measures, including withholding of payment where necessary until contractors resolve identified significant deficiencies (DCMA, 2019a; DCMA, 2022b). For this research study, analyzing the DCAA audit report's SOCAR section is critical for understanding the factors leading to significant deficiencies and auditors' recommendations to contractors for compliance with the DFARS 252.242-7006 Accounting System Administration. Figure 4 shows where the DCAA (2023) records instances of noncompliance in an audit report.

Condition	Exhibit	Appendix	Opinion Type
DFARS Significant Deficiency	X		Generally Adverse
DFARS Less Severe Significant Deficiency	X		Generally Qualified
Less than Material Noncompliance that Warrants Attention Of The Contracting Officer		X	Generally Unqualified

Figure 4. DCAA Audit Reporting for Noncompliance. Source: DCAA (2023).

Figure 4 illustrates the DCAA's approach to reporting noncompliance, correlating the severity of a DFARS deficiency with the type of audit opinion issued. An adverse opinion is typically associated with a significant deficiency under the DFARS, indicating a serious concern requiring immediate attention (DCAA, 2023). Despite the DCAA using GAO's GAGAS, which aligns with the private sector's GAAS terminology on significant deficiencies (AICPA, 2001; GAO, 2021), there seems to be a discrepancy in how the DCAA reports these deficiencies when compared to GAO's GAGAS and the private sector's GAAS guidelines. As previously discussed, the DFARS definition of significant deficiencies that generally results in an adverse audit opinion, does not align with the GAO's GAGAS and the private sector's GAAS definition and audit opinion (AICPA, 2001; DCAA, 2023; GAO 2021; Section 809 Panel, 2019). Generally, the private sector's GAAS material weakness results in an adverse opinion. A significant deficiency does not result in an adverse opinion. "This lack of consistency creates confusion regarding the identification, severity, meaning, and resolution of deficiencies" (Section 809 Panel, 2019, p. 381). This research study aims to provide valuable insights regarding the severity and meaning of significant deficiencies between contractors and government organizations.

The DCAA's (2019) presentation titled *Accounting System Requirements* offers an overview of the accounting system audit process, system evaluation criteria, and five common deficiencies often found in contractors' accounting systems, which are listed in Table 8.

Table 8. The DCAA's List of Five Common Deficiencies for Accounting Systems. Source: DCAA (2019).

"(1) Contractors not making Interim (at least monthly) determination of costs charged through routine positing to books of account.
(2) Failure to properly segregate direct and indirect costs.
(3) Improper timekeeping.
(4) Failure to exclude unallowable costs.
(5) Inadequate procedures to ensure that subcontractor and vendor costs are only included in billings if payment to subcontractor or vendor will be made in accordance with terms and conditions of the subcontract or invoice and ordinarily within 30 days of the contractor's payment request to the Government." (DCAA, 2019, pp. 34–35)

The DCAA's list of five common deficiencies for accounting systems serves as a benchmark for the analysis of the most common audit report factors resulting in significant deficiencies with the DFARS 252.242-7006 Accounting System Administration. The following section discusses the DCMA's roles and responsibilities, drawing on the DCMA (2019a, 2022b) *Surveillance* and *Contractor Business Systems* manuals for significant deficiencies.

H. DCMA CONTRACT ADMINISTRATION OF CONTRACTORS' ACCOUNTING SYSTEMS

The DCMA (2022b) *Surveillance* manual provides guidance on the agency's surveillance procedures for identifying, evaluating, and addressing significant deficiencies in contractors' accounting systems. The manual (DCMA, 2022b) emphasizes key aspects of the DCMA's surveillance responsibilities, as shown in Figure 5.

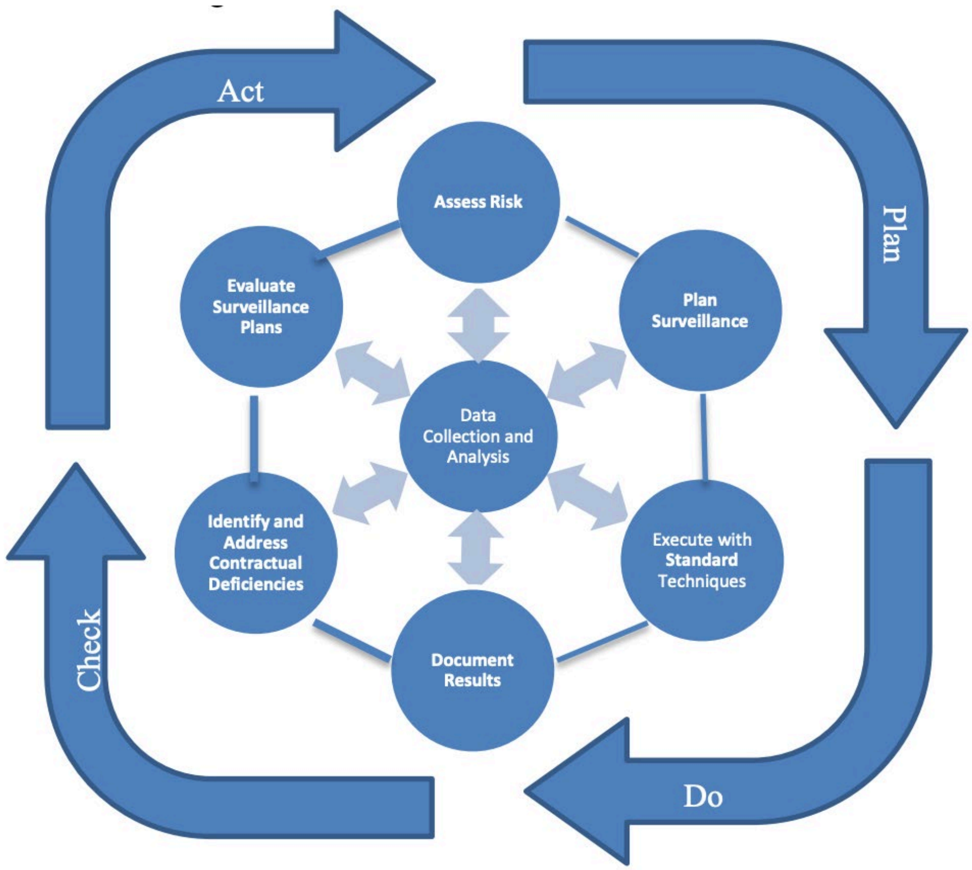

Figure 5. DCMA Surveillance Responsibilities. Source: DCMA (2022b).

The DCMA (2022b) uses a risk-based approach to prioritize surveillance efforts, focusing on high-risk areas where significant deficiencies are more likely to occur. This approach allows the agency to efficiently allocate resources and maintain effective oversight of contractors' accounting systems. The DCMA (2022b) works closely with the DCAA to share information relating to risk assessments and coordinate efforts in auditing and evaluating contractor accounting systems. This collaboration ensures a comprehensive and streamlined approach to identifying and addressing significant deficiencies. The review of the accounting system is conducted every 3 years by the DCAA (GAO, 2019; Loflin, 2020).

After the DCAA completes the accounting system audits, they issue an audit report to the DCMA. The DCMA (2022b) is responsible for documenting surveillance findings, including the identification of significant deficiencies, and communicating these findings to the contractor. This communication includes providing timely notifications to contractors and other government organizations, such as the DCAA, to facilitate the initial determinations and final determinations of significant deficiencies (DCMA, 2019a; 2022b). The severity of a deficiency within a contractor's accounting system determines the corresponding level of the corrective action request (CAR), with the various levels and their implications detailed in Table 9 (DCMA, 2022b).

Table 9. DCMA Corrective Acting Request Level. Source: DCMA (2022b).

CAR Level	Description
Level I CAR	"Describes a deficiency on a product of a process(es) and is not a symptomatic breakdown of a process or system.
Level II CAR	Describes deficiencies in a contractor process(es) that are not a breakdown of a system but are: (a) An escalation of Level I CARs indicating increasing process performance risk or (b) Multiple major or critical deficiencies on a product indicating a systemic issue throughout the process(es).
Level III CAR	Describes deficiencies in a contractor's system that are affecting a contract or program ability to meet cost, schedule or performance requirements and are: (a) A significant deficiency pursuant to DFARS 252.242-7005, "Contractor Business Systems" or (b) a failure to respond to a lower level CAR, or to remedy a recurring noncompliance. (c) A Level III CAR may result in the initiation of available contractual remedies, such as reductions of payments, cost disallowances, revocation of government assumption of risk of loss, or business management systems disapprovals, etc.
Level IV CAR	Issued to the contractor's business segment or corporate management when the contractual deficiency is of a serious nature or when a Level III CAR has been ineffective. A Level IV CAR will result in a mandatory review of available contractual remedies, such as cost disallowance, reduction or suspension of payments, revocation of government assumption of risk of loss, contractor business system disapproval, or suspension of all product acceptance activities. Contractual remedies will be implemented in accordance with applicable FAR/DFARS clauses and/or DCMA manuals. Action to suspend product acceptance will be accomplished via a Level IV CAR." (DCMA, 2022b. p. 33)

Based on Table 9, a Level III CAR is issued to the contractor by the DCMA contracting officer in response to a DCAA audit that identifies significant deficiencies (DCMA, 2022b). The contractor is then required to submit an adequate corrective action plan (CAP) within 45 days (DCMA, 2022b). The DCMA (2022b) contracting officer reviews the CAP and, upon acceptance, verifies the implemented actions. If the CAP is validated, the CAR is closed; if not, it can lead to the business system's disapproval

(DCMA, 2022b). In addition, Table 10 describes the “required criteria a contractor’s response/CAP must contain” (DCMA, 2022b, p. 38).

Table 10. Corrective Action Plan Required Criteria. Source: DCMA (2022b).

• “Root cause of the deficiency if required
• Actions taken to correct the current specific deficiency
• Corrective Action taken or planned to eliminate deficiency
• Action taken to prevent recurrence of the deficiency o What controls have been implemented to ensure financial/costs/products/services to be provided to the government for acceptance are not deficient
• Target date(s) for implementation of planned actions
• Determination of whether other processes, financials, costs, products, services are affected by the identified root cause, including product already delivered to the customer” (DCMA, 2022b, pp. 38–39)

This CAP process is central to this research as it informs the DCMA contracting officers’ decision-making concerning contractor accounting system approvals, particularly in the context of draft Level III CARs issued by the DCMA contracting officers during the initial determination. The surveillance and evaluation of contractor business systems are also guided by the DCMA (2019a) *Contractor Business Systems* manual.

The DCMA (2019a) *Contractor Business Systems* manual and DFARS Procedures, Guidance, and Information (PGI) 242.75 Contractor Accounting Systems and Related Controls (2024), outlines the agency’s approach to evaluating contractor business systems, including accounting systems, to ensure their adequacy and compliance with DFARS requirements. Table 11 highlights the manual aspects and key aspects of DFARS PGI regarding the DCMA’s roles and responsibilities for receiving a DCAA audit report on significant deficiencies in the contractor’s accounting system under the DFARS 252.242-7006 Accounting System Administration.

Table 11. DCMA Contractor Business System Review Process. Adapted from DCMA (2019a) and DFARS PGI 242.75 (2024).

Step 1: Initial Review and Determination by DCMA Contracting Officer (10 days or 30 days) DCMA contracting officer assesses the DCAA audit report on DFARS 252.242-7006 for significant deficiencies. If in agreement with DCAA: (1) Confirm no significant deficiencies, then: - Inform the contractor in writing of accounting system approval within 10 days. (2) If significant deficiencies are identified, then notify the contractor in writing within 30 days detailing: - The relevant business system clause, number, paragraph, and criteria. - Specific details of the deficiency and its non-compliance. - How the deficiency impacts the government's reliance on the system information. - A request for the contractor's feedback within 30 days using an attached draft level III or IV CAR labeled "draft".
Step 2: Contractor's Response Period (30 days) Contractor has 30 days to: (1) Address each deficiency. (2) Provide reasons for any disagreements. (3) Optionally, share a corrective action plan.
Step 3: Final Determination by DCMA Contracting Officer (30 to 45 days) Within 30 to 45 days, the DCMA contracting officer reviews the contractor's feedback. (1) If a disagreement arises: - Notify the auditor in writing, provide reasons, and request a review board. (2) If deficiencies are resolved: - Issue a final determination approving the accounting systems. (3) If deficiencies persist: (a) Before issuing a final disapproval, send details to the DCMA Contractor Business System Panel for evaluation. (b) The final determination should: - Detail each deficiency. - Include the contractor's initial response. - Provide the contracting officer's analysis of the response. - Attach the finalized level III or IV CAR. - Ask the contractor for a corrective action plan within 45 days. - Assess if payment withholdings apply under DFARS 252.242-7005 and provide a list of affected contracts if necessary.

After the DCMA contracting officer issues the final determination, they must update the Contract Business Analysis Repository (CBAR), Contract Audit Follow-Up (CAFU), and the DCMA's (2019a) CBS Tracking Tool. The CBAR system is a web-based DOD data repository for contractor business system audit information. The DCMA (2019a) contracting officer uses CBAR to facilitate information exchange and effective communication among the acquisition community regarding contractors' business systems status. The contracting officer inputs the approval or disapproval of the contractors' accounting system in the CBAR (DCMA, 2019a).

The DCMA (2022a) CAFU system is an electronic system that tracks and records the DCMA contracting officers' actions for the initial determinations and final determinations of DCAA audit reports. The CAFU system is updated monthly with new records imported from the DCAA (DCMA, 2022a). The DCAA's audit reports on the contractor's business system audit are tracked in the CAFU system and the DCMA's CBS Tracking Tool (DCMA 2019a, 2022a). The DCMA CAFU and DCMA CBS Tracking Tool's initial determination and final determination processes of contractors' accounting system audit reports follow the same process discussed previously in the DCMA *Surveillance* and *Contractor Business Systems* manuals.

