Email Archive Process
Risk Mitigation

Discussion Document

October 25, 2005

Executive Summary

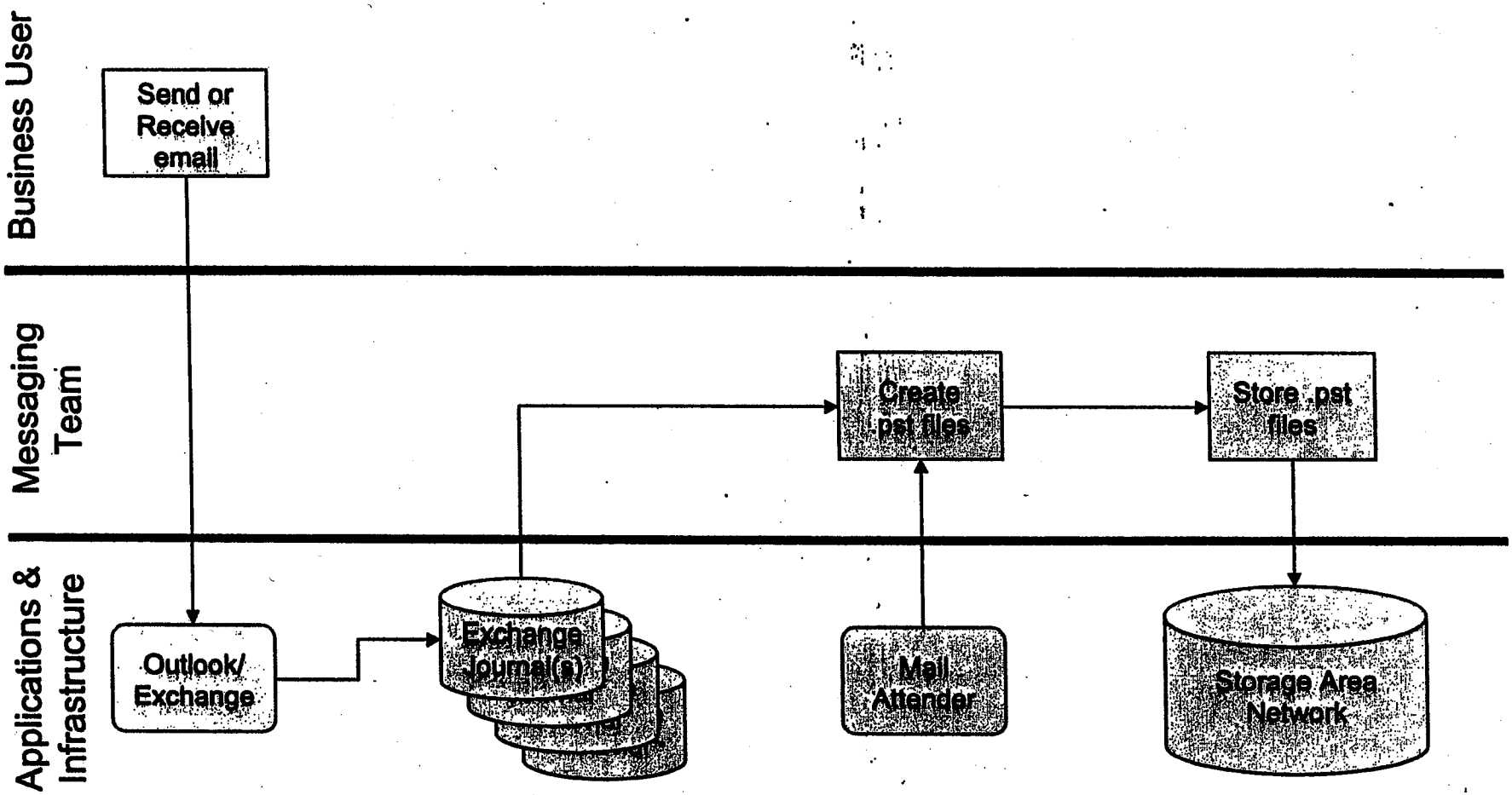
- There is operational risk in current email storage management processes. Lost or misplaced email archives may result in an inability to meet statutory requirements.

- This risk can be mitigated. However, several steps must be taken over time to close exposures to risk.
  - Implement procedures.
  - Update the Mail Attender tool.
  - Implement system monitoring.
  - Implement a dedicated email archive.
  - Upgrade Exchange servers to Exchange 2003.
  - Capture emails directly and continuously with ECRMS.

- Senior management authorization is required to proceed with risk mitigation recommendations.

- There are significant benefits to the recommendations.
  - Reduces the frequency of error typical of manual processes.
  - Closes exposure to risk by isolating the email archive from data and file storage.
  - Provides safeguards to assure the integrity of the process.
  - Manages data with vendor supported technologies.

There is operational risk in current email storage management processes.



Lost or misplaced email archives may result in an inability to meet statutory requirements.

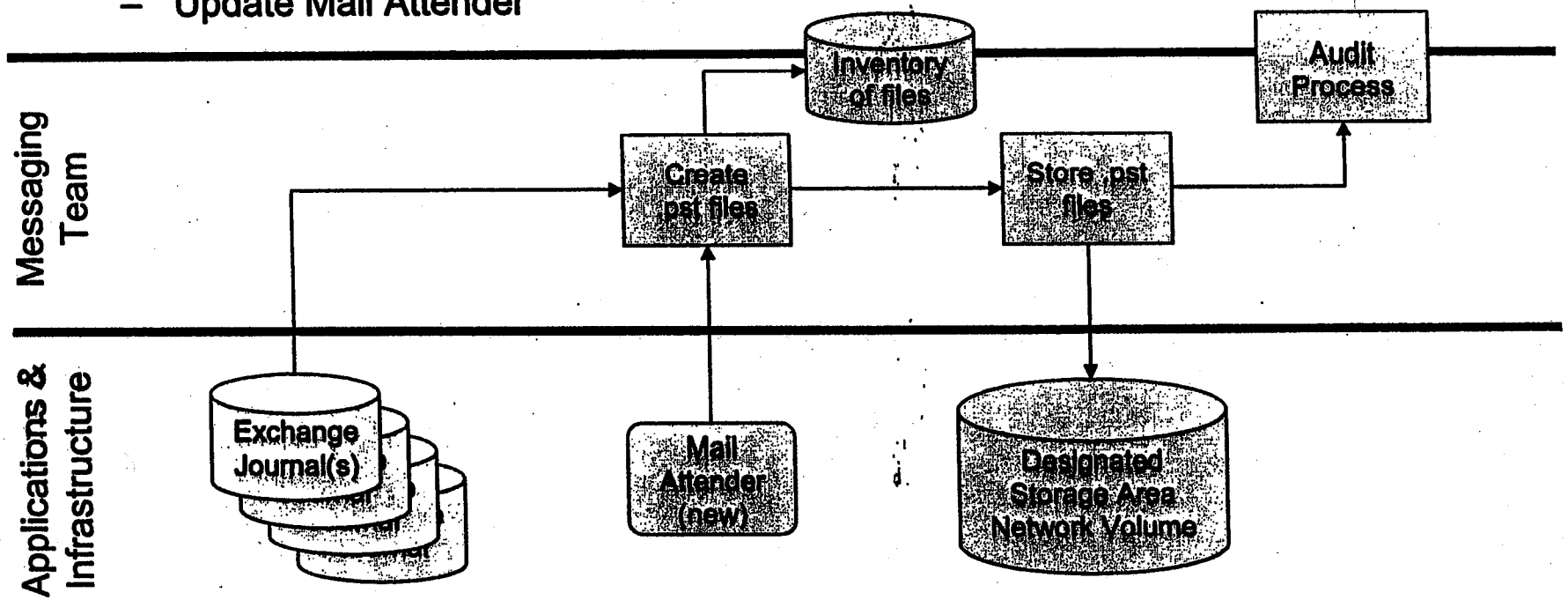
- The email archive process depends on manual operations and monitoring.
  - Institutional knowledge is held be a single administrator
  - The administrator must launch each process and monitor to completion
- Standard operating procedures for email management do not exist
- Automated tools that support the email archive process are not robust
  - The current version of Mail Attender is prone to failure
  - Naming requirements are not fully supported
- Archive process are not monitored with system management tools
  - System management tools can be used to alert when a process fails
  - Completeness of the archive process can be monitored as well
- There is no "dedicated" archive location. Emails have been stored in various locations
  - Storage locations are created whenever there is available space, at the direction of the operator
  - Searches of email in response to statutory requirements may not be complete, creating legal and political risk

This risk can be mitigated.

