

**OFFICE OF INSPECTOR GENERAL**

**Information Technology  
Management Letter for  
the United States Coast  
Guard Component of the  
FY 2016 DHS Financial  
Statement Audit**



Homeland  
Security

**May 25, 2017**  
**OIG-17-61**



# DHS OIG HIGHLIGHTS

## *Information Technology Management Letter*

### *for the United States Coast Guard Component of the FY 2016 Department of Homeland Security Financial Statement Audit*

May 25, 2017

## **Why We Did This Audit**

Each year, our independent auditors identify component-level information technology (IT) control deficiencies as part of the DHS consolidated financial statement audit. This letter provides details that were not included in the fiscal year 2016 DHS Agency Financial Report.

## **What We Recommend**

We recommend that the Coast Guard, in coordination with the DHS Chief Information Officer and Acting Chief Financial Officer, make improvements to Coast Guard's financial management systems and associated IT security program.

### **For Further Information:**

Contact our Office of Public Affairs at (202) 254-4100, or email us at

## **What We Found**

We contracted with the independent public accounting firm KPMG, LLP to perform the audit of the consolidated financial statements of the U.S. Department of Homeland Security (DHS) for the year ended September 30, 2016. KPMG evaluated selected general IT controls (GITC), IT entity-level controls, and business process application controls at the United States Coast Guard (Coast Guard). KPMG determined that Coast Guard took corrective action to address six prior-year IT control deficiencies. Specifically, Coast Guard had made improvements by implementing certain controls regarding account recertification and database passwords. However, KPMG continued to identify GITC deficiencies related to access controls, segregation of duties, and configuration management of Coast Guard's core financial and feeder systems.

The deficiencies collectively limited Coast Guard's ability to ensure that critical financial and operational data were maintained in such a manner as to ensure their confidentiality, integrity, and availability. In addition, certain of these deficiencies adversely impacted internal controls over DHS' financial reporting and its operation, and therefore are considered to collectively represent a material weakness identified in the FY 2016 DHS Agency Financial Report.



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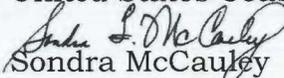
Department of Homeland Security

Washington, DC 20528 / [www.oig.dhs.gov](http://www.oig.dhs.gov)

May 25, 2017

MEMORANDUM FOR: Thomas P. Michelli  
Chief Information Officer  
United States Coast Guard

Rear Admiral Andrew J. Tionson  
Chief Financial Officer  
United States Coast Guard

FROM:   
Sondra McCauley  
Assistant Inspector General  
Office of Information Technology Audits

SUBJECT: *Information Technology Management Letter for the  
United States Coast Guard Component of the FY 2016  
Department of Homeland Security Financial Statement  
Audit*

Attached for your information is our final report, *Information Technology Management Letter for the United States Coast Guard Component of the FY 2016 Department of Homeland Security Financial Statement Audit*. This report contains comments and recommendations related to information technology internal control deficiencies. The observations did not meet the criteria to be reported in the *Independent Auditors' Report on DHS' FY 2016 Financial Statements and Internal Control over Financial Reporting*, dated November 14, 2016, which was included in the FY 2016 DHS Agency Financial Report.

The independent public accounting firm KPMG, LLP conducted the audit of DHS' FY 2016 financial statements and is responsible for the attached information technology management letter and the conclusions expressed in it. We do not express opinions on DHS' financial statements or internal control, nor do we provide conclusions on compliance with laws and regulations. We will post the final report on our website.

Please call me with any questions, or your staff may contact Kevin Burke, Acting Director, Information Systems and Acquisitions Division, at (202) 254-5450.