The DCMA's CBS Tracking Tool served as a basis for the research study to identify the DCAA audit reports for contractors' accounting systems that identified significant deficiencies and the DCMA contracting officers' initial determinations and final determinations. Having highlighted the important roles the CBAR, CAFU, and DCMA CBS Tracking Tool play in the process of the DCMA contracting officers' initial determinations and final determinations, this study transitions to the next section to summarize this chapter.

I. SUMMARY

In summary, this literature review provided a comprehensive overview of the regulatory landscape that governs the defense acquisition process, highlighting the role of key government agencies and legislations instrumental to this process. The NDAA for FY 2011 and FY 2016, the Section 809 Panel Recommendations 72 and 73, and the NDAA for FY 2021 amendments serve as the essential regulatory pillars offering substantial improvements to contractors' business systems evaluation and adherence to the DFARS 252.242.7006 Accounting System Administration system criteria.

This chapter discussed auditability theory, focusing on the three components: effective internal controls, competent personnel, and capable processes. The chapter further discussed the COSO’s (2013) *Internal Control – Integrated Framework* and its applications within the context of internal controls in contractor accounting systems. The chapter then discussed the different stages of the contract management life cycle for accounting systems, underlining the unique roles and functions at each stage as they relate to the DFARS 252.242-7006 Accounting System Administration. Next, the chapter discussed agency theory, establishing a foundation for understanding the dynamic interplay between the principal and the agent in the defense contracting landscape.

Furthermore, the chapter addressed the DCAA’s guidance for conducting audits of contractors’ business systems and the reporting requirements for identified significant deficiencies. Finally, the chapter discussed the DCMA’s policies and procedures for the oversight of contractor business system compliance with the DFARS 252.242-7006 Accounting System Administration. The next chapter discusses the methodological approach of this research study.

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III. METHODOLOGY

A. INTRODUCTION

This chapter describes the research methodology used in this research study, with a specific focus on the data sources, data access, data analysis, limitations of research, and summary. It provides details on two data sources, the DCMA's CBS Tracking Tool and eDRMS IWMS, followed by the process by which data from these sources were obtained for this research study. The Data Analysis section discusses the quantitative and qualitative methods to answer the four research questions. This chapter also includes a discussion of the possible limitations of the research study, followed by a summary of the chapter. The next section describes the data sources used in this research study.

B. DATA SOURCES

The data sources for this research study were selected based on their relevance to the research questions. The primary sources included the DCMA's CBS Tracking Tool for contractors' business systems and eDRMS IWMS to identify the DCAA audit reports and the contracting officers' initial determination and final determination documents for the DFARS 252.242-7006 Accounting System Administration significant deficiencies.

The DCMA's (2019a, 2022a) CBS Tracking Tool is used for tracking the contracting officers' initial determinations and final determinations. This tool includes fields such as DCMA region, system, commercial and government entity (CAGE), contractor name, audit report date, contracting officers' initial determination date, initial determination/approval of business system (Approved/Not Approved/No Determination Required), and final determination date (DCMA, 2022a). The DCMA's CBS Tracking Tool complements the data obtained from the CAFU system and offers additional insights into the DCMA (2022a) contracting officers' initial determinations and final determinations of significant deficiencies. Specifically, the tracking tool compiles data relating to contractors' business systems, such as accounting, material management accounting system, purchasing, estimating, and property management systems across the DCMA. It allows the DCMA to monitor the timeliness of contracting officers' initial determination and final determination issuances of contractor business system approval and disapproval (DCMA, 2019a). While the DCMA's CBS Tracking Tool and CAFU system are used to track and record audit reports, the DCMA (2021) also relies on another electronic system, the eDRMS IWMS, as its designated system of record for records management.

The eDRMS IWMS is the designated system of record for records management at the DCMA (2021). The DCMA is required to upload contract documents into eDRMS IWMS. The DCAA audit report, as well as the DCMA contracting officer's initial determination and final determination documents used in this research study, were obtained from the eDRMS IWMS. The eDRMS IWMS systems play a crucial role in supporting the DCMA's records management processes, ensuring that important documents and information are properly maintained and easily accessible to DCMA personnel (DCMA, 2019b, 2021). The following section discusses the process by which data from these electronic systems were obtained for this research study.

C. DATA ACCESS

As a supervisory contract specialist, the researcher coordinated with the DCMA general counsel to ensure that data access in this research was permissible as part of the researcher's official duties and would not be considered a misuse of government property. To obtain access to the DCMA's CBS Tracking Tool, the designated point of contact (POC) within the DCMA Eastern Region was contacted. After the researcher explained the purpose and scope of the research, the DCMA POC granted the researcher permission to access the DCMA's CBS Tracking Tool. In addition, the DCMA POC provided the researcher with the necessary guidance to navigate the DCMA's CBS Tracking Tool.

The DCMA's CBS Tracking Tool was filtered to only include the DCMA Eastern Region accounting system initial determination of "Not Approved" during FY 2020 through FY 2022. The data set comprises 465 accounting system audit reports submitted to the DCMA Eastern Region from FY 2020 through FY 2022. Out of these, 47 initial determinations "Not Approved," were identified as significant deficiencies within the contractors' accounting system. The identification of the 47 initial determinations "Not Approved," allowed the researcher to extract relevant data concerning the DCMA contracting officers' initial determinations and final determinations for contractors' business systems as well as other pertinent information related to the DCAA audit reports from the eDRMS IWMS record management system (DCMA, 2019a, 2021, 2022a). The researcher complied with all relevant DCMA guidelines for data handling and privacy (DCMA, 2019), securely managing information from the DCMA's CBS Tracking Tool and eDRMS IWMS in accordance with records management protocols. No personally identifiable information was collected or reviewed. Furthermore, the Institutional Review Board of the Naval Postgraduate School determined that this research study does not include human subject research. The following section discusses the data analysis for this research study.

D. DATA ANALYSIS

The data analysis section of this research study follows a systematic approach to examine the significant deficiencies and trends or patterns that emerge from the analysis of the DFARS 252.242-7006 Accounting System Administration 18 system criteria in the DCAA audit reports and the DCMA contracting officers' initial determination and final determination documents. The data analysis process involves a combination of quantitative and qualitative methods to answer the research questions and includes data preparation, coding, and categorization, which are discussed further in this section. The results of the data analysis are provided in the next chapter, which also includes a discussion of the text segment analyses and answers to the research questions.

Research Question 1: The researcher examined the most common audit report factors leading to significant deficiencies, as defined by the DFARS 252.242-7006 Accounting System Administration, through an examination of the DCAA audit reports and DCMA contracting officers' initial determination documents. The objective was to reveal the relationship between audit report factors and significant deficiencies with the 18 system criteria of the DFARS 252.242-7006 Accounting System Administration. The following chapter includes a cross-tabulation table of the patterns and relationships identified between audit report factors and significant deficiencies.

Research Question 2: The researcher assessed the extent to which the common audit report factors for significant deficiencies aligned or diverged with the Section 809

Panel Recommendation 72 for seven system criteria in the context of the COSO (2013) *Internal Control – Integrated Framework* by examining the DCAA audit reports and the DCMA contracting officers' initial determination documents. The text segments related to common audit report factors leading to significant deficiencies with the 18 system criteria of the DFARS 252.242-7006 Accounting System Administration, were compared to both the COSO (2013) *Internal Control – Integrated Framework* and the Section 809 Panel Recommendation 72 to identify points of alignment or deviation. The following chapter includes cross-tabulation tables of the patterns and relationships identified between common audit report factors leading to significant deficiencies with the Section 809 Panel Recommendation 72 in the context of the COSO (2013) *Internal Control – Integrated Framework*.

Research Question 3: The researcher determined the most common auditors' recommendations for contractors to improve their accounting system administration processes and avoid disapproval in the future by examining the SOCAR section of the audit reports. The following chapter includes a cross-tabulation table of the audit report recommendations that establish a rank hierarchy of the most frequent recommendations.

Research Question 4: The researcher reviewed the DCMA contracting officers' initial determination and final determination documents to identify common themes and patterns related to the contractor's responses to significant deficiencies. The researcher examined the common themes and patterns that emerged from contracting officers' approval or disapproval of the contractor's accounting system. The following chapter includes cross-tabulation tables of the patterns and relationships between the contractors' responses to the DCMA contracting officers' initial determinations and the DCMA contracting officers' final determination evaluations.

The researcher used data preparation, coding, and categorization to address the research questions.

1. Data Preparation

The data preparation included collecting and reviewing the DCAA audit reports and the DCMA contracting officers' initial determination and final determination documents for the 47 samples that identified significant deficiencies in the contractors' accounting systems. The researcher then ensured that these documents covered significant deficiencies cited under the DFARS 252.242-7006 Accounting System Administration 18 system criteria by reviewing the DCAA audit reports and the DCMA contracting officers' initial determination and final determination documents. Based on this review, the researcher identified eight samples lacking significant deficiencies and consequently excluded those samples from further analysis. The eight samples were removed due to the following reasons:

1. Three samples (Samples 10, 17, and 19) were pre-award survey audit reports of prospective contractors' accounting systems, which do not necessitate an operational effectiveness evaluation per the DFARS 252.242-7006 Accounting System Administration (DCAA, 2023).
2. Three samples (Samples 8, 22, and 27) featured qualified audit opinions with no significant deficiencies identified. In addition, the corresponding DCMA contracting officers' initial determinations and final determinations also did not cite any significant deficiencies.
3. One sample (Sample 43) was a duplicate entry.
4. One sample (Sample 45) did not appear to have a DCAA audit report and the DCMA contracting officer's initial determination and final determination documents in eDRMS IWMS.

For the remaining 39 samples, the relevant information related to the significant deficiencies, audit report factors, alignment or divergence with Section 809 Panel Recommendations 72 in the context of the COSO (2013) *Internal Control – Integrated Framework*, auditors' recommendations for improvement, contractors' responses to the DCMA contracting officers' initial determination and final determination evaluations were extracted from the DCAA audit reports and the DCMA contracting officers' initial determination and final determination documents. This detailed examination served as a solid foundation for the subsequent phase of the research, the coding process.

2. Coding

For the first three research questions, the researcher developed a coding scheme to categorize the extracted information. A coding scheme was not developed for the last research question. This coding scheme included codes for each significant deficiency category, audit report factors, COSO (2013) *Internal Control – Integrated Framework*, Section 809 Panel Recommendation 72, and DCAA auditors' recommendations for improvement. Next, the codes were assigned to the relevant text segments in the DCAA audit reports and DCMA contracting officers' initial determination documents. The coding scheme follows.

Significant Deficiency Category (SDC): SDC was developed utilizing the DFARS 252.242-7006 (2012) Accounting System Administration 18 system criteria. The researcher examined the DCAA audit reports and the DCMA contracting officers' initial determination documents to identify significant deficiencies per the DFARS 252.242-7006 Accounting System Administration 18 system criteria. As shown in Table 12, the subsequent coding scheme was applied to the pertinent text segments.

Table 12. Coding Scheme: Significant Deficiency Category. Adapted from DFARS 252.242-7006 (2012).

SDC Code	SDC Code Description DFARS 252.242-7006 System Criteria
SDC01 Internal Controls	"A sound internal control environment, accounting framework, and organizational structure." (DFARS 252.242-7006, 2012)
SDC02 Direct and Indirect Costs	"Proper segregation of direct costs from indirect costs." (DFARS 252.242-7006, 2012)
SDC03 Direct Costs	"Identification and accumulation of direct costs by contract." (DFARS 252.242-7006, 2012)
SDC04 Indirect Costs	"A logical and consistent method for the accumulation and allocation of indirect costs to intermediate and final cost objectives." (DFARS 252.242-7006, 2012)
SDC05 General Ledger Control	"Accumulation of costs under general ledger control." (DFARS 252.242-7006, 2012)
SDC06 Reconciliation to General Ledger	"Reconciliation of subsidiary cost ledgers and cost objectives to general ledger." (DFARS 252.242-7006, 2012)
SDC07 Adjusting Entries	"Approval and documentation of adjusting entries." (DFARS 252.242-7006, 2012)
SDC08 Management Controls	"Management reviews or internal audits of the system to ensure compliance with the Contractor's established policies, procedures, and accounting practices." (DFARS 252.242-7006, 2012)
SDC09 Timekeeping System	"A timekeeping system that identifies employees' labor by intermediate or final cost objectives." (DFARS 252.242-7006, 2012)
SDC10 Labor Distribution System	"A labor distribution system that charges direct and indirect labor to the appropriate cost objectives." (DFARS 252.242-7006, 2012)
SDC11 Routine Posting	"Interim (at least monthly) determination of costs charged to a contract through routine posting of books of account." (DFARS 252.242-7006, 2012)
SDC12 Unallowable Costs	"Exclusion from costs charged to Government contracts of amounts which are not allowable in terms of Federal Acquisition Regulation (FAR) part 31, Contract Cost Principles and Procedures, and other contract provisions." (DFARS 252.242-7006, 2012)
SDC13 Contract Line Item and Unit	"Identification of costs by contract line item and by units (as if each unit or line item were a separate contract), if required by the contract." (DFARS 252.242-7006, 2012)
SDC14 Preproduction Costs	"Segregation of preproduction costs from production costs, as applicable." (DFARS 252.242-7006, 2012)
SDC15 Cost Accounting Information	"Cost accounting information, as required— (i) By contract clauses concerning limitation of cost (FAR 52.232-20), limitation of funds (FAR 52.232-22), or allowable cost and payment (FAR 52.216-7); and (ii) To readily calculate indirect cost rates from the books of accounts." (DFARS 252.242-7006, 2012)
SDC16 Reconciliation of Billings	"Billings that can be reconciled to the cost accounts for both current and cumulative amounts claimed and comply with contract terms." (DFARS 252.242-7006, 2012)
SDC17 Pricing Follow-On Acquisitions	"Adequate, reliable data for use in pricing follow-on acquisitions." (DFARS 252.242-7006, 2012)
SDC18 Accounting Practices	"Accounting practices in accordance with standards promulgated by the Cost Accounting Standards Board, if applicable, otherwise, Generally Accepted Accounting Principles." (DFARS 252.242-7006, 2012)

Audit Report Factors (ARFs): The DCAA audit reports were methodically reviewed to identify the ARFs for significant deficiencies with the DFARS 252.242-7006 Accounting System Administration 18 system criteria. The researcher established three primary ARFs as a basis for this coding scheme. The ARFs were used to classify and analyze findings from the audit reports. As shown in Table 13, each ARF was analyzed with respect to the COSO (2013) *Internal Control – Integrated Framework* to help identify and understand the root causes of each ARF.