- Implement interim procedures
  - Daily archive v. system administrator defined periodicity
  - Standard naming conventions
  - Designated storage location(s)
- Update Mail Attender
  - Automated scheduling of the .pst creation and storage process
  - Better and consistent naming support
  - More reliable performance
- Use Microsoft Operation Manager (MOM) system management software to monitor each process and validate the integrity of the entire process
  - Alert the messaging team and NOC when the process fails so that remedial action can be taken immediately
- Implement a dedicate system that is intended for email archive, search and record management functions
  - Using vendor supported technologies to replace tools such as Find It will improve the quality of service
- Systematically- eliminate manual processes and potential points of failure from the process

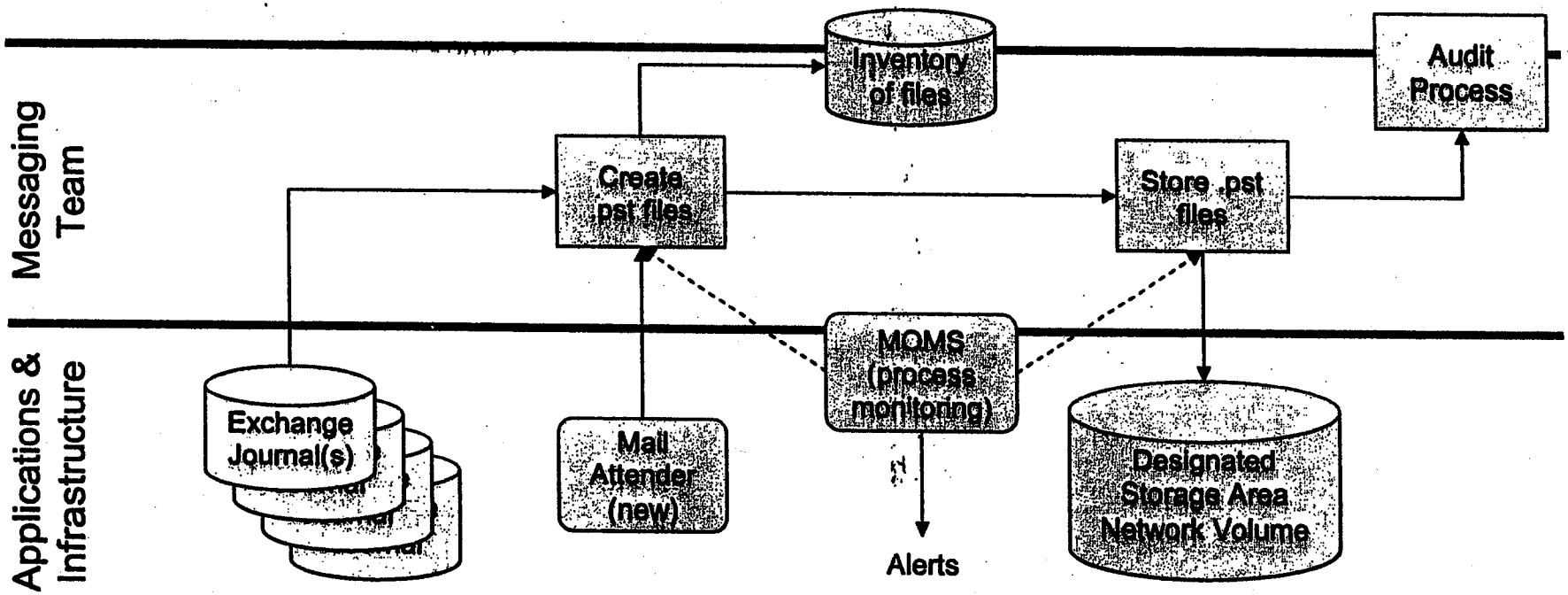
However, several steps…

- Release 1
  - Implement procedures
  - Update Mail Attender



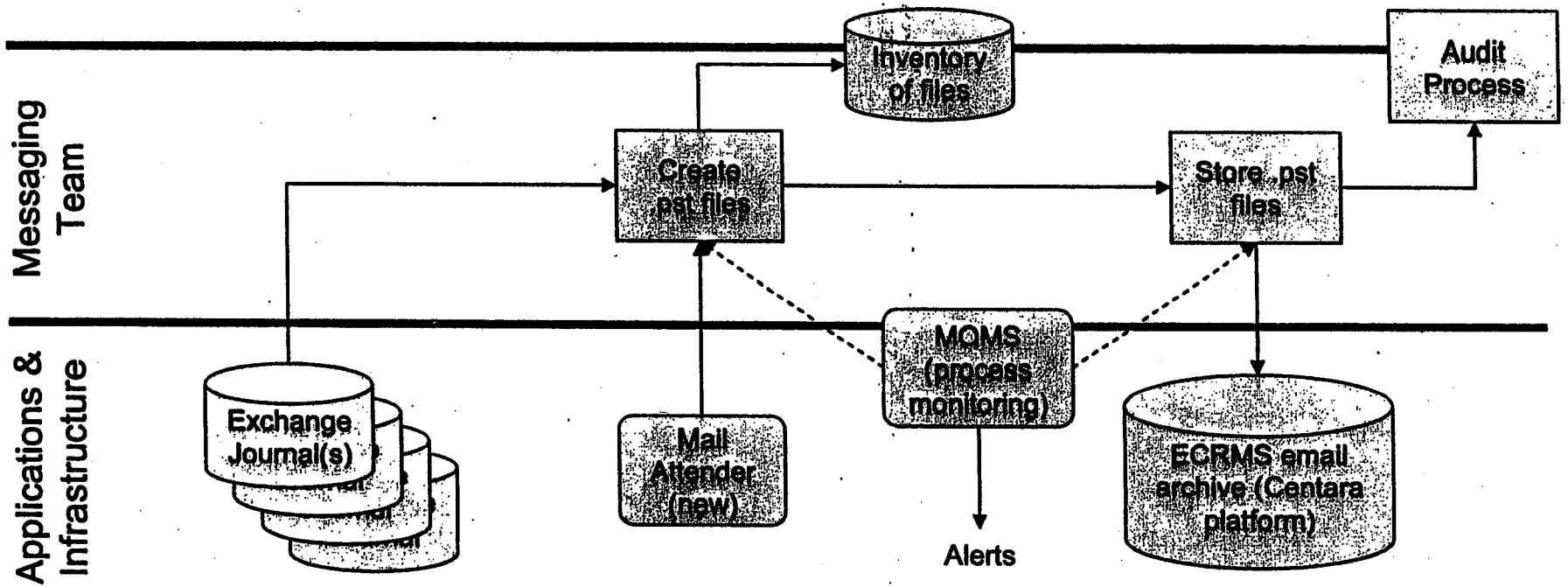
...must be taken...

- Release 2
  - Implement system monitoring



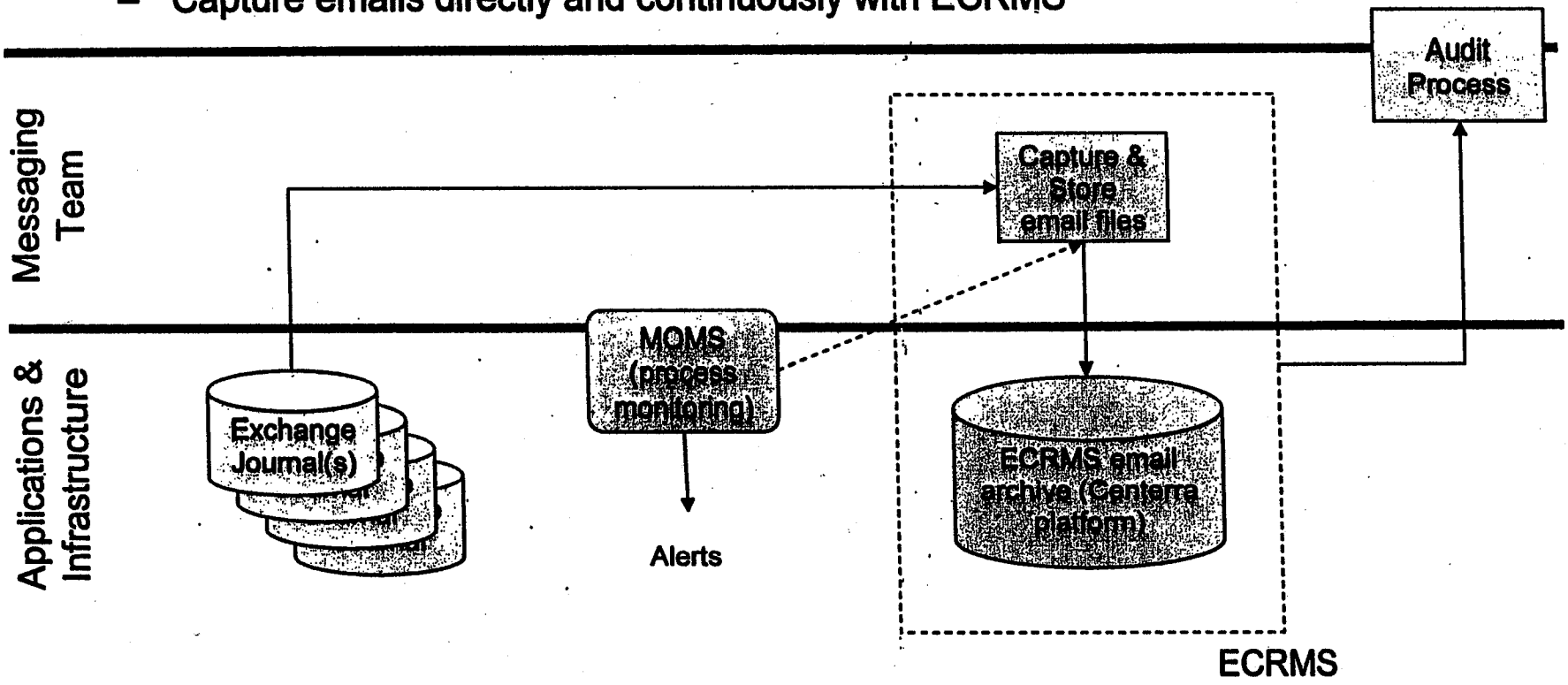
…over time…

- Release 3
  - Implement dedicated email archive



...to close exposures to risk.

- Release 4
  - Upgrade Exchange servers to Exchange 2003 (for "enveloping" capability)
  - Capture emails directly and continuously with ECRMS



Senior management authorization is required to proceed with risk mitigation recommendations.

- Procedures, tool upgrades and storage management decisions can be made by OCIO.

- Conversion of old emails to the ECRMS platform is time consuming. During the conversion process, the current storage volume and the ECRMS (Centerra) storage volume will need to be searched.
  - OCIO currently searches multiple volumes with Lotus Notes Mail and MS Exchange email platforms.