Attachment  
[www.oig.dhs.gov](http://www.oig.dhs.gov)

OIG-17-61



KPMG LLP  
Suite 12000  
1801 K Street, NW  
Washington, DC 20006

December 15, 2016

Office of Inspector General,  
U.S. Department of Homeland Security, and  
Chief Information Officer and Chief Financial Officer,  
U.S. Coast Guard,  
Washington, DC

Ladies and Gentlemen:

We planned and performed our audit of the consolidated financial statements of the U.S. Department of Homeland Security (DHS or Department), as of, and for the year ended, September 30, 2016, in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States; and Office of Management and Budget Bulletin No. 15-02, *Audit Requirements for Federal Financial Statements*. We considered internal control over financial reporting (internal control) as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial statements. In conjunction with our audit of the consolidated financial statements, we also performed an audit of internal control over financial reporting in accordance with attestation standards issued by the American Institute of Certified Public Accountants.

During our audit, we noted certain matters involving internal control and other operational matters at the U.S. Coast Guard (Coast Guard), a component of DHS, that are presented for your consideration. These comments and recommendations, all of which have been discussed with the appropriate members of management, are intended to improve internal control or result in other operating efficiencies.

We identified certain internal control deficiencies at Coast Guard during our audit that, in aggregate and when combined with certain internal control deficiencies identified at certain other DHS Components, contributed to a material weakness in information technology (IT) controls and financial system functionality at the DHS Department-wide level. Specifically, with respect to financial systems at Coast Guard, we noted certain matters in the general IT control areas of access controls, segregation of duties, and configuration management. These matters are described in the *Findings and Recommendations* section of this letter.

Additionally, at the request of the DHS Office of Inspector General (OIG), we performed additional non-technical information security procedures to identify instances in which Coast Guard personnel did not adequately comply with requirements for safeguarding sensitive material or assets from unauthorized access or disclosure. These matters are described in the *Observations Related to Non-Technical Information Security* section of this letter.

We have provided a description of key Coast Guard financial systems and IT infrastructure within the scope of the Fiscal Year (FY) 2016 DHS financial statement audit in Appendix A, and a listing of each Coast Guard IT Notice of Finding and Recommendation communicated to management during our audit in Appendix B.

During our audit, we noted certain matters involving financial reporting internal controls (comments not related to IT) and other operational matters at Coast Guard, including certain deficiencies in internal control that we consider to be significant deficiencies and material weaknesses, and communicated them in writing to



management and those charged with governance in our *Independent Auditors' Report* and in a separate letter to the OIG and the Coast Guard Chief Financial Officer.

Our audit procedures are designed primarily to enable us to form opinions on the FY 2016 DHS consolidated financial statements and on the effectiveness of internal control over financial reporting, and therefore may not bring to light all deficiencies in policies or procedures that may exist. We aim, however, to use our knowledge of Coast Guard's organization gained during our work to make comments and suggestions that we hope will be useful.

We would be pleased to discuss these comments and recommendations with you at any time.

The purpose of this letter is solely to describe comments and recommendations intended to improve internal control or result in other operating efficiencies. Accordingly, this letter is not suitable for any other purpose.

Very truly yours,

KPMG LLP

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## OBJECTIVE, SCOPE, AND APPROACH

### Objective

We audited the consolidated financial statements of the U.S. Department of Homeland Security (DHS or Department) for the year ended September 30, 2016, (hereinafter, referred to as the “fiscal year (FY) 2016 DHS consolidated financial statements”). In connection with our audit of the FY 2016 DHS consolidated financial statements, we performed an evaluation of selected general information technology (IT) controls (GITC), IT entity-level controls (ELC), and IT application controls at the U.S. Coast Guard (Coast Guard), a component of DHS, to assist in planning and performing our audit engagement. At the request of the DHS Office of Inspector General (OIG), we also performed additional information security testing procedures to assess certain non-technical areas related to the protection of sensitive IT and financial information and assets.

### Scope and Approach

#### General Information Technology Controls and IT Entity-Level Controls

The *Federal Information System Controls Audit Manual (FISCAM)*, issued by the U.S. Government Accountability Office (GAO), formed the basis for our GITC and IT ELC evaluation procedures.