Table 13. Coding Scheme: Audit Report Factors. Adapted from COSO (2013).

ARF Code	ARF Code Description
ARF01 Noncompliance With Laws and Regulations	ARF01 refers to noncompliance with laws and regulations, affecting the control environment. Through the COSO (2013) *Internal Control – Integrated Framework*, this relates to the organization's culture, ethics, and operational environment. Noncompliance could arise from weak control environment, inadequate risk assessment, poor control activities, miscommunication of regulations, or insufficient monitoring processes.
ARF02 Weak Internal Controls	ARF02 concerns weak internal controls. Analyzed through COSO (2013) *Internal Control – Integrated Framework*, these deficiencies could emerge from flawed control environment such as poor management or lack of commitment to integrity, inadequate risk assessment, poorly designed control activities, ineffective communication regarding controls, or insufficient monitoring of internal control deficiencies.
ARF03 Lack of Internal Controls	ARF03 pertains to absent internal controls, traced back though COSO (2013) *Internal Control – Integrated Framework*, to a control environment that undervalues controls, insufficient risk assessment leading to control omission, inherent lack of control activities, miscommunication about controls' importance, or ineffective monitoring activities allowing control absence to persist.

COSO: COSO codes were developed utilizing the COSO (2013) *Internal Control – Integrated Framework* five components: control environment, risk assessment, control activities, information and communication, and monitoring activities. As shown in Table 14, the DCAA audit reports were methodically reviewed to identify the COSO categories based on the ARFs for significant deficiencies to help identify and understand the root cause of ARFs and alignment or divergence with the Section 809 Panel Recommendation 72 for the seven systems criteria.

Table 14. Coding Scheme: COSO Component. Adapted from COSO (2013).

COSO Component Code	COSO Component Code Description COSO Internal Control Framework 17 Internal Control Principles
COSO1 Control Environment	"1. Demonstrates Commitment to Integrity and Ethical Values 2. Exercises Oversight Responsibility 3. Establishes Structure, Authority, and Responsibility 4. Demonstrates Commitment to Competence 5. Enforces Accountability" (COSO, 2013)
COSO2 Risk Assessment	"6. Specifies Suitable Objectives 7. Identifies and Analyzes Risk 8. Assesses Fraud Risk 9. Identifies and Analyzes Significant Change" (COSO, 2013)
COSO3 Control Activities	"10. Selects and Develops Control Activities 11. Selects and Develops General Controls over Technology 12. Deploys through Policies and Procedures" (COSO, 2013)
COSO4 Information and Communication	"13. Uses Relevant Information 14. Communicates Internally 15. Communicates Externally" (COSO, 2013)
COSO5 Monitoring Activities	"16. Conducts Ongoing and/or Separate Evaluations 17. Evaluates and Communicates Deficiencies" (COSO, 2013)

Section 809 Panel (S809): S809 codes were developed utilizing the Section 809 Panel Recommendation 72 for seven system criteria (Section 809 Panel, 2019). The researcher examined the DCAA audit reports and the DCMA contracting officers' initial determination documents to identify significant deficiencies based on the ARFs. As

shown in Table 15, the subsequent coding scheme was applied to the pertinent text segments.

Table 15. Coding Scheme: Section 809 Panel. Adapted from Section 809 Panel (2019).

S809 Code	S809 Code Description Section 809 Panel Recommendation 72
S8091 Classification of Costs	"Direct costs and indirect costs are classified in accordance with contract terms, FAR, Cost Accounting Standards (CAS) and other regulations, as applicable." (Section 809 Panel, 2019)
S8092 Direct Costs	"Direct costs are identified and accumulated by contract in accordance with contract terms, FAR, CAS and other regulations, as applicable." (Section 809 Panel, 2019)
S8093 Indirect Costs	"Methods are established to accumulate and allocate indirect costs to contracts in accordance with contract terms, FAR, CAS and other regulations, as applicable." (Section 809 Panel, 2019)
S8094 General Ledger Control	"General ledger control accounts accurately reflect all transactions recorded in subsidiary ledgers and/or other information systems that either integrate or interface with the general ledger including, but not limited to, timekeeping, labor cost distribution, fixed assets, accounts payable, project costs, and inventory." (Section 809 Panel, 2019)
S8095 Adjustments to Ledgers	"Adjustments to the general ledger, subsidiary ledgers, or other information systems bearing on the determination of contract costs (e.g., adjusting journal entries, reclassification journal entries, cost transfers, etc.) are done for reasons that do not violate contract terms, FAR, CAS, and other regulations, as applicable." (Section 809 Panel, 2019)
S8096 Unallowable Costs	"Identification and treatment of unallowable costs are accomplished in accordance with contract terms, FAR, CAS, and other regulations, as applicable." (Section 809 Panel, 2019)
S8097 Billing Practices	"Billings are prepared in accordance with contract terms, FAR, CAS, and other regulations, as applicable." (Section 809 Panel, 2019)

Auditors' Recommendations for Improvement (ARI): The auditors' recommendations from the DCAA audit reports were methodically reviewed to identify the ARIs. Six primary ARIs were established as a basis for this coding scheme. As shown in Table 16, the ARI was used to classify the DCAA auditors' recommendations.

Table 16. Coding Scheme: Auditors' Recommendations for Improvement

ARI Code	ARI Code Description
ARI01 Policies and Procedures	Recommendation to revise or implement new policies and procedures, which includes accounting practices, compliance with FAR and DFARS, billing procedures, or timekeeping procedures, etc.
ARI02 Accounting System	Recommendation to enhance the accounting system, such as the ability to track costs at a more granular level (CLIN or ACRN), adjust to accrual accounting from cash basis, or handle mid-year provisional billing rate changes, etc.
ARI03 Internal Audits	Recommendation to conduct regular internal audits and management reviews, including the review of unallowable costs, approval of adjusting journal entries, and oversight of timekeeping systems, etc.
ARI04 Billings	Recommendation to correct billings, submit final vouchers, use approved provisional billing rates on all vouchers, or make timely adjustments of unallowable costs from billings, etc.
ARI05 Training	Recommendation to conduct training on different processes and policies, such as timekeeping, identifying and segregating unallowable costs, vendor discounts, or telework policy, etc.
ARI06 FAR and DFARS	Recommendation to comply with specific FAR and DFARS.

Note: Acronyms listed in Table 16 not previously defined include contract line item number (CLIN) and accounting classification reference number (ACRN).

3. Categorization

For the categorization of the data, the coded text segments were categorized into categories based on the codes—for example, grouping together all text segments related to a specific significant deficiency, audit report factor, COSO component, Section 809 Panel recommendation, or auditor recommendation, which are presented in the following chapter. The following section addresses the limitations of this research study.

E. LIMITATIONS OF RESEARCH

There may be potential limitations affecting the interpretation of data used in this research. Firstly, the data extracted from the DCMA Eastern Region may raise questions of geographic specificity and representation. Given that this region is but one component of the broader DOD and DCMA network, the practices, trends, and anomalies present in this subset might not entirely align with the larger organizational landscape. In addition, the DCMA Eastern Region may have unique regional practices, preferences, or challenges that are not widely shared across other regions. Thus, extrapolating the findings from this region to the entirety of the DOD or the DCMA could result in skewed or unrepresentative conclusions.

Secondly, the study's chronological scope, limited to FY 2020 through FY 2022, presents another limitation. This narrow timeframe could miss out on capturing evolving trends, historical contexts, or emerging patterns that might have been evident in a more extended analysis. It also raises the question of whether these three years are anomalous or reflective of broader, long-standing trends. Factors like changes in government policies, shifts in economic climates, or other macro-level events occurring during or just before this period could disproportionately influence the data, thus potentially skewing interpretations.

Thirdly, another limitation centers on the reliability of the DCAA audit reports and the DCMA contracting officers' initial determination and final determination documents. Any inconsistencies, inaccuracies, or disparities within these primary sources could cascade through the research findings, potentially leading to misleading or erroneous conclusions. The onus, then, becomes ensuring that these documents are as accurate and consistent as possible. However, given the complex nature of audits and the potential for subjective interpretations by different DCMA contracting officers, achieving uniformity and consistency is undoubtedly challenging.

Lastly, while the study offers insights into the reasons for significant deficiencies as per the DFARS 252.242-7006 Accounting System Administration, it does not explore the broader ramifications of these shortcomings within the government contracting realm. For instance, how do these deficiencies impact financial reconciliations, contractor relationships, or even public trust in governmental contracting processes? A broader approach might have unveiled deeper layers of impact, offering richer insights into the intricate web of government operations and contractor dynamics. Despite these constraints, this research study provides an analysis of the current state of the DFARS 252.242-7006 Accounting System Administration significant deficiencies within governmental contracting. The following section provides a summary of this chapter.

F. SUMMARY

This chapter presented the research methodology applied in this research study, which included data source, data access, and data analysis. The primary data sources were the CBS Tracking Tool and eDRMS IWMS. These data sources were identified based on their relevance to the research questions, as they included information on the DCAA audit reports and the DCMA contracting officers' initial determination and final determination documents. The data access for the DCMA's CBS Tracking Tool was acquired through the DCMA Eastern Region POC. The relevant data related to the DFARS 252.242-7006 Accounting System Administration significant deficiencies were extracted from the eDRMS IWMS record management system.

The data analysis involved a systematic examination of significant deficiencies. A mixed-method approach was adopted to answer the four research questions, offering comprehensive insights into the research topic. The methodology used allows for future replication and assessment of the research, strengthening its reliability and validity. In the next chapter, the results are presented and discussed from the analysis of the data using these methodological tools.

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IV. ANALYSIS, FINDINGS, IMPLICATIONS, AND RECOMMENDATIONS BASED ON FINDINGS

A. INTRODUCTION

This chapter is dedicated to a comprehensive analysis of the DFARS 252.242-7006 Accounting System Administration significant deficiencies. The objective of this chapter is to address the four research questions. This chapter begins with analyzing the first research question to identify the most common audit report factors leading to significant deficiencies with the DFARS 252.242-7006 (2012) Accounting System Administration 18 system criteria. It then addresses the second research question by examining these issues for alignment or divergence with the Section 809 Panel (2019) recommendation of seven system criteria, within the context of the COSO (2013) *Internal Control – Integrated Framework*. The third research question investigates the auditors' recommendations for contractors' improvements to their accounting system administration processes. The fourth and final research question examines contractors' responses to the contracting officers' initial determinations and the contracting officers' final determination evaluations. Throughout this chapter, a combination of numerical data and textual analysis is used to facilitate a comprehensive understanding of the research question findings. This chapter discusses the implications and recommendations based on the findings from the four research questions and concludes with a summary.

B. ANALYSIS AND FINDINGS

Research Question 1: What are the most common audit report factors that result in significant deficiency per the DFARS 252.242-7006 Accounting System Administration 18 system criteria?

The first research question involved identifying the most common audit report factors leading to significant deficiencies according to the DFARS 252.242-7006 (2012) Accounting System Administration 18 system criteria. As previously discussed in the Methodology chapter, the data preparation included collecting and reviewing the DCAA audit reports and the DCMA contracting officers' initial determination documents for 39 samples submitted to the DCMA Eastern Region from FY 2020 through FY 2022. The relevant data relating to the significant deficiencies and audit report factors were extracted from the DCAA audit reports and the DCMA contracting officers' initial determination documents. This extraction of data revealed a total of 132 observations relating to audit report factors and significant deficiency findings. The data was coded and categorized into 18 significant deficiency categories (SDCs) and three audit report factors (ARFs).

Table 17 summarizes the interaction between the 18 SDCs and the three ARFs. To calculate the percentage, the frequency count of the ARFs (columns) associated with the frequency count of the SDCs (rows) was divided by the total frequency of all observations in the research study and then multiplied by 100. For example, the percentage of ARF01 related to SDC01 is $(3/132)\times100 = 2\%$, and the percentage of ARF02 related to SDC01 is $(8/132)\times100 = 6\%$. The total percentage of ARF01 across all SDCs is $(59/132)\times100 = 45\%$, while the total percentage of SDC01 across all ARFs is $(18/132)\times100 = 14\%$. The analysis from Table 17 provides insight into the common audit report factors and the significant deficiencies as outlined by the DFARS 252.242-7006 (2012) Accounting System Administration 18 system criteria. For the first research question, an ARF that led to an SDC percentage of 5% or more was considered the most frequent and is discussed in further detail.

Table 17. Analysis: Common Audit Report Factors for the DFARS 252.242-7006 Significant Deficiency Category

SDC Code DFARS 252.242-7006 System Criteria	ARF Code						Total	
	ARF01 Noncompliance With Laws and Regulations		ARF02 Weak Internal Controls		ARF03 Lack of Internal Controls			
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
SDC01 Internal Controls	3	2%	8	6%	7	5%	18	14%
SDC02 Direct and Indirect Costs	0	0%	0	0%	1	1%	1	1%
SDC03 Direct Costs	0	0%	1	1%	3	2%	4	3%
SDC04 Indirect Costs	1	1%	5	4%	0	0%	6	5%
SDC05 General Ledger Controls	1	1%	0	0%	1	1%	2	2%
SDC06 Reconciliation to General Ledger	1	1%	1	1%	1	1%	3	2%
SDC07 Adjusting Entries	0	0%	1	1%	5	4%	6	5%
SDC08 Management Controls	0	0%	4	3%	1	1%	5	4%
SDC09 Timekeeping System	0	0%	6	5%	3	2%	9	7%
SDC10 Labor Distribution System	2	2%	6	5%	1	1%	9	7%
SDC11 Routine Posting	0	0%	0	0%	1	1%	1	1%
SDC12 Unallowable Costs	10	8%	0	0%	1	1%	11	8%
SDC13 Contract Line Item and Unit	1	1%	2	2%	0	0%	3	2%
SDC14 Preproduction Costs	0	0%	0	0%	0	0%	0	0%
SDC15 Cost Accounting Information	12	9%	1	1%	1	1%	14	11%
SDC16 Reconciliation of Billings	24	18%	6	5%	2	2%	32	24%
SDC17 Pricing Follow-On Acquisitions	1	1%	3	2%	1	1%	5	4%
SDC18 Accounting Practices	3	2%	0	0%	0	0%	3	2%
Total	59	45%	44	33%	29	22%	132	100%

As shown in Table 17, ARF01 Noncompliance With Laws and Regulations emerged with a considerable frequency of 59, comprising 45% of total observations. Three SDCs—SDC16 Reconciliation of Billings, SDC15 Cost Accounting Information, and SDC12 Unallowable Costs—displayed frequencies of 24 (18%), 12 (9%), and 10 (8%), respectively. Table 18 lists the findings relating to ARF01 Noncompliance With Laws and Regulations.

