

# UNTOLD STORIES



## THE UNTOLD STORY OF THE BUSH WHITE HOUSE EMAILS

**CREW**

citizens for responsibility  
and ethics in washington

## EXECUTIVE SUMMARY

Thousands of pages of documents disclosed by the White House<sup>1</sup> confirm the truth of CREW's report issued over three years ago, *WITHOUT A TRACE: The Story Behind the Missing White House E-Mails and the Violations of the Presidential Records Act*, and reveal additional details about what the Bush White House knew and when, and what actions it took and refused to take in response. Specific revelations include the following:

- Years before its discovery in October 2005 that millions of emails were missing from White House servers, the Bush White House received multiple warnings from multiple sources, including the National Archives and Records Administration (NARA), that its emails were at risk of destruction.
- The Bush White House insisted on continuing with a migration from Lotus Notes to Microsoft Exchange even though it had no system in place that could preserve email created on Microsoft Exchange.
- Upon discovering the missing emails in the fall of 2005, a Message Storage Team (MST) conducted a comprehensive analysis of the problem and documented its findings with multiple charts showing days of zero or low message counts.
- While the MST was charged with determining the scope of the missing email problem, it was never instructed to investigate why the emails went missing.
- Missing emails included emails from the Office of the Vice President for a critical period in the fall of 2003 that were sought by the Department of Justice as part of its investigation into the leak of Valerie Plame Wilson's covert CIA identity. Files that should have contained these emails also were missing from backup tapes for that period and in its efforts to restore those emails from individual users' mailboxes, the Bush White House excluded the mailbox of I. Lewis Libby from those being restored.
- The Bush White House's problems with missing emails extended to backup tapes, which did not exist for critical periods and which, even if created, were often overwritten with new data.
- After spending millions of dollars and years of effort creating an effective electronic record keeping system called the Electronic Communications Records Management System (ECRMS), the Bush White House abandoned ECRMS on

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<sup>1</sup> These documents were provided as part of a settlement of two consolidated lawsuits: *Nat'l Sec. Archive v. Executive Office of the President* (D.D.C.), filed on September 5, 2007, and *CREW v. Executive Office of the President* (D.D.C.), filed on September 25, 2007. The National Security Archive's first-filed lawsuit provided the legal framework for analyzing the facts set forth in CREW's April 2007 report.

the eve of its deployment for questionable reasons that NARA, among others, did not accept as reasonable.

- Two years after the Bush White House cancelled ECRMS, it still had not deployed any replacement system and was instead using a stop-gap method that failed to meet fundamental record keeping requirements.
- Shortly after discovering the missing emails in the fall of 2005, the Office of Administration proposed to White House Counsel Harriet Miers a restoration plan that would have fully restored all missing emails, but which the White House refused to implement. By May 2006, estimates for a full recovery were at \$2.4 million, and by April 2007 estimates to restore just 60 components days had risen to \$3.5 million.
- In the end, the White House spent between \$10 and \$15 million to restore just 48 components days.
- A 2010 analysis of 21 days of email restored from backup tapes revealed that the Bush White House had failed to archive and preserve nearly 90 percent of the universe of known emails for that period.
- The 2010 analysis also revealed that the disaster recovery backup system failed to preserve 3.9 percent of the universe of known emails for those 21 days.
- After initially meeting with NARA officials on the design of ECRMS, the Bush White House ceased all meetings and failed to advise NARA about problems with ECRMS the White House supposedly was encountering or to give NARA advance notice of its decision to abandon ECRMS altogether.
- The Bush White House also rebuffed NARA's repeated attempts to meet with White House officials to prepare for a presidential transition.
- The Bush White House failed to inform NARA about the missing emails or share information with NARA until well after CREW released its report and CREW and the National Security Archive sued both the Executive Office of the President and NARA.
- A significant volume of emails has yet to be restored and will be lost forever to history absent further action.

August 30, 2010

## INTRODUCTION

Over three years ago, based on information from confidential sources, CREW published a report, *WITHOUT A TRACE: The Story Behind the Missing White House E-Mails and the Violations of the Presidential Records Act*. CREW's report blew the lid on the knowing and purposeful failure of the Bush White House to restore millions of missing emails and to put in place an effective electronic record keeping system that would prevent this problem from reoccurring. The White House responded with predictable denials and obfuscation.

Years of litigation and the production of tens of thousands of White House documents in the interim confirm the accuracy of CREW's report and provide additional disturbing details. Missing emails included critical emails from the Office of the Vice President (OVP) that Special Prosecutor Patrick Fitzgerald was seeking as part of his investigation into the leak of Valerie Plame Wilson's covert CIA identity. But the problem by no means was limited to the OVP; also missing were Bush White House emails from other significant time periods, such as the period leading up to the war in Iraq. In light of this discovery, officials in the Office of Administration (OA) recommended to then-White House Counsel Harriet Miers that the White House undertake an email restoration project, a recommendation the White House ignored. Because CREW was denied access to communications with the White House counsel, the public will never know the full extent of counsel's role in this appalling saga.

Documents also confirm that well before October 2005, the Bush White House knew it was at risk of losing emails and that document searches were seriously incomplete, but refused to take corrective actions. Ignoring repeated warnings from officials in OA and the National Archives and Records Administration (NARA), the White House chose to continue with a seriously deficient stop-gap method for storing emails. Just as troubling, it wasted millions of dollars and years of work developing an electronic record keeping system that it abandoned on the eve of deployment for very dubious reasons, including the system's inability to separate presidential and personal records, even though this resulted from an earlier decision by OA's counsel that the system need not have this function.

Other documents provide tantalizing tidbits of information that suggest more nefarious conduct. Why, for example, in attempting to recover missing emails from backup tapes to respond to the special counsel's document subpoenas did the White House not restore email from the mailbox of Scooter Libby? Why, after discovering the missing email problem in the fall of 2005, did the Bush White House have no interest in finding the cause of the problem? Why did the Bush White House refuse for years to meet with NARA, perhaps the only federal agency able to understand just how deficient the White House's method for preserving emails was? What was the real reason for the Bush White House abandoning an electronic record keeping system after learning it could perform full-text "google-like" searches?

With this new report, CREW fills in many of the gaps in the missing email story with new details of steps the White House took, and those it refused to take. All point to one

unmistakable conclusion: the Bush White House had little or no interest in preserving emails that likely would cast a less than favorable light on its actions. Further, while the partial email restoration completed by the Obama White House fills in a few more gaps, large numbers of emails remain unaccounted for, possibly lost forever to history.

## EARLY WARNINGS AND EARLY PROPOSED SOLUTIONS

Well before the Office of Administration's discovery in October 2005 that millions of emails were missing from White House servers, the Bush White House received multiple warnings its emails were at risk of destruction. When President Bush took office in January 2001, White House email was sent through the Lotus Notes system and archived in the Automatic Records Managements System (ARMS). The Clinton administration implemented ARMS in 1994, to meet the record keeping requirements of the Presidential Records Act, the Federal Records Act, and a consent decree entered into in *Armstrong v. Executive Office of the President*, Civil No. 89-142 (D.D.C.). While ARMS was not problem free, it largely succeeded in separating federal from presidential records, preserving both, and allowing them to be searched in response to subpoenas and other information requests.

The Bush White House soon decided to switch to a Microsoft Outlook/Exchange email system (Exchange) in part because senior officials had used it during the campaign.<sup>2</sup> Problems emerged shortly after the White House began the transition. Microsoft Exchange did not include an automated record keeping solution, and ARMS was not designed to capture Exchange email.<sup>3</sup> As a result, in early 2002, OA began working on a mechanism that would enable ARMS to preserve Exchange emails.

### *The Exchange Interface System*

In March 2002, OA accepted a proposal from ECS, a company associated with Northrop Grumman Corporation, to develop a pilot for an Exchange Interface System (EIS) that would convert Exchange emails into a format ARMS could ingest.<sup>4</sup> ECS developed the EIS pilot throughout the summer of 2002, but ran into numerous problems. The system would not process some emails, put the wrong time stamp on messages, failed to sort some emails by White House components, exhibited "quirky behavior" at times, and lacked clear standard operating procedures (SOPs).<sup>5</sup> Although it is unclear whether these problems were resolved, in March 2003, the White House contracted with a company called Legato to deploy EIS, and committed nearly half a million dollars to the deployment.<sup>6</sup>

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<sup>2</sup> [Responses of Steven McDevitt to House Committee on Oversight and Government Reform \(HOCR\)](#) (hereinafter McDevitt responses), Feb. 21, 2008, [part 1](#), at 4.

<sup>3</sup> [OAP00005044](#) (full document: [OAP00005029](#)).

