

NATIONAL ARCHIVES *and*
RECORDS ADMINISTRATION

OFFICE *of*
INSPECTOR GENERAL



Audit of NARA's Human Resources
Systems and Data Accuracy

August 24, 2015

OIG Audit Report No. 15-13

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Executive Summary

The National Archives and Records Administration (NARA) uses various internal and external systems to store, process, and manage human resources (HR) data and execute personnel actions. In Fiscal Year (FY) 2012, NARA initiated an interagency agreement with the Department of Interior (DOI)'s Interior Business Center (IBC)¹ to use IBC's personnel, payroll, and HR and related services. However, concerns were raised about the accuracy of personnel and payroll information reported, and the security of the HR systems. Specifically, users noticed the data and data formats were not always consistent across the systems. In addition, the FY 2013 financial statement audit found issues with NARA's access control on the systems maintained by the IBC².

NARA's Office of Inspector General (OIG) performed an audit of NARA's HR Systems and Data Accuracy to: (1) assess the security and availability controls over the systems processing or storing NARA's HR data; and (2) test the reliability and accuracy of the data entered into the systems.

In general, it appears security and availability controls for the systems hosted by the IBC were adequate, with (a) a designated Data Custodian serving as the contact for data security administration issues; and (b) the complementary client controls implemented by NARA to support security, availability, and integrity of the systems and data. However, opportunities exist to strengthen the agency's ability to maintain data reliability and accuracy, provide adequate user training, conduct access reviews for the systems, and manage personnel data and system access for individuals other than federal employees.

Inaccuracies were found in the Federal Personnel and Payroll System (FPPS)³, which caused other HR and HR-related systems fed from FPPS to also contain inaccurate supervisor information. Also, NARA does not have a process to ensure employees review their Employee Locator⁴ entries on a periodic basis for accuracy and completeness. These conditions resulted in approximately 26% of the employees sampled for our testing having either inaccurate or incomplete entries in the system. In addition, timekeepers did

¹ Previously known as the National Business Center (NBC) until it was restructured and renamed "Interior Business Center" effective October 1, 2012.

² FY 2014 Financial Statement Audit Management Letter, Appendix B; p. 12.

³ A system developed by the Department of the Interior (DOI) which provides personnel and payroll support to NARA under an interagency agreement.

⁴ A system on NARA's intranet allowing users to review and update their contact information, as well as search for contact information of other employees.

not always follow appropriate steps to ensure employees were assigned a correct cost account⁵ in Quicktime.⁶

Further, nine of the 14 management survey participants stated training on NARA's HR systems was either inadequate or not provided. The survey also revealed customers would appreciate the opportunity to learn how different systems interact with one another, and what types of and how information is exchanged between systems. We also found access reviews for FPPS and Quicktime had not been conducted on a periodic basis to ensure individuals' access to the systems remains appropriate. Access to the systems is handled on an individual basis, and NARA relies on the account review conducted by the external auditor as part of the annual financial statement audit. While there are automated, systematic controls to deactivate the accounts or passwords after a set period of time; this alone does not ensure the type of access or privileges remains appropriate.

Finally, as previously noted in our Federal Information Security Management Act of 2002 (FISMA) evaluations for FYs 2013 and 2014, NARA does not centrally manage personnel data for individuals other than federal employees (e.g. contractors). NARA is currently in the process of implementing a Homeland Security Presidential Directive 12 (HSPD-12) compliant Logical Access Control System (LACS), which will include an upgrade of NARA's Identity Management System (IDMS) to integrate and synchronize with other NARA systems including the HR systems. However, NARA's personnel and payroll system is currently being utilized for federal employees only, and for non-federal employees, no central data repository exists that could be used as an authoritative source of data for managing user access to NARA facilities and information systems. A management decision has yet to be made on where to obtain an authoritative source of data for the non-federal workforce. In addition, NARA does not have one authoritative data source providing the latest data to role-based users encompassing all types of employment (federal, contractor, and volunteer) at the enterprise level.

Most of these issues exist because strong internal controls including detailed and clearly defined policies and procedures were not implemented; and user training and education were not adequately enforced. This report contains 11 recommendations which, upon implementation, will assist NARA in strengthening the security, availability, and integrity of its HR systems and personnel data.

⁵ A cost account is assigned to every NARA employee in Quicktime to ensure the employee's payroll is processed out of the correct funds allocated for the group, office, or organization.

⁶ A time and attendance input system offered by the IBC which NARA utilizes under an interagency agreement.

Background

In 2004, the U.S. Office of Management and Budget (OMB) established five lines of business to identify ways in which services commonly found in numerous agencies could be provided in a more efficient manner. The Human Resources Line of Business (HR LOB) initiative was led by the U.S. Office of Personnel Management (OPM) and launched in 2004. The purpose of the HR LOB initiative was to move some HR practices, those that are transactional in nature and not clearly linked to agency missions, to federal HR service centers. The initiative was developed to realize the potential of electronic government and redefine human resources service delivery for all civilian employees of the Executive Branch of the Federal Government, allowing agency resources to do more valuable strategic HR functions.