ARF02 Weak Internal Controls presented a somewhat different pattern, as shown in Table 17. It was most frequently linked with SDC01 Internal Controls, SDC09 Timekeeping System, SDC10 Labor Distribution System, and SDC16 Reconciliation of Billings with frequencies of eight (6%), six (5%), six (5%), and six (5%), respectively. The cumulative instances linked to ARF02 Weak Internal Controls were 44, representing 33% of total observations. Table 19 lists the findings relating to ARF02 Weak Internal Controls.

As displayed in Table 17, ARF03 Lack of Internal Controls was most associated with SDC01 Internal Controls, with a frequency of seven (5%). The overall instances linked with ARF03 Lack of Internal Controls were 29, accounting for 22% of total observations. Table 20 lists the findings relating to ARF03 Lack of Internal Controls. Next, Table 18 provides insights into the findings for ARF01 Noncompliance With Laws and Regulations.

Table 18. Findings: ARF01 Noncompliance with Laws and Regulations

SDC Code	Findings
SDC16 Reconciliation of Billings	1. Contract billings cannot be "reconciled to the cost accounts for both current and cumulative amounts." (DFARS 252.242-7006, 2012)
	2. Failure to use approved provisional billing rates for the interim public voucher in accordance with FAR 52.216-7(e) Allowable Cost and Payment and FAR 42.704 Billing rates.
	3. Failure to "update the billings of all contracts to reflect the final settled rates" in accordance with FAR 52.216-7(d)(2)(v) Allowable Cost and Payment. (FAR 52.216-7, 2024)
	4. Failure to submit final voucher within 120 days in accordance with FAR 52.216-7(d)(5) Allowable Cost and Payment.
	5. Failure to pay vendors and subcontractors "within 30 days of the submission of the Contractor's payment request to the Government" in accordance with FAR 52.216-7(b)(ii)(A) Allowable Cost and Payment. (FAR 52.216-7, 2024)
SDC15 Cost Accounting Information	1. Failure to use approved provisional billing rates for interim public voucher in accordance with FAR 52.216-7(e) Allowable Cost and Payment and FAR 42.704 Billing rates.
	2. Failure to "submit an adequate final indirect cost rate proposal" in accordance with FAR 52.216-7(d)(2)(i) Allowable Cost and Payment. (FAR 52.216-7, 2024)
	3. Failure to "update the billings of all contracts to reflect the final settled rates" in accordance with FAR 52.216-7(d)(2)(v) Allowable Cost and Payment. (FAR 52.216-7, 2024)
	4. Failure to submit final voucher within 120 days in accordance with FAR 52.216-7(d)(5) Allowable Cost and Payment.
	5. Failure to pay vendors and subcontractors "within 30 days of the submission of the Contractor's payment request to the Government" in accordance with FAR 52.216-7(b)(ii) Allowable Cost and Payment. (FAR 52.216-7, 2024)
	6. Failure to ensure compliance with FAR 52.232-20 Limitation of Cost and FAR 52.232-22 Limitation of Funds.
	7. Failure "to readily calculate indirect cost rates from the books and records." (DFARS 252.242-7006, 2012)
SDC12 Unallowable Costs	1. Failure to remove unallowable cost from payment request in accordance with FAR 31.205-33 Professional and consultant service costs.
	2. Failure to remove unallowable cost from payment request in accordance with FAR 31.205-46(a)(2)(i) Travel costs.
	3. Failure to remove unallowable cost from payment request in accordance with FAR 31.205-26 Material costs.
	4. Failure to remove unallowable cost from payment request in accordance with FAR 52.216-7(b)(ii) Allowable Costs and Payment.

As shown in Table 17, ARF01 Noncompliance With Laws and Regulations for SDC16 Reconciliation of Billings, which relates to the contractors' ability to "reconcile billings to cost accounts for both current and cumulative amounts claimed and compliance with contract terms," exhibited the highest frequency of 24 (18%) deficiencies (DFARS 252.242-7006, 2012). ARF01 Noncompliance With Laws and Regulations for SDC15 Cost Accounting Information showed the second-highest frequency of 12 (9%) in Table 17, SDC15 Cost Accounting Information involves providing cost accounting information as required by "contract clauses concerning limitation of cost (FAR 52.232-20), limitation of funds (FAR 52.232-22), or allowable cost and payment (FAR 52.216-7) and to readily calculate indirect cost rates from the books and accounts" (DFARS 252.242-7006, 2012). The findings in Table 18 demonstrated the contractors' failure to comply with the FAR clauses.

As shown in Table 17, ARF01 Noncompliance With Laws and Regulations for SDC12 Unallowable Costs revealed a noteworthy frequency of 10 (8%). SDC12 Unallowable Costs are defined as amounts that cannot be "charged to Government contracts which are not allowable in terms of Federal Acquisition Regulation (FAR) part 31, Contract Cost Principles and Procedures and other contract provisions" (DFARS 252.242-7006, 2012). The findings in Table 18 demonstrated that ARF01 Noncompliance With Laws and Regulations emerged as the leading cause behind unallowable costs in the context of the FAR clauses.

As presented in Table 18, the ARF01 Noncompliance With Laws and Regulations findings imply widespread issues in contractors' adherence to the contract clauses concerning the provision of SDC16 Reconciliation of Billings to cost accounts and compliance with contract terms, SDC15 Cost Accounting Information, and SDC12 Unallowable Costs. The audit report factors resulting in significant deficiencies emphasize the need for a comprehensive understanding and management of contract terms, regulations, and cost accounting data. Next, Table 19 provides insights into the findings for ARF02 Weak Internal Controls.

Table 19. Findings: ARF02 Weak Internal Controls

SDC Code	Findings
SDC01 Internal Controls	1. Employees' noncompliance with timekeeping practice due to lack of proper timekeeping training.
	2. Lack of internal controls for accumulation and allocation of indirect costs.
	3. Lack of internal controls for employees' proper recording of time and expenses to final cost objectives.
	4. Lack of internal controls for timekeeping system segregation of duties for employee timesheet corrections/input.
	5. Employees unaware of process for correcting approved timesheet.
	6. Timekeeping system does not have an audit trail of documentation for adjustments made after timesheet approval.
SDC09 Timekeeping System	1. Lack of internal controls for employees' proper recording of time and expenses to final cost objectives.
	2. Timekeeping system does not allow employees to certify timesheet.
	3. Inadequate internal controls for employee timesheet correction.
	4. Lack of internal control for recording of daily timesheet labor.
	5. Timekeeping system does not allow employees to record time in excess of daily schedule hours.
	6. Failure to identify bid and proposal costs by project.
SDC10 Labor Distribution System	1. Inadequate accumulation and allocation of labor costs.
	2. Labor distribution hour and costs does not reconcile to timesheet or payroll.
	3. Inadequate internal controls over the proper recording of time and expenses to final cost objectives.
	4. Lack of internal controls for recording of daily timesheet labor.
	5. Failure to record indirect labor in accordance with policy and procedure.
	6. Timekeeping labor distribution reports do not include paid time off and overtime premium hours and costs.
SDC16 Reconciliation of Billings	1. Contract billings cannot be "reconciled to the cost accounts for both current and cumulative amounts." (DFARS 252.242-7006, 2012)
	2. Accounting system does not provide for payments to subcontractor or vendor "(1) In accordance with terms and condition of a subcontract or invoice; and (2) Ordinarily within 30 days of the submission of the Contractor's payment request to the Government" in accordance with FAR 52.216-7(b). (FAR 52.216-7, 2024)
	3. Accounting system does not have the ability to make provisional billing rate adjustments.
	4. Fee not billed in accordance with contract terms.

As shown in Table 17, ARF02 Weak Internal Controls for SDC01 Internal Controls, pertaining to the establishment of "a sound internal control environment, accounting framework, and organizational structure," displayed a deficiency frequency of eight (6%), which denotes weaknesses in internal controls (DFARS, 252.242-7006, 2012). The findings in Table 19 for SDC01 Internal Controls pertains mostly to the timekeeping system with is discussed further in SDC09 Timekeeping System and SDC10 Labor Distribution System.

As presented in Table 17, ARF02 Weak Internal Controls for SDC09 Timekeeping System and SDC10 Labor Distribution System resulted in identical deficiency frequencies of six (5%). SDC09 Timekeeping System relates to "a timekeeping system that identifies employees' labor by intermediate or final cost objectives," while SDC10 Labor Distribution System involves "a labor distribution system that charges direct and indirect labor to the appropriate cost objectives" (DFARS 252.242-7006, 2012). The deficiency frequencies for both SDC09 Timekeeping System and SDC10 Labor Distribution System under ARF02 Weakness in Internal Controls were at six (5%), indicating parallel challenges among contractors in managing their labor accounting systems. Like the shortcomings identified in Table 19 SDC01 Internal Controls, deficiencies in SDC09 Timekeeping System suggest potential inaccuracies or inefficiencies in timekeeping systems that track labor across different cost objectives. This lack of precision can lead to erroneous labor costing and billing, affecting contract compliance and profitability. Similarly, deficiencies in SDC10 Labor Distribution System signal issues in correctly distributing direct and indirect labor costs to the right cost objectives. Such deficiencies could lead to the misallocation of labor costs, potentially skewing financial records, impacting profitability, and leading to non-compliance with contract terms and regulatory requirements.

As shown in Table 17, SDC16 Reconciliation of Billings was particularly evident in the context of ARF02 Weak Internal Controls, with an occurrence frequency of six (5%). The findings in Table 19 for SDC16 Reconciliation of Billings pertain mostly to the accounting system's inability to reconcile costs and make payment adjustments. The findings shed light on a scenario wherein contractors, despite having internal controls in place, exhibit weaknesses that detrimentally impact the reconciliation of their billings. Next, Table 20 provides insights into the findings for ARF03 Lack of Internal Controls.

Table 20. Findings: ARF03 Lack of Internal Controls

SDC Code	Findings
SDC01 Internal Controls	1. Lack of internal controls for compliance with timekeeping policy and procedure.
	2. Lack of internal controls for compliance with contract billing policy and procedure.
	3. Lack of internal controls for accumulation of all costs under general ledger.
	4. Inadequate system controls for proper identification and accumulation of direct costs.

As shown in Table 17, ARF03 Lack of Internal Controls for SDC01 Internal Controls resulted in a deficiency frequency of seven (5%). The findings in Table 20 for SDC01 Internal Controls mostly pertain to the lack of internal controls relating to timekeeping and billings. SDC01 Internal Controls reveal certain contractors were deficient in establishing or maintaining comprehensive internal control activities, potentially negatively influencing their contract compliance and financial management.

While Table 18, Table 19, and Table 20 highlighted findings with an ARF that led to an SDC of 5% or more in Table 17, it is crucial to also consider aspects of the contractors' accounting systems that demonstrate fewer issues. In contrast to the previously discussed findings, certain SDCs displayed no connection with significant deficiencies across any of the ARFs. SDC14 Preproduction Costs displayed frequencies of zero (0%), which may indicate that in the sample of the DCAA audit reports and the DCMA contracting officers' initial determination documents examined for this study, there were no recorded deficiencies. Thus, SDC14 Preproduction Costs would be considered the least impacted area based on this research.

As shown in Table 17, SDC02 Direct and Indirect Costs, SDC03 Direct Costs, SDC05 General Ledger Controls, SDC06 Reconciliation to General Ledger, SDC08 Management Controls, SDC11 Routine Posting, SDC13 Contract Line Item and Unit, SDC17 Pricing Follow-On Acquisitions, and SDC18 Accounting Practices indicated only minimal links of less than 5%, indicating lesser contribution to significant deficiencies in contractors' accounting systems. The lower frequency of deficiencies in these areas could suggest that these elements are generally well-managed by contractors or perhaps not as noticeable in the documents examined by the DCAA auditors.

The findings further revealed that a single ARF can trigger multiple citations of significant deficiencies with the DFARS 252.242-7006 Accounting System Administration 18 system criteria. The ARF appears to interconnect with various SDCs, as evidenced by the findings summarized in Table 21.