<sup>4</sup> [OAP00047773-75](#) (full document: [OAP00047772](#)).

<sup>5</sup> [OAP00026707](#) (full document: [OAP00026707](#)).

<sup>6</sup> [OAP00000056-59](#) (full document: [OAP00000056](#)), [OAP00007977](#) (full document: [OAP00007975](#)), [OAP00023214-16](#) (full document: [OAP00023214](#)).

Two months later Legato was experiencing such significant problems fulfilling its contractual obligations that OA threatened to terminate the contract.<sup>7</sup> Legato continued to work on EIS throughout the summer of 2003. As of September 26, 2003, Legato had not completed the project, but OA expected it to be finished within days.<sup>8</sup>

Ultimately OA decided to abandon EIS before its completion. The documents do not fully explain why, but several senior OA employees later told the House Committee on Oversight and Government Reform that EIS was “not technically feasible”<sup>9</sup> and abandoned because of its “poor performance.”<sup>10</sup> In February 2004, Microsoft said there was no “stable and consistent solution to transfer data from Exchange into ARMS,” adding that “EIS currently fails to consistently move data from Legato into ARMS and it is not architected to handle [the] amount of traffic generated within Exchange each day.”<sup>11</sup> Microsoft also found hundreds of “critical” problems in a sample of EIS code it reviewed.<sup>12</sup>

In pursuing EIS, the White House was aware of the consequences of proceeding with the migration to the Exchange/Outlook system without a system in place that could archive Exchange emails. According to Steven McDevitt, a high-ranking official within the Office of the Chief Information Officer (OCIO), “there was a great deal of concern about proceeding with the migration to Outlook/Exchange without having an adequate email records management solution in place,” and the risks were discussed repeatedly by OA management.<sup>13</sup> In April 2003, Legato described EIS to OA as “a critical component without which the Exchange implementation at the EOP cannot proceed.”<sup>14</sup> By September, OA concluded “[w]ithout the ability to reliably provide ARMS compliant data to ARMS, the current Exchange Pilot program will need to be terminated and users participating in the pilot converted from MS Outlook back to Lotus Notes.”<sup>15</sup>

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<sup>7</sup> [OAP00021722](#) (full document: [OAP00021722](#)).

<sup>8</sup> [OAP00007978-79](#) (full document: [OAP00007975](#)).

<sup>9</sup> *Supplemental Information for Full Committee Hearing on White House E-mails*, Memorandum to Members of the House Oversight and Government Reform Committee (hereinafter HOGF report), Feb. 26, 2008, [at 8](#).

<sup>10</sup> McDevitt responses, [part 1, at 6](#).

<sup>11</sup> [OAP00000087](#) (full document: [OAP00000083](#)).

<sup>12</sup> *Id.*

<sup>13</sup> McDevitt responses, [part 1, at 7](#).

<sup>14</sup> [OAP00000058](#) (full document: [OAP00000056](#)).

<sup>15</sup> [OAP00007977](#) (full document: [OAP00007975](#)).

### *Stop-Gap Measures*

Despite OA's assessment of the critical need for a system to preserve Exchange emails before the migration could occur, OA started migrating White House employees from Lotus Notes to Exchange in the summer of 2002,<sup>16</sup> including those in the White House Office (WHO) and the Office of the Vice President (OVP). As a stop-gap measure in the absence of an automated system for preserving their emails, OA began using a feature of Exchange called "journaling." In the Exchange system, a "Journal" mailbox can be set up that captures a copy of every incoming and outgoing email from a particular user. OA established Journal mailboxes for the various White House components, and began exporting the emails saved in them to Outlook data files called PSTs.<sup>17</sup> This process was "completely manual" at the beginning,<sup>18</sup> with a White House employee or contractor naming the files and saving them on various White House servers.<sup>19</sup>

OA soon concluded the "[r]isks for potential mistakes are very high."<sup>20</sup> According to Mr. McDevitt, the process was "primitive,"<sup>21</sup> and the then-White House chief information officer admitted journaling was a "temporary" solution that was not "a good long-term situation."<sup>22</sup> OA's management regularly discussed concerns about email archiving in the Exchange system before the large-scale rollout of Exchange in early 2003.<sup>23</sup> The National Archives and Records Administration, charged with administering federal record keeping requirements, also recognized the risks inherent in the stop-gap solution. A key NARA employee described the system as "a 'message collection system' even though we all understand that it hardly qualifies as a 'system' by the usual IT definition."<sup>24</sup> NARA pointedly warned the White House emails were not being safely preserved and that the White House was "operating at risk by not capturing and storing

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<sup>16</sup> [OAP00032981](#) (full document: [OAP00032980](#)).

<sup>17</sup> *Id.*, HOCR report [at 5](#).

<sup>18</sup> [OAP00051072](#) (full document: [OAP00051063](#)).

<sup>19</sup> HOCR report [at 5](#).

<sup>20</sup> [OAP00051072](#) (full document: [OAP00051063](#)).

<sup>21</sup> McDevitt responses, [part 1, at 7](#).

<sup>22</sup> HOCR report [at 5](#).

<sup>23</sup> McDevitt responses, [part 1, at 8](#).

<sup>24</sup> HOCR report [at 5](#).

messages outside the email system.”<sup>25</sup> Despite these concerns, “[a] decision was made to proceed with the transition to Exchange Outlook with the focus on manual processes for record keeping and searching.”<sup>26</sup> OA advised NARA the White House did not have “any choice” about whether to implement Exchange because it had received “a mandate from higher authorities.”<sup>27</sup>

### *Early Signs of a Problem*

By moving forward on the migration without having a way to preserve emails, the Bush White House set the stage for the significant problems that followed. Almost immediately, the White House’s first search for documents related to the Department of Justice’s (DOJ) investigation into the leak of Valerie Plame Wilson’s covert CIA identity revealed critical problems. On September 30, 2003, then-White House Counsel Alberto Gonzales notified White House employees of the investigation, and instructed them to preserve all documents related to it.<sup>28</sup> Shortly thereafter on October 8, perhaps in response to this directive, OA stopped converting the Journal mailboxes into PSTs, and let the Journal mailboxes accumulate email for three months.<sup>29</sup> In January 2004, OA resumed experimenting with EIS, and stored emails in that system for at least a few weeks.<sup>30</sup>

To find emails responsive to DOJ’s document request, OA had to search both ARMS and the PST files. OA quickly learned the PST archiving process was poorly documented, and OA could not determine the location of some PST files.<sup>31</sup> OA also had no way to search the PST files, and asked Microsoft to develop a software tool called “FindIt” to search them.<sup>32</sup> FindIt also proved to have fundamental flaws. The original version did not search subfolders, which likely means not all the PSTs were searched and casts doubt on whether the White House located and

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<sup>25</sup> [OAP00053989](#) (full document: [OAP00053987](#)).

<sup>26</sup> [OAP00005044](#) (full document: [OAP00005029](#)).

<sup>27</sup> [OAP00042843](#) (full document: [OAP00042843](#)).

<sup>28</sup> *See United States v. I. Lewis Libby*, No. 05-CR-394 (D.D.C.), Trial Exhibit (Libby trial exhibit) [GX52](#).

<sup>29</sup> [OAP00051035](#) (full document: [OAP00051034](#)).

<sup>30</sup> *Id.*

<sup>31</sup> [OAP00051071](#) (full document: [OAP00051063](#)).

<sup>32</sup> [OAP00033084](#) (full document: [OAP00033084](#)), [OAP00051037](#) (full document: [OAP00051034](#)).

produced all responsive documents.<sup>33</sup> In addition, FindIt did not search email attachments, another critical flaw in its ability to locate all documents responsive to the search.<sup>34</sup>

An independent verification and validation (IV&V) of the October 2003 search also uncovered a significant security issue. According to the IV&V report, the servers and workstations used for conducting email searches were left unsecured during non-business hours, and were not password-protected.<sup>35</sup> As a result, “[a]nyone with access to the Data Center Lab could potentially alter a search process or a result’s report.”<sup>36</sup>

The IV&V also found problems in the strategy and management of the search process. Many aspects of the process were not documented, there was confusion about which White House components were to be searched, and a miscommunication left some members of the team not knowing which fields to search.<sup>37</sup> The report recommended, among other things, research into ways to search email attachments, removal of all manual procedures from the Exchange journaling and archiving process, creation of a process for immediately recording incidents that may have resulted in emails not being properly archived, and documentation of the process.<sup>38</sup>

A few months later, the White House encountered more problems in responding to Special Counsel Patrick Fitzgerald’s January 22, 2004 subpoena for documents related to the Valerie Plame Wilson leak.<sup>39</sup> By that time, potentially responsive documents were housed in multiple locations; OA had stopped moving Journal mailboxes into PSTs in October, and resumed storing emails in EIS in early January.<sup>40</sup> As a result, OA needed at least four tools to search all of the Exchange and ARMS emails.<sup>41</sup>

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<sup>33</sup> [OAP00033084](#) (full document: [OAP00033084](#)).