FISCAM was designed to inform financial statement auditors about IT controls and related audit concerns, to assist them in planning their audit work and to integrate the work of auditors with other aspects of the financial statement audit. It also provides guidance to auditors when considering the scope and extent of review that generally should be performed when evaluating GITCs, IT ELCs, and the IT environment of a Federal agency. FISCAM defines the following five control categories to be essential to the effective operation of GITCs, IT ELCs, and the IT environment:

1. *Security Management* – controls that provide a framework and continuing cycle of activity for managing risk, developing security policies, assigning responsibilities, and monitoring the adequacy of computer-related security controls.
2. *Access Control* – controls that limit or detect access to computer resources (data, programs, equipment, and facilities) and protect against unauthorized modification, loss, and disclosure.
3. *Configuration Management* – controls that help prevent unauthorized changes to information system resources (software programs and hardware configurations) and provide reasonable assurance that systems are configured and operating securely and as intended.
4. *Segregation of Duties* – controls that constitute policies, procedures, and an organizational structure to manage who can control key aspects of computer-related operations.
5. *Contingency Planning* – controls that involve procedures for continuing critical operations without interruption, or with prompt resumption, when unexpected events occur.

Although each of these FISCAM categories were considered during the planning and risk assessment phase of our audit, we selected GITCs and IT ELCs for evaluation based on their relationship to the ongoing effectiveness of process-level automated controls or manual controls with one or more automated components. This includes those controls that depend on the completeness, accuracy, and integrity of information provided by the entity in support of our financial audit procedures. Consequently,

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FY 2016 GITC and IT ELC procedures at Coast Guard did not necessarily represent controls from each FISCAM category.

Business Process Application Controls

Where relevant GITCs were operating effectively, we tested selected IT application controls (process-level controls — fully automated or manual with an automated component) on financial systems and applications to assess internal controls over input, processing, and output of financial data and transactions.

FISCAM defines Business Process Application Controls (BPAC) as the automated and/or manual controls applied to business transaction flows; and related to the completeness, accuracy, validity, and confidentiality of transactions and data during application processing. BPACs typically cover the structure, policies, and procedures that operate at a detailed business process (cycle or transaction) level and operate over individual transactions or activities across business processes.

Financial System Functionality

In recent years, we have noted that limitations in Coast Guard's financial systems' functionality may be inhibiting the agency's ability to implement and maintain internal controls, including effective GITCs, IT ELCs, and IT application controls supporting financial data processing and reporting. Many key financial and feeder systems have not been substantially updated since being inherited from legacy agencies several years ago. Therefore, in FY 2016, we continued to evaluate and consider the impact of financial system functionality on internal control over financial reporting.

Non-Technical Information Security Testing

To complement our IT controls test work, we conducted limited after-hours physical security testing and social engineering at selected Coast Guard component facilities to identify potential weaknesses in non-technical aspects of IT security. This includes those related to component personnel awareness of policies, procedures, and other requirements governing the protection of sensitive IT and financial information and assets from unauthorized access or disclosure. This testing was performed in accordance with the FY 2016 DHS *Security Testing Authorization Letter* (STAL) signed by KPMG LLP, DHS OIG, and DHS management.

Appendix A provides a description of the key Coast Guard financial systems and IT infrastructure within the scope of the FY 2016 DHS financial statement audit.

## SUMMARY OF FINDINGS

During our FY 2016 assessment of GITCs, IT ELCs, and IT application controls, we noted that Coast Guard took corrective action to address six prior year IT control deficiencies. Specifically, Coast Guard made improvements over implementing certain controls around account recertification and database passwords. However, we continued to identify GITC deficiencies related to access controls, segregation of duties, and configuration management of Coast Guard's core financial and feeder systems. In many cases, new control deficiencies reflected weaknesses over controls that historically were operating effectively.

The conditions supporting our findings collectively limited Coast Guard's ability to ensure that critical financial and operational data were maintained in such a manner as to ensure their confidentiality, integrity, and availability. In addition, certain of these deficiencies at Coast Guard adversely impacted the internal controls over DHS' financial reporting and its operation, and we consider them to collectively contribute to a Department-wide material weakness regarding IT controls and financial system functionality for DHS, under standards established by the American Institute of Certified Public Accountants and the U.S. GAO.