Table 21. Findings: Multiple Significant Deficiency Category

Sample	Findings	SDC Code
Sample 3	Failure to comply with FAR 52.216-7(e) Allowable Cost and Payment and FAR 52.216-7(d)(2)(v) Allowable Cost and Payment	SDC15 Cost Accounting Information SDC16 Reconciliation of Billings
Sample 3	Failure to comply with FAR 52.216-7(b)(ii) Allowable Cost and Payment	SDC12 Unallowable Costs SDC16 Reconciliation of Billings
Sample 13	Lack of policies and procedures for timekeeping	SDC01 Internal Controls SDC02 Direct and Indirect Costs SDC03 Direct Costs SDC09 Timekeeping System
Sample 13	Lack of policies and procedures for contract billings	SDC01 Internal Controls SDC15 Cost Accounting Information SDC16 Reconciliation of Billings
Sample 28	Inadequate internal controls over the proper recording of time and expenses to final cost objectives	SDC01 Internal Controls SDC04 Indirect Costs SDC08 Management Controls SDC09 Timekeeping System SDC10 Labor Distribution System
Sample 36	Lack of internal controls for recording of daily timesheet labor	SDC03 Direct Costs SDC09 Timekeeping System SDC10 Labor Distribution System
Sample 37	Noncompliance with FAR 31.205-46(a)(2)(i) Travel Costs	SDC04 Indirect Costs SDC12 Unallowable Costs
Sample 38	Noncompliance with FAR 31.205-26 Material Costs	SDC12 Unallowable Costs SDC16 Reconciliation of Billings
Sample 40	Timekeeping system does not allow employees to record time in excess of daily schedule hours	SDC08 Management Controls SDC09 Timekeeping System
Sample 44	Lack of internal controls for accumulation of all costs under general ledger	SDC01 Internal Controls SDC03 Direct Costs SDC05 General Ledger Control SDC06 Reconciliation to General Ledger SDC07 Adjusting Entries SDC16 Reconciliation of Billings SDC17 Pricing Follow-On Acquisitions
Sample 47	Lack of internal controls for compliance with timekeeping policy and procedure	SDC01 Internal Controls SDC09 Timekeeping System SDC10 Labor Distribution System

The data suggests that noncompliance with FAR clauses and contractors' lack of appropriate policies and procedures have a cascading effect on the DFARS 252.242-7006 Accounting System Administration. For instance, as shown in Table 21, Sample 3 failure to adhere to FAR 52.216-7 Sections (e) and (d)(2)(v) not only violated the SDC15 Cost Accounting Information but also impacted SDC16 Reconciliation of Billings. Such a pattern suggests a systemic issue where a single lapse in compliance can result in multiple significant deficiencies.

Furthermore, as shown in Table 21, Sample 13 findings for the lack of policies and procedures for timekeeping resulted in deficiencies across four SDCs: SDC01 Internal Controls, SDC02 Direct and Indirect Costs, SDC03 Direct Costs, and SDC09 Timekeeping System. In addition, the repeated deficiencies in key areas such as SDC09 Timekeeping System and SDC10 Labor Distribution System were observed in Samples 28, 36, and 47. Finally, as shown in Table 21, noncompliance with specific FAR clauses like FAR 31.216-7(b)(ii) Allowable Cost and Payment, FAR 31.205-46(a)(2)(i) Travel Costs, and FAR 31.205-26 Material Costs in Samples 3, 37 and 38, respectively, resulted in noncompliance with SDC12 Unallowable Costs and additional deficiencies for SDC16 Reconciliation of Billings (Samples 3 and 38) and SDC04 Indirect Costs (Sample 37). Such findings demonstrate that weaknesses in fundamental internal controls can have extensive consequences across various components of accounting system administration. The repeated deficiencies point to widespread issues with internal controls rather than isolated incidents.

In summary, addressing Research Question 1, the findings indicate that the most common audit report factors resulting in significant deficiencies within with the DFARS 252.242-7006 Accounting System Administration pertain to ARF01 Noncompliance With Laws and Regulations. As shown in Table 17, ARF01 Noncompliance With Laws and Regulations emerged with the highest frequency of 59, comprising 45% of total observations. Notably, within the ARF01 Noncompliance With Laws and Regulations, the most frequent deficiencies were observed in SDC16 Reconciliation of Billings, SDC15 Cost Accounting Information, and SDC12 Unallowable Costs, displayed frequencies of 24 (18%), 12 (9%), and 10 (8%), respectively.

Research Question 2: How do the audit report factors resulting in significant deficiencies align or diverge with Section 809 Panel Recommendation 72 for seven system criteria in the context of the COSO *Internal Control – Integrated Framework*?

The second research question aimed to analyze the extent to which audit report factors resulting in significant deficiencies align or diverge with the Section 809 Panel Recommendation 72 for seven system criteria in the context of the COSO *Internal Control – Integrated Framework*. As previously discussed in the Methodology chapter, the data preparation included collecting and reviewing the DCAA audit reports and the DCMA contracting officers' initial determination documents for 39 samples submitted to the DCMA Eastern Region from FY 2020 through FY 2022. The relevant data relating to the significant deficiencies and audit report factors were extracted from the DCAA audit reports and the DCMA contracting officers' initial determination documents. This extraction of data revealed a total of 132 observations relating to audit report factors and significant deficiency findings. The data was coded and categorized into 18 SDCs and three ARFs. The SDCs and ARFs were further examined to identify alignment or divergence with the Section 809 Panel Recommendation 72 for seven system criteria in the context of the COSO *Internal Control – Integrated Framework*. The data for Section 809 Panel Recommendation 72 and the COSO *Internal Control – Integrated Framework* was coded and categorized into seven S809s and five COSO components. The coded text segments related to specific SDCs, ARFs, S809, and COSO components were grouped together in a cross-tabulation table to show the frequency count and percentage of the total observation.

Table 22 summarizes the interaction between the three ARFs and seven S809s. To calculate the percentage, the frequency count of the ARFs (columns) associated with the frequency count of the S809s (rows) was divided by the total frequency of all observations in this research study and then multiplied by 100. For example, the percentage of ARF01 related to S8091 is $(2/132)\times100 = 2\%$ and the percentage of ARF02 related to S8091 is $(4/132)\times100 = 3\%$. The total percentage of ARF01 across all S809s is $(59/132)\times100 = 45\%$, while the total percentage of S8091 across all ARFs is $(7/132)\times100 = 5\%$. An ARF that led to an S809 of 5% or higher was deemed most frequent for analyzing alignment or divergence with the Section 809 panel recommendation within the COSO components.

Table 22. Analysis: Audit Report Factors Alignment with or Divergence from Section 809 Panel Recommendation 72

S809 Code Section 809 Panel Recommendation 72	ARF Code						Total	
	ARF01 Noncompliance With Laws and Regulations		ARF02 Weak Internal Controls		ARF03 Lack of Internal Controls			
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
S8091 Classification of Costs	2	2%	4	3%	1	1%	7	5%
S8092 Direct Costs	2	2%	1	1%	0	0%	3	2%
S8093 Indirect Costs	1	1%	6	5%	0	0%	7	5%
S8094 General Ledger Control	4	3%	24	18%	13	10%	41	31%
S8095 Adjustment to Ledgers	5	4%	5	4%	7	5%	17	13%
S8096 Unallowable Costs	13	10%	0	0%	1	1%	14	11%
S8097 Billing Practices	32	24%	4	3%	7	5%	43	33%
Total	59	45%	44	33%	29	22%	132	100%

The examination of the second research question, which focused on the extent to which audit report factors resulting in significant deficiencies align or diverge with the Section 809 Panel recommendation for seven system criteria in the context of the COSO (2013) *Internal Control – Integrated Framework*, revealed that all ARFs resulting in SDCs align with the Section 809 Panel (2019) Recommendation 72 for seven system criteria.

As shown in Table 22, the findings of ARF01 Noncompliance With Laws and Regulations recorded a frequency of 59, making up 45% of total observations. ARF01 Noncompliance With Laws and Regulations is frequently aligned with S8097 Billing Practices and S8096 Unallowable Costs, with frequencies of 32 (24%) and 13 (10%), respectively. Next, ARF02 Weak Internal Controls presented an alignment with S8094 General Ledger Control and S8093 Indirect Costs, with frequencies of 24 (18%) and six (5%), respectively. Finally, ARF03 Lack of Internal Controls presented an alignment with S8094 General Ledger Control, S8095 Adjustment to Ledgers, and S8097 Billing Practices, with frequencies of 13 (10%), seven (5%), and seven (5%), respectively.

This pattern of alignment highlights a pervasive difficulty among contractors with regulatory compliance, particularly concerning billing and cost allocation practices. It also points to potential deficiencies in internal control systems, with a significant emphasis on the management of general ledgers and adjustments. These findings suggest that many contractors may not have sufficient internal control systems in place, which is especially evident in their ledger management processes.

Next, Table 23 summarizes the interaction between the seven S809s and the 18 SDCs. To calculate the percentage, the frequency count of the S809s (columns) associated with the frequency count of the SDCs (rows) was divided by the total frequency of all observations in the research study and then multiplied by 100. For example, the percentage of S8091 related to SDC01 is $(1/132)\times100 = 1\%$, and the percentage of S8092 related to SDC01 is $(0/132)\times100 = 0\%$. The total percentage of S8091 across all SDCs is $(7/132)\times100 = 5\%$, while the total percentage of SDC01 across all S809s is $(18/132)\times100 = 14\%$. An S809 that led to an SDC of 5% or higher was deemed most frequent for analyzing alignment or divergence with the Section 809 panel recommendation within the COSO components.

Table 23. Analysis: DFARS 252.242-7006 Significant Deficiency Category Alignment with or Divergence from Section 809 Panel Recommendation 72

SDC Code DFARS 252.242-7006 System Criteria	**S809 Code Section 809 Panel Recommendation 72**														**Total**	
	S8091 Classification of Costs		**S8092 Direct Costs**		**S8093 Indirect Costs**		**S8094 General Ledger Control**		**S8095 Adjustment to Ledgers**		**S8096 Unallowable Costs**		**S8097 Billing Practices**			
	F	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**
SDC01 Internal Controls	1	1%	0	0%	1	1%	9	7%	3	2%	1	1%	3	2%	18	14%
SDC02 Direct and Indirect Costs	0	0%	0	0%	0	0%	1	1%	0	0%	0	0%	0	0%	1	1%
SDC03 Direct Costs	0	0%	0	0%	0	0%	4	3%	0	0%	0	0%	0	0%	4	3%
SDC04 Indirect Costs	0	0%	0	0%	3	2%	2	2%	0	0%	1	1%	0	0%	6	5%
SDC05 General Ledger Controls	0	0%	0	0%	0	0%	1	1%	1	1%	0	0%	0	0%	2	2%
SDC06 Reconciliation to General Ledger	1	1%	0	0%	0	0%	1	1%	1	1%	0	0%	0	0%	3	2%
SDC07 Adjusting Entries	0	0%	0	0%	0	0%	1	1%	3	2%	1	1%	1	1%	6	5%
SDC08 Management Controls	0	0%	0	0%	0	0%	4	3%	0	0%	0	0%	1	1%	5	4%
SDC09 Timekeeping System	1	1%	1	1%	0	0%	6	5%	1	1%	0	0%	0	0%	9	7%
SDC10 Labor Distribution System	0	0%	0	0%	2	2%	5	4%	2	2%	0	0%	0	0%	9	7%
SDC11 Routine Posting	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	1%	1	1%
SDC12 Unallowable Costs	0	0%	0	0%	0	0%	3	2%	0	0%	8	6%	0	0%	11	8%
SDC13 Contract Line Item and Unit	2	2%	0	0%	0	0%	0	0%	1	1%	0	0%	0	0%	3	2%
SDC14 Preproduction Costs	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
SDC15 Cost Accounting Information	0	0%	2	2%	0	0%	1	1%	0	0%	0	0%	11	8%	14	11%
SDC16 Reconciliation of Billings	0	0%	0	0%	0	0%	2	2%	2	2%	2	2%	26	20%	32	24%
SDC17 Pricing Follow-On Acquisitions	2	2%	0	0%	0	0%	1	1%	1	1%	1	1%	0	0%	5	4%
SDC18 Accounting Practices	0	0%	0	0%	1	1%	0	0%	2	2%	0	0%	0	0%	3	2%
Total	7	5%	3	2%	7	5%	41	31%	17	13%	14	11%	43	33%	132	100%

Note: F refers to frequency, and % refers to percentage of the total observations.

As previously discussed, the examination of the second research question, which focused on the extent to which audit report factors resulting in significant deficiencies align or diverge with the Section 809 Panel (2019) Recommendation 72 for seven system criteria in the context of the COSO (2013) *Internal Control – Integrated Framework* revealed that all SDCs align with the Section 809 Panel (2019) Recommendation 72 for seven system criteria.

As shown in Table 23, S8094 General Ledger Control presents alignment across SDC01 Internal Controls and SDC09 Timekeeping System with frequencies of nine (7%) and six (5%), respectively. The S8096 Unallowable Costs are notably aligned with SDC12 Unallowable Costs at a frequency of eight (6%). Most notably, S8097 Billing Practices align with SDC15 Cost Accounting Information and SDC16 Reconciliation of Billings at significant frequencies of 11 (8%) and 26 (20%), respectively. These findings suggest that despite contractors' efforts to comply with the DFARS 252.242-7006 (2012) Accounting System Administration 18 system criteria, there remains a notable gap in the effective implementation of control activities within their accounting systems, as shown in Table 24.

Table 24 summarizes the interaction between the ARFs and the COSO components. To calculate the percentage, the frequency count of the ARFs (columns) associated with the frequency count of the COSO components (rows) was divided by the total frequency of all observations in the research study and then multiplied by 100. For example, the percentage of ARF01 related to COSO1 is (3/132)×100 = 2% and the percentage of ARF02 related to COSO1 is (0/132)×100 = 0%. The total percentage of ARF01 across all COSOs is (59/132)×100 = 45%, while the total percentage of COSO1 across all ARFs is (15/132)×100 = 11%.