<sup>34</sup> [OAP00051037](#) (full document: [OAP00051034](#)), [OAP00051044](#) (full document: [OAP00051034](#)).

<sup>35</sup> [OAP00051072](#) (full document: [OAP00051063](#)).

<sup>36</sup> *Id.* The lab did have a sign-in sheet, an electronic log for badge activity, and closed-circuit surveillance. *Id.*

<sup>37</sup> [OAP00051071-72](#) (full document: [OAP00051063](#)).

<sup>38</sup> [OAP00051078-79](#) (full document: [OAP00051063](#)).

<sup>39</sup> [OAP00000086-89](#) (full document: [OAP00000083](#)), Libby trial exhibit [GX54](#).

<sup>40</sup> [OAP00051035](#) (full document: [OAP00051034](#)).

<sup>41</sup> [OAP00051036](#) (full document: [OAP00051034](#)).

At the same time, OA had not yet fixed many of the problems from the earlier search. FindIt still did not search subfolders or attachments.<sup>42</sup> In addition, the size of the Journal mailboxes made them very difficult to search.<sup>43</sup> In a “post-mortem” report, Microsoft admitted it had not tested the “exceptionally sized mailboxes” and did not know what would happen to them.<sup>44</sup> As it turned out, when OA tried to search the WHO mailbox, the system crashed.<sup>45</sup> To make the WHO mailbox searchable, OA had to reduce the file’s size by converting parts of it to PSTs.<sup>46</sup>

Apparently concerned about these problems, OA conducted a review of email preservation and searching in May 2004.<sup>47</sup> An “after action report” chronicled numerous problems OA had uncovered: (1) PST files had been discovered in subfolders where FindIt could not search them; (2) many files were misnamed; (3) dozens of files were not searched because they had been saved to the wrong location; (4) numerous files had duplicate file names; (5) numerous PST files were empty; and (6) user accounts were misplaced.<sup>48</sup> The report also noted there was no inventory of PST files.<sup>49</sup>

In response, OA created a database of the names of all the files, established a new file naming convention, and updated FindIt to allow it to search subfolders.<sup>50</sup> OA also reviewed the files for incorrect names, locations and contents, moved misplaced files, and drafted procedures for how to search and archive PST files.<sup>51</sup> OA further recommended fixing the names of mislabeled files, deleting duplicates, and making sure each PST contained only emails from a

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<sup>42</sup> [OAP00033084](#) (full document: [OAP00033084](#)).

<sup>43</sup> [OAP00000089](#) (full document: [OAP00000083](#)).

<sup>44</sup> *Id.*

<sup>45</sup> [OAP00051042](#) (full document: [OAP00051034](#)).

<sup>46</sup> *Id.*

<sup>47</sup> [OAP00033178-80](#) (full document: [OAP00033178](#)).

<sup>48</sup> [OAP00033179](#) (full document: [OAP00033178](#)).

<sup>49</sup> *Id.*

<sup>50</sup> [OAP00033180](#) (full document: [OAP00033178](#)).

<sup>51</sup> *Id.*, [OAP00033190](#) (full document: [OAP00033185](#)), [OAP00005045](#) (full document: [OAP0005029](#)).

single component.<sup>52</sup> It is unclear if or when the Bush White House implemented these recommendations.

### *Other Short-Term Solutions*

In the months that followed, OA made several other changes. It installed a program called Mail Attender that was supposed to automatically move the contents of Journal mailboxes into PSTs.<sup>53</sup> While Mail Attender improved the process by automating a key step, it also proved to have flaws and was later found to be “prone to failure.”<sup>54</sup> OA also documented an IV&V process for searches.<sup>55</sup> At some point OA abandoned EIS and focused on developing a new comprehensive email record keeping system called the Electronic Communication Records Management System (ECRMS).<sup>56</sup>

Despite these changes, serious problems remained. A February 2005 document prepared by White House officials describes the White House records management system as “inadequate, out of date, non-compliant, undocumented, and having a ‘make it up as you go along approach’” – problems that risked records being “improperly destroyed.”<sup>57</sup> The White House continued to migrate from Lotus Notes to Exchange even though it had yet to implement any email preservation system to replace ARMS. Instead, email messages “simply [were] ‘warehoused’ in .PST files and stored on designated file servers.”<sup>58</sup> “Manual, complex” processes continued.<sup>59</sup> Standard operating procedures for email management still did not exist.<sup>60</sup> The automated tools for archiving and searching remained flawed.<sup>61</sup> OA continued to store PSTs in multiple locations

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<sup>52</sup> [OAP00033180](#) (full document: [OAP00033178](#)).

<sup>53</sup> [OAP00005045](#) (full document: [OAP00005029](#)).

<sup>54</sup> [OAP00015687](#) (full document: [OAP00015684](#)).

<sup>55</sup> [OAP00016501-03](#) (full document: [OAP00016501](#)).

<sup>56</sup> McDevitt responses, [part 2, at 8-10](#).

<sup>57</sup> [OAP00032599-603](#) (full document: [OAP00032599](#)).

<sup>58</sup> [OAP00033000](#) (full document: [OAP00032989](#)).

<sup>59</sup> [OAP00005033](#) (full document: [OAP00005029](#)).

<sup>60</sup> [OAP00000400](#) (full document: [OAP00000399](#)).

<sup>61</sup> *Id.*, [OAP00015687](#) (full document: [OAP00015684](#)).

and used inconsistent naming conventions for them.<sup>62</sup>

The failure of EIS and the difficulties in dealing with requests for emails in 2003-04 should have been an early warning of substantial problems with preserving and searching for Exchange email. Nevertheless, the Bush White House continued to migrate from Lotus Notes to Exchange, use manual processes, and use the Journal mailboxes and PSTs as a makeshift archive.

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<sup>62</sup> *Id.*

## DISCOVERY OF THE MISSING EMAILS

In October 2005, the Bush White House discovered that large numbers of emails were missing from multiple components within the EOP over a two and one-half year period. Steven McDevitt, who led the effort within OA to ascertain the scope of the problem, learned of the missing email problem during the first week of October 2005.<sup>63</sup> Shortly thereafter, it became widely known among OA officials that emails were missing from White House servers where they had been stored for archival purposes.

The discovery resulted from a review of the White House email management system triggered by an August 2005 “network configuration error.” That error “caused the email from multiple components to be designated and stored as OA email.”<sup>64</sup> Instead of sorting emails into individual components, the system had been storing all White House emails for August and September 2005 in one location without any categorization by component or user.<sup>65</sup> The White House discovered the misfiled emails after it initiated a search for emails in connection with an unidentified pending document request.<sup>66</sup>

Upon discovering the two months of misrouted emails, OA began a retrieval process to sort them out and drafted directions on how to conduct a search of the misplaced files while it completed the recovery.<sup>67</sup> This discovery also prompted the White House to conduct a “comprehensive inventory and analysis of the PST file management process.”<sup>68</sup> It was this comprehensive inventory that led to the discovery in October 2005, of a much broader problem of missing emails.<sup>69</sup>

### *Investigation and Analysis Of The Problem*

With the discovery of a much broader problem, OA created the “Message Store Team” (MST) on October 20, 2005, to comprehensively analyze and address the missing email

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<sup>63</sup> McDevitt responses, [part 2, at 2](#).

<sup>64</sup> McDevitt responses, [part 2, at 1-4](#), [OAP00032982](#) (full document: [OAP00032980](#)).

<sup>65</sup> [OAP00000173](#) (full document: [OAP00000167](#)), McDevitt responses, [part 2, at 1](#).

<sup>66</sup> McDevitt responses, [part 2, at 1](#).

<sup>67</sup> [OAP00000173](#) (full document: [OAP00000167](#)).

<sup>68</sup> [OAP00032982](#) (full document: [OAP00032980](#)).