Of the 18 IT Notices of Findings and Recommendations (NFR) issued during our FY 2016 testing at Coast Guard, 8 were repeat findings, either partially or in whole from the prior year, and 10 were new findings. The 18 IT NFRs issued represent deficiencies and observations related to three of the five FISCAM GITC categories.

The majority of the deficiencies that our audit identified were related to noncompliance with financial system controls. According to DHS Sensitive Systems Policy Directive 4300A, *Information Technology Security Program*, National Institute of Standards and Technology guidance, and Coast Guard policies, financial system controls lacked proper documentation, were not fully designed and implemented, were inadequately detailed, and were inconsistently implemented. The most significant weaknesses from a financial statement audit perspective continued to include:

1. excessive or inadequately monitored access to system components for key Coast Guard financial applications; and
2. configuration management controls that were not fully defined, followed, or effective.

During our IT audit procedures, we also evaluated and considered the impact of financial system functionality on financial reporting. In recent years, we have noted that limitations in Coast Guard's financial systems' functionality may be inhibiting Coast Guard's ability to implement and maintain effective internal control and to effectively and efficiently process and report financial data. Many key financial and feeder systems have not been substantially updated since being inherited from legacy agencies several years ago. Many key Coast Guard financial systems were not compliant with Federal financial management system requirements as defined by the *Federal Financial Management Improvement Act of 1996 (FFMIA)* and Office of Management and Budget Circular Number A-123 Appendix D, *Compliance with FFMIA*.

Although the recommendations made by us should be considered by Coast Guard, it is ultimately the responsibility of Coast Guard management to determine the most appropriate method(s) for addressing the deficiencies identified.

## **FINDINGS AND RECOMMENDATIONS**

### **Findings**

During our audit of the FY 2016 DHS consolidated financial statements, we identified the following GITC and ELC deficiencies at Coast Guard, certain of which, in the aggregate, contribute to the IT material weakness at the Department level:

#### *Access Controls and Segregation of Duties*

- Application engineers (developers) and database administrators retained inappropriate or excessive access to financial application production environments in conflict with the principle of segregation of duties.
- Account management activities on Coast Guard financial systems were not consistently or timely documented or implemented. Deficiencies included not maintaining documentation or corresponding supervisor approval for new accounts.
- Database audit logs were not reviewed by a party independent of system administration.
- Controls over recertification of user accounts, including privileged users, were not designed, implemented and operating effectively. Deficiencies included not having documented procedures for the recertification process, not reviewing 100% of user accounts, and not removing user access in a timely manner.
- Strong password requirements were not consistently enforced on databases supporting financial applications.
- Shared accounts were used by database administrators and application engineers without formal approval.
- Application users were not timely removed upon their separation from Coast Guard.

#### *Configuration Management*

- Certain configuration-related deficiencies identified on servers and system software were not remediated within a timely manner and tracked appropriately for remediation within management's Plan of Action and Milestones (POA&M).

#### *Entity-Level Controls*

- An entity-wide process to ensure revocation of system access for separated or transferred military, civilian, and contractor personnel in a timely manner based upon risk did not exist.

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## **Recommendations**

We recommend that the Coast Guard Office of the Chief Information Officer (OCIO) and Office of the Chief Financial Officer (OCFO), in coordination with the DHS OCIO and the DHS OCFO, make the following improvements to Coast Guard's financial management systems and associated IT security program (in accordance with Coast Guard and DHS requirements, as applicable).

### *Access Controls and Segregation of Duties*

- Implement a review process over developer access and implement controls to ensure proper segregation of duties.
- Implement more robust account management and creation procedures.
- Implement an audit log review process and strengthen controls over the audit log review process.
- Develop, implement, improve, and strengthen account management procedures regarding periodic recertification of user access.
- Comply with the guidelines and/or implement compensating controls regarding database passwords until a bug fix is released to address the complexity requirements.
- Implement a review process for the shared accounts and obtain approval from the Authorizing Official for shared database and system administrator accounts.
- Improve the review process to remove application access when individuals separate from Coast Guard.

### *Configuration Management*

- Implement more robust procedures to ensure that vulnerabilities are discovered and remediated in a timely manner consistent with the criticality of each vulnerability.