Table 24. Analysis: Relationship between Audit Report Factors and COSO Component

	ARF Code							
	ARF01 Noncompliance With Laws and Regulations		ARF02 Weak Internal Controls		ARF03 Lack of Internal Controls		Total	
COSO Code COSO Component	**Frequency**	**Percentage**	**Frequency**	**Percentage**	**Frequency**	**Percentage**	**Frequency**	**Percentage**
COSO1 Control Environment	3	2%	0	0%	12	9%	15	11%
COSO2 Risk Assessment	6	5%	0	0%	0	0%	6	5%
COSO2 Risk Assessment, COSO3 Control Activities, COSO5 Monitoring Activities	14	11%	0	0%	0	0%	14	11%
COSO3 Control Activities	30	23%	40	30%	17	13%	87	66%
COSO3 Control Activities, COSO4 Information and Communication, COSO5 Monitoring Activities	6	5%	4	3%	0	0%	10	8%
Total	59	45%	44	33%	29	22%	132	100%

As shown in Table 24, the COSO3 Control Activities component of the COSO (2013) *Internal Control – Integrated Framework* is consistently prominent across all ARFs at a frequency of 87 (66%). Specifically, ARF02 Weak Internal Controls has an alignment with COSO3 Control Activities, at a frequency of 40 (30%). Furthermore, ARF01 Noncompliance With Laws and Regulations aligns with COSO3 Control Activities at a frequency of 30 (23%). ARF03 Lack of Internal Controls also shows significant alignment with COSO3 Control Activities at a frequency of 17 (13%). The frequent associations between ARFs and COSO3 Control Activities indicate that contractors might be struggling with the development and implementation of control activities within their accounting systems.

Table 25 summarizes the interaction between the SDCs and the COSO components. To calculate the percentage, the frequency count of the COSOs (columns) associated with the frequency count of the SDCs (rows) was divided by the total frequency of all observations in the research study and then multiplied by 100. For example, the percentage of COSO1 related to SDC01 is (5/132)×100 = 4% and the percentage of COSO2 related to SDC01 is (0/132)×100 = 0%. The total percentage of COSO1 across all SDCs is (15/132)×100 = 11%, while the total percentage of SDC01 across all COSO components is (18/132)×100 = 14%. COSO3 Control Activities that led to an SDC of 5% or higher was deemed most frequent and is discussed in further detail.

Table 25. Analysis: Relationship between DFARS 252.242-7006 Significant Deficiency Category and COSO Component

SDC Code DFARS 252.242-7006 System Criteria	**COSO Code COSO Component**										**Total**	
	COSO1 Control Environment		**COSO2 Risk Assessment**		**COSO2 Risk Assessment, COSO3 Control Activities, COSO5 Monitoring Activities**		**COSO3 Control Activities**		**COSO3 Control Activities, COSO4 Information and Communication, COSO5 Monitoring Activities**			
	F	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**
SDC01 Internal Controls	5	4%	0	0%	1	1%	12	9%	0	0%	18	14%
SDC02 Direct and Indirect Costs	1	1%	0	0%	0	0%	0	0%	0	0%	1	1%
SDC03 Direct Costs	1	1%	0	0%	0	0%	3	2%	0	0%	4	3%
SDC04 Indirect Costs	0	0%	0	0%	1	1%	5	4%	0	0%	6	5%
SDC05 General Ledger Controls	0	0%	1	1%	0	0%	1	1%	0	0%	2	2%
SDC06 Reconciliation to General Ledger	0	0%	1	1%	0	0%	2	2%	0	0%	3	2%
SDC07 Adjusting Entries	0	0%	0	0%	0	0%	6	5%	0	0%	6	5%
SDC08 Management Controls	1	1%	0	0%	0	0%	4	3%	0	0%	5	4%
SDC09 Timekeeping System	2	2%	0	0%	0	0%	7	5%	0	0%	9	7%
SDC10 Labor Distribution System	0	0%	0	0%	0	0%	9	7%	0	0%	9	7%
SDC11 Routine Posting	1	1%	0	0%	0	0%	0	0%	0	0%	1	1%
SDC12 Unallowable Costs	0	0%	0	0%	9	7%	1	1%	1	1%	11	8%
SDC13 Contract Line Item and Unit	0	0%	0	0%	0	0%	3	2%	0	0%	3	2%
SDC14 Preproduction Costs	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
SDC15 Cost Accounting Information	1	1%	2	2%	0	0%	8	6%	3	2%	14	11%
SDC16 Reconciliation of Billings	2	2%	1	1%	2	2%	24	18%	3	2%	32	24%
SDC17 Pricing Follow-On Acquisitions	0	0%	0	0%	1	1%	1	1%	3	2%	5	4%
SDC18 Accounting Practices	1	1%	1	1%	0	0%	1	1%	0	0%	3	2%
Total	15	11%	6	5%	14	11%	87	66%	10	8%	132	100%

Note: F refers to frequency, and % refers to percentage of the total observations.

As shown in Table 25, COSO3 Control Activities for SDC01 Internal Controls displayed a frequency of 12 (9%). SDC07 Adjusting Entries, SDC09 Timekeeping System, SDC10 Labor Distribution System, and SDC15 Cost Accounting Information resulted in frequencies of six (5%), seven (5%), nine (7%), and eight (6%), respectively. The most prominent frequency is observed with SDC16 Reconciliation of Billings at 24 (18%), marking this as a critical area for improvement. These patterns of deficiencies in control activities signal a need for contractors to focus on improving their internal controls, particularly around adjusting entries, timekeeping, labor distribution, and billing processes.

In summary, addressing Research Question 2, the findings indicate audit report factors resulting in significant deficiencies align with the Section 809 Panel (2019) Recommendation 72 for seven system criteria in the context of the COSO (2013) *Internal Control – Integrated Framework*. As shown in Table 22, ARF01 Noncompliance With Laws and Regulations, emerged with the highest frequency of 59, comprising 45% of total observations. Notably, the most frequent deficiencies for ARF01 Noncompliance With Laws and Regulations were observed in S8097 Billing Practices and S8096 Unallowable Costs, with frequencies of 32 (24%) and 13 (10%), respectively.

In addition, as shown in Table 24, the data indicate that COSO3 Control Activities was consistently prominent across all ARFs with a frequency of 87 (66%). Specifically, ARF01 Noncompliance With Laws and Regulations, ARF02 Weak Internal Controls, and ARF03 Lack of Internal displayed frequencies of 30 (23%), 40 (30%), and 17 (13%), respectively. Table 25 further indicated SDCs associated with COSO3 Control Activities include SDC01 Internal Control, SDC07 Adjusting Entries, SDC09 Timekeeping System, SDC10 Labor Distribution System, SDC15 Cost Accounting Information, and SDC16 Reconciliation of Billings, which displayed frequencies of 12 (9%), six (5%), seven (5%), nine (7%), eight (6%), and 24 (18%), respectively. COSO3 Control Activities highlight the critical areas requiring improvement, specifically in adjusting entries, timekeeping, labor distribution, billing reconciliation, and overall internal control mechanisms.

Research Question 3: What are the most common auditors' recommendations for contractors to improve their accounting system administration processes and avoid disapproval in the future?

The third research question analyzed the DCAA auditors' recommendations in addressing the significant deficiencies according to the DFARS 252.242-7006 Accounting System Administration 18 system criteria. As previously discussed in the Methodology chapter, the data preparation included collecting and reviewing the DCAA audit reports for 39 samples submitted to the DCMA Eastern Region from FY 2020 through FY 2022. The relevant data relating to the significant deficiencies and auditors' recommendations were extracted from the DCAA audit reports. This extraction of data revealed a total of 212 observations relating to audit report recommendations. The data was coded and categorized into auditors' recommendations for improvement (ARIs). The observations were totaled by the coded text segments grouping to show the frequency count and percentage of each ARI.

Table 26 summarizes the ARIs' frequency and percentage. To calculate the percentage, the frequency count of the ARIs (rows) was divided by the total frequency of all observations in this research study and then multiplied by 100. For example, the percentage of ARI01 is $(90/212)\times100 = 42\%$, and the percentage of ARI02 is $(28/212)\times100 = 13\%$. Table 26 establishes a rank hierarchy of the most frequent recommendations.

Table 26. Analysis: Auditors' Recommendations for Improvement

ARI Code	Frequency	Percentage
ARI01 Policies and Procedures	90	42%
ARI02 Accounting System	28	13%
ARI05 Training	27	13%
ARI06 FAR and DFARS	24	11%
ARI04 Billings	22	10%
ARI03 Internal Audits	21	10%
Total	212	100%

As shown in Table 26, the analysis of ARI01 Policies and Procedures emerged with a frequency of 90, comprising 42% of total observations. The next notable recommendation was ARI02 Accounting System and ARI05 Training with frequencies of 28 (13%) and 27 (13%), respectively. ARI06 FAR and DFARS displayed a frequency of 24 (11%). Lastly, ARI04 Billings and ARI03 Internal Audits displayed frequencies of 22 (10%) and 21 (10%), respectively. Next, Table 27 provides insights into the findings for each ARIs.

Table 27. Findings: Auditors' Recommendations for Improvement

ARI Code	Findings
ARI01 Policies and Procedures	1. Develop or update policies and procedures for compliance with the FAR 52.216-7 Allowable Cost and Payment.
	2. Update policies and procedures to include contract briefing of unallowable costs and special contract provisions.
	3. Revise policies and procedures to implement a logical method to allocate overhead pool costs to temporary labor where a casual beneficial relationship exists.
	4. Maintain and provide policies and procedures for the current accounting system.
	5. Develop or update timekeeping policy and procedures.
	6. Develop and implement policies and procedures to ensure staff reconcile direct costs from the subsidiary ledger to the general ledger and maintain a record of reconciliation prior to submission of progress payment billing.
ARI02 Accounting System	1. Implement accrual basis accounting system in accordance with GAAP to record all costs.
	2. Update the accounting system to allow for the job cost ledger to accumulate and report incurred costs by CLIN or ACRN for the current period and year-to-date costs.
	3. Update the accounting system for adjusting journal entry approval capability.
	4. Change the timekeeping system to require employees to certify their timesheet.
ARI03 Internal Audits	1. Establish a process for review of unallowable costs prior to approval for payment.
	2. Put controls in place to ensure posting of transactions at least monthly.
	3. Conduct management performance of periodic reviews of employees' timesheets.
ARI04 Billings	1. Use current and approved provisional billing rates and final rates in billings to the government, FAR 52.216-7 Allowable Cost and Payments.
	2. Submit final vouchers within 120 days from final rate settlement, FAR 52.216-7 Allowable Cost and Payments.
ARI05 Training	1. Provide training to employees on timekeeping policies and procedures.
	2. Provide training to employees for compliance with FAR 52.216-7 Allowable Cost and Payment.
	3. Provide training to employees for compliance with FAR 31 Contract Cost Principles and Procedures.
ARI06 FAR and DFARS	1. Comply with contract terms for fixed fee.
	2. Comply with FAR 52.216-7 Allowable Cost and Payment.
	3. Comply with FAR 31 Contract Cost Principles and Procedures.
	4. Comply with subcontractor and vendor payments "within 30 days of submission of the Contractor's payment request to the Government" to ensure compliance with FAR 52.216-7(b) Allowable Cost and Payment. (FAR 52.216-7, 2024)

As shown in Table 26, ARI01 Policies and Procedures displayed a high frequency of 90 (42%). The findings in Table 27, ARI01 Policies and Procedures, suggest that many contractors need to update or refine their policies and procedures in areas like cost recording, timekeeping, and billing methods. The next notable findings in Table 26 were ARI02 Accounting System and ARI05 Training with frequencies of 28 (13%) and 27 (13%), respectively. The findings in Table 27, ARI02 Accounting System, indicate a need for changes in areas like accounting software, system design, data processing, and reporting capabilities. ARI05 Training findings highlight the importance of employee training with FAR 52.216-7 Allowable Cost and Payment and FAR 31 Contract Cost Principles and Procedures.

As shown in Table 26, ARI06 FAR and DFARS displayed a high frequency of 24 (11%). The findings in Table 27, ARI06 FAR and DFARS emphasize the need for regulatory adherence with FAR 31 Contract Cost Principles and Procedures and FAR 52.216-7 Allowable Cost and Payment. Lastly, Table 26 showed frequencies for ARI04 Billings and ARI03 Internal Audits of 22 (10%) and 21 (10%), respectively. ARI04 Billings and ARI03 Internal Audits emphasize the need to align billing practices to comply with contractual terms, cost accounting standards, or other relevant regulations and the importance of ongoing internal reviews to identify potential issues.

In summary, addressing Research Question 3, the findings clearly indicate that ARI01 Policies and Procedures was the most prominent auditors' recommendations for contractors to establish or refine policies and procedures, with the highest frequency of 90, comprising 42% of the observations. ARI01 Policies and Procedures encompasses the need for compliance with FAR clauses, timekeeping accuracy, and billing practices. ARI02 Accounting System and ARI05 Training constitute the next significant areas for improvement, with a frequency of 28 (13%) and 27 (13%), respectively. ARI02 Accounting System suggests the need for updates to software and data processing capabilities, and ARI05 Training highlights the importance of employee training. The emphasis on ARI06 FAR and DFARS, ARI04 Billings, and ARI03 Internal Audits further underlines the necessity for compliance with the FAR and DFARS clauses, adherence to billing rates, and regular reviews.

Research Question 4: What do the comparisons between the contractors' responses to the contracting officers' initial determination of significant deficiencies and the contracting officers' final determinations reveal?

The fourth and last research question analyzed the contractors' responses to the DCMA contracting officers' initial determinations and compared it to the DCMA contracting officers' final determination evaluations. As previously discussed in the Methodology chapter, the data preparation included collecting and reviewing the DCMA contracting officers' initial determination and final determination documents for 39 samples submitted to the DCMA Eastern Region from FY 2020 through FY 2022. The relevant data relating to the contractors' responses to the significant deficiencies and the DCMA contracting officers' final determinations were extracted from the DCMA contracting officers' initial determination and final determination documents. This extraction of data revealed a total of 39 observations relating to the contractors' responses to the DCMA contracting officers' initial determinations and the DCMA contracting officers' final determination evaluations. The observations were totaled by the text segment groupings to show the frequency count and percentage of the contractors' responses to the DCMA contracting officers' initial determination and the DCMA contracting officers' final determination evaluations.

Table 28 summarizes the frequency and percentages of the contractors' responses to the DCMA contracting officers' initial determinations. To calculate the percentages, the frequency count of the DCMA contracting officers' initial determinations (rows) was divided by the total frequency of all observations in this research study and then multiplied by 100. For example, the percentage of contractors submitting an unsolicited CAP due to the DCMA contracting officers' initial determination significant deficiency exists pursuant to the DFARS 252.242-7006 is $(38/39)\times100 = 97\%$. Table 29 summarizes the percentages of the contractors' responses to the DCMA contracting officers' initial determinations.