<sup>69</sup> McDevitt responses, [part 2, at 2-3](#), [OAP00032982](#) (full document: [OAP00032980](#)).

situation.<sup>70</sup> OA assigned the MST three specific tasks: (1) copy all PST files from their assorted locations to one centralized server; (2) inventory the PST files on the new server; and (3) generate new rules on how to store PST files and how to oversee that process.<sup>71</sup>

The MST met for the first time on October 21, 2005, and again on October 24, 2005, to kick-off the project. Following the initial meeting, the MST met daily to update team members about their progress and continued to meet throughout November and December.<sup>72</sup> In addition to the daily meetings, on October 25, 2005, the MST began sending out daily email updates detailing what each team member had accomplished the day before.<sup>73</sup>

During its investigation, the MST also documented many deficiencies with the existing email infrastructure. An October 25, 2005 PowerPoint presentation highlighted the system's many shortcomings.<sup>74</sup> Standard operating procedures for email management did not exist and automated tools to support the White House's email archive process were not robust. There were no system management tools to monitor the archiving process, leaving the system with no way to alert a failure. Finally, there was no "dedicated" archive location and instead emails were stored in various locations. As a result, "[s]earches of email in response to statutory requirements may not be complete, creating legal and political risk."<sup>75</sup> The MST offered several temporary measures for how to avoid losing additional emails and urged the White House to begin implementing the Electronic Communications Records Management System (ECRMS) as a long-term solution.

The MST conducted an extensive investigation to produce a detailed inventory of all White House emails from January 1, 2003 through August 10, 2005.<sup>76</sup> Those efforts included a search of the entire EOP network for all PST files that were then copied to one central location.<sup>77</sup>

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<sup>70</sup> [OAP00005046](#) (full document: [OAP00005029](#)), [OAP00033170](#) (full document: [OAP00033170](#)).

<sup>71</sup> [OAP00045850-51](#) (full document: [OAP00045847](#)), [OAP00046880-81](#) (full document: [OAP00046880](#)), [OAP00005046](#) (full document: [OAP00005029](#)).

<sup>72</sup> [OAP00033170](#) (full document: [OAP00033170](#)), [OAP00007853](#) (full document: [OAP00007853](#)), [OAP00007859](#) (full document: [OAP00007859](#)).

<sup>73</sup> [OAP00045427-28](#) (full document: [OAP00045427](#)).

<sup>74</sup> [OAP00015684-85](#) (full document: [OAP00015684](#)).

<sup>75</sup> *Id.*

<sup>76</sup> [OAP00048085](#) (full document: [OAP00048085](#)).

<sup>77</sup> McDevitt responses, [part 2, at 2](#).

The team prepared an inventory of those files, and collected relevant information about them, including the name, size, and creation date of each.<sup>78</sup>

As this process proceeded, Mr. McDevitt noticed a number of discrepancies with their findings.<sup>79</sup> Some of the PST files appeared to have no data in them, and the names of others suggested gaps in the dates of the email archive.<sup>80</sup> Based on these anomalies, the MST decided to more carefully analyze the contents of the PST files. In order to do so, the MST contacted Microsoft and tasked the company with modifying the FindIt tool to provide a message count for each day represented in a given PST file.<sup>81</sup> This process was performed on each PST file in the inventory, and the data was aggregated into a single data set that provided the basis for the MST's subsequent analysis.<sup>82</sup>

The final analysis revealed hundreds of days for which the message count for a particular White House component was zero.<sup>83</sup> In addition, the MST used a "formal analysis" that revealed hundreds of additional days for which the number of retained messages was lower than expected. The analysis accounted for working days and non-working days (weekends and federal holidays), and employed a multi-week moving average model to account for normal fluctuations of email volume. The MST performed extensive testing to ensure the tabulation had been done correctly, and had a contractor perform an independent verification and validation of the results.<sup>84</sup>

Based on that analysis, the MST put together a chart noting which days had zero or low message counts that later came to be known as the "red/yellow" chart or the 2005 analysis. The team had completed a version of the chart by November 21, 2005, but many iterations followed.<sup>85</sup> By November 23, 2005, according to an email of that date, "Inventory of all message storage PST files ha[d] been completed." The email also stated there were a number of days for which no messages existed, and suggested searching through additional servers to find emails for the

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<sup>78</sup> McDevitt responses, [part 2, at 2-4](#).

<sup>79</sup> *Id.*

<sup>80</sup> *Id.*

<sup>81</sup> [OAP00045441](#) (full document: [OAP00045441](#)), [OAP00045449](#) (full document: [OAP00045449](#))

<sup>82</sup> McDevitt responses, [part 2, at 2](#).

<sup>83</sup> McDevitt responses, [part 2, at 3](#).

<sup>84</sup> *Id.*

<sup>85</sup> [OAP00026677](#) (full document: [OAP00026677](#)), McDevitt responses, [part 2, at 4](#).

missing days.<sup>86</sup>

As this analysis was proceeding, OA began to understand the missing emails had broader repercussions for ongoing searches. In an email from October 11, 2005, for example, White House officials described the impact on a search request for emails about Hurricane Katrina: “the ECRMS solution for the misnamed PST files is still under evaluation. Initial response does not look promising so the results of this search may take considerably longer.”<sup>87</sup>

By January 2006, the MST had a good approximation of the missing email situation; the team had completed what one report calls a final version of the red/yellow chart by January 6, 2006.<sup>88</sup> That report found 473 component days with no email at all, and 229 component days for which the message count was lower than expected.<sup>89</sup> Several documents discuss the total number of missing emails and low component days, although no document appears to conclude definitively how many emails were missing. Mr. McDevitt told the House Oversight and Government Reform Committee:

On the low end, there were about 470 days (as reported by the Committee) with missing email for individuals [sic] component in the EOP. If other assumptions were taken into account, that number increased to over 1,000 days of missing email . . . I do not recall the exact number of estimated missing email, but I believe it was greater than 1,000,000. This estimate did not include the days for which the number of retained emails was a statistically low number compared to the predicted number of email that should have been retained for a particular day.<sup>90</sup>

Later documents, based on an analysis done after Mr. McDevitt left OA, take issue with the MST’s estimate as well as the counts reflected on the multi-color chart. According to one document from 2008, OA had “293 zero days that require additional research.”<sup>91</sup> Teresa Payton, the White House Chief Information Officer at the time, testified before Congress that a new analysis of the missing email period, “had identified 23 million more emails for this period than

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<sup>86</sup> [OAP00050813](#) (full document: [OAP00050813](#)).

<sup>87</sup> [OAP00054621-22](#) (full document: [OAP00054618](#)).

<sup>88</sup> [OAP00004641](#) (full document: [OAP00004640](#)).

<sup>89</sup> *Id.*, [OAP00021276](#) (full document: [OAP00021275](#)).

<sup>90</sup> McDevitt responses, [part 2, at 6](#).

<sup>91</sup> [OAP00005143](#) (full document: [OAP00005111](#)).

the 2005 analysis.” She also told Committee staff her office had found emails for some of the days identified in the 2005 analysis as having no emails preserved.”<sup>92</sup> But Ms. Payton neglected to tell the Committee that OA had not yet completed this post-2005 analysis, and even when completed it suffered from multiple and significant flaws that cast considerable doubt on the accuracy of its findings.

While the precise number of missing emails still is not known,<sup>93</sup> the 2005 analysis performed by the MST documents that at a minimum, millions of messages were not stored correctly, many were not stored at all, and no emails in either category could be located in response to information requests.

### *Efforts To Prevent Further Loss Of Emails*

In addition to determining the number of missing emails, the MST also bore responsibility for setting up new procedures to ensure no more emails were lost. The charter for the MST tasked the team with drafting “procedures, including roles and responsibilities of Government and contract staff, for pst file creation to include the use of Mail Attender,” and recommending “who will provide Government oversight to the pst file creation process and provide the necessary tools and training to do so.”<sup>94</sup>

Upon first discovering the missing emails, the White House stopped creating PST files, but started again after a one-week delay.<sup>95</sup> By October 25, 2005, OA had identified what new

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<sup>92</sup> HOCR report [at 20](#). According to the White House, it was able to locate an additional 23 million emails after fixing software used to count emails in PST files that purportedly stopped counting when it reached 32,000 emails. *CREW v. Executive Office of the President*, Civil No. 07-1707 (D.D.C.) (hereinafter *CREW v. EOP*), [Defendants’ Motion to Dismiss and Memorandum of Points and Authorities in Support](#), Jan. 21, 2009, [at 16, 18](#). This claim, however, is at odds with the 2005 email counts that appear to exceed 32,000. In any event, counting these additional emails still did not resolve how many emails were missing and needed to be restored.

<sup>93</sup> Data released by the White House in June 2010 suggests a massive volume of email in fact was missing. As part of the settlement of lawsuits brought by CREW and the National Security Archive, the White House agreed to compare the number of emails it had in its archive for 21 days to the emails subsequently recovered from the backup tapes. That comparison found 89.4 percent of the total universe of emails was not preserved in the archive for those 21 days. [Letter from Anne L. Weismann and Thomas S. Blanton to David S. Ferriero](#) (hereinafter Weismann/Blanton letter), June 11, 2010, [at 1](#).

<sup>94</sup> [OAP00046880-81](#) (full document: [OAP00046880](#)).