In 2009, NARA performed a project to: (1) evaluate the processes and automated systems associated with NARA's HR service delivery; and (2) identify process improvements and automation solutions that would improve the efficiency, effectiveness, and level of overall customer service the organization could provide. This effort was also designed to help NARA assess the quality of service it was receiving from its HR and payroll provider, the General Services Administration (GSA), and the benefits and costs associated with migrating to an HR LOB Shared Service Center (SSC). This project found a number of challenges facing NARA with reference to the systems and processes provided by the GSA. In addition, based on information gathered on potential SSCs, it was recommended NARA migrate its HR and payroll systems to an SSC. The project identified DOI's Interior Business Center (IBC) as the best fit for NARA's requirements among the SSCs evaluated. As a result, between April 2012 and March 2014, NARA migrated its HR and payroll systems and services to the IBC, which brought NARA in compliance with the HR LOB initiative.

NARA currently utilizes a total of five HR- and payroll- related systems and services provided by the IBC, one of the SSCs approved by the OPM. **Table 1** below lists the systems utilized by NARA, their descriptions, and the go-live dates.

In addition to the systems hosted by the IBC, NARA utilizes other HR- and training-related information systems, including Employee Locator and the Learning Management System (LMS).⁷ Each of these systems utilizes data from FPPS, the online personnel and payroll system hosted by the IBC, to keep the user accounts and personnel information in the systems up to date.

⁷ A system delivering and managing learning content and resources for NARA employees.

Table 1: IBC-hosted Systems at NARA

System	Description	Go-live Date
Federal Personnel and Payroll System (FPPS)	An integrated, on-line personnel and payroll system	April 2012
Quicktime	A web-based time and attendance input system	April 2012
Datamart	A data warehouse providing online access to data from the FPPS	April 2012
Workforce Transformation and Tracking System (WTTS)	A system allowing creation and tracking of vacancies	April 2013
Entrance-on -Duty System (EODS)	A library of on-line forms to be completed by a new hire	March 2014

Objectives, Scope, Methodology

The objectives of this audit were to: (1) assess the security and availability controls over the systems that process or store NARA's HR data; and (2) test the reliability and accuracy of the data entered into the systems.

Among various HR systems at NARA, we focused on the two IBC-hosted systems, FPPS and Quicktime, based on the concerns raised by users. Users were concerned with regard to the functionality of the systems and reliability and accuracy of the data processed on them. In addition, we reviewed the accuracy of the data available on two HR-related systems, Employee Locator and LMS, which use the data from FPPS to create, update, and delete user accounts in the system.

In order to accomplish our audit objectives, we reviewed documents describing NARA's policies and procedures on handling HR systems, user accounts, and data stored or processed on them. We also reviewed applicable requirements and guidelines, including the OPM's *"Guide to Processing Personnel Actions"*, dated November 2014; OMB Memorandum M-06-15, *"Safeguarding Personally Identifiable Information"*, dated May 2006; Government Accountability Office (GAO)'s *"Standards for Internal Control in the Federal Government"*, dated September 2014; and National Institute of Standards and Technology (NIST) Special Publication (SP) 800-53 Revision 4 *"Security and Privacy Controls for Federal Information Systems and Organizations"*, dated April 2013.

In addition, we surveyed 17 senior managers at NARA to learn how satisfied the employees are with the systems and data they use to perform assigned duties and identify any challenges or issues they experienced utilizing the systems and data. Based on the responses received from the survey, we selected the systems and types of data to focus on for our audit to address the concerns raised by the majority of the survey participants.

We judgmentally selected a sample of NARA employees of various levels and organizations, based on the employee listing provided by the Office of Human Capital (H) as of June 24, 2014. We then reviewed personnel data from FPPS, Quicktime, and Employee Locator to assess accuracy and reliability of personnel and payroll data from these systems. The results of a non-statistical sample cannot be projected to the intended population. Further, a list of supervisors in LMS was reviewed to determine whether it contained most up-to-date information.

During the course of our audit, we conducted interviews with representatives from the Offices of Human Capital (H), Innovation (V), and Information Services (I) to: (1) determine whether the HR systems and data are maintained in accordance with

documented internal policies and procedures, as well as Government-wide requirements and guidelines; and (2) identify ways to improve the overall performance of the HR systems and data management.

Our audit work was performed at Archives II in College Park, MD, between May 2014 and May 2015. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Audit Results

1. Data Quality Assurance Process Needs to be Strengthened

Our review of the data in FPPS, LMS, and Quicktime found personnel and payroll data are not always accurately maintained in the systems. Specifically, we found supervisory information in LMS and FPPS were outdated, and cost accounts in Quicktime were not always accurate. These inaccuracies occurred because:

- (1) NARA had not assigned employees responsibility for reviewing data quality;
- (2) there are steps that need to be performed manually to update data in NARA's payroll system; and
- (3) users of the systems are not always aware of their responsibilities to notify appropriate parties of the changes to be made.