Table 28. Analysis: Contractors’ Responses to the DCMA Contracting Officers’ Initial Determinations

DCMA Contracting Officers’ Initial Determinations	Contractors’ Responses					
	Submitted Unsolicited CAP		No Response		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Significant deficiency exists pursuant to the DFARS 252.242-7006	38	97%	1	3%	39	100%

As shown in Table 28, the frequency of 38 (97%) of contractors submitted unsolicited CAPs in response to the DCMA contracting officers’ initial determinations for significant deficiencies. The frequency of one (3%) contractor not submitting an unsolicited CAP was due to the contractor going out of business. In addition, the findings further revealed that four (10%) contractors disagreed with the severity of the deficiency.

Next, Table 29 summarizes the frequency and percentages of the DCMA contracting officers’ evaluations of contractors’ responses. To calculate the percentages, the frequency count of the DCMA contracting officers’ final determinations (rows) was divided by the total frequency of all observations in this research study and then multiplied by 100. For example, the percentage of adequacy of unsolicited CAP that is acceptable for DCMA and DCAA agreed that significant deficiency no longer exists is $(27/39)\times100 = 69\%$.

Table 29. Analysis: DCMA Contracting Officers' Evaluations of Contractors' Responses

DCMA Contracting Officers' Final Determinations	DCMA Contracting Officers' Evaluations of Contractors' Responses																	
	Adequacy of Unsolicited CAP						Verification & Validation of Unsolicited CAP						Final Determinations					
	Acceptable		Not Acceptable		Total		Verified & Validated		Not Verified & Validated		Total		Resolved		Not Resolved		Total	
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
DCMA and DCAA disagreed that significant deficiency still exists pursuant to the DFARS 252.242-7006.	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
DCMA and DCAA agreed that significant deficiency still exists pursuant to the DFARS 252.242-7006.	2	5%	3	8%	5	13%	0	0%	5	13%	5	13%	0	0%	5	13%	5	13%
DCMA and DCAA agreed to lower severity of findings from significant deficiency to deficiencies.	7	18%	0	0%	7	18%	0	0%	7	18%	7	18%	7	18%	0	0%	7	18%
DCMA and DCAA agreed that significant deficiency no longer exists.	27	69%	0	0%	27	69%	7	18%	20	51%	27	69%	27	69%	0	0%	27	69%
Total	36	92%	3	8%	39	100%	7	18%	32	82%	39	100%	34	87%	5	13%	39	100%

Note: F refers to frequency, and % refers to percentage of the total observations.

As shown in Table 29, a frequency of 27 (69%) of the DCMA contracting officers' final determination evaluation observations resulted in a consensus between the DCMA and the DCAA that significant deficiencies no longer existed, whereas zero (0%) observations showed a disagreement on the existence of a significant deficiency under the DFARS 252.242-7006 Accounting System Administration. A detailed analysis revealed that 34 (87%) of contractors who submitted an unsolicited CAP received final determinations that the significant deficiency was resolved, leading to approval of their accounting systems.

As shown in Table 29, a frequency of 36 (92%) indicated a high acceptability rate for unsolicited CAPs and a resolution frequency of 34 (87%) in final determinations. Moreover, despite the high frequency of 27 (69%) consensus between the DCMA and the DCAA in precluding significant deficiencies, there is a notable inconsistency when considering the verification and validation frequency of seven (18%) for unsolicited CAPs. Further examination showed that the verification and validation processes were incomplete, and the final determination of a significant deficiency no longer existing relied solely on the adequacy of the contractors' unsolicited CAPs.

As shown in Table 29, a frequency of five (13%) resulted in a consensus between the DCMA and the DCAA that significant deficiencies still exist under the DFARS 252.242-7006 Accounting System Administration, which resulted in five (13%) of the DCMA contracting officers' final determinations not resolved, leading to disapproval of the contractors' accounting system. Of the five (13%) observations, two (5%) observations of unsolicited CAPs were deemed adequate by the DCMA contracting officers. However, the DCMA contracting officers were unable to perform the verification and validation process of the CAP within 30 to 45 days for approval of the accounting systems for the three observations. The remaining three (8%) observations of unsolicited CAPS were deemed inadequate by the DCMA contracting officers because the contractors' responses did not include the CAP required criteria listed in Table 10. In addition, the researcher was able to verify that four of the five contractors' accounting system disapprovals were related to small businesses. Per Table 2, small businesses are exempt from CAS, and therefore, DFARS 252.242-7005 Contractor Business System payment withholds did not apply to the disapproval of the contractors' accounting systems.

In summary, addressing Research Question 4, the findings showed a significant interaction between the contractors' proactive responses and the DCMA contracting officers' final determinations. The data showed a high acceptability frequency of 36 (92%) for unsolicited CAPs submitted by contractors, with 34 (87%) of these observations resulting in the resolution of significant deficiencies. Notably, 27 (69%) of samples achieved consensus between DCMA and DCAA, concluding that significant deficiencies were no longer present. However, there is a gap in the verification and validation of CAPs, indicated by a lower frequency of seven (18%). This gap in the verification and validation of CAPs process suggests that while contractors' CAPs are often deemed adequate based on their content, further efforts in validation are required to ensure these plans are effectively implemented and deficiencies are truly addressed. Moreover, a small frequency of five (13%) observations still resulted in unresolved deficiencies, leading to the disapproval of the contractors' accounting systems. The next section provides the implications of findings as they relate to the four research questions.

C. IMPLICATIONS OF FINDINGS

The findings presented significant insights into the challenges facing contractors in their adherence to accounting practices and compliance with the DFARS 252.242-7006 (2012) Accounting System Administration 18 system criteria. For the first research question, Table 17 showed high deficiency frequencies for ARF01 Noncompliance With Laws and Regulations in areas such as SDC16 Reconciliation of Billings, SDC15 Cost Accounting Information, and SDC12 Unallowable Costs. The findings in Table 18 point to a broader systemic issue in contractors' understanding and implementation of the DFARS 252.242-7006 Accounting System Administration contract clause related to cost accounting and reconciliation.

As shown in Table 17 and Table 18, the difficulties that contractors face in reconciling their billing with cost accounts or adhering to FAR regulations, as evidenced by the high frequencies of SDC16 Reconciliation of Billings, SDC15 Cost Accounting Information, and SDC12 Unallowable Costs, mirror the common deficiencies identified by the DCAA (2019) *Accounting System Requirements*. These parallels stress the importance of meticulous recordkeeping and a deep understanding of the FAR and DFARS clauses to maintain billing accuracy and contractual compliance. Failing to comply with FAR and DFARS clauses can adversely affect contractors' financial outcomes and risk legal consequences, potentially harming their relationship with the government.

As shown in Table 17, the infrequent occurrence of deficiencies related to SDC02 Direct and Indirect Costs and SDC11 Routine Posting could suggest that these areas are typically well-managed or possibly not examined as thoroughly in DCAA audits, which might result in issues being underreported. When this research study's findings are compared to the DCAA's (2019) *Accounting System Requirements*, the commonality of deficiencies such as the SDC02 Direct and Indirect Costs requirement for "Interim (at least monthly) determination of costs charged to a contract through routine posting of books and records" (DFARS 252.242-7006, 2012) and the SDC11 Routine Posting "Proper segregation of direct and indirect costs" (DFARS 252.242-7006, 2012) emphasize the significance of sustaining an effective accounting system as stipulated by the DFARS 252.242-7006 (2012) Accounting System Administration. Nonetheless, the lower incidence of these issues noted in this current study could point to a shift in the focus of DCAA audits or suggest variations in how thoroughly these areas are investigated or documented.

As shown in Table 19 and Table 20, ARF02 Weak Internal Controls and ARF03 Lack of Internal Controls, as reflected in SDC01 Internal Controls, SDC09 Timekeeping System, and SDC10 Labor Distribution System, suggest that many contractors might be overlooking the significance of internal control activities. These deficiencies, ranging from non-compliance in timekeeping practices to challenges in labor cost allocation, indicate potential vulnerabilities in the contractors' accounting systems. The consequences of these oversights could be manifold, from incorrect financial reporting to potential breaches of contract terms. Contractors who fail to prioritize and strengthen their internal controls could face repercussions, both in terms of financial losses and tarnished reputations.

As shown in Table 21, the findings indicated that a single ARF could result in numerous significant deficiencies being cited under the DFARS 252.242-7006 Accounting System Administration criteria. Specifically, the data showed an interrelation of deficiencies across different SDCs, such as SDC16 Reconciliation of Billings with SDC15 Cost Accounting Information. This interrelation implies that a single area of deficiency, like billing reconciliation, can have cascading effects, potentially causing issues in related areas such as cost accounting. The confluence of ARFs in these areas may lead to ambiguity in the identification of significant deficiencies, especially when a single problem spans multiple categories. These observations highlight the complex and systemic challenges that contractors encounter, emphasizing the necessity for holistic solutions to address such interconnected issues.

Building on Chapter II, Literature Review, Section 809 Panel (2019) Recommendation 72 could serve as a strategic approach to clarifying and streamlining significant deficiency citations (Section 809 Panel, 2019). By condensing the DFARS 252.242-7006 (2012) Accounting System Administration criteria from 18 to seven, the Section 809 Panel's recommendation seeks to simplify the evaluation process for contractors, making it easier to identify and address significant deficiencies (Section 809 Panel, 2019). The transition toward a more focused set of criteria underscores the implications for this research study. The streamlined approach proposed by the Section 809 Panel could lead to more effective and efficient oversight of contractors' accounting systems, potentially reducing the occurrence of multiple, interrelated deficiencies. This refinement of the DFARS 252.242-7006 Accounting System Administration system criteria could aid contractors in more effectively managing their accounting systems to prevent significant deficiencies and help government organizations in their surveillance and evaluation efforts.

For the second research question, Table 22 showed a clear alignment between the DFARS 252.242-7006 (2012) Accounting System Administration system 18 system criteria and the Section 809 Panel's (2019) Recommendation 72 for seven criteria. In addition, Table 22 and Table 23 showed significant deficiencies relating to ARF01 Noncompliance With Laws and Regulations and SDC16 Reconciliation of Billings, respectively. These findings are consistent with the findings of the first research question, highlighting a recurring theme of noncompliance and reconciliation issues, which suggests systemic challenges within contractors' accounting practices. The implication here is that contractors frequently struggle with understanding and applying regulations correctly and consistently managing their billing processes to align with contractual and regulatory requirements. The findings emphasize the need for enhanced focus on compliance training and robust billing systems to mitigate the risk of significant deficiencies and to improve the overall effectiveness of the accounting system control activities.

As shown in Table 24 and 25, the findings highlight the crucial role of COSO3 Control Activities from the COSO (2013) *Internal Control – Integrated Framework*, underlining its significance in minimizing significant deficiencies. According to the COSO (2013) *Internal Control – Integrated Framework*,

> Control activities are the actions established by policies and procedures to help ensure that management directives to mitigate risks to the achievement of objectives are carried out. Control activities are performed at all levels of the entity and at various stages within business processes, and over the technology environment. (p. 13)

In the context of these findings, enhancing internal controls maps directly to improving the control activities component within the COSO (2013) *Internal Control – Integrated Framework*. Contractors can better manage and monitor the risk of deficiencies by enforcing the control activities component.

For the third research question, Table 26 highlights the necessity for contractors to reassess and improve their policies and procedures, as reflected in the high frequency of the ARI01 Policies and Procedures recommendations cited in the DCAA audit reports. The need for enhanced guidance in critical areas such as cost recording, timekeeping, and billing methodologies not only echoes the broader issues identified by deficiencies, such as SDC16 Reconciliation of Billings, SDC15 Cost Accounting Information, and SDC12 Unallowable Costs, but also sheds light on the widespread challenge contractors encounter in correctly interpreting and applying contract terms and regulations, as shown in Table 27. The implication here is clear: by investing in targeted training and fostering a deeper comprehension of legal and regulatory frameworks, contractors may be able to diminish the occurrence of significant deficiencies and strengthen their compliance in day-to-day operations.

For the fourth research question, the analysis brought into focus the dynamic between contractors and the DCMA, revealing contractors' readiness to engage with compliance processes. This was evidenced in Table 28 by the substantial proportion of unsolicited CAPs submitted. The contractors proactively proposed corrective actions for identified significant deficiencies, demonstrating a commendable level of engagement. The effectiveness of these unsolicited CAP submissions is further underscored by the fact that there was agreement between the DCMA and the DCAA that the significant deficiencies identified in the initial determinations had been adequately addressed, as shown in Table 29. Such proactive measures by contractors are indicative of their effective engagement and their dedication to resolving audit issues.

As shown in Table 29, despite the proactive engagement from contractors, the continued presence of significant deficiencies in the observations underscores the need for further improvement. The discrepancy between the high rate of agreement on the non-existence of deficiencies and the much lower rate of verification and validation of CAPs points to serious concerns. This disparity suggests that while deficiencies may be formally addressed in the CAPs, there could be deeper issues or misalignments in the resolution process that are not being fully resolved. The DCMA's tight timeline of 30 to 45 days for final determination (DCMA, 2019a) could be exerting undue pressure on the verification and validation processes, leading to rushed evaluations, or overlooked details, which risks leaving critical problems unresolved.

As shown in Table 29, the reduction in audit findings' severity from significant deficiencies to deficiencies demonstrates the impact of the Section 809 Panel's (2019) Recommendation 73. The NDAA for FY 2021's amendments, which advocate for a unified auditing language and standardized evaluation criteria for contractor business systems, signify an important shift in auditing culture. As of March 15, 2024, the DARS (2024) Regulatory Control Officer is still reviewing the NDAA for FY 2021 Section 806 draft proposed rule (p. 11). This amendment is characterized by the replacement of the term *significant deficiencies* with *material weaknesses*, aligning the NDAA for FY 2021 with Section 809 Panel Recommendation 73 for harmonized and clear audit standards (NDAA, 2021; Section 809 Panel, 2019). This amendment indicates a move from a punitive auditing approach to a more collaborative and solution-oriented method, indicative of a strengthening partnership between contractors and government organizations.