- Use of the ECRMS platform requires management authorization.
  - "Release 3" uses the ECRMS platform for archiving. No change to search tools is implied.
  - "Release 4" stores the email directly. Current search tools used on .pst files will need to be replaced. However, the *Find It* tool is not a vendor supported product and should be replaced.

- Failure to mitigate operational risks may result in an inability to comply with statutory requirements.

There are significant benefits to the recommendations.

- Reduces the frequency of error typical of manual processes.
- Closes exposure to risk by isolating the email archive from data and file storage that is managed to support production applications where data is more volatile.
- Provides safeguards to assure the integrity of the process.
  - System monitoring
  - Audit processes
  - Business rules and controls
- Manages data with supported technologies.

November 14, 2005

MEMORANDUM FOR JOHN STRAUB
ACTING CHIEF INFORMATION OFFICER

FROM: STEVEN MCDEVITT
DIRECTOR, ARCHITECTURE AND ENGINEERING
DIRECTORATE

SUBJECT: MS Exchange Electronic Mail Archival Process Standard Operating Procedures

Purpose: To obtain approval

1. to implement new "interim"Standard Operating Procedure (SOP) for the MS Exchange Electronic Mail Archival Process, and
2. to implement a longer term risk mitigation plan for the email archive process

Both improves the integrity of the email archival process and reduces risk that is inherent in the process.

Background: The Executive Office of the President (EOP) is required by law to retain email records for search and archive as either Federal or Presidential records. The current email archive process depends on manual operations and monitoring, standard operating procedures do not exist, automated tools that support the email archive process are not robust, and there is no dedicated archive storage location. As a result, the current process and lack of storage management limitations result in potential loss of emails. Lost or misplaced email archives in turn result in an inability to meet statutory requirements.

Related Acquisitions/Projects: Both the "interim" procedure and the longer term risk mitigation plan rely on related projects.

- The interim procedure requires that Mail Attender be upgraded to the current version. Mail Attender has been purchased by the IS&T organization. The SIS Branch of IS&T is responsible for testing and implementing the new version with the business the that are described in the SOP for MS Exchange Electronic Mail Archival. Implementation will result in automated scheduling of daily archival for each components email to the Storage Area Network (SAN).
- The procedure also requires system monitoring of the archive process. The SIS Branch of IS&T is responsible for implementation of system monitoring. System monitoring will allow the data center operations staff to assure that the email archival process runs successfully every night.

- The long term risk mitigation plan relies on the implementation of the Electronic Communication Record Management System (ECRMS) as a dedicated storage volume for email archive. This will isolate email archives from other storage management decisions.
- Full implementation of ECRMS requires the all MS Exchange servers be upgraded to the 2003 version of MS Exchange. This will allow envelop journaling and the elimination of Mail Attender from the archive process. By simplifying the process and tool set, the integrity of the process will be enhanced.

Funding Profile: None.

- Mail Attender has been purchased.
- Microsoft Operations Management (MOM) can be used to monitor the process.
- Funding for ECRMS is established in the ECRMS budget.

Recommendation: The Acting Chief Information Officer approves and directs the

- use of the attached Standard Operating Procedure for MS Exchange Electronic Mail archiving, and
- implementation of ECRMS.

Approved: _____ Disapproved: _____ Date: _____

Comments:

November 14, 2005

MEMORANDUM FOR JOHN STRAUB
SPECIAL ASSISTANT TO THE PRESIDENT AND
DIRECTOR, OFFICE OF ADMINISTRATION

FROM: JOHN STRAUB
ACTING CHIEF INFORMATION OFFICER

SUBJECT: MS Exchange Electronic Mail Archival Process Standard Operating Procedures

Purpose: To obtain approval to implement new process X that improves the Y support effort...

Background: Provide a brief description of the situation or events leading to the purpose of the memorandum and any cost detail or trade-offs (e.g. impact if not approved...or $$ saved). Describe the basic requirement or shortfall of the customer group that is the basis for the procurement or action.

Related Acquisitions/Projects: Provide a brief description of other related acquisitions that either affect the decision associated with this memo, or that this memo will impact other projects or acquisitions. Indicate if this procurement is a piece of a larger system or has follow-on costs (e.g. sustainment)...otherwise state "None." (Greg – ECRMS).

Funding Profile: NA

Recommendation: The OA Director approves the use of the attached Standard Operating Procedure for MS Exchange Electronic Mail archiving.

Approved: _____ Disapproved: _____ Date: _____

Comments:

From: Nancy Smith
To: Sharon Fawcett
Date: 2/2/06 11:56:09 AM
Subject: The newspaper article on Vice Presidential email for 2003

Sharon:
I wanted to let you know that Jason and I called Jenny Brosnahan to ask her if she knew anything about the following quote in today's paper:

But the prosecutor added: "In an abundance of caution, we advise you that we have learned that not all e-mail of the Office of Vice President and the Executive Office of the President for certain time periods in 2003 was preserved through the normal archiving process on the White House computer system."

Jason and I told Jenny that this was just an informal call. Jenny said she did not know anything but would check with the lawyer who is responding to Libby requests.

There was a general discussion of what the White House obligations would be to inform if 1) there had been an accidental disposal, 2) there has been no disposal but they were not archived in the ECRMS system, and 3) if some of these emails were federal record rather than Presidential.

We informed Jenny that if they found out 1) had occurred that they should let the Archivist know because under the PRA they are supposed to inform the Archivist before any disposal of record. If 2) was the situation and these emails exist but have not been archived they are under no obligation because there has been no disposal, but that we would appreciate a heads up on this and that we might have expertise to assist them if they need to do a restoration project. If 3) was the situation and some of these were federal and there was a disposal, then NARA could have regulatory authority in this situation.

Jenny is checking and said she will call us back. As far as she knows nothing has occurred. As you know this is a sensitive issue because it is not at all clear what if anything has happened and what authority NARA has and, therefore, this information should be held closely. We will let you know as soon as we hear anything else.
Nancy

CC: GaryM Stern; Jason Baron

CHRONOLOGY OF WHITE HOUSE MEETINGS

NARA has had many contacts and meetings with the White House over the last six years for the purpose of providing guidance and assistance in terms of Presidential Record Act issues. NLMS has daily contact with White House staff offices and often responds gives informal guidance on records issues or has regular meetings with these Offices. The following is a description of the types of meetings NARA has had with the White House, with more detail provided on those meetings specifically dealing with the email system. An * by other meetings indicates that the primary purpose of the meeting was a discussion of an electronic record system.

1. Transition Meetings:

NARA staff including N, ND, NGC, NL and NLMS had several meetings with the Bush Transition Team, including Judge Gonzales, to go over Presidential Records Act issues in November 2000 – January 2001.

2. Briefings for New White House Counsels and Associate Counsels on PRA Issues:

NARA staff, including NL, NLMS and NGC, have had a series of briefings during the last six years to go over PRA issues. We have briefed all new Counsels to the President and Associate Counsels dealing with the PRA. In January and February 2001, NGC and NLMS responded to questions from the White House Counsel's Office concerning its issuance of PRA guidance, which was issued in February 2001. In January 2005, at the request of the White House Counsel, NARA provided comments and suggestions for updating the PRA guidance. White House Counsel issued new guidance in June 2006.

3. Meetings with NSC*:

NARA staff including NGC and NLMS have had series of meetings over the past six years with the National Security Council's Access and Management Directorate going over their email and other electronic systems, offering advice on what should be consider NSC PRA records, and getting updated briefings from NSC on their electronic systems. We last met with NSC on 12/7/2006 regarding their new systems. From NARA, Nancy Smith, Kate Dillon-McClure, Jason Baron, and Sam Watkins met with Bill Leary and John Ficklin of NSC, and Phil Droege or WHORM.

On January 18, 2007, White House Counsel informs NGC and NLMS that the NSC RMS has gone down for about a twenty-four hour period. Bill Leary, NSC Senior Directorate for Access Management says that NSC is doing everything it can to get their IT support to recover the information from backup tapes. Recently Bill Leary called NLMS to say that NARA should be receiving a report on the final outcome of this situation.

4. Meetings with the White House Photo Office*:

NLMS along with NHV have had several meetings with the White House Photo Office on the electronic system controlling and holding digital copies of the Bush White House Photos. The last meeting in which NH participated occurred on 6/18/2004.

5. Meetings with White House and Department of Justice and the Secret Service regarding the WAVES and other Secret Service White House electronic systems*:

NARA staff including NGC, NLMS and NWM have had a series of meeting on the status of the WAVES and other Secret Service electronic systems governing access to the White House, the White House compound and the Vice President's house. NARA has also given written input on this issue.

6. Meetings with White House Office of Records Management:

NLMS along with NHV staff have had a series of meetings over the past six years giving WHORM assistance on PRA issues and their electronic RMS system.

7. Meetings on Disposal of Presidential and Vice Presidential Bulk Mail:

NLMS and NGC staff have had a series of discussion and meeting with White House and the Office of the Vice President Counsel, the Director of White House Office of Records Management, and the Correspondence Unit staff on disposal of Presidential and Vice Presidential textual and electronic bulk mail and faxes. In a series of letters between the Archivist and White House and OVP Counsel, approval to dispose of Presidential and Vice Presidential textual and electronic bulk mail and faxes was given after retaining a sample by the Archivist in 2001, 2002, and 2005. NLMS staff sample this mail at the White House on a weekly basis.

8. Meetings with the White House Gift Office:

NLMS staff have had a series of meetings with the White House Gift Office providing them guidance on their electronic database and dealing with electronic transfer of this information to the NLMS iO database. Additionally, NLMS staff have provided briefings for each new head of the Bush White House Gift Office, guidance on gifts and disposal of gifts. NLMS and NGC have also met with the Associate White House Counsels who deal with gift issues.