According to GAO's Standards for Internal Control in the Federal Government ("Federal Internal Control Standards"), management should:

- (a) evaluate both internal and external sources of data for reliability;
- (b) consider characteristics of quality information⁸ in evaluating processed information; and
- (c) make revisions as necessary so that the information is quality information.

Lack of a strong data quality assurance process may result in incomplete and inaccurate personnel data stored on the systems. Further, it can also hinder management from making informed decisions about and evaluating performance of NARA's human resources effectively and efficiently.

Inaccurate supervisory information is found in LMS and FPPS

Concerns were raised by managers at NARA in the beginning of our audit that LMS, a system delivering and managing learning content and resources for NARA employees, includes those who were separated from NARA or no longer hold supervisory positions in the list of supervisors. An inaccurate list of supervisors in LMS is concerning because LMS contains courses all supervisors are required to complete, and the supervisor

⁸ According to GAO's Federal Internal Control Standards, quality information is appropriate, current, complete, accurate, accessible, and provided on a timely basis.

reporting tools in LMS allow them to track the training status of the employees they supervise. We found the list of supervisors in LMS, along with other user information, is obtained through a biweekly pull from Datamart, a data repository fed by FPPS. Therefore, if data is inaccurately maintained in FPPS, it would also affect the accuracy of data in LMS. We also found there is no process to ensure data uploads to LMS are completed successfully, and no periodic review is performed of the completeness and accuracy of the data in LMS.

We reviewed a chain of email communications provided by a NARA senior manager. The communications took place between May and June 2014 and included a list of 24 supervisors in a NARA organization who were required to take the anti-harassment training but appeared to have missed the deadline in LMS. Among the supervisors listed, three were found to no longer hold supervisory positions at NARA. One retired over a year before the list was generated, and two were detailed to a non-supervisory position. However, we found as of August 15, 2014, the two employees detailed to a non-supervisory position were still noted as a supervisor in LMS. According to the Human Resources Specialist handling personnel data in FPPS, the two employees were detailed to an unclassified set of duties in June and July 2013, but their supervisory status had not been updated in the system.

Another example involved an employee in another NARA organization who retired in May 2013, but appeared on the supervisor list in LMS as of August 15, 2014. According to the Human Resources Specialist, the employee's separation was processed in FPPS in May 2013. We made an inquiry with the employee responsible for managing LMS regarding why the supervisor's account was not deactivated in LMS. The responsible employee stated she spot-checked recent departures and found LMS was correctly deactivating the accounts. Although the responsible employee believed something was amiss in the integration routine⁹, she was unable to identify the exact cause of the exception.

We reviewed supervisor information in FPPS for 58 employees in our sample. Among the 58 employees, four had inaccurate supervisor information in FPPS. One employee's supervisor's name was misspelled, and three employees' supervisor information was outdated. For example, there was an employee who was an acting supervisor for approximately four months between February and June 2014, until a new supervisor was assigned in June 2014. However, as of December 2014, the information had not been corrected in FPPS. Another employee also had an outdated supervisor's name in the system, however the employee's administrative officer did not respond to our inquiry

⁹ A biweekly process of uploading data files from FPPS to LMS to maintain personnel data and user accounts in LMS up to date.

regarding when the change occurred. Lastly, in FPPS, one employee's supervisor was marked "Acting," although the supervisor was no longer in an "acting" role.

Our review of supervisor information in FPPS also revealed inconsistency in the data formats between the "Full Name" and "Supervisor's Name" fields. We found the "Full Name" field in FPPS was generally populated in the "Last, First, M" format with or without a period after the middle initial. However, the "Supervisor Name" field was generally populated in the "First, (M), Last" format with or without the middle initial and a period after the middle initial. One of the management survey participants also indicated the employee spends a significant amount of time performing v-lookups¹⁰ to fill in missing or inaccurate data after running a report. The employee also stated the task is cumbersome and not always possible as the same data may be entered in multiple formats (i.e. first name with the middle initial in the same cell vs. first name without a middle initial in the same cell).

Through interviews with representatives from the Office of Human Capital, we found both the inaccurate supervisor information and inconsistent data formats were due to the manual process to update supervisor information in FPPS. According to NARA's Data Custodian, she maintains a table outside of FPPS containing fields such as the names of supervisors, their office symbols, and supervisory levels¹¹ by receiving update requests from the offices. However, the names of the supervisors are manually typed in to the table, and the format in which they are typed is different from the format used in the FPPS's "Full Name" field. When the supervisor information is transferred to FPPS from the table, supervisory levels are used to link an employee to his or her supervisor; therefore, if an employee is linked to an incorrect supervisory level or the supervisor's name associated with the level contains error, it will be reflected in FPPS as it appears in the table.