### *Entity-Level Controls*

- Continue efforts to plan, develop, document, and implement enterprise-wide processes that will notify all impacted system owners of terminated, transferred, or retired contractor, military, and civilian personnel.

## **OBSERVATIONS RELATED TO NON-TECHNICAL INFORMATION SECURITY**

To complement our IT controls test work during the FY 2016 audit, we performed additional non-technical information security procedures at Coast Guard. These procedures included after-hours physical security walkthroughs and social engineering to identify instances where Coast Guard personnel did not adequately comply with requirements for safeguarding sensitive material or assets from unauthorized access or disclosure. These procedures were performed in accordance with the FY 2016 *Security Testing Authorization Letter* (STAL) signed by DHS OIG management, KPMG management, and DHS management.

### **Social Engineering**

Social engineering is defined as the act of manipulating people into performing actions or divulging sensitive information. The term typically applies to trickery or deception for the purpose of gathering information or obtaining computer system access. The objective of our social engineering tests was to identify the extent to which Coast Guard personnel were willing to divulge network or system passwords that, if exploited, could compromise Coast Guard sensitive information.

To conduct this testing, we made phone calls from various Coast Guard locations at various times throughout the audit. Posing as Coast Guard technical support personnel, we attempted to solicit access credentials from Coast Guard users. Attempts to log into Coast Guard systems were not performed; however, we assumed that disclosed passwords that met the minimum password standards established by DHS policy were valid exceptions. During social engineering performed at Coast Guard, we attempted to call a total of 45 employees and contractors and reached 39. Of those 39 individuals with whom we spoke, none divulged their passwords in violation of DHS policy.

The selection of attempted or connected calls was not statistically derived; therefore, the results described here should not be used to extrapolate to Coast Guard as a whole.

### **After-Hours Physical Security Walkthroughs**

Multiple DHS policies, including the DHS Sensitive Systems Policy Directive 4300A; the DHS Privacy Office *Handbook for Safeguarding Sensitive Personally-Identifiable Information (PII)*; and DHS Management Directive 11042.1, *Safeguarding Sensitive but Unclassified (SBU) (FOUO) Information*, mandate the physical safeguarding of certain materials and assets that, if compromised either due to external or insider threat, could result in unauthorized access, disclosure, or exploitation of sensitive IT or financial information.

We performed procedures to determine whether Coast Guard personnel consistently exercised responsibilities related to safeguarding sensitive materials as defined in these policies. Specifically, we performed escorted walkthroughs of workspaces – including cubicles, offices, shared workspaces, and/or common areas (e.g., areas where printers were hosted) – at Coast Guard facilities that processed, maintained, and/or had access to financial data during FY 2016. We inspected workspaces to identify instances in which materials designated by DHS policy as requiring physical security from unauthorized access were left unattended. Exceptions noted were validated by designated representatives from Coast Guard, DHS OIG, and DHS OCIO.

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During after-hours physical security walkthroughs performed at Coast Guard, we inspected a total of 326 workspaces. Of those, 59 were observed to have material – including, but not limited to, system passwords, government-issued identification cards, information marked “FOUO”, documents containing sensitive PII, and government-issued laptops or storage media – left unattended and unsecured after business hours in violation of DHS policy.

The selection of inspected areas was not statistically derived; therefore, the results described here should not be used to extrapolate to Coast Guard as a whole.

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**Appendix A**

**Description of Key Coast Guard Financial Systems and IT Infrastructure within the Scope of the  
FY 2016 DHS Financial Statement Audit**

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Below is a description of the significant Coast Guard financial management systems and supporting IT infrastructure included in the scope of the FY 2016 DHS financial statement audit.

Core Accounting System (CAS)

CAS is a web-based major application and the official accounting system of record for the Coast Guard. It is used to record all income and expenses and create income statements, balance sheets, and other financial reports to show financial condition. Accounting and financial management functions supported by CAS include accounts payable, accounts receivable, general and expense ledgers, and asset (including capital asset) management. CAS interfaces with DHS' Treasury Information Executive Repository, internal Coast Guard feeder systems, and systems of external service providers (including the Department of Treasury's Bureau of the Fiscal Service).