9. Meetings with White House Counsel and the Department of Justice on input on EO 13233:

From the fall of 2001 forward N, ND, NGC,NL and NLMS have had a series of meetings, written and oral discussions regarding advice on EO 13233, changes to EO 13233, and implementation of EO 13233.

10. Meetings with WHCA on White House TV and Film*:

NLMS staff have had several meeting with James Vankeuren on the WHCA's electronic system controlling and describing White House TV and Film materials.

11. Meeting with the Vice President's Staff:

NGC and NLMS have had several meetings with the Office of the Vice President's staff on Vice Presidential records issues.

12. Meetings with the President's Foreign Intelligence Advisory Board Staff:

NGS and NLMS have had several meetings providing PFIAB advice on Presidential Records Act issues.

13. Meetings and Input to OA on the Bush Email Systems*:

NARA staff, including ND, NGC, NLMS, NWM, NWME, and NHV, have had a series of meetings and conversations with OA on the Bush email systems. Most of these meetings have been composed of a smaller sub-set of the NARA EOP team. Various members of NARA staff have had either meetings or discussions regarding OA IT issues and the OA schedule throughout this period. The following is a non-inclusive list of meetings between NARA and OA staff on the White House email system:

- On February 13, 2001, a NARA team consisting of NHV, NWM, and NLMS met with OA/IST to discuss NARA-OA Targeted Assistance.

- Between November 2001 and February 2002, NHV had preliminary discussions with various OA and WHORM staff, including Jim Wright, Lee Clay, Nell Doering, Tony Barry, Terry Good, Bob Spangler, and Sharon Whitt, regarding the broad, high level requirements for a replacement to the ARMS system.

- On November 6, 2002, NHV met with Carlos Solari (acting CIO) and five other EOP representatives regarding the difficulties EOP was having implementing records management with Microsoft Xchange and other issues.

- On March 20, 2003 NARA met with OA to get an update on the new EOP IT systems, and discuss other EOP records issues.

- On April 22, 2003 OA and NARA staff meet discussing electronic records management for the EOP including ARMS redesign and other RM tools, their enterprise architecture review, and other systems upgrades. NARA attendees at this meeting included ND, NGC, NLMS, NWM, and NHV. OA staff included Tim Campen, Carlos Solari, Lee Clay, Steve McDevitt, and Markus Most.

- On May 6, 2003, at the request of the EOP, NARA provided comments on the ECRMS Concept of Operations document. ECRMS was the designation given for the system designed to replace ARMS.

- In 2004, members of the EOP team including NHV, NWM, NLMS, and NGC had a series of meetings with OA to discuss their email systems (ARMS and Legato), their plans to change from ARMS to ECRMS and also gave input on various documents OA circulated to NARA for comment:

    - On January 6, 2004 two members of OA staff, Keith Regatts, the Project Manager, and Markus Most, the then OA Records Manager, came to Archives II with their EOP contractors to meet with NARA staff to gather requirements from NARA for their new system to collect, preserve and transfer to NARA electronic messages. On January 21, 2004, Keith sends Sam Watkins the draft ECRMS requirement listing for NARA's review and comment.

    - On February 2, 2004, NARA met with OA and White House staff at OA for what was called an ECRMS Stakeholder Review Session with NARA. This meeting included discussion of a variety of emails issues including the Legato/Xchange interface with ARMS, as well as NARA's response to EOP's "metadata management" alternative proposal, segregation of Federal from Presidential email, the default bucket, and NARA's position on EOP electronic calendars. NARA staff included ND, NGC, NLMS, NWM, and NHV.

    - On February 12, 2004, NARA provided comments to the EOP on the ECRMS requirements.

    - On May 13, 2004, NARA provided the EOP with comments on the ECRMS System Design Description document.

    - May – June 2004, NARA responds to EOP questions regarding snapshots of EOP hard-drives.

    - No meetings took place in 2005 and 2006. Essentially, development of ECRMS was delayed after the 2004 election.

- On February 2, 2006, NGC and NLMS called Associate White House Counsel Jenny Brosnahan to ask her if she knew anything about the quote in the paper that said that "in an abundance of caution, we advise you that we learned that no all e-mail of the Office of the Vie President and the Executive Office of the President for certain time period in 2003 was preserved through the normal archiving process on the White House computer system." Jenny said that she did not know anything but would check with the lawyer responsible for responding to Libby requests. On February 6, 2006, NGC spoke with OA Counsel Vic Berson, who

clarified that they did not believe there was not a loss of email, but rather they believed the email were not sent into ARMS, or an equivalent electronic recordkeeping system; they believed that the emails existed and could be accounted for.

- In the fall of 2006, NARA re-initiates effort to meet with OA to discuss status of ECRMS and related issues.
    - On February 6, 2007, ND, NLMS, NGC, NHV, NWM meet with OA CIO Theresa Payton and OA staff to discuss NARA's need for knowledge of OA electronic email and other electronic systems managed by OA. OA explains that ECRMS is not being implemented, and therefore emails are no longer being preserved in a formal electronic recordkeeping system (and NARA will thus likely receive emails in multiple formats). OA gives NARA no indication that there is a problem with any missing emails.
- On March 29, 2007, NGC and NLMS call Associate White House Counsel Chris Oprison regarding news reports about the possibility of PRA emails not being saved on personal/political accounts.
- On April 14, 2007, NGC calls Chris Oprison to request a briefing on further press reports on White House emails.

From: GaryM Stern
To: Baron, Jason; Bellardo, Lewis; Constance, John; Cooper, Susan; Fawcett, Sharon; McMillen, David; Smith, Nancy; Weinstein, Allen
Date: 3/27/07 1:23:47 PM
Subject: White House Emails

In case you haven't yet seen it, today's WashPost has a story, reprinted and linked below, that Chairman Waxman is requesting the RNC and the Bush-Cheney '04 campaign to preserve emails that may be Presidential records. Waxman's letters are on the Committee website, also linked below, and ask, among other questions: "What agreements, if any, has the RNC entered into with the White House, the National Archives, or other government agencies regarding the e-mail accounts maintained by the RNC that have been used by White House officials."

I am not aware that NARA has ever been contacted by these political organizations on this issue.

By way of background, last week Waxman's staff called John's office wanting "to know what sort of regulations does NARA have for incumbent Presidents; what guidance do we give White House staff on Presidential records." (See attached email.) I spoke with the staffer, Anna Laitin, to explain that under the PRA we do not have a formal, statutory role in records management of the incumbent, but that we do provide informal guidance (and I sent her the transition document on the PRA that we prepared for the incoming Bush Administration).

She explained the Committee's concern that WH staff may be using non-government email accounts to conduct government business. I stated that if that occured, then they should preserve such email either by printing it out or forwarding it to their government account.

As we routinely do when this sort of issue arises, we will contact the White House Counsel's Office to discuss further.

Thanks,
Gary

http://oversight.house.gov/story.asp?ID=1225

http://www.washingtonpost.com/wp-dyn/content/article/2007/03/26/AR2007032601979.html?nav=hcmodule

GOP Groups Told to Keep Bush Officials' E-Mails
Democrat Cites Investigation of Firings

By R. Jeffrey Smith
Washington Post Staff Writer
Tuesday, March 27, 2007; A03

A Democratic House committee chairman yesterday told the Republican National Committee and the Bush-Cheney '04 campaign to retain copies of all e-mails sent or received by White House officials using e-mail accounts under their control, raising the political stakes in the congressional inquiry into U.S. attorneys' firings.

Rep. Henry A. Waxman (D-Calif.) said his broadly written request was based on evidence that White House officials -- particularly aides to top political adviser Karl Rove -- have used their politically related e-mail accounts to hide the conduct of official business regarding the prosecutor firings and other matters being investigated by Congress.

"The e-mails of White House officials maintained on RNC e-mail accounts may be relevant to multiple congressional investigations," Waxman wrote to the group's chairman, Mike Duncan, adding that as

"governmental records" they are subject to preservation requirements and "eventual public disclosure."

Waxman, chairman of the Oversight and Government Reform Committee, said he also expects Duncan and Marc Racicot, the former Bush-Cheney campaign chief, to arrange a briefing on how their groups control and preserve such e-mails. A spokeswoman for Duncan, Tracey Schmitt, said of Waxman's letter, "We're reviewing it and will take appropriate action." Racicot did not return a phone call.

The request by a Democratic lawmaker for access to records kept by a rival party's campaign offices has a precedent: In the mid-1990s, when the same committee was under Republican control and investigating alleged campaign finance abuses by the Clinton White House, it demanded and obtained hundreds of pages of Democratic campaign records and communications.

"This is a classic congressional document-preservation warning," said University of Baltimore law professor Charles Tiefer, a former deputy and acting counsel to the House from 1984 to 1995. He said failure to comply could expose the groups to possible obstruction charges.

Yesterday's request was based, Waxman said, on at least three White House officials' use of Republican Party-affiliated e-mail accounts for some of their work in recent years, as well as on reports that Rove routinely uses his RNC e-mail account for business.

Waxman noted for example that J. Scott Jennings, the White House deputy director of political affairs, used a "gwb43.com" e-mail account last August to discuss the replacement of the U.S. attorney for Arkansas, Bud Cummins, according to e-mails released to Congress by the White House.

Barry Jackson, a deputy to Rove, in 2003 used a "georgewbush.com" e-mail account to consult with Neil G. Volz, then an aide to lobbyist Jack Abramoff, about nominating one of Abramoff's Indian tribe clients for a Medal of Freedom, according to a copy of an e-mail. Abramoff is now serving a prison sentence for bank fraud, and Volz plead guilty to conspiracy charges last year.