There is currently no process to request NARA organizations to verify their supervisor information on a periodic basis to ensure the information is accurate and up to date. When supervisor changes are internal moves within an organization, they do not generate a personnel action, and the Office of Human Capital would remain uninformed of the change unless it is communicated by the organization. According to the Data Custodian, she has made a report in Datamart available to organizations showing the employees and their supervisors assigned in FPPS, so that the organizations can report any changes needed to their HR specialist. According to NARA's former Supervisory HR Specialist,

¹⁰ A function in Microsoft Excel looking at a value in one column and finding its corresponding value on the same row in another column.

¹¹ The supervisory level field serves as a unique identifier of the supervisor, which is entered into FPPS to link an employee to his or her assigned supervisor.

NARA had to undergo a massive data clean-up on supervisor information before a performance appraisal period began.

Per inquiries made with key HR staff during this audit, we found as of April 2015, NARA is in the process of implementing a new process to assign supervisors to employees in FPPS, using the “SUPV” function in FPPS. Upon implementation of the new process, the supervisory level table will no longer be required to maintain supervisory information, eliminating the formatting issues on supervisor names. Also, the Office of Human Capital plans on educating customers about the new process and providing guidance on handling the movement or departure of employees. In addition, the Office plans to conduct a perpetual audit of the data through a dedicated data quality control (QC) resource who will maintain the quality of the data. In order to achieve this goal, NARA recently detailed an HR Specialist, experienced in conducting data QC with GSA-hosted systems, back to perform QC of the data on the IBC-hosted systems at NARA. However, this is currently a temporary position Not-to-Exceed (NTE) June 2015, and the Office is submitting a request to NARA’s Resource Allocation Board for a permanent data QC position.

Cost accounting update process is manual and not always understood by customers

In May 2014, an example of data anomalies in FPPS and Quicktime was brought to our attention by a senior manager at NARA. This example involved an employee who was assigned an incorrect NARA organization code (org code) in FPPS. Due to the incorrect org code in FPPS, his cost account in Quicktime was also incorrect, causing his payroll to be processed out of an incorrect account.¹² When this issue was detected by the employee’s administrative officer, she entered a personnel action in FPPS to reassign the employee to the appropriate office and org code as instructed by the Human Capital Office in March 2014. However, the cost account in Quicktime remained unchanged, still linked to the incorrect office, until it was detected by the administrative officer of the incorrect office in May 2014.

According to NARA’s Payroll Manager, when there is an org code change for an employee, it usually involves a change in the timekeeper and/or certifier for the employee, and the timekeeper who gained the employee is required to provide a Quicktime new employee form to the Payroll Manager. Our inquiry with the employee’s timekeeper for the example above revealed the timekeeper believed she completed her part by entering the personnel action in FPPS, without knowing she also had to submit a Quicktime new employee form to the Payroll Manager. According to the Payroll

¹² According to NARA’s Payroll Manager, each org code in FPPS is linked to a cost account in Quicktime. However, the process to assign a cost account in Quicktime is not automated and has to be manually performed by the Payroll Manager upon notification from the organization.

Manager, there are two interface files that are fed from FPPS to Quicktime on a biweekly basis – one updating a few personnel data fields in the Quicktime Employee Profile and the other updating leave balances. However, neither of these two files updates cost accounts in Quicktime. The timekeeper was not aware the interface between FPPS and Quicktime does not automatically update cost accounts in Quicktime, and relied on Office of Human Capital to change the cost account without submitting a Quicktime new employee form.

A similar example was found during our review of the HR data for the employees sampled. One employee in the sample had an incorrect cost account in Quicktime due to a reorganization in the office, which caused changes in the org codes for a group of employees within the office. According to the Management Analyst of the office, the office did not notify the Payroll Manager of the org code changes, because she was under the impression that the Payroll Manager would receive notification when personnel paperwork was processed for team changes. During the course of our audit, the Management Analyst discussed this issue with the Payroll Manager and updated the Standard Operating Procedures (SOP) for the office to include a step to notify the Payroll Manager directly when there is a team change within the office.

Both of the examples illustrated above indicate the need for more effective communication between the Office of Human Capital and other NARA organizations on: (1) how systems interact with one another; (2) what types of data are interchanged between systems; and (3) what needs to be completed to update personnel and/or payroll data for an employee. This corresponds to the response we received from the management survey that communication needs to be strengthened to educate users on how the various HR systems interact with one another.

Recommendations

We recommend NARA's Chief Human Capital Officer:

1. Fully implement the new supervisor information update process in FPPS and conduct a review of the information on a periodic basis to ensure the information remains accurate and complete.
2. Consider obtaining at least one permanent, full-time position responsible for ensuring data quality for NARA's HR systems.
3. Develop and provide mandatory user training on system interaction and the actions required of NARA offices to request changes to personnel and payroll data in the HR systems.

Management Response

Management concurred with the recommendations.

2. Employee Contact Information Is Not Maintained Accurately on Employee Locator

We found employee contact information on Employee Locator was not always complete and accurate. Among the 58 employees sampled, 15 employees' Locator entries (26%) contained incomplete or inaccurate contact information. This occurred because:

- (1) the employees failed to periodically verify the completeness and accuracy of the information;
- (2) the employees' supervisors did not always ensure their employees updated information on Employee Locator as changes occur; and
- (3) there is no guidance on when employees should update their contact information on Employee Locator if there is a change, or how supervisors should follow up to ensure changes are properly reflected on Employee Locator.