CAS is an Oracle Federal Financials product, including an Oracle database with HP-UX (Hewlett-Packard Unix)-based servers.

The Office of the Director of Financial Operations/Comptroller and Coast Guard OCIO host and support CAS exclusively for the internal Coast Guard user community. The Operations Systems Center (OSC) Detachment Chesapeake, in Chesapeake, VA, hosts the application.

Finance Procurement Desktop (FPD)

FPD is a web-based major application that supports Coast Guard funds management processes by creating and managing simplified procurement documents and maintaining accurate accounting records agency- wide. Functions performed by FPD include budgeting and funds distribution, procurement requests and simplified acquisitions, receipt of goods/services (accruals), and program element status reporting. FPD is integrated with CAS and interfaces with the DHS Treasury Information Executive Repository, other internal Coast Guard feeder systems (including the Contract Management Information System), and systems of external service providers (including the Department of Treasury's Bureau of the Fiscal Service).

An Oracle database with HP-UX-based servers supports the FPD application.

The Office of the Director of Financial Operations/Comptroller and Coast Guard OCIO host and support CAS exclusively for the internal Coast Guard user community. The OSC Detachment Chesapeake in Chesapeake, VA, hosts the application.

Workflow Imaging Network System (WINS)

WINS is a web-based major application that supports the procurement process through the imaging and documenting of vendor invoices. Contracting Officers (KO) or Contracting Officer Representatives (COR) enter invoice data within the application that interfaces with the Core Accounting System upon approval.

An Oracle database with HP-UX-based servers supports the WINS application.

The Office of the Director of Financial Operations/Comptroller and Coast Guard OCIO host and support WINS exclusively for the internal Coast Guard financial management and acquisitions user community. The OSC Detachment Chesapeake, in Chesapeake, VA, hosts the application.

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Direct Access

The Coast Guard's Direct Access is an internet-accessible, web-based, agency-wide, full-lifecycle military human resources (HR) and payroll solution using commercial/government off-the-shelf products from Oracle and PeopleSoft. A third-party application service provider hosts the application, and a mix of government and contractor staff support and maintain it. Direct Access is the primary system for HR and payroll for more than 50,000 Coast Guard, Health and Human Services (HHS), Public Health Service (PHS), and National Oceanic and Atmospheric Administration (NOAA) active duty and reserve personnel. It also provides HR and pay support to a customer base of approximately 68,000 Coast Guard, HHS, PHS, and NOAA retirees, annuitants, and *Former Spouse Protection Act* (FSPA) recipients, while providing non-pay customer service support to an additional 2,500 personnel. Direct Access provides military assignment processing, aids in the management of personnel housing and occupancy, supports recruitment and accession processes, posts official Coast Guard positions, schedules training, manages personnel assets and readiness, tracks and processes retirements, processes promotions and disciplinary actions, maintains all personnel attributes, and provides military payroll.

Direct Access runs on several Microsoft Windows-based and Red Hat-based UNIX servers, and Oracle databases support it.

Direct Access has implemented applicable DHS Hardening Guidelines as well as applicable Defense Information Systems Agency (DISA) Security Technical Implementation Guides (STIGs) (e.g., Red Hat Linux, Oracle Database Management System (DBMS), VMWare, Windows 2008, etc.). The system has its own dedicated hardware and storage and is hosted by a FEDRAMP-certified provider.

Naval and Electronics Supply Support System (NESSS)

NESSS is a web-based major application that provides integrated provisioning and cataloging, unit configuration, supply and inventory control, procurement, depot-level maintenance, property accountability, and financial ledger capabilities as part of the family of Coast Guard logistics systems.

An Oracle database with Microsoft Windows-based and Red Hat-based Linux servers support this Oracle Forms and Reports application. In August 2015, the Coast Guard enabled the application for single sign-on capability.