Susan B. Ralston, while she was executive assistant to Rove, similarly used "georgewbush.com" and "rnchq.org" e-mail accounts to confer in 2001 and 2003 with Abramoff, her former boss, about matters of interest to Abramoff's clients.

In a related e-mail, an Abramoff aide said Ralston had warned that "it is better to not put this stuff in writing in [the White House] . . . email system because it might actually limit what they can do to help us, especially since there could be lawsuits, etc."

Abramoff's response, according to a copy of his e-mail, was: "Dammit. It was sent to Susan on her rnc pager and was not supposed to go into the WH system."

Waxman said the exchange indicated that in some instances, White House officials were using nongovernmental accounts "specifically to avoid creating a record of communications" that are nonetheless subject to the committee's jurisdiction.

Record of meeting

10/11/2007, 2:00-3:30pm, OA Conference Room, G Street NW Offices

Participants:

EOP: Theresa Payton (EOP CIO), Will Reynolds, Liz Medaglia (OA Counsel), Chris Oprison (WH Counsel), Alan Swendiman (OA) (for last portion)
NARA: Sam Watkins (NH), Bob Spangler (NWME), Jason Baron (NGC)

Theresa Payton provided a description of the process used to collect and store messages when the EOP began the move to Microsoft Xchange in 2002. Per this description, any message sent or received by a user was recorded immediately in two different locations: the user's mailbox on the active Xchange system, and the Xchange Journal (arranged by mail store and organization) with access available only to administrators. On a periodic basis, an administrator copied these journal files to a PST file. They have not found documentation of how this process was executed, recorded, or verified, or how often the copy took place, or was supposed to take place.

We asked if anyone had brought to the meeting the so-called "2005 report," which we understand constitutes an Excel spreadsheet of some sort. No one had a copy available. We asked if Theresa had reviewed an electronic version of the 2005 report (as metadata consisting of formulas or other information might prove useful). She indicated she had not reviewed an electronic version out of a concern that doing so would in some way compromise the integrity of the document. We specifically requested that OA provide NARA with a copy of the 2005 report, in electronic form, and any related documentation that could be recovered. EOP representatives took that request under advisement.

In 2004, Mail Attender was introduced to automate the copy process. Although the process was apparently scheduled to take place daily, they do not seem to have logs or other records verifying this. At about this time, two software utilities were introduced to the process: "Findit" and "CMDFI". "Findit" is a custom legal search tool developed by Microsoft to allow them to search the data in response to queries. "CMDFI" generates statistics from the repository

PST files. Both were written in Visual Basic 6, which may have "memory leak" problems.

"CMDFI" is the program that was used to create the report which apparently indicated that they had missing emails. The report flagged "red days" as those days when few to no messages are saved for an organizational PST. They believe that the low numbers are at least partially attributable to a flaw in the "CMDFI" tool. The more problematic aspect of the PST integrity checking is the logic of the methodology: they apparently have run this CMDFI tool to "evaluate" PSTs but they are not tying that evaluation back to any system logs or back to the original source of the messages. In essence, they are only comparing the volume of messages on any given day to other similar days, to see if there are any anomalies. For example, a total of 500 messages on a working Wednesday for OMB would be an anomaly if OMB normally accumulated an average of 5000 messages on working Wednesdays.

They are still in the process of developing a new tool to produce a new count of these messages. They are now awaiting clearance for a contractor to be hired. They expect the development and report process to take 6-9 weeks after the contractor is on board. We should note that this process was supposed be completed by the end of June, the end of the summer, and the end of October in our previous meetings. They are now saying that it will take about six weeks of work to have any results, and that further work is dependent upon an FBI clearance process being completed immediately for one assigned contractor. That means no results before the end of November at the earliest.

We expressed great concern that the process was moving so slowly, and that we were very skeptical that the report results from the new tool could completely eliminate the possibility of messages missing from the collection system. We pointed out that some type of restoration project would inevitably be necessary if significant doubt remained that messages had not been collected, and that they should begin planning for such a project by requesting funding for the current FY. We indicated that such a restoration project could cost on the order of $25 million, and pointed out that any unused funds could easily be returned to the Treasury. We recommended that they pursue funding for the project prior to determining the exact nature and extent of the missing messages problem. Ms. Payton indicated that she

refers funding issues to the head of OA, Alan Swendiman, who was present at that point in the meeting, but made no comment.

Ms. Payton also provided some of the history of the ECRMS development effort. The system was to pilot in the fall of 2006, but was cancelled for two primary reasons:

1) The system would require 18 months to ingest the existing backlog of messages in the Microsoft Xchange system. We pointed out that that would still have left time to complete before transition if it had worked out properly. Ms. Payton indicated that the normal types of delays associated with implementing such a system would have prevented completion in time for transition.

2) The system offered users no option to distinguish between Presidential record and political or personal materials. This would result in a large amount of inappropriate material being transferred to NARA intermixed with the Presidential records. In response we stated that NARA certainly supported the segregation of Presidential records from personal and political communications, and that we had received large quantities of this material in the past, i.e. in the email records of the Clinton administration. We also pointed out that NARA had participated in the development of requirements for ECRMS, and that the decision to drop the requirement to distinguish between Presidential and personal/political messages was made by OA counsel early in the development of ECRMS.

Ms Payton also provided us with a brief status of the development of the new system to collect, store, and transfer electronic messages of the EOP. The system is being developed in Documentum, and is scheduled for a "minipilot" in November, 2007. When we asked about the new system's ability to ingest the vast numbers of emails stored in PST files, she and Will Reynolds indicated that they believed the system could ingest the files rapidly, but it was not clear that the ingestion would be completed before transition.

National Archives
Archivist of the United States
Washington, DC 20408

May 1, 2007

The Honorable Fred Fielding
Counsel to the President
The White House
Washington, DC 20500

Dear Fred:

Thank you for taking the time out of your crowded schedule to have lunch with me last Wednesday. I greatly enjoyed our conversation.

I also wanted to thank you for meeting with key members of NARA's senior staff that same morning. They appreciated the update on current issues relating to White House emails. We believe that it is essential that the White House move with the utmost dispatch both in assessing any problems that may exist with preserving emails on the Executive Office of the President email system, and in taking whatever action may be necessary to restore any missing emails. NARA has gone through three Presidential transitions involving the transfer of electronic records and, in each of these transitions, we experienced some problems with this issue. Based on this previous experience and similar problems experienced by prior Administrations, a 'restoration' project can easily take more than one year to complete.

Additionally, given both the extensive volume of White House emails that NARA will need to ingest at the end of the Administration – much more than in any previous Administration – and the complexity of migrating electronic records, it is extremely important that NARA staff begin meeting as soon as possible with relevant staff of the Office of Administration (OA). In order to ensure a successful migration of both presidential and federal electronic records to NARA, we need to acquire a clear knowledge of the current White House electronic systems and the current plans of OA for both restoration of any non-archived emails and transfer of the preserved emails to a new system. NARA remains available to provide you and the Office of Administration with our expertise and appropriate guidance, as we have previous Administrations, as you work to solve any problems.

My staff is also available to work closely with you and other relevant White House officials in preparing for the January 2009 Presidential transition. As NARA staff has mentioned in previous meetings, we believe that now is the time to begin regular meetings in order to discuss a variety of issues including: 1) when to begin formal move planning, including meeting with the military; 2) the need to scope out and inventory the

(continued on page two)

volume of materials that will be transferred to the National Archives at the end of the Administration for deposit into the George W. Bush Presidential Library; 3) establishment of a project site for storage of these records until the Library is built; 4) White House needs for NARA staff in assisting with the move; and 5) other issues that will require White House assistance in order for NARA to physically carry out the move.

Please feel free to discuss these coordination issues with Gary M. Stern, General Counsel, and Nancy Smith, Director of Presidential Materials.

Thank you again for your support and assistance.

Sincerely,

Allen

ALLEN WEINSTEIN
Archivist of the United States

From: GaryM Stern
To: Flood, Emmet T.; Oprison, Christopher G.
Date: 6/20/07 3:27:57 PM
Subject: Email Update

Emmet and Chris:

The current press coverage about the use by White House staff of the RNC email system compels us to inquire again, since our meeting with you and Fred Fielding on April 25, about the status of that situation and your review into the allegations about emails missing from the White House system. You have stated that emails appear to be missing from the White House system from the time period of late 2003 through late 2005, although you had not been able to provide any estimate of how many emails are actually missing.

When we met again with Chris and OA on May 21, we were informed that the OA CIO audit of the missing email situation should be completed in about 4 weeks. Chris also noted that there were approximately 27,000 backup tapes covering that time period.

We have advised you on both occasions that it is essential that you begin an email restoration project from the backup tapes as soon as possible, so that it can be completed before the end of the Administration.

It is imperative that we be updated as soon as possible on the state of any missing emails from the White House system and the plan to recover them from the backup tapes, as well as any plans to recover presidential record emails from the RNC? We would be happy to meet with you at your earliest convenience to discuss this issue, or can talk by phone.

I look forward to hearing from you soon.

Thanks,
Gary

CC: Baron, Jason; Bellardo, Lewis; Fawcett, Sharon; Smith, Nancy

From: GaryM Stern
To: Weinstein, Allen
Date: 5/23/07 10:48:30 AM
Subject: WH Email Meeting

Allen, here are our notes from Monday's meeting. Let us know if you have any questions.

Thanks.