According to NARA Notice 2013-172, it is important to periodically check the employee's Locator entry to ensure NARA staff can locate each other in a timely manner. In addition, NARA Notice 2013-087 states NARA must be able to contact and provide emergency information to all staff. Incomplete or inaccurate contact information on Employee Locator makes it difficult to locate the employee in a timely manner and provide important information during a contingency, disaster, or other types of emergencies.

Incomplete and inaccurate information is found on Employee Locator

The Employee Locator on NARA@Work, NARA's intranet, is maintained by the Office of Innovation (V) and contains a total of seven fields for an employee: name, phone, email, organization, location, room, and fax. Among the seven entries, name, email, organization, and location are retrieved from a biweekly Datamart report, which is fed from FPPS. The other entries, phone, room, and fax, are not included on the Datamart report, and each employee is supposed to verify and update the information on the system. These three entries are not on the Datamart report because, according to the employee maintaining Employee Locator, FPPS does not have these fields available in the system, and Employee Locator is the only system at NARA where employee contact information is updated and maintained.¹³ Among the 58 sampled employees, we found 15

¹³ According to NARA's Data Custodian, there is a phone number field in FPPS where employees' phone numbers can be entered. However, NARA does not routinely maintain this field up to date.

had either incomplete or inaccurate information in the system. All of the fields containing incomplete or inaccurate information were fields where employees had to manually input information. **Table 2** below includes a summary of the fields found incomplete or inaccurate.

The following is a summary of the responses obtained from the employees' administrative officers or supervisors regarding the incomplete or inaccurate information for each field.

(1) Phone – Two employees in the sample had either incomplete or inaccurate phone numbers in the system. One employee listed her old home telephone number although she moved a couple of months ago. The other employee was missing information on all of the three entries the employee was responsible for updating manually. The supervisor was unable to provide a reason why the information was missing.

(2) Room – Eight employees in the sample had either incomplete or inaccurate room information in the system. One of the employees had the last four digits of her phone number in the Room field. Another employee had outdated room information although the facility underwent a renovation a couple of years ago. There were three other employees whose room numbers were listed incorrectly and their administrative officers or supervisors did not provide a reason why. Three employees were missing their room information, and the supervisor of one stated he was not sure why room numbers matter at presidential libraries. The other two employees' supervisors did not provide a reason why the information was missing.

(3) Fax – Seven employees in the sample had either an incomplete or inaccurate fax number. The supervisor of one of the employees stated the office discontinued the fax machine when it moved a couple of years ago, but the employee's old fax number still appeared on Employee Locator. There were three other employees whose fax numbers were incorrect in the system. Their administrative officers or supervisors did not provide a reason why they were incorrect. Another three employees did not have their fax numbers in the system, although their administrative officers or supervisors confirmed there is an active fax number for these employees.

Maintaining complete and accurate employee contact information, and making it available at all times, is imperative. This not only enables employees to reach one another easily for normal business activities, but also enables the agency to quickly provide important information in case of an emergency. Failure to maintain complete and

accurate employee contact information may result in the inability to locate employees in an efficient manner when needed.

Table 2: Summary of Employee Locator Sample Testing

	No. of Employees with Incomplete/Inaccurate Information¹⁴	Incomplete (Not listed on Employee Locator)	Inaccurate (Information is either outdated or irrelevant)
Phone	2	1	1
Room	8	3	5
Fax	7	3	4

Policy is inadequate for periodically reviewing Employee Locator entries

NARA issued a series of Notices in recent years related to updating Employee Locator entries. NARA Notice 2013-087, dated February 14, 2013, requested employees to update personal contact information for emergency and continuity purposes. NARA Notice 2013-172, dated June 19, 2013, requested employees to self-identify foreign language proficiency skills in their Employee Locator information and provided a reminder to check their locator entries. In addition, NARA Notice 2013-216, dated September 30, 2013, required employees to update personal contact information in the Employee Locator on NARA@Work and in the office emergency contact list, in preparation of the orderly shutdown of the agency.

However, we found there is no NARA policy defining how frequently employees should review and update their Employee Locator entries. As stated above, although employees’ contact information has changed due to move or renovation, their information remained unchanged on Employee Locator for months to years. In addition, when a new hire is brought onboard at NARA, updating Employee Locator entries is not stressed as one of the requirements the employee needs to complete within a certain timeframe. Further, there is no guidance for supervisors to ensure their employees review and update their contact information on a periodic basis or as changes occur. As a result, employees may not have a clear understanding of: (1) their responsibility to review and update contact information on Employee Locator; and (2) how frequently they are required to review and update the entries, causing delays and failures in maintaining employee contact information.

¹⁴ There was one employee whose phone, room, and fax numbers were not populated on Employee Locator. Therefore, the employee is counted for all of the three entries.