The Coast Guard OSC (a component of the Office of the Assistant Commandant for Command, Control, Communications, Computers and Information Technology) in Kearneysville, WV, developed, maintains, and hosts NESSS. The Office of Logistics Information manages the application. OSC supports the application exclusively for the internal Coast Guard Yard and Surface Forces Logistics Center (SFLC) finance and logistics user communities.

Aviation Logistics Management Information System (ALMIS)

ALMIS is a hybrid web-based and client-server major application that provides Coast Guard aviation logistics management support in the areas of operations, configuration management, maintenance, supply, procurement, financial management, and business intelligence. It includes inventory management and fiscal accounting functionality of the Aviation Maintenance Management System (AMMIS) subsystem to improve inventory purchase/repair decisions and provide total asset visibility. ALMIS supports data flight operations, flight execution recording, aircrew events tracking, aircraft aging, aircraft configuration

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management, aircraft maintenance, aircraft parts replacement, warehouse activities, procurement actions, financial payments, and reconciliation.

Ingres and Oracle databases with Microsoft Windows, and HP-UX and Red Hat Linux-based servers support this application.

The Coast Guard's Aviation Logistics Center (ALC) in Elizabeth City, North Carolina, developed, maintains, hosts, and supports ALMIS exclusively for the internal Coast Guard financial management and aviation logistics user community.

National Pollution Funds Center (NPFC) Case Information Management System (CIMS)

NPFC-CIMS is one of four web-based major applications that comprise the Management and Operation Support Information Systems (MOSIS) suite. The application supports the NPFC's mission to manage the funding and prosecution of pollution cases (also known as projects). It provides Coast Guard and Environmental Protection Agency (EPA) Federal On-Scene Coordinators (FOSCs) access to the Oil Spill Liability Trust Fund (OSLTF) or Comprehensive Environment Response, Compensation, and Liability Act (CERCLA) funds to respond to pollution incidents. CIMS consists of financial and non-financial case information, such as responsible party, pollution response status, costs, and accounts receivable. Projects within CIMS are first created and initiated via interfaces from NPFC's Ceiling and Number Assignment Processing System (CANAPS) and the Claims Processing System (CPS). Project costs are downloaded daily from the Core Accounting System's Mirror Database (CAS MIR).

This Oracle Financials application includes three modules – accounts receivable, project accounting, and general ledger. CIMS sits on an Oracle database with Red Hat Linux-based servers.

The OSC in Kearneysville, WV, hosts the entire MOSIS suite. NPFC end-users reside throughout the country; however, program management is conducted out of Arlington, VA.

Shore Asset Management (SAM)

SAM provides core information about the Coast Guard shore facility assets and facility engineering. The application tracks activities and assists in the management of the Civil Engineering (CE) and Facility Engineering (FE) programs. SAM data contributes to shore facility assets full life cycle program management, and facility engineering full life cycle program management and rationale to adjust Coast Guard mission needs through planning, budgeting, and project funding. SAM also provides real property inventory and management of all shore facilities, in addition to the ability to manage and track facilities engineering equipment and the maintenance of that equipment.

Oracle databases with Microsoft Windows servers support SAM.

The OSC in Kearneysville, WV, hosts SAM.

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Contract Information Management System (CIMS)

CIMS is a contract management system that is used for contract creation and management. It includes milestone planning, solicitations, award, and closeout. CIMS interfaces with FPD to receive commitments and send contract procurement information. The primary users of CIMS are contracting officers and contracting specialists.

Oracle databases with Microsoft Windows servers support CIMS. The OSC Detachment Chesapeake, in Chesapeake, VA, hosts the application.

Open Obligation Validation Application (OOVA)

OOVA is a tool that enables financial managers to monitor and validate open obligations in accordance with DHS and Coast Guard policies. OOVA opens obligations from CAS and provides an instrument to classify each open obligation as to whether it is valid.

A Microsoft SQL Server and Microsoft Windows servers support OOVA. The OSC Detachment Chesapeake, in Chesapeake, VA, hosts the application.

CAS Mirror Data Warehouse (MIR)

MIR is a direct copy (mirrored image) of the CAS production database and is used for reporting purposes. MIR is refreshed daily with the previous day's production data.