<sup>95</sup> [OAP00000379-80](#) (full document: [OAP00000379](#)).

procedures needed to be put in place for creating PST files to prevent the loss of additional emails.<sup>96</sup> By November 11, 2005, the MST had developed new SOPs for archiving messages,<sup>97</sup> and on November 14, 2005, Mr. McDevitt sought permission from John Straub, the Acting Chief Information Officer and Director of OA, to implement the new SOPs.<sup>98</sup>

While the MST and Mr. McDevitt understood and expressed the need to implement the new procedures immediately, deciding officials in the White House either failed to grasp or simply ignored the urgency of the situation. One email from November 18, 2005, about implementing the SOPs states:

I have major concerns that this SOP is getting bogged down and will never get routed. [Redacted] came to my office yesterday asking “what the rush is.” I think her comment exemplifies the fact that no group besides A&E and the MST have any motivation to see this SOP implemented. [Redacted] has been saying the same thing.

*By delaying the deployment of the SOP and the oversight and monitoring outlined in the Roles and Responsibilities section, the EOP is in serious risk of additional Email problems.*<sup>99</sup>

(emphasis added). OA subsequently implemented the SOPs and, as documents from 2007 and 2008 attest, that implementation prevented the loss of additional emails.<sup>100</sup>

It is unclear whether and to what extent the White House sought to restore any of the missing emails during this period, with the exception of certain OVP emails. A memo from May 10, 2006 explains the costs and lengths of time associated with restoring backup tapes to recover

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<sup>96</sup> [OAP00015688](#) (full document: [OAP00015684](#)). It is unclear whether SOPs existed before the discovery of the missing emails. One official’s handwritten notes from this time period state, “[Redacted] is under the impression that procedures did not exist. They did . . . I found Evidence in my own email.” [OAP00033150](#) (full document: [OAP00033137](#)). A PowerPoint Presentation from October 25, 2005, states to the contrary that SOPs did not exist at that time. [OAP00015687](#) (full document: [OAP00015684](#)).

<sup>97</sup> [OAP00000264-65](#) (full document: [OAP00000264](#)).

<sup>98</sup> [OAP00000400-01](#) (full document: [OAP00000399](#)).

<sup>99</sup> [OAP00038293](#) (full document: [OAP00038293](#))

<sup>100</sup> [OAP00005132-38](#) (full document: [OAP00005111](#)).

the emails, clearly implying the White House had not yet acted to restore missing emails.<sup>101</sup> Similarly, a 2007 PowerPoint presentation states, “OCIO developed a three-pronged proposal to address this issue, which was presented to White House Counsel in November 2005,”<sup>102</sup> also implying the matter was not acted upon once it was presented to the White House counsel.

The White House Counsel’s Office kept close tabs on OA’s investigation and email restoration. It is unknown how frequently OA briefed the White House Counsel’s Office, but a November 7, 2005 email from OA’s general counsel states that “Harriet” – presumably then-White House Counsel Harriet Miers – “would like a report by the end of the day on what we know” about the “email issue,” and that others were “keenly interested in this.”<sup>103</sup> MST Leaders briefed OA’s management and general counsel regularly from October 2005 through February 2006, and Ms. Miers and her staff received briefings on the situation in the fall and winter.<sup>104</sup> Mr. McDevitt also worked with the White House Counsel’s Office to inform Special Counsel Patrick Fitzgerald about the missing email situation.<sup>105</sup> Other documents and evidence suggest White House Counsel Miers had a key role in the decision of the White House not to take further remedial steps. Upon completion of its analysis of the PST files, the OCIO developed a three-step solution it presented to the White House Counsel Office in November 2005,<sup>106</sup> but there is no evidence the proposed solution was ever implemented.<sup>107</sup>

#### *Evaluations Of The 2005 Process*

With the release in April 2007 of CREW’s report, *Without a Trace: The Story Behind the Missing White House E-Mails and the Violations of the Presidential Records Act*, public and congressional attention focused on the Bush White House and its role in the disappearance of White House emails. In response, the White House sought to cast doubt on the accuracy of the 2005 process and its conclusion that millions of emails were missing. For example, a report from 2007 claims the email message count the MST found for each component is not accurate because it relied on a flawed tool to count the messages in the stored PST.<sup>108</sup> A PowerPoint

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<sup>101</sup> [OAP00026114-15](#) (full document: [OAP00026112](#)).

<sup>102</sup> [OAP00005047](#) (full document: [OAP00005029](#)).

<sup>103</sup> [OAP00054634](#) (full document: [OAP00054633](#)).

<sup>104</sup> McDevitt responses, [part 2, at 7](#).

<sup>105</sup> McDevitt responses, [part 2, at 14](#).

<sup>106</sup> [OAP00005047](#) (full document: [OAP00005029](#)).

<sup>107</sup> [OAP00005040](#) (full document: [OAP00005029](#)).

<sup>108</sup> [OAP00004640](#) (full document: [OAP00004640](#)).

presentation from April 9, 2008, criticizes the 2005 analysis for relying on inaccurate assumptions and other failures.<sup>109</sup> Yet even this presentation conceded the 2005 analysis was at least useful in identifying needs for tighter management controls.<sup>110</sup>

Other documents challenge the adequacy of the MST's documentation of their procedures, a claim Mr. McDevitt disputes. As he explained,

There were numerous documents, PowerPoint presentations and other memoranda that described the analysis that was performed, the actions taken to correct the process and the recommendations to improve the processing of pst files. The team documented the details of each action taken to clean up and correct the identified issues.<sup>111</sup>

#### *Still Unknown Cause Of The Missing Emails*

One of the more intriguing aspects of the missing Bush White House emails is the apparent lack of interest in and failure to investigate the cause of the problem. The MST team was never instructed to investigate why the emails went missing. According to Mr. McDevitt:

From October 2005 through August 2006, no analysis was conducted to determine the cause of these issues. No direction was given by OA management to undertake such an analysis.

The primary focus of the team addressing these issues was to create a proper inventory of pst files, analyze these files to determine if issues related to email retention existed.<sup>112</sup>

Similarly, a response to an email from January 24, 2006, asking about the cause of the missing emails states:

CIO [Chief Information Officer] simply does not know the answer and understandably is reluctant to speculate. Everyone

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<sup>109</sup> [OAP00005122](#) (full document: [OAP00005111](#)).

<sup>110</sup> [OAP00005121](#) (full document: [OAP00005111](#)).

<sup>111</sup> McDevitt responses, [part 2, at 5](#). In addition, the White House released to CREW and the National Security Archive thousands of pages of email exchanges between the members of the MST that reflect painstaking analysis and documentation at each step of their work.

<sup>112</sup> McDevitt responses, [part 2, at 7](#).

who was intimately involved in the process at that time is no longer employed by OA.<sup>113</sup>

Notwithstanding the Bush White House's failure to fully investigate the cause of the missing email problem, by 2008 the White House was willing to speculate that whatever the cause, "no intentional or malicious act created the zero and low message count days."<sup>114</sup> This conclusion was based on the distribution of missing emails and the difficulty of deleting PST files,<sup>115</sup> only two of the many factors that might explain the cause of the problem.

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<sup>113</sup> [OAP00054605-06](#) (full document: [OAP00054604](#)).

<sup>114</sup> [OAP00005112](#) (full document: [OAP00005111](#)).

<sup>115</sup> *Id.*

## PROBLEMS WITH EMAIL FROM THE OFFICE OF THE VICE PRESIDENT

As OA began to investigate the missing email problem in October 2005, it made an additional and deeply troubling discovery: the archives contained little or no email from the OVP for an important group of days in September and October 2003. While any missing email should have been cause for concern, this discovery set off alarm bells at the White House. DOJ, as part of its investigation into the leak of Valerie Plame Wilson's covert CIA identity, had served the White House with several subpoenas and document requests for OVP emails for the September and October 2003 time-frame. In the absence of any preserved OVP emails for those days, the White House's responses clearly were incomplete. In addition, the discovery coincided with the end of Special Counsel Patrick Fitzgerald's investigation into the leak. A federal grand jury indicted I. Lewis "Scooter" Libby on five counts of perjury and obstruction of justice on October 25, 2005. His defense team soon began demanding that the special counsel turn over documents, including emails, received from the White House.<sup>116</sup> Faced with these issues, OA launched a specific investigation into the extent of the problem with missing OVP emails.