Recommendations

We recommend NARA's Chief Innovation Officer:

4. Create an Employee Locator update policy including the following:
 - a. A defined timeframe within which employees are required to review and update Employee Locator entries; and
 - b. Supervisors' responsibility to ensure employee contact information remains complete and accurate.

We recommend NARA's Chief Human Capital Officer:

5. Include in the new hire orientation the requirement to update Employee Locator entries, based on the policy created from Recommendation 3.

Management Response

Management concurred with the recommendations.

3. User Training on HR Systems Is Was Not Adequately Enforced

We found NARA did not always ensure users of NARA's HR systems receive adequate training. We surveyed 17 senior managers at NARA to learn about their satisfaction level with NARA's HR systems, data, and services. Most of the senior managers responded to the survey, stating training was either inadequate or not provided. In addition, we found NARA did not always require users of the HR systems to take training before they are granted access to the systems. This occurred because documented policies and procedures have not been fully established for requiring users to complete the training, and reviewing training status for the users so appropriate action can be taken for those who have not completed required training. GAO's Federal Internal Control Standards state in order to carry out assigned responsibilities, the individual needs to obtain relevant knowledge, skills, and abilities, which are gained largely from professional experience, training, and certifications. Inadequate training on NARA's HR systems not only resulted in users finding the systems difficult to use, but also resulted in erroneous or omitted personnel- or payroll-related data entries.

Federal Internal Control Standards state through training, the entity: (1) enables individuals to develop competencies; (2) reinforces standards of conduct; and (3) develops and retains employee knowledge, skills, and abilities to meet changing organizational needs. For Quicktime users, NARA's Payroll Manager uses opportunities

such as monthly payroll conference calls and one-on-one training with new timekeepers to educate the users and address various issues and processes. However, the Quicktime Timekeeper and Certifier courses available in LMS have not been made mandatory for new users, and the completion of the User Account and User Responsibility forms is the only requirement for a new user to gain access to the system. Per inspection of the forms, we found the only course the user was required to take was the NARA-sponsored IT Security Awareness training, and not a course specific to the user's role in Quicktime (Timekeeper or Certifier).

For FPPS, NARA's Data Custodian began requesting a certificate of completion for the FPPS training available in LMS from all users in July 2014. Currently, the Data Custodian requires a certificate of completion before she grants access to the new user, and the requirement is reflected on the FPPS form processing and management worksheet she utilizes to process user access. However, this requirement has not been included on the FPPS User Account form, which is completed by the user and the user's supervisor. Therefore, if the Data Custodian fails to request the certificate of completion from the user, the user or the supervisor may not notice completing the training is a required step before the user starts utilizing the system.

Further, on July 2, 2014, the Data Custodian communicated to all FPPS users at NARA via email that she would be verifying they have completed required FPPS training by July 18, 2014. However, we found training status of the users was not reviewed until March 2015, after we requested evidence of the review. According to the Data Custodian, the review was delayed due to other urgent matters.

In March 2015, we were provided a report containing NARA's FPPS users and their FPPS training status in LMS as of February 24, 2015. There were 110 users who had not completed the training, and among them were individuals who hold senior management positions at NARA. These senior managers indicated in our survey that they did not receive adequate training on how to use the systems, and how to report to Human Capital when a personnel action is required. If they were made aware training was available in LMS and completed it, they might have obtained a better understanding of the systems and utilized the systems with improved efficiency.

Lastly, our interview with one of the senior managers revealed currently, users of Datamart outside the Office of Human Capital do not have permission to populate their own reports. The employee stated when she needed information for the employees in her office immediately, she found it inconvenient to have to contact HR Specialists to retrieve the information for the office. During the course of our audit, we discussed this with representatives of the Office of Human Capital, and they agreed managers and

supervisors should be granted permission to populate reports in Datamart. The representatives stated proper training on how to run reports and utilize different functionalities in Datamart should first be provided to prevent any unintended data loss or alteration.

Recommendations

We recommend NARA's Chief Human Capital Officer:

6. Update the FPPS User Account form to include the requirement to complete the system-specific training before access is granted to the user.
7. Require all Quicktime users to complete system-specific training before access is granted to the new user, and update the Quicktime User Account form to include the requirement.
8. Consider developing and providing user training on populating reports in Datamart, and providing managers and supervisors with permission to populate reports for their offices or the employees they supervise.

Management Response

Management concurred with the recommendations.

4. User Account Review Is Not Performed on a Periodic Basis

We found there are no internal, periodic reviews conducted for the user accounts for FPPS and Quicktime. This occurred because NARA's Office of Human Capital has not developed a process to conduct a periodic review of user accounts to ensure they are still required, and commensurate with the user's roles and responsibilities. As a client of the shared service provider, there is a set of complementary client controls which should be in operation at NARA. One of the controls is to ensure access reviews are performed at least annually to validate employee access to the systems. In addition, it is NARA policy that the NARA system owner review account compliance with account management requirements at least annually. Failure to perform a periodic account review may result in individuals having inappropriate access to the systems and personnel data, including personally identifiable information.