Oracle databases and Red Hat Linux-based servers support MIR. The OSC Detachment Chesapeake, in Chesapeake, VA, hosts the application.

Coast Guard Business Intelligence (CGBI)/Enterprise Data Warehouse (EDW)

CGBI/EDW is a Business Intelligence (BI) and mission support tool that provides users with web-based reporting and analysis capability by using standardized enterprise data and metrics.

Oracle databases and Microsoft Windows and Red Hat Linux-based servers support CGBI/EDW. The OSC in Kearneysville, WV, hosts the application.

Web Time and Attendance (WebTA)

WebTA is a commercial off-the-shelf (COTS) web-based major application that the U.S. Department of Agriculture's (USDA) National Finance Center (NFC) hosts. The NFC's IT Services Division and Risk Management Staff developed, operate, and maintain the application. The Coast Guard uses NFC and WebTA to process front-end input and certification of Coast Guard user community time and attendance entries to facilitate payroll processing.

EmpowHR

EmpowHR is a COTS web-based major application that the USDA NFC hosts. The NFC IT Services Division and NFC Risk Management Staff developed, operate, and maintain the application. DHS

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components use NFC and EmpowHR to initiate, authorize, and send personnel data to NFC for processing.

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**Appendix B**

**FY 2016 IT Notices of Findings and Recommendations at Coast Guard**

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<b>FY 2016 NFR #</b>	<b>NFR Title</b>	<b>FISCAM Control Area</b>	<b>New Issue</b>	<b>Repeat Issue</b>
CG-IT-16-01	Lack of Consistent Contractor, Civilian, and Military Account Termination Notification Process for Coast Guard Systems	Entity Level		X
CG-IT-16-02	Ineffective Controls over NESSS Application Account Management	Access Controls	X	
CG-IT-16-03	Weakness in Direct Access Database Password Configurations Associated with the PeopleSoft Application/System Accounts	Access Controls		X
CG-IT-16-04	Security Awareness Issues Identified during After-Hours Physical Security Testing at USCG	Security Management		X
CG-IT-16-05	Weakness in Review of Database Audit Log Review for NESSS, NPFC, and SAM	Access Controls	X	
CG-IT-16-06	Weakness in SAM Database Password Configurations and Shared Account Usage	Access Controls	X	
CG-IT-16-07	Weakness in Developer Access to Production for NESSS	Access Controls and Configuration Management	X	
CG-IT-16-08	Weakness in Developer Access to Production for NPFC-CIMS	Access Controls and Configuration Management	X	
CG-IT-16-09	Ineffective Controls over Direct Access Account Maintenance	Access Controls	X	
CG-IT-16-10	Weakness in EmpowHR Privileged Accounts	Access Controls	X	
CG-IT-16-11	Ineffective Controls over NESSS Operating System User Recertification	Access Controls		X
CG-IT-16-12	Ineffective Design over NESSS Database User Recertification	Access Controls		X
CG-IT-16-13	Ineffective Design over NPFC-CIMS Database User Recertification	Access Controls		X

Department of Homeland Security  
*Information Technology Management Letter*  
 U.S. Coast Guard  
 September 30, 2016

<b>FY 2016 NFR #</b>	<b>NFR Title</b>	<b>FISCAM Control Area</b>	<b>New Issue</b>	<b>Repeat Issue</b>
CG-IT-16-14	Ineffective Design over SAM Database User Recertification	Access Controls	X	
CG-IT-16-15	Weaknesses Identified Through Vulnerability Assessment Procedures on Financially Significant OSC, ALC and FINCEN Hosted Environments	Access Controls and Configuration Management		X
CG-IT-16-16	Ineffective Controls over Periodic Review of Access Authorization for ALMIS	Access Controls	X	
CG-IT-16-17	Lack of Controls over Segregation of Duties within the Workflow Imaging Network System (WINS)	Segregation of Duties		X
CG-IT-16-18	Ineffective Controls over the Open Obligation Validation Application (OOVA) User Account Creation Process	Access Controls	X	



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