CC: Baron, Jason; Bellardo, Lewis; Fawcett, Sharon; Smith, Nancy; Spangler, Robert; Watkins, Sam; Wester, Paul

Notes of May 21, 2007, Meeting with White House on Email Issues:

NARA attendees:

Lew Bellardo
Gary M. Stern
Sharon Fawcett
Nancy Smith
Sam Watkins
Bob Spangler

White House attendees:

Chris Oprison, Associate White House Counsel
Al Lichtman, Associate White House Counsel
Phil Droege, Director, White House Office of Records Management (WHORM)
Teresa Payton, Office of Administration Chief Information Officer
Linda Gambatesa, Deputy Assistant to the President for Management Administration and Oval Office Operations
Al Swindeman, Director, Office of Administration
Liz Medalia, General Counsel, Office of Administration
Keith Roberts, Deputy General Counsel, Office of Administration

Primary purpose of the meeting was to get a briefing from Office of Administration on the status of the problem relating to alleged missing White House emails from the EOP email system.

Chris Oprison explained that they believe the problem relates to gaps in emails on the EOP system from late 2003 to late 2005, but they could not assure that the problem does not extend beyond that timeframe, and even into the present. They first became aware of the issue of gaps in emails, i.e., not being properly archived, in 2005.

Their current process is that they are using Microsoft Exchange and then saving these emails to Personal Information Store (PST) file.[1] They also have disaster recovery tapes, i.e., backup tapes. They have identified approximately 27,000 such backup tapes covering that period, and they have not been recycling tapes since 2003. Their current belief is that the problem occurs only in the PST files that are supposed to be saving emails from MS Exchange/Outlook.

[1] "PST" refers to a "Personal Information Store" file, an export of a single individual's mailbox from the email system. My understanding is that in lieu of ARMS-managed email like we have received in the past, EOP plans to supply PST files as a primary means of email export and transfer. It is in situations where that PST export process may not have been properly executed that backup tapes would be used instead. The backup tapes would include the entire server-based information store (i.e., *everybody's* email), so the equivalent of individual PST files would have to be exported from those backups in a separate reconstruction effort.

They stated that they currently do not believe that the ARMS emails, dating mostly from 2001-2003, have this gap problem (and ARMS continues to ingest the very small amount of LotusNotes emails that continue to be in operation).

Within the next month they are going to complete an audit of the PST files to determine the full extent of the problem. But they also stated that they expect to have an action plan ready by the end of the summer. We asked that they brief us when the audit is complete, and not wait for the action plan.

We asked if they could give us any more specifics on what they know so far: e.g., volume of missing email; whether it is particular to specific "buckets" representing particular EOP offices; does it involve both federal and presidential emails? They said that they could not at this point answer any of these questions. We asked them to confirm currently how many emails systems existed for Bush EOP emails. They said there are two ARMS/Lotus Notes and the PST/Microsoft exchange systems.

We then asked about the RNC email issue. They are working with the RNC and looking at this issue. They stated that the RNC server is now fixed so that this will not happen again, and that the RNC has the old servers. They are exploring how they will try to capture the Presidential record emails. RNC has a list of people to which this issue would speak, back to 2002. This will be a separate restoration effort from the EOP email restoration.

They also stated that they were talking to EOP stakeholders to determine whether to implement Documentum as the prospective records management application for email. Sam offered to work with them on reviewing requirements and concept of operations documentation.

Chris asked what was NARA's bottom line interest? We said that at the end of the Administration, we wanted a complete set of Bush emails in a format that we could accept into ERA. We stressed that if they determine they need to do tape restorations projects (TRP) to recover missing emails, it needs to begin as soon as possible, so that they could complete it before the end of the Administration. Chris noted that a restoration project that involved de-duplication would be extremely expensive. We noted that Congress can fund the restoration project, just as it did during the Clinton Administration. Sam also offered that he still had contacts with the persons and contractors who did the Clinton TRP.

We agreed that even while the audit of the email system is ongoing, we should move ahead as quickly as possible with meetings for transition planning, including a specific meeting with the photo office, given the unusually large size of the digital photo collection (up to 100 terabytes). [The transition meeting is tentatively scheduled for the week of June 4.]

From: GaryM Stern
To: Baron, Jason; Bellardo, Lewis; Brewer, Laurence; Fawcett, Sharon; Kurtz, Michael; Smith, Nancy; Thomas, Adrienne; Weinstein, Allen; Wester, Paul
Date: 6/29/2007 11:44:10 AM
Subject: Meeting with OA Counsel

On Wednesday, Jason and I met with the new General and Deputy Counsel to the EOP Office of Administration: Liz Medaglia and Andrew Turley, respectively. Prior to being in private practice, Liz was a former Assistant U.S. Attorney in D.C. (They met us at A1, so we could also give them and their interns a tour of the rotunda.) Its purpose was as a meet and greet and general overview of the PRA and FRA as they relate to OA and the EOP, particularly with respect to White House emails and other electronic records, and the transition.

Overall, the meeting went well as a starting point for open communication. We did note that during the last two years NARA had experienced a notable drop off in open communication and interaction with OA. We also touched on the issue of the missing White House email, on which Liz continued to say that they still have not completed their review, and it likely won't be done until the end of the summer; and therefore they still had nothing concrete to report to us on what, if anything, is actually missing and would need to be restored.

We raised that they need to carefully and completely label and provide documentation for all backup tapes and other electronic objects that may end up being transferred to us at the end of the Administration. And we said that for ERA we need to know as soon as possible the projected volume of electronic records, including email. Liz also inquired about any technical requirements NARA intends to impose as part of the ingest or accessioning process into ERA (formatting concerns we would have, issue of encrypted files, etc.). Appropriate people in NH, NL and NW should talk about this and we'd be happy to be part of the conversation as well.

Let us know if you have any questions.

From: GaryM Stern
To: Gold, Donna; Weinstein, Allen
Date: 10/15/2007 2:53:32 PM
Subject: What NARA Needs from White House on Transition.doc

Allen, per your request, attached is a bullet memo on the issues that are currently pending with the White House relating to transition. We have raised all of these issues with them repeatedly, and on some of them we are finally beginning to see a little progress, as noted in the current status line. Let us know if you would like to meet or otherwise discuss further.

Also, per your request, on Friday I told Mike Farren that you would like to have a meeting with Fred Fielding for this week, including if Fred wanted to come to A1. Mike agreed that a meeting would be good (he himself having previously suggested doing it at A1), and said he would check on Fred's availability for this week and next.

Given how slow they can be to respond, I think it makes very good sense for you/Donna to contact him as well, particularly if you want to try to get a meeting for this week.

I hope this is helpful.

Thanks,
Gary

CC: Baron, Jason; Bellardo, Lewis; Cooper, Susan; Fawcett, Sharon; Kurtz, Michael; Smith, Nancy; Thomas, Adrienne; Wall, Debra

What NARA Needs from the White House on Transition

1. WH Approval to work with TRANSCOM; key issue is what size planes will be available – if C5 Transports (the largest plane) are not available, then many more flights will be necessary:

   Current Status: WH said at Friday, Oct. 12 meeting that it has nearly completed its internal, senior level transition planning structure, and can then focus on this and related issues.

   Background: Because this is the first time that TRANSCOM is doing this for NARA (in the past, the Army did the work), we want to begin working with them as soon as possible.

2. IT Inventory for PRA systems

   Current Status: WH said at Friday, Oct. 12 meeting that it would get us the inventory early this week.

3. Schedule of PRA office-by-office meetings to review specific IT systems and textual holdings:

   Current Status: WH agreed at Friday, Oct. 12 meeting to beginning scheduling these meetings this week.

   Background: WH asked NARA to provide it with update transition timeline.

4. Bush43 Library Holdings:

   a. Estimated total volume of textual records for Library Architects
   b. Estimated total volume of PRA electronic records for ERA
   c. PRA commissions
   d. Will Vice President's records be coming to Bush43 Library?
   e. Estimated volume of personal materials, including pre-presidential records, 2000 and 2004 campaign and inaugural records, etc.

   Current Status: We should start to get this information from office-by-office meetings, but would prefer an overall number now.

   Background: Library architects need this information.

5. Need clarification on what types of information/documents would be excluded from transfer to NARA as non-Presidential record:

   Background: NARA has repeatedly stated that we would likely want copies of electronic records that are in different formats. NARA would also like to receive

personal and political non-records, for eventual donation by the President. It's expensive for the President to hold these records personally; personal/political records are what make Presidential Libraries unique and distinguishable as separate facilities.

6. 2005 OA Report/Chart (in electronic form), and any supporting documentation, on problems with White House email system.

   Current Status: On Friday, Oct. 12 phone call, Mike Farren and Chris Oprison said that NARA could see this report, and should arrange to do so at the next meeting with OA.

   Background: We have repeatedly asked to see this report, and have been ignored, or, more recently, told it is hard to comprehend and of little value. White House has shown copies to House Oversight Committee and DOJ.

7. NARA strongly recommends that the WH begin planning for a backup tape email restoration project now, including seeking appropriations from Congress, even before it has the final answer. The cost for such a restoration project will likely be in the tens of millions of dollars.

   Current Status: OA is still reviewing process for testing email system, and does not anticipate completing the testing until late November, at the earliest.

   Background: Missing WH emails is now the subject of two recently filed lawsuits, by CREW and National Security Archive, and a pending motion for a temporary restraining order (TRO). NARA IT staff (and counsel) have had two recent meetings with OA IT staff (and counsel) on this issue.

8. Need final decision on location of Library.

   Background: NARA is reviewing lease options in Dallas, and intends to sign lease in late November. Need assurance from WH that this is the appropriate location before signing lease.