On October 21, 2005, OA made the review of OVP emails a top priority, particularly in view of the "pending searching request for that office."<sup>117</sup> On October 26, all members of the team investigating the missing email problem were told to "drop what they are doing and help with an urgent request . . . to conduct a spot check of OVP PST files."<sup>118</sup> A manual check of 10 PST files found "some inconsistencies," which led to an order to immediately review the more than 200 PST files containing OVP email.<sup>119</sup>

The review uncovered "gaps" in the archive of OVP email, meaning the archive had no email at all for certain days.<sup>120</sup> The gaps included September 12 and October 1-3, 2003,<sup>121</sup> and OA also found very low email counts for several other days, including September 30 and October

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<sup>116</sup> [Letter from Special Counsel Patrick Fitzgerald to Counsel for I. Lewis Libby](#), Jan. 23, 2006 (Fitzgerald letter).

<sup>117</sup> [OAP00045477](#) (full document: [OAP00045477](#)). It is not clear if this request involved the Valerie Plame Wilson investigation or a request for documents by a House select committee looking into the federal government's response to Hurricane Katrina. [OAP00054621-22](#) (full document: [OAP00054618](#)).

<sup>118</sup> [OAP00016404](#) (full document: [OAP00016403](#)).

<sup>119</sup> [OAP00000791](#) (full document: [OAP00000790](#)).

<sup>120</sup> [OAP00000377](#) (full document: [OAP00000377](#)).

<sup>121</sup> *Id.*

4-5.<sup>122</sup> Several subpoenas and document requests encompassed OVP email from all these days, including DOJ's September 30, 2003 request for documents, and Special Counsel Fitzgerald's January 22, 2004 and January 30, 2004 subpoenas.<sup>123</sup>

As of November 8, OA had "no explanation" why the OVP emails were missing.<sup>124</sup> Unable to find emails that should have been searched in response to the subpoenas, the White House turned to the only other place the missing emails might be: the disaster recovery backup tapes that were supposed to be used if emails were somehow lost or deleted from the White House servers.

OA devised a three-step plan to try to recover the OVP email from September 30 through October 6, 2003, a vital period because it immediately followed DOJ's request for documents. First, OA would try to recover the missing emails from PST files on the backup tapes.<sup>125</sup> If that failed, OA would restore the Journal mailboxes and try to retrieve the emails from them.<sup>126</sup> The last resort would be to restore the mailboxes of individual OVP employees.<sup>127</sup> The plan was presented to and approved by the White House Counsel's Office.<sup>128</sup>

OA began executing the plan some time in late November or early December 2005,<sup>129</sup> with the MST making "OVP search activities" its "top priority."<sup>130</sup> For unexplained reasons, the first two steps failed; the recovered PSTs and Journal mailboxes did not contain any messages

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<sup>122</sup> [OAP00046096](#) (full document: [OAP00046092](#)).

<sup>123</sup> Libby trial exhibits [GX52](#), [GX54](#), and [GX56](#).

<sup>124</sup> [OAP00044004](#) (full document: [OAP00044001](#)).

<sup>125</sup> [OAP00026702](#) (full document: [OAP00026701](#)), [Exchange MST Activity Plan](#) (hereinafter Restoration Plan), Jan. 20, 2006, released by the [House Committee on Oversight and Government Reform as exhibits](#) to the Feb. 26, 2008 hearing (hereinafter HOGGR exhibits), [at 1-3](#).

<sup>126</sup> *Id.*

<sup>127</sup> *Id.*

<sup>128</sup> McDevitt responses, [part 2, at 14](#).

<sup>129</sup> [OAP00026993](#) (full document: [OAP00026993](#)).

<sup>130</sup> [OAP00004312](#) (full document: [OAP00004312](#)).

from September 30 through October 6, 2003.<sup>131</sup> OA then recovered the individual mailboxes,<sup>132</sup> and successfully restored 70 mailboxes of OVP employees containing nearly 18,000 emails.<sup>133</sup>

It appears, however, OA did not restore and search Scooter Libby's mailbox, even though he was a central focus of the leak investigation. Mr. Libby's mailbox, with 1,649 emails, was among the individual mailboxes on the backup tapes OA estimated would take weeks to restore.<sup>134</sup> The backup tapes also included mailboxes belonging to non-OVP employees.<sup>135</sup> To ensure restoration of the correct mailboxes, OA asked human resources for a list of OVP employees dating back to October 2003.<sup>136</sup> Apparently and inexplicably that list did not contain Mr. Libby's name.<sup>137</sup> OA then asked the OVP to validate the list.<sup>138</sup> In response, the OVP "reviewed and confirmed" the list, a process that resulted in Mr. Libby's continuing exclusion.<sup>139</sup> Thus, neither the list of OVP users whose mailboxes were to be restored<sup>140</sup> nor the final list of restored mailboxes validated by the OVP included Mr. Libby.<sup>141</sup>

Beyond this, the documents do not indicate why OA apparently did not search and restore Mr. Libby's mailbox. Perhaps Mr. Libby was not listed as an OVP employee because he was considered an employee of the White House Office. Yet, as a January 23, 2004 email from the vice president's counsel to Mr. Libby notes, he had a "unique status" as a commissioned officer

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<sup>131</sup> [OAP00026703-04](#) (full document: OAP00026701), Restoration Plan [at 2-3](#).

<sup>132</sup> *Id.*

<sup>133</sup> [OAP00026705](#) (full document: [OAP00026701](#)).

<sup>134</sup> [OAP00010283-84](#) (full document: [OAP00010282](#)).

<sup>135</sup> [OAP00010284](#) (full document: [OAP00010282](#)).

<sup>136</sup> [OAP00054615-16](#) (full document: [OAP00054608](#)).

<sup>137</sup> [OAP00033125-27](#) (full document: [OAP00033123](#)). On the other hand, a list of OVP users exported by the "Domain Controller" includes Mr. Libby. [OAP00004357-59](#) (full document: [OAP00004357](#)).

<sup>138</sup> [OAP00054615](#) (full document: [OAP00054608](#)).

<sup>139</sup> [OAP00026705](#) (full document: [OAP00026701](#)).

<sup>140</sup> [OAP00033125-27](#) (full document: [OAP00033123](#)).

<sup>141</sup> [OAP00004407-09](#) (full document: [OAP00004407](#)).

of the president in WHO, but one who principally served the vice president.<sup>142</sup> Given Mr. Libby's function of serving the vice president, his title in October 2003 of Chief of Staff to the Vice President, and his indictment two months earlier as a result of the special counsel's investigation, the apparent failure of the Bush White House to restore and search his mailbox is both inexplicable and deeply disturbing.

OA worked on the restoration of the OVP mailboxes through December and completed it in early January 2006.<sup>143</sup> OA then re-ran the October 2003 and February 2004 searches conducted in response to the DOJ request and Special Counsel Fitzgerald's subpoenas on the 70 restored OVP mailboxes.<sup>144</sup> From the nearly 18,000 restored emails, the White House found 250 it considered responsive, and provided them to the special counsel in early February.<sup>145</sup>

As soon as OA finished this restoration, it began trying to restore 15 more days of OVP emails from December 2003 through February 2004 that had low email counts.<sup>146</sup> It is unknown if this process was completed.

It is also unknown how much the White House told Special Counsel Fitzgerald about the cause or extent of the missing email problem, or if he knew Mr. Libby's mailbox was not among the restored mailboxes. Ms. Miers notified the special counsel there was a problem and briefed him about it, but exactly what she revealed is unknown. Special Counsel Fitzgerald revealed the existence of a problem in a January 23, 2006 letter to Mr. Libby's counsel, advising counsel that "not all email of the Office of the 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."<sup>147</sup>

The missing OVP emails and OA's restoration process raise several troubling questions beyond those raised by the broader missing email problem. The White House's disaster recovery system suffered from serious problems. The PST files and Journal mailboxes on the disaster recovery tapes should have contained emails from the target dates, but inexplicably did not. The failure of the Bush White House to restore and search Scooter Libby's individual mailbox calls

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<sup>142</sup> Libby trial exhibit [GX65](#), [at 11](#).

<sup>143</sup> [OAP00004407](#) (full document: [OAP00004407](#)).

<sup>144</sup> [OAP00055121](#) (full document: [OAP00055120](#)).

<sup>145</sup> See Toni Locy, [Ex-White House aide loses and wins on evidence requests](#), *The Associated Press*, Feb. 25, 2005.

<sup>146</sup> [OAP00001392](#) (full document: [OAP00001392](#)).

<sup>147</sup> Fitzgerald letter [at 7](#).

into serious question the completeness of the White House's response to subpoenas and document requests from DOJ and the special counsel.