According to NARA's Data Custodian for FPPS, user access to FPPS is addressed on an individual basis based on the new user forms submitted by NARA organizations and the report listing individuals who changed positions. NARA's Payroll Manager, who also

performs the system administration role for Quicktime, stated a user access form needs to be signed by the new user and the user's supervisor before access is granted, and the removal of access form needs to be completed in order to remove the user's access to Quicktime. However, we found NARA relies on the annual external financial statement audit, covering access reviews of these systems, instead of conducting its own internal review of the accounts on a periodic basis.

We obtained a list of active users for FPPS and Quicktime as of March 2015 and found there were approximately 500 users in FPPS and 550 users in Quicktime. We requested last login dates of these users from the system administrators to determine if there were any accounts remaining active after the users had not logged in for an extensive period of time. However, the system administrators were unable to provide a report including last login dates of the users. The User Account Management Standard Operating Procedure (SOP) for NARANet¹⁵ accounts states “[a]t NARA’s discretion, the NARA Information Technology and Telecommunications Support Services (NITTSS) Novell, Service Desk, and Field Office System Administrator (FOSA) Teams disable all Active Directory (AD) and eDirectory user accounts that are pending deletion or have not been accessed during the previous 90 days.” For FPPS, a similar account review is done through an automated weekly job to suspend the accounts that have been inactive for over 80 days. In addition, there is an automated monthly job in FPPS to move the accounts that have never been used for over 90 days to the “Never-Used” group. For Quicktime, there is no automated job to suspend inactive accounts, but the passwords expire after 60 days, which would require the user to change the password in order to log on to the system. However, the automated, systematic disablement of accounts and passwords alone does not ensure the accounts, type of access, and any privileges granted to the user remain appropriate for the user’s current roles and responsibilities.

During our review of the FPPS user accounts as of March 2015 in comparison to the list of separated employees between January 2014 and March 2015, we found there was one employee who retired in April 2014 but stayed in FPPS as a user. Per inquiry with NARA’s Data Custodian, we found the employee’s FPPS account was implemented one day after she left NARA, and the temporary password created for the employee was never used. This caused the account to be moved to the “Never-Used” group. However, the Data Custodian was not aware of it and failed to remove the user until our inquiry was made. In response to this finding, the Data Custodian stated she planned on distributing the user list to NARA offices for review to identify any other users in this scenario and remove them from the system.

¹⁵ NARA’s unclassified computer network providing access to NARA intranet, e-mail, and the Internet.

Our review of the Quicktime accounts in comparison to the list of separated employees did not find any users who were separated between January 2014 and March 2015, and not deleted from the system. However, for both FPPS and Quicktime, the formatting of user names was different from the separated employee list, requiring us to manually adjust the formats to perform comparison analyses between reports. Therefore, it is possible some of the separated employees' user accounts in these systems remained undetected by our analyses. In addition, because there is not an internal, periodic access review performed, we were not able to determine whether the roles assigned to the users in the systems were commensurate with their current job responsibilities.

Recommendations

We recommend NARA's Chief Human Capital Officer:

9. Develop a documented process to conduct an internal review of user accounts for FPPS and Quicktime on an annual basis, in accordance with NARA policy, to ensure:
 - a. User accounts for separated employees are removed timely; and
 - b. Roles and privileges assigned to the users are commensurate with their current job responsibilities.

Management Response

Management concurred with the recommendation.

5. No Central Data Repository Exists for Non-Federal Workforce at NARA

The Federal Information Security Management Act of 2002 (FISMA) evaluations for FY 2013 and FY 2014 revealed the Office of Human Capital does not have visibility of system users who are not NARA employees (e.g., contractors), and their separation from NARA projects is not consistently reported to Human Capital or Information Service offices. We found this condition still exists because: (1) NARA does not utilize a central database to manage and track non-federal employee data; and (2) the implementation of Homeland Security Presidential Directive 12 (HSPD-12)¹⁶ has not been completed. FISMA requires the agency to identify all users, including federal employees,

¹⁶ HSPD-12 is a strategic initiative intended to enhance security, increase Government efficiency, reduce identity fraud, and protect personal privacy and requires agencies to follow specific technical standards and business processes for the issuance and routine use of Federal Personal Identity Verification (PIV) smartcard credentials.

contractors, and others who access organization systems, and ensure accounts are terminated or deactivated once access is no longer required. Without a solution to centrally maintain and track personnel information for non-federal employees, NARA does not ensure their physical and logical access to NARA facilities and information systems is adequately removed when they no longer need the access.

The Human Resources Management Suite (HRMS), offered by the IBC, is a set of modules providing single point data capture to eliminate redundant data entry and enable real-time data sharing. Among the modules under the HRMS, NARA currently utilizes FPPS, Quicktime, Datamart, WTTS, and EODS¹⁷ to track and manage personnel and payroll data for its federal workforce. The HRMS also includes a module, called “eCStaffing”, which allows agencies to enter, track, and report data on contractors, their HSPD-12 information, as well as access to systems. According to a representative from the Office of Human Capital, the Office was aware this module was available when the HR LOB migration took place in 2012. However, NARA chose not to acquire the module due to resources and cost.