From: GaryM Stern
To: Flood, Emmet T.; Oprison, Christopher G.
Date: 6/20/07 3:27:57 PM
Subject: Email Update

Emmet and Chris:

The current press coverage about the use by White House staff of the RNC email system compels us to inquire again, since our meeting with you and Fred Fielding on April 25, about the status of that situation and your review into the allegations about emails missing from the White House system. You have stated that emails appear to be missing from the White House system from the time period of late 2003 through late 2005, although you had not been able to provide any estimate of how many emails are actually missing.

When we met again with Chris and OA on May 21, we were informed that the OA CIO audit of the missing email situation should be completed in about 4 weeks. Chris also noted that there were approximately 27,000 backup tapes covering that time period.

We have advised you on both occasions that it is essential that you begin an email restoration project from the backup tapes as soon as possible, so that it can be completed before the end of the Administration.

It is imperative that we be updated as soon as possible on the state of any missing emails from the White House system and the plan to recover them from the backup tapes, as well as any plans to recover presidential record emails from the RNC? We would be happy to meet with you at your earliest convenience to discuss this issue, or can talk by phone.

I look forward to hearing from you soon.

Thanks,
Gary

CC: Baron, Jason; Bellardo, Lewis; Fawcett, Sharon; Smith, Nancy

From: GaryM Stern
To: Oprison, Christopher G.
Date: 4/12/2007 4:59:16 PM
Subject: WH Email and PRA Guidance

Chris, following up on our conversation several weeks ago about White House emails, we appreciate, as noted in the press, that your office is taking steps to investigate whether PRA records were created or received on non-White House email systems, and if so, to take all measures to recover and preserve them. As you know, under section 2203 of the PRA, the President may not dispose of Presidential records without first obtaining the written views of the Archivist. It has also been normal practice for the White House to inform NARA of any unauthorized destruction of Presidential records.

As always, we at NARA are available to provide your office our expertise and guidance on the PRA, including the issue of distinguishing between PRA records and non-record political materials. We would be happy to work with you as you are developing new guidance on this issue.

Let me know if we can be of help.

Thanks,
Gary

Also, we would still very much appreciate your sending us a copy of the updated records guidance that Harriet Miers issued, superceding the Gonzales guidance of Feb. 2001, and any other such guidance.

Let me know if we can be of further assistance.

Thanks.

GARY M. STERN
General Counsel
National Archives and Records Administration
8601 Adelphi Road, Suite 3110
College Park, MD 20740-6001
[redacted]

CC: Smith, Nancy

From: Robert Spangler
To: Kepley, David
Date: 10/1/2007 2:41:26 PM
Subject: Fwd: Re: Federal Records and ERA

David: cc: Sam Watkins, NGC, NWME mgt.

In my opinion, with regard to EOP e-records, the volume thereof, and the split between Federal and Presidential, the only reasonable answer at this point is: we don't know.

The Office of Administration, the component of EOP through whom we are attempting to gain detailed technical information, has been extremely guarded in their responses, and all communication has been conducted under a patina of legal caution. Whenever we solicit specific technical information, they reply for the most part that they are still in the process of conducting inventories.

I also have heard the estimate below of 400-600 million emails but, given the way we've gotten information from them, I wouldn't be surprised if the real figure is much more or much less. In addition, there's much confusion about the format of email (and other e-records) they intend to supply, so it's hard to know how a given count of records will translate into volume, e.g., how will attachments be handled?

Sam Watkins has been in more meetings than I have (I've really only been in the email discussion), and may know more about the issue of expected volume for other record types.

Sorry I don't know more at this point, but I'm not sure that more can be known right now!

Thanks

Bob

May 6, 2007

Mr. Alan R. Swindeman
Director
Office of Administration
Executive Office of the President
Washington, DC 20503

By Fax: 202-456-6512

Dear Mr. Swindeman:

Based on recent press reports and a meeting that the Deputy Archivist of the United States and NARA General Counsel had with the Counsel to the President, I am writing concerning the possible loss of Federal records of the federal agency components of the EOP that are required to be maintained on the White House email system.

We request that you look into this matter to determine whether instances of alienation of Federal records actually occurred and then notify us of your findings. If you conclude Federal records were alienated without proper authorization, we request that you furnish us with a report as required and described under 36 CFR 1228.104 (Reporting Damage to, Alienation, and Unauthorized Destruction of Records). Your report should include a statement about the safeguards established to prevent further loss of records.

We look forward to your response and thank you for your cooperation. If you have any questions, please contact Laurence Brewer of the Life Cycle Management Division at [redacted] or at [redacted].

Sincerely,

PAUL M. WESTER, JR
Director
Modern Records Programs

Official File - NWML
Reading File - NWML
Information Copy – NWM

cc: Fischer (NWML)
Langbart (NWML)

S:/correspondence/unauthorizeddestruction-eop.3May07.doc
Wf/jpc
File: 1301-1b Disposal – unauthorized (Executive Office of the President)

001130

OCT 1 0 2007

Mr. John P. Walters, Director
Office of National Drug Control Policy
Executive Office of the President
Washington, DC 20503

Dear Mr. Walters:

We also request that you look into whether any electronic mail records of your agency maintained on the White House email system were lost or alienated, as has been widely reported. If Federal records were improperly disposed of, please furnish us with a report as required under 36 C.F.R. § 1228.104 (copy enclosed). We had written to OA concerning this matter on May 6, 2007 (copy enclosed). However, because OA no longer handles records management under the FRA for the Federal agencies within EOP, your agency is now directly responsible for responding to NARA on this matter.

We look forward to working with you. If you have any questions, please contact Laurence Brewer, Director, Life Cycle Management Division, at [redacted] or at [redacted]

Sincerely,

MICHAEL J. KURTZ
Assistant Archivist for
Records Services – Washington, D.C.

Enclosures

cc: Fischer
Hawkins

Official file - NWML
Reading file - NWML
Reading file - NW

File: 1301-1a Executive Office of the President

S:/correspondence/EOP Drug Control
Drafted by Nashorn/jpc 10/05/07

From: Sam Watkins
To: Fawcett, Sharon; Kurtz, Michael; Morphy, Martha; Smith, Nancy; Stern, GaryM
Date: Mon, Oct 22, 2007 11:58 AM
Subject: Fwd: Followup to meeting of 10/11/2007

Here's what I sent to Theresa Payton as followup to the "whiteboard" meeting on the missing email issue. Just trying to keep everyone posted. Please "hold close," per request of EOP. Thanks

Sam Watkins
Director, Product Management
National Archives & Records Administration
[redacted]

>>> Sam Watkins 10/19/07 9:45 PM >>>
Theresa,

We wanted to thank you for the "whiteboard" session we had last week in which you explained some aspects of the methodology and history of collecting emails within the EOP in the current administration. Bob, Jason, and I certainly have a better understanding of how the process has worked, and what additional controls you have put in place in the past two years, even if you were not yet in the position to share with NARA any real specifics on the nature and scope of the alleged WH missing email problem.

We are certainly willing to participate in the analysis of the data related to the "missing emails," but we are still trying to figure out how we can help without an understanding of what the "2005 report" says. Obviously, the report must give some indication that there was a problem, or we would not be in this situation. As we stated in our meeting last week, we would like to be able to review the report, preferably in its original electronic spreadsheet format, along with any related documentation you have been able to uncover, so that we can better understand the nature of the problem. Then, when you have completed the new counts of the PSTs, we would be able to compare the original results to the new results.

BTW, has the clearance process completed? Have you been able to finish work on the new tool and start the counting and analysis process again?

I understand that you have been on leave this week, and I hope you enjoyed some time off. Please let me know when and how we can review the 2005 report & anything related to it.

Thanks again.

Sam Watkins
Director, Product Management
National Archives & Records Administration
[redacted]

CC: Baron, Jason; Spangler, Robert

From: Crippen, Susan M.
Sent: Monday, January 23, 2006 1:19 PM
To: McDevitt, Steven; Borrego, Jaime
Cc: Reynolds, William D.
Subject: RE: Updated MST Presentation
Attachments: Exchange MST Activity Plan 20060120 v01.doc

SIS has "filled in" the blanks.

From: McDevitt, Steven
Sent: Monday, January 23, 2006 11:18 AM
To: Borrego, Jaime; Reynolds, William D.; Crippen, Susan M.
Subject: Updated MST Presentation

Someone needs to fill in some of the blanks.

Steven McDevitt
Executive Office of the President
Office of Administration

Subject: Exchange MST Activity Plan

Date: Monday, November 28, 2005 (Updated Friday, January 20, 2006)

The following outlines the planned activities to recover Office of Vice President email from the target period of September 30, 2003 to October 6, 2003:

1. Environment information gathering activities

    a. In the lab environment, restore the [redacted] from backup tapes from the target period. This will provide technical staff with an accurate configuration of the server and Exchange environment for the target period. (Estimate: 2 days)

    b. Perform a set of queries against this restored [redacted]. This includes identifying all registered Exchange servers, all user objects and associated components, and all user mail stores and storage groups. This information will be used to determine which servers need to be restored to recover .PST files, journal mailboxes and Exchange servers from the target period. (Estimate: 1 day)

> The environment information gathering activities were successfully completed. As a result, it was determined that the Exchange server used to support the OVP mailboxes was and the Journal Mailbox server that was used during the target period was OVP_JOURNAL.

Note: At this point there are three paths that will be followed:

1. Recovery of servers that were used to store .PST files for the target period.
2. Recovery of the Exchange servers used as the journal mailbox servers for the target period.
3. Recovery of Exchange servers that contained the mailboxes of the components in question for the target period.

2. Identify and restore the servers that contain data from the target period.

    a. Identify and restore the servers that were used to store the .PST files (estimate 3 - 5 days per server).

    b. Identify and restore Exchange journal mailbox servers for appropriate component (estimate 1 day per server).

    c. Identify and restore Exchange servers for the appropriate component (estimate 5 to 10 days per server).