## ADDITIONAL PROBLEMS WITH BACKUP TAPES

The Bush White House compounded the critical problem of missing email by failing to follow proper procedures in implementing its disaster recovery backup system. Unlike the makeshift archiving system the White House had pulled together with PST files that was intended for record preservation, the White House disaster recovery system was intended to provide a short-term emergency backup in the event of a system failure while servers and operating systems were restored.<sup>148</sup> The backup tapes create a “snapshot” of the White House network that includes all emails found in PST files, journals, and mailboxes at the time of the backup’s creation.<sup>149</sup> Backup tapes, however, have limitations; tapes only capture emails at the time of the last backup, thereby excluding emails sent or received after the creation of the tapes.<sup>150</sup> Backup tapes also do not capture emails that were erased from individual mailboxes prior to being journaled or saved on the server.<sup>151</sup> The process to restore emails found on backup tapes is lengthy, labor intensive, and expensive.<sup>152</sup>

While the Bush White House had a policy requiring it to make backup tapes on a regularly scheduled basis,<sup>153</sup> documents cast doubt on the extent to which the White House faithfully followed that policy. Then-Chief Information Officer Theresa Payton testified that “the EOP Network has been and continues to be regularly backed-up onto disaster recovery backup tape media.”<sup>154</sup> She did not, however, define what “regularly” meant or provide further detail on how often the backups occurred, including whether they were made on a daily, weekly, or monthly basis.<sup>155</sup> The White House continually resisted efforts by CREW and the National Security Archive in their litigation to ascertain the actual practices of the Bush White House in performing backups; CREW was able to confirm that by April 2008, PST files were backed up

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<sup>148</sup> [OAP00055288](#) (full document: [OAP00055285](#)).

<sup>149</sup> *CREW v. EOP*, [Declaration of Theresa Payton](#), Jan. 15, 2008 (Payton Declaration), [at 3](#).

<sup>150</sup> *Id.*

<sup>151</sup> *CREW v. EOP*, [CREW’s Opposition to EOP Motion to Reconsider](#), May 19, 2008, [at 15](#).

<sup>152</sup> Payton Declaration [at 4](#).

<sup>153</sup> *Id.* [at 2](#).

<sup>154</sup> *Id.*

<sup>155</sup> *CREW v. EOP*, [CREW’s Memorandum In Support of Plaintiff NSA’s Request for Hearing](#), Jan. 23, 2008, [at 2-3](#).

onto disaster recovery tapes on a daily basis.<sup>156</sup>

Despite a lack of clarity as to how frequently the White House created backup tapes, it is certain the EOP was not properly backing up emails. As discussed above, in 2005, the White House tried to recover emails from the Office of the Vice President between the dates of September 30, 2003 and October 6, 2003, as part of Special Counsel Patrick Fitzgerald's investigation of the leak of Valerie Plame Wilson's covert CIA identity. The White House restored backup tapes for those dates and found no journals or PST files.<sup>157</sup> Additionally, there were no backup tapes from at least March 1, 2003 to May 22, 2003.<sup>158</sup>

Confusion regarding the Bush White House's backup tape practices extended to the Office of the Chief Information Officer. In a June 5, 2005 information gathering session on backing up electronic data, the OCIO asked what data was being backed up, why data was backed up, and what should be backed up. The PowerPoint also asked, "Is there a schedule for recycling backup tapes?"<sup>159</sup>

Moreover, even when the Bush White House created backup tapes, it had a practice of recycling those tapes. Here too, however, the extent to which the White House recycled backup tapes also is unclear. In a 2002 meeting with NARA officials, EOP officials gave varying reports on the frequency with which the White House recycled backup tapes. One official stated the White House had not recycled tapes in a long time, whereas another official contradicted that statement by claiming the White House recycled backup tapes on a regular basis, but interrupted the process to accommodate searches, including a search on for Enron-related documents.<sup>160</sup>

By October 2003, the OA opted to stop recycling disaster recovery backup tapes and preserve them instead. This practice came at a price; the EOP spent about \$50,000 a month purchasing new tapes, whereas the normal operational cost to recycle tapes and replace those that have reached their life span was approximately \$15,000 per year.<sup>161</sup> EOP officials confirmed at an April 2005 meeting with NARA that the White House still was not recycling tapes.<sup>162</sup> At

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<sup>156</sup> [OAP00005114](#) (full document: [OAP00005111](#)).

<sup>157</sup> [OAP00026703-04](#) (full document: [OAP00026701](#)). Only individual mailboxes were found on the backup tapes for these dates. *Id.*

<sup>158</sup> *CREW v. EOP*, [Third Declaration of Theresa Payton](#), May 5, 2008, [at 5](#).

<sup>159</sup> [OAP00032611-12](#) (full document: [OAP00032611](#)).

<sup>160</sup> [OAP00042843](#) (full document: [OAP00042843](#)).

<sup>161</sup> [OAP00050959](#) (full document: [OAP00050957](#)).

<sup>162</sup> [OAP00043043](#) (full document: [OAP00043041](#)).

some point before October 2005, however, the White House considered returning to the practice of recycling backup tapes due to the substantial costs of purchasing new tapes, problems finding adequate amount of storage space for the growing volume of tapes, and based on the mistaken belief OA was maintaining redundant backup systems.<sup>163</sup> By 2007, OA had drafted new SOPs to return to the standard practice of recycling tapes.<sup>164</sup> During the litigation that followed, CREW sought and received a restraining order in October 2007, blocking the White House from recycling any backup tapes and requiring the White House to instead continue preserving them.<sup>165</sup>

Even when backup tapes are created, there is no guarantee the data on them will be readable. In April 2007, for example, White House officials admitted they could not guarantee they could recover emails from the backup tapes, as the tapes could be corrupted or key dates might not be retrievable.<sup>166</sup> Most recently, the EOP conducted a comparison between the emails that were archived by the Bush administration for 21 non-consecutive days with the emails restored from backup tapes for the same days and found the White House failed to archive and preserve 89.4% of the universe of known emails.<sup>167</sup> In addition, 3.9% of the universe of known emails for that 21-day period was not present on backup tapes.

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<sup>163</sup> [OAP00055285-91](#) (full document: [OAP00055285](#)).

<sup>164</sup> [OAP00047836](#) (full document: [OAP00047835](#)).

<sup>165</sup> *CREW v. EOP*, [Order Adopting Magistrate Judge John Facciola's Report and Recommendation Granting Temporary Restraining Order](#), Nov. 12, 2007.

<sup>166</sup> OAP00005042 (full document: [OAP00005029](#)).

<sup>167</sup> Weismann/Blanton letter [at 1](#).

## ABANDONMENT OF THE ELECTRONIC COMMUNICATIONS RECORDS MANAGEMENT SYSTEM

In the years before the Bush White House discovered the missing email problem, it spent considerable time and money developing an electronic record keeping system called the Electronic Communications Records Management System. ECRMS was intended to collect, manage, use, and dispose of electronic records within the EOP. Despite this effort and the clear need for a comprehensive email archiving system, the White House inexplicably cancelled ECRMS in late 2006, on the eve of its deployment. With no other replacement system, the White House had to continue using a makeshift journaling/PST file solution, and in the end never implemented a reliable email archiving system.

At the beginning of the Bush administration, White House email was sent through the Lotus Notes system and archived in ARMS. With technological advances, including the increasing use of email, the Bush White House decided to replace Lotus Notes with Microsoft Exchange. But this presented a new challenge for the White House as ARMS – never intended to be a long-term strategic solution<sup>168</sup> – was not designed to capture Exchange email.

As discussed above, OA initially tried to develop a mechanism that would enable ARMS to preserve Exchange email messages, but by late 2002 this solution did not seem viable. In November 2002, OA turned to ECRMS, a solution intended to replace ARMS and provide a comprehensive email archiving system for Microsoft Exchange email.<sup>169</sup> OA assigned Steven McDevitt as the initial project manager.<sup>170</sup>

In the first phase of the ECRMS project, the White House contracted with Booz Allen Hamilton to “complete a detailed systems requirements specification, evaluate commercial off the shelf products and propose solutions that meet the government requirements.”<sup>171</sup> In May 2004, the EOP combined two commercial-off-the-shelf products to create ECRMS: MDY’S FileSurf, and Symantec’s Enterprise Vault.<sup>172</sup> OA’s counsel, the White House Office of Records Management, and the White House counsel all agreed on the system design.<sup>173</sup>

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<sup>168</sup> [OAP00027341](#) (full document: [OAP00027340](#)).

<sup>169</sup> McDevitt responses, [part 2, at 9-11](#).

<sup>170</sup> *Id.*

<sup>171</sup> McDevitt responses, [part 1, at 3](#), [OAP00007740](#) (full document: [OAP00007740](#)).

<sup>172</sup> [OAP00007728-9](#) (full document: [OAP00007728](#)), [OAP00032988](#) (full document: [OAP00032980](#)).

<sup>173</sup> McDevitt responses, [part 2, at 9-10](#).