Considering this amendment, had the DCAA adopted the material weakness definition as proposed, there might have been fewer DCMA contracting officers' initial determinations indicating that significant deficiencies exist pursuant to the DFARS 252.242-7006 Accounting System Administration that led to final determinations of accounting system disapprovals. The material weakness definition, generally associated with a higher threshold for severity, could potentially lead to a reclassification of some findings that were previously deemed significant deficiencies. This would reduce the overall number of DCMA contracting officers' issuances of initial determinations citing significant deficiencies that may lead to final determinations of accounting system disapprovals. The reduction of accounting system disapprovals could be attributed to the material weakness definition's focus on issues that result in a more probable and material misstatement of contractors' finances, whereas significant deficiencies may account for a broader range of issues, including those that are less likely to have a material impact on financial requirements.

The use of the term material weakness may also prompt a more nuanced analysis of each deficiency's impact on a contractor's financial control and compliance systems. If a deficiency does not substantially increase the risk of material misstatement, it might not warrant an accounting system disapproval under the material weakness definition, thereby reducing the number of disapprovals. This nuance could facilitate a more cooperative relationship between contractors and government organizations as they work together to address and resolve deficiencies without the immediate threat of accounting system disapprovals.

Furthermore, the findings emphasize the need for consistent application and interpretation of audit standards. If the material weakness term were used instead of the significant deficiency term, it would be crucial for auditors and contracting officers to have a shared understanding of the implications of these terms to ensure equitable and effective enforcement. A unified approach to these definitions would likely reduce confusion and increase transparency in the auditing process, fostering a better compliance environment.

In essence, adopting the material weakness definition could lead to a more discerning and constructive auditing process, which aligns with the NDAA for FY 2021's objective of clear and consistent defense procurement practices. It would potentially result in fewer accounting system disapprovals, as the definition for material weakness typically demands a demonstration of a more substantial impact on the reliability of financial reporting. The adoption of the definition for material weakness would require the DCAA auditors to establish a higher burden of proof before classifying an accounting system as inadequate, possibly leading to a decrease in the overall number of accounting system disapprovals. As a result, contractors may be afforded more opportunities to rectify issues before facing the consequences of a disapproved accounting system. This approach aligns with the broader trend towards fostering a collaborative environment in which contractors are encouraged to improve their accounting systems proactively rather than being penalized without a chance for prior correction.

Transitioning from the broad implications of audit standardization, it is important to consider the specific impact on smaller entities within the defense sector. As shown in Table 29, the findings indicated that the majority of the DCMA contracting officers' final determinations not resolved that led to accounting system disapprovals were related to small businesses, which cast a spotlight on the unique challenges these entities face. While small businesses benefit from certain regulatory exemptions, like those from the CAS, the findings suggest that they are not immune to the complexities of compliance (DFARS 252.242-7005, 2012). This situation may indicate a shortfall in specialized resources or detailed guidance, which are essential for small businesses to successfully meet the stringent requirements of federal contracting compliance.

The small businesses accounting system disapprovals underscores an urgent need for customized support and education. It is evident that one-size-fits-all approaches to compliance may overlook the distinctive challenges and resource limitations that smaller contractors encounter. Addressing this gap is not merely a matter of regulatory fairness but also critical to maintaining a diverse and healthy defense industrial base where businesses of all sizes can thrive. Therefore, the defense acquisition community may need to explore new strategies and tools to support these smaller entities, ensuring they are adequately prepared to meet the stringent requirements of government contracting. The next section provides recommendations based on findings for contractors and government organizations.

D. RECOMMENDATIONS BASED ON FINDINGS

Based on the comprehensive analysis of the challenges contractors face in adhering to the DFARS 252.242-7006 (2012) Accounting System Administration 18 system criteria and the findings from this research study, Table 30 and Table 31 propose recommendations for contractors and government organizations to enhance compliance and operational efficiency. These recommendations are targeted at improving both contractor practices and government oversight.

Table 30. Recommendations for Contractors Based on Findings

1. **Internal Controls:** Contractors should enhance their internal control systems by aligning with the COSO (2013) *Internal Control – Integrated Framework*, specifically within control activities related to billing, cost accounting, and reconciliation processes, to prevent significant deficiencies.
2. **Policies and Procedures:** Contractors should develop and refine their policies and procedures to strengthen areas such as timekeeping and cost recording; thereby, addressing systemic issues in understanding and executing contract terms.
3. **FAR and DFARS Training:** Contractors should implement ongoing training programs on FAR and DFARS regulations to enhance understanding and compliance among employees. Specifically, contractors should develop comprehensive training programs focused on FAR 31 Contract Cost Principles and Procedures, FAR 52.216-7 Allowable Cost and Payment, and DFARS 252.242-7006 Accounting System Administration to ensure their personnel are well-versed and fully compliant with these critical regulatory requirements.
4. **Compliance Audits:** Contractors should establish a routine of conducting regular compliance audits to ensure adherence to changes in regulatory standards and to proactively identify areas that require improvement.
5. **General Ledger and Billing Processes:** It is essential for contractors to emphasize the refinement of general ledger management and billing practices to ensure accuracy and compliance with contractual terms.

Table 31. Recommendations for Government Based on Findings

1. **Verification and Validation:** The DCMA should reinforce its verification and validation mechanisms to align with the final determinations regarding contractors' accounting systems.
2. **Small Businesses:** It is imperative to provide specialized training and guidance assistance to small businesses, especially considering their CAS exemptions, to ensure they have the necessary tools and knowledge to comply with DFARS regulations.
3. **Review Process:** Government organizations should optimize their review processes to eliminate unnecessary delays in the verification or validation of contractors' corrective actions.
4. **Penalty Exemptions:** There should be a reevaluation of the application of consistent standards, possibly revising penalty exemptions to maintain fairness across all business sizes.

The next section provides a summary of the analysis and findings, implications, and recommendations based on findings.

E. SUMMARY

This chapter provided an in-depth examination of significant deficiencies within the DFARS 252.242-7006 Accounting System Administration and offered a synthesis of findings in relation to the four research questions. This analysis encompassed a detailed examination of common audit report factors that lead to significant deficiencies and the extent of their alignment with the Section 809 Panel's recommendations. The chapter also examined the auditors' recommendations aimed at contractors' improvement, which highlighted the critical areas for enhancing internal control processes and compliance mechanisms. These recommendations were directed at mitigating the risks of future disapprovals and fostering a culture of continuous improvement within contractors' accounting systems. In addressing the final research question, the study evaluated contractors' responses to contracting officers' initial determinations and assessed the adequacy of these responses in the context of the contracting officers' final determination evaluations. The findings from this inquiry highlighted the responsiveness of contractors to compliance issues and their engagement with corrective actions.

The chapter provided a comprehensive understanding of the challenges and potential solutions related to significant deficiencies in contractors' accounting systems. It presented a set of pragmatic recommendations for both contractors and government organizations, aiming to bolster the adequacy and compliance of accounting systems with the DFARS 252.242-7006 Accounting System Administration. These recommendations are poised to foster a more effective and efficient system for managing defense contracts, ensuring that both contractors and government organizations can navigate the complexities of compliance with greater clarity and confidence. The next chapter provides the summary, conclusions, and areas for future research.

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V. SUMMARY, CONCLUSIONS, AND AREAS FOR FUTURE RESEARCH

A. INTRODUCTION

This chapter provides a summary of this research study's findings on the DFARS 252.242-7006 Accounting System Administration significant deficiencies. This research study's conclusions aim to support clearer and more effective compliance and management strategies in the defense sector. Additionally, this chapter sets the stage for future research by identifying potential areas that can extend the dialogue and improve the defense contracting landscape. The next section presents the summary for this research study.

B. SUMMARY

This research study examined the significant deficiencies in the DFARS 252.242-7006 Accounting System Administration 18 system criteria. Through a detailed analysis of the DCAA audit reports and DCMA contracting officers' initial determination and final determination documents, several significant findings emerged and are summarized in Table 32.

Table 32. Summary of Research Findings

Research Questions	Summary of Findings
1. What are the most common audit report factors that result in significant deficiency per the DFARS 252.242-7006 Accounting System Administration 18 system criteria?	• ARF01 Noncompliance with Laws and Regulations showed high instances of significant deficiencies in SDC16 Reconciliation of Billings, SDC15 Cost Accounting Information, and SDC12 Unallowable Costs (Refer to Table 17 and Table 18). • ARF02 Weak Internal Controls was often cited with SDC01 Internal Controls, SDC09 Timekeeping System, SDC10 Labor Distribution System, and SDC16 Reconciliation of Billings (Refer to Table 17 and Table 19). • ARF03 Lack of Internal Controls was predominantly associated with SDC01 Internal Controls (Refer to Table 17 and Table 20). • A single ARF can lead to multiple significant deficiency citations under the DFARS 252.242-7006 Accounting System Administration criteria (Refer to Table 21).
2. How do the audit report factors resulting in significant deficiencies align or diverge with Section 809 Panel Recommendation 72 for seven system criteria in the context of the COSO *Internal Control – Integrated Framework*?	• SDCs across all ARFs align with Section 809 Panel (2019) Recommendation 72 for seven system criteria (Refer to Table 22 and Table 23). • Regulatory adherence issues were noted in S8097 Billing Practices, S8096 Unallowable Costs, S8095 Adjustment to Ledger, S8094 General Ledger Control, and S8093 Indirect Costs (Refer to Table 22 and Table 23). • Control Activities, a COSO (2013) *Internal Control – Integrated Framework* component, emerged as a primary concern (Refer to Table 24 and Table 25).
3. What are the most common auditors' recommendations for contractors to improve their accounting system administration processes and avoid disapproval in the future?	• ARI01 Policies and Procedures was frequently recommended by the DCAA auditors, indicating a need for contractors to enhance policies and procedures in areas like cost recording, timekeeping, and billing methods (Refer to Table 26 and Table 27).
4. What do the comparisons between the contractors' response to the contracting officers' initial determination of significant deficiencies and the contracting officers' final determinations reveal?	• There was a high rate of proactive CAP submissions by contractors (Refer to Table 28). • A discrepancy was observed between the high agreement rate on deficiencies resolutions and the lower verification/validation rate of CAPs (Refer to Table 29). • Despite proactive CAP submissions, significant deficiencies persist in some observations (Refer to Table 29). • Most of the accounting system disapprovals are related to small businesses, highlighting a specific area for improvement.

Systemic issues in contractors' understanding and implementation of the DFARS 252.242-7006 Accounting System requirements were evident, particularly in billing, cost accounting, and reconciliation processes. This study highlighted significant weaknesses in contractors' internal control mechanisms. Weaknesses in timekeeping, labor distribution, and general ledger reconciliation were especially evident, indicating a pervasive pattern of internal control inadequacies.

Furthermore, the research presented an alignment between the audit report factors leading to significant deficiencies and the Section 809 Panel's Recommendation 72 for seven system criteria. However, this alignment also revealed a broader issue in which a single lapse in compliance could lead to multiple significant deficiencies. Additionally, contractors demonstrated a proactive approach in addressing audit concerns, as seen in the high percentage of unsolicited CAPs. Despite this, there was an observed gap in aligning these CAPs with the actual DCMA contracting officers' dispositioning of the significant deficiencies.

In addition, a shift towards a more collaborative and solution-focused approach in auditing and compliance was also noted. The reduction in the severity of audit findings suggests a more cooperative relationship between contractors and government organizations, aiming to establish resolutions that are constructive and minimize disruptions. The next section provides the conclusion for this research study.

C. CONCLUSIONS

In conclusion, this research study provided an analysis of significant deficiencies identified in contractors' accounting systems under the DFARS 252.242-7006 Accounting System Administration. By identifying key factors leading to significant deficiencies and assessing the alignment with Section 809 Panel recommendations, this study contributes to the ongoing dialogue on improving governmental oversight and contractor compliance. It highlights the need for clarity, consistency, and cooperation in governmental regulations and contractor management.

Recommendations derived from the findings, detailed in Chapter IV, aim to strengthen the adequacy and compliance of accounting systems with the DFARS

252.242-7006 Accounting System Administration. These recommendations are intended to create a more effective and streamlined process for managing defense contracts, ensuring that both contractors and government organizations can navigate the complexities of compliance with greater clarity and confidence. Moreover, this study acknowledges the role of the auditability triangle—effective internal controls, competent personnel, and efficient processes—and agency theory in understanding the dynamic interactions within government contracting. These frameworks provide essential insights into creating systems that promote accountability and address the principal–agent relationship challenges.

As this research study concludes, it paves the way for ongoing research and dialogue, crucial for the evolution of governmental contracting practices. The next section provides consideration for areas for future research.

D. AREAS FOR FUTURE RESEARCH

This research study highlights several areas for future research consideration. These areas offer substantial opportunities for further research, each capable of advancing the understanding of contractor compliance and governmental oversight.

1. **Contractor Internal Control Systems:** It would be beneficial for future researchers to conduct a more detailed analysis of contractors' internal control systems and focus on identifying the root causes of significant deficiencies and formulating specific improvements.

2. **Small Business Impact:** The impact of regulatory changes on small businesses, particularly in the context of the DFARS 252.242-7006 Accounting System Administration, warrants close examination to understand the challenges small businesses face and the effectiveness of existing FAR requirements and oversight, such as FAR 52.216-7 Allowable Cost and Payment and FAR 52.232-16 Progress Payments.

3. **Effectiveness of CAP Implementation:** Exploring the long-term effectiveness of CAPs implemented by contractors is crucial to assess the sustainability of these compliance measures.

4. **CAP Verification and Validation Compliance Process:** Future researchers should examine the dynamics between contractors and government organizations and focus on the agreement rate of significant deficiencies no longer existing versus the verification and validation rate of unsolicited acceptable CAPs to shed light on the efficiency and effectiveness of the compliance process.

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