3. Step 1 – Recovery of .PST files that contain message data from the gaps identified.

    a. Perform analysis on the .PST file to determine the components, users and the data range of the messages.

    b. If messages are found for the target component, users and dates, then further analysis is required to determine if these .PST files were included in the search activities during the target period.

    c. If the .PST files are recovered for the entire target period, steps 2 and 3 may not be necessary.

Analysis of the files contained on the file servers that were used to store .PST files during the target period was performed and no messages were found that filled the gap of missing messages for the target period.

4. Step 2 – Recover messages from the journal mailboxes.

    a. Initialize restored Exchange journal servers in lab environment.

    b. Configure and verify Exchange server operation and connectivity.

    c. Verify the existence of messages in the journal mailbox, and that the journal mailbox contains messages for the target users / components for the target period.

    d. If messages are found for the target period, create .PST files from the journal mailbox. Further analysis is then required to determine if these messages were included in the search activities during the target period.

    e. If the journal mailbox messages are recovered for the entire target period, step 3 may not be necessary.

> The server that contained the journal mailboxes for the target period was successfully restored. This was from a backup that was performed on 10/21/2003. The journal mailboxes were examined and no messages for the target period were present in the journal mailbox.

5. Step 3 – Recover messages from individual user mailboxes.

    a. Once the restore of the Exchange servers is complete, verify the existence of the user mailboxes.

    b. Export mail messages from the all target user mailboxes. These user mailboxes should contain all messages that existed in the mailbox at the time of the backup. This export process would include the inbox, sent, and delete items folders as well as all personal folders of the user.

> The Exchange server that contained the OVP mailboxes for the target period was restored from a backup that was performed on 10/21/2003. OA Human Resources produced a list of active OVP staff for the target period. This list was reviewed and confirmed by OVP.
>
> The Exchange server that contained the OVP mailboxes was restored. This was from a backup that was performed on 10/21/2003. The email from the target period was extracted from each of the 70 OVP mailboxes and copied to a .PST file.

From: "Payton, Theresa M." <
To: "Sam Watkins" <[redacted]>, "Turley, F. Andrew" <
>, "Medaglia, M. Elizabeth (Liz)" <
"Reynolds, William D." <
, "Crippen, Susan M." <
"Oprison, Christopher G." <

Date: 11/7/07 10:14:23 PM
Subject: RE: Follow-up

Sam,
Just wanted to let you know that I received your note and we're having discussions about when the next meeting will be.

Thanks for sending your questions and thoughts ahead of time so we can review. The next time we get together, it would be good to discuss your note below along with the action plan and the RACI (Responsible, Accountable, Consulted, Informed) model so we can assign tasks and owners for the next steps.

Hope you are doing well and that everyone has a safe holiday on Veterans' Day. Semper Fi.

Thanks,
TP

-----Original Message-----
From: Sam Watkins [redacted]
Sent: Tuesday, November 06, 2007 1:58 PM
To: Turley, F. Andrew; Medaglia, M. Elizabeth (Liz); Reynolds, William D.; Crippen, Susan M.; Payton, Theresa M.; Oprison, Christopher G.
Cc: GaryM Stern; Jason Baron; Nancy Smith
Subject: Follow-up

Theresa,

We missed you at last week's OA transition meeting with representatives of the CFO's office held on October 31, 2007. We now have a better understanding of the systems used by the office of the OA CFO, and what Presidential records may be generated by those systems now that OA is a PRA organization. We look forward to future meetings with representatives of other elements of OA. We suggest that it would be helpful, now that OA considers itself a Presidential component of the EOP, if in the next meeting we had a general discussion of the functions that OA uniquely performs for the President as opposed to OA's monitoring or passing off on other agencies functions. This general discussion would assist us in giving better advice as to which of the OA IT systems are creating Presidential records.

We (Gary Stern, Jason Baron, Nancy Smith, and I) were also afforded a brief opportunity to view a paper copy of the 2005 spreadsheet or chart (what has been referred to by some as the "2005 report") that first raised concerns about the "message collection system." I refer to it as a "message collection system" even though we all understand that it hardly qualifies as a "system" by the usual IT definition. Nevertheless, our brief review of the chart suggests a number of ideas relating to how you might approach determining whether there is a

clearance of the person who will be able to apply the new forensic tool you have acquired).

1) On the chart, many files are identified as "issue" files, which I believe means the chart tool could not identify in which organizational PST the file should be deposited. We recommend that you examine some of these files to see if a closer look could determine what organizational element was appropriate.

2) Specific days for certain organizations show no messages collected/stored. We recommend that you run a search of the message system for anything for those days in that organization. If such a search produced a positive result, it would be a clear indication that the original chart was flawed (unless the messages have somehow been added since the original chart was run).

3) As we mentioned when we last met with you on Oct. 11, 2007, you also may be able to ascertain the meaning of the data elements in the chart by examining the spreadsheet in electronic form (for metadata in the form of formulas, comment fields, or other audit data on its creation that might exist). For example, the chart has a column labeled "expected" or "projected" number of messages for an organization for a particular day. The spreadsheet formulas might reveal where this number came from. Also, we will need some type of "expected numbers" with which to compare the results of your next chart generated with the new tool.

4) We have also mentioned this before, but it bears repeating: you could do some type of partial restore of messages from backup tapes, e.g., for a one day or one week time period, to allow you to compare the results against the chart. We are not suggesting initiating a full tape restoration project, but rather taking a sample to ascertain the scope of the problem.

5) Given that there appears to be a continuing level of confusion, or loss of institutional memory, as to the origination of the 2005 chart and its purpose, we agree with Chris's suggestion that it would be useful for someone to contact the original authors/requestors of the chart to ask questions about its nature and meaning, the methodology used to produce it, the shortcomings or flaws you have noted, and whether they prepared any additional or related documentation about the issue (and if so, where is it filed).

I hope these ideas are helpful, and would be happy to assist in following up or carrying out any of them. We look forward to continuing with our OA meetings and assume that another meeting will be scheduled soon.

Sam Watkins
Director, Product Management
National Archives & Records Administration
[redacted]

CC: "GaryM Stern" <[redacted]>, "Jason Baron" <[redacted]>,

Summary of Jan 6, 2004, meeting with EOP re ECRMS at Archives II

Attendees:

EOP:
Keith Regatts – Project Manager
Markus Most – OA Records Officer

Booz Allen (EOP contractor):
[redacted]

NARA:
Jason Baron
Bob Spangler
Sam Watkins

Purpose: The EOP has contracted with BAH to gather requirements from stakeholders and users for a new system to collect, preserve, and transfer to NARA, electronic messages. The Electronic Communications Records Management System (ECRMS) will collect all forms of electronic messages and calendars. Instant messaging currently is not allowed in the EOP, but they expect it will be in the future, and ECRMS will be designed to collect those messages when enabled. The system will replace, expand, and enhance the collection currently performed by ARMS, and will be fully compliant with 5015.2.

Several issues re segregation of data by Presidential/Federal, and by EOP organizational element, dominated the meeting. EOP would like to implement ECRMS as a "single instance" storage system, rather than the current "bucket scheme," which preserves one instance of each message in every appropriate agency "bucket." Each message collected by ECRMS would appear only once in the entire system, but would be coded via database tables to identify what organization(s) sent and received the message. These tables would make each message searchable by the organization code.

EOP understands that it must transfer Presidential and Federal data to NARA separately in order to accommodate NARA preservation processing requirements, and would build that segregation into the export/transfer process. However, segregating the active data in ECRMS, either by agency or by PRA/FRA, onto separate media within the system will be very difficult. EOP would like a decision from NARA as to whether this is necessary. In addition, we need to be able to tell EOP whether we need the output for transfer separated simply by Presidential and Federal records, or if we require that the media for each organizational element must be distinct, i.e. OMB, WHO, OA, etc. Jason's question: Is there value to being able to hold a tape in your hand and say "This is the email of the White House Office, January, 2004."?

All data in the current ARMS system will be migrated into the new system. EOP wanted to know if we would prefer that data to be transferred to the new system with attachments "hexified" as currently stored in ARMS, or if we would prefer them restored to the native format. NARA agreed that we would prefer in native format, based upon our current transfer guidance and search capabilities.

Some attachments in the new system will not be searchable by text for obvious reasons: there is no text associated with digital photos, audio, or video files. Virtually all textual material in the system, either in the message or in attachments, will be searchable, if it is in a standard format such as Word, WP, PDF, Excel, etc.

EOP will provide bulk email sampling capability in the system. The NARA team suggested two sampling modes we would like to see included: a fully automated, randomized sampling conducted without requiring user intervention by either NARA or EOP; and a manual, targeted capability, which could be invoked by NARA in response to special circumstances. EOP documented this as a NARA requirement.

EOP will include transfer testing as part of the acceptance of the system implementation. They will generate test output for NARA, and we will review/process to verify the acceptability of the output.

EOP has been converting from Lotus Notes to Microsoft Xchange over the past two years. They did not say how far along they were in the process, but my impression is that they are nearing completion. **Messages in Xchange are NOT being captured in ARMS or any other system external to Xchange, nor do they have plans to capture them prior to implementation of ECRMS. I do not believe that ECRMS can be implemented in less than one year from today. The NARA team emphasized that EOP was operating at risk by not capturing and storing messages outside the email system.** This came up at the very end of the meeting, and we need to explore this much further in future meetings with the EOP team, although this is not a requirements issue for ECRMS since it will include the ability to collect these messages.

Schedule: They expect the requirements and "solution design" to be completed by the end of May, 2004. Then they plan to compete a separate contract for development and implementation, with work to begin in late 2004.