We had discussions with representatives from the Human Capital and Information Services offices regarding the implementation of HSPD-12 Logical Access Control System (LACS), and its impact on personnel data management for NARA employees and contractors. The project was initiated in 2013 with a pilot involving approximately 30 users of NARA’s IT systems and is currently in progress with a scheduled completion date of September 2015. According to the implementation plan for the project, it includes an upgrade of NARA’s Identity Management System (IDMS) to integrate and synchronize with other NARA systems including the HR systems to prepare the general rollout of Personal Identity Verification (PIV) enablement for all NARA employees and contractors. Therefore, representatives from both offices agreed the upgraded IDMS could potentially serve as a central repository of personnel data for federal and non-federal individuals at NARA. However, a management decision has not been made where to obtain an authoritative source of data for contractors, and the integration with IBC-hosted HR systems has not been clearly defined.

According to the vendor implementing the LACS at NARA, contractors are currently entered into the IDMS upon receipt of the Remedy¹⁸ request made by the Contracting Officer Representative (COR) to grant access to NARA facilities and systems. However, when a modification or deletion of access is required, the Remedy ticketing process has not been consistently followed, resulting in delays in removing access. NARA actively

¹⁷ The definitions and descriptions of these systems can be found in Table 1: IBC-hosted Systems at NARA, on page 6.

¹⁸ NARA’s incident management system.

utilizes a non-federal workforce, such as contractors and volunteers, to carry out various tasks and projects. For Archives I and Archives II, there are estimated to be 1,500 contractor employees and 200 volunteers.¹⁹ The vendor agreed the implementation of a single authoritative source for user information, such as eCStaffing, would improve both the on-boarding and exit processes for non-federal workforce at NARA by providing a unified data entry point for all users.

In addition, our discussions with NARA executives revealed the need to establish one authoritative data source for NARA's federal employees, contractors, and volunteers, providing the latest data to role-based users at the enterprise level. This source should be a consolidated set of data acquired from: (a) NARA's current HR systems and services provider for federal employee data; (b) the Contractor Officer Representatives (CORs) for contractor data; and (c) NARA's Volunteer Coordinator in the Legislative Archives, Presidential Libraries, and Museum Services office for all volunteer data.

Recommendations

We recommend NARA's Chief Human Capital Officer and Chief Information Officer collaboratively perform the following:

10. Re-evaluate the option to utilize eCStaffing to manage personnel data for non-federal workforce at NARA and use the HRMS as the single authoritative data source for the HSPD-12 LACS implementation.

We recommend NARA's Chief Information Officer, in collaboration with the Chief Human Capital Officer and Executive for Business Support Services, perform the following:

11. Establish one authoritative data source that provides the latest data to role-based users on NARA's federal employees, contractors, and volunteers at the enterprise level.

Management Response

Management concurred with the recommendations.

¹⁹ Due to a lack of a central data repository for non-federal workforce at NARA, agency-wide estimates for contractors and volunteers were not obtained.

Appendix A – Acronyms and Abbreviations

AD	Active Directory
COR	Contracting Officer Representative
DOI	Department of the Interior
EODS	Entrance on Duty System
FISMA	Federal Information Security Management Act of 2002
FOSA	Field Office System Administrator
FPPS	Federal Personnel and Payroll System
FY	Fiscal Year
GAO	Government Accountability Office
GSA	General Services Administration
HR	Human Resources
HR LOB	Human Resources Line of Business
HRMS	Human Resources Management Suite
HSPD-12	Homeland Security Presidential Directive 12
IBC	Interior Business Center
IDMS	Identity Management System
IT	Information Technology
LACS	Logical Access Control System
LMS	Learning Management System
NARA	National Archives and Records Administration
NBC	National Business Center
NIST SP	National Institute of Standards and Technology Special Publication
NITTSS	NARA Information Technology and Telecommunications Support Services
NTE	Not to Exceed
OIG	Office of Inspector General
OPM	United States Office of Personnel Management
PIV	Personal Identity Verification
QC	Quality Control
SOP	Standard Operating Procedure
SSC	Shared Service Center
WTTS	Workforce Transformation and Tracking System

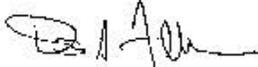
Appendix B - Management's Response to the Report



Date: AUG 17 2015
To: James Springs, Inspector General
From: David S. Ferriero, Archivist of the United States
Subject: OIG Draft Audit Report 15-13, Audit of NARA's Human Resources Systems and Data Accuracy

Thank you for the opportunity to provide comments on this draft report. We appreciate your willingness to clarify language in the report.

We concur with the 11 recommendations in this audit, and we will address them further in our action plan.



DAVID S. FERRIERO
Archivist of the United States

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Appendix C - Report Distribution List

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