For the second phase, OA chose a different contractor, Unisys, in mid-2004 to test and implement ECRMS.<sup>174</sup> Throughout 2005 and 2006, the EOP prepared extensively for ECRMS by testing the system to ensure it supported the daily volume of EOP emails, and correcting issues that arose during the testing period.<sup>175</sup> When the ECRMS team discovered during this process that many emails were not properly stored in PST files, it also focused on cleaning up PST files.<sup>176</sup> By early 2006, OA had developed standard operating procedures for ECRMS.<sup>177</sup> In March and July of that year, the White House counsel, the White House Office of Records Management, and OA counsel were briefed on ECRMS and its search and retrieval capabilities.<sup>178</sup>

The project progressed slowly. Initially, the White House planned to implement the new solution by early 2005, prior to the presidential inauguration, but could not meet this date.<sup>179</sup> The selection of software took years, and the implementation and testing of ECRMS took even longer. Progress stalled even further starting in October 2005, as key OA employees and contractors shifted their focus to the investigation of the missing emails.<sup>180</sup>

Nevertheless, ECRMS remained a priority in OA, and its importance increased after the discovery of the missing email. As a May 15, 2006 email presenting a draft plan to put ECRMS into production asserted: “ECRMS is the most important system that we have implemented in a long time, we need to get it right and need to have the processes to support the effective operations on a daily basis without fail. This is our number 1 priority.”<sup>181</sup>

ECRMS moved through several final pre-production stages in the summer of 2006. From July through September 2006, key OA personnel responsible for maintaining ECRMS, White House records managers, and others underwent ECRMS training in preparation for its

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<sup>174</sup> HOCR report [at 9](#), [OAP00007728-9](#) (full document: [OAP00007728](#)).

<sup>175</sup> McDevitt responses, [part 2, at 10](#).

<sup>176</sup> [OAP00045403](#) (full document: [OAP00045403](#)), McDevitt responses, [part 2, at 10-11](#).

<sup>177</sup> [OAP00044615](#) (full document: [OAP00044615](#)), [OAP00045576](#) (full document: [OAP00045576](#)).

<sup>178</sup> McDevitt responses, [part 2, at 9-11](#).

<sup>179</sup> [OAP00025627](#) (full document: [OAP00025627](#)), [OAP00042499](#) (full document: [OAP00042499](#)).

<sup>180</sup> McDevitt responses, [part 2, at 10-11](#).

<sup>181</sup> [OAP00000720](#) (full document: [OAP00000719](#)).

implementation.<sup>182</sup> At the same time, OA moved forward with a plan to deploy an ECRMS pilot. A June 2006 time-line described the pilot's three-phase implementation: ECRMS was to be implemented first in OA, followed by the non-Presidential Records Act (PRA) components (such as OMB), and finally in the PRA components (including the WHO and OVP).<sup>183</sup> According to Steven McDevitt, ECRMS was ready to go live on August 21, 2006, once OA's director and the Office of the Chief Information Officer approved the pilot.<sup>184</sup> That approval was never forthcoming and by September the pilot had run into technical problems. Options on how to proceed were presented to senior OA officials.<sup>185</sup>

Even with these delays, OA officials supervising ECRMS continued to believe the system was going to be deployed. On September 18, 2006, OA determined ECRMS's system risk was low, and OA's acting director requested an extension of OA's authority to operate ECRMS in order to properly resolve problems found during the pilot period.<sup>186</sup> Throughout this final testing and resolution of problems ECRMS was to be used operationally.

### *The Abrupt Abandonment of ECRMS*

In late 2006, despite the years of effort and millions of dollars already expended, the White House abruptly and inexplicably pulled the plug on ECRMS. A November 15 "discussion document" discredited ECRMS as the proper archiving solution and recommended implementing another electronic records management system called Documentum.<sup>187</sup> White House Chief Information Officer Theresa Payton told the House Oversight and Government Affairs Committee she determined in late 2006 ECRMS had significant problems, and thus its deployment was cancelled.<sup>188</sup> By the end of December, OA had discontinued the scheduled weekly reboot of ECRMS servers by the network operations center, effectively terminating ECRMS.<sup>189</sup>

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<sup>182</sup> [OAP00039088-90](#) (full document: [OAP00039088](#)), [OAP00039172](#) (full document: [OAP00039172](#)).

<sup>183</sup> [OAP00043437](#) (full document: [OAP00043435](#)).

<sup>184</sup> [OAP00038395](#) (full document: [OAP00038395](#)), McDevitt responses, [part 2, at 10-11](#).

<sup>185</sup> [OAP00024256](#) (full document: [OAP00024256](#)).

<sup>186</sup> [OAP00038578](#) (full document: [OAP00038578](#)).

<sup>187</sup> [OAP00038534](#) (full document: [OAP00038534](#)).

<sup>188</sup> [Theresa Payton, Written testimony before the House Oversight and Government Reform Committee](#) (hereinafter Payton testimony), Feb. 26, 2008, [at 4](#).

<sup>189</sup> [OAP00038446](#) (full document: [OAP00038446](#)).

The Bush White House provided various questionable justifications for its last-minute decision to cancel ECRMS, including that the system would not be able to fully ingest all email in the PST files before the end of the administration. But OA's own estimates of the amount of time this task would take – both before and after the White House cancelled ECRMS – indicated there would have been sufficient time. At the end of 2005, White House officials estimated it would take a year to ingest the 4,300 PST files containing 98.1 million messages.<sup>190</sup> By August 2006, the estimated amount of PST files and emails ballooned to 12,844 PST files containing approximately 129 million messages, but there was no indication they could not be ingested before the end of the administration.<sup>191</sup> And although Ms. Payton told NARA in October 2007 that the White House had cancelled ECRMS in part because ingesting all the PST files would have taken 18 months,<sup>192</sup> NARA refused to accept this claim. NARA pointed out there would have been enough time to complete the job if ECRMS had been deployed as planned in late 2006.<sup>193</sup> While a time-line in the November 15, 2006 discussion document indicates ECRMS would need over 30 months to ingest all the emails, only finishing after the target date of the upcoming presidential transition,<sup>194</sup> this date was based on the assumption ECRMS would not start ingesting the PST files until November 2007.<sup>195</sup>

The White House also justified its decision to abandon ECRMS just before it was scheduled to be fully operational by citing “concerns that the project would not fully meet records management and operational requirements.”<sup>196</sup> But it neglected to include the fact that early in the development of ECRMS, OA counsel affirmatively elected to drop the requirement that ECRMS distinguish between presidential and personal messages – part of the records

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<sup>190</sup> [OAP00032982](#) (full document: [OAP00032980](#)), [OAP00045905](#) (full document: [OAP00045896](#)).

<sup>191</sup> [OAP00033001](#) (full document: [OAP00032989](#)).

<sup>192</sup> [NARA Record of Meeting](#), Nov. 11, 2007 (NARA Bates No. 1628-30) (HOCR exhibits).

<sup>193</sup> *Id.*

<sup>194</sup> [OAP00038537](#) (full document: [OAP00038534](#)). Documentum, on the other hand, would only take 9 to 12 months to ingest, finishing well before the target end date, the document claimed. *Id.*

<sup>195</sup> *Id.*

<sup>196</sup> [OAP00005034](#) (full document: [OAP00005029](#)), [OAP00038534](#) (full document: [OAP00038534](#)), [NARA Record of Meeting](#), Nov. 11, 2007 (NARA Bates No. 1628-30) (HOCR exhibits).

management requirements later found lacking.<sup>197</sup>

Other justifications for abandoning ECRMS in favor of Documentum include the comparative costs of maintenance and storage. ECRMS was estimated to cost \$4.45 million over a five-year period, whereas Documentum RMS was estimated to cost \$1.3 million over the same period.<sup>198</sup> In addition, Documentum, unlike ECRMS, purportedly supported all federal records management requirements and protected “business sensitive” email.<sup>199</sup>

Even if these problems with ECRMS genuinely existed, they do not explain why the White House did not recognize ECRMS’s flaws earlier in the process, or attempt to make any changes to ECRMS to address these concerns, especially given the investment of time and money the White House already had made in the project.

As discussed more fully below, the many flaws of the system the White House chose to replace ECRMS further undermine the excuses offered by the White House for abandoning ECRMS. The White House considered ECRMS’s successor to be resource intensive, requiring manual and complex archiving, and did not dedicate a staff to manage the PST files. The replacement system relied on Microsoft Exchange/Outlook, a system that lacked the necessary technology to properly manage records. In addition, Documentum had many of the same supposed shortcomings as ECRMS. For example, both ECRMS and Documentum failed to differentiate between emails qualifying as records that the White House was required by law to preserve, and non-record emails that were not subject to record keeping requirements.<sup>200</sup>

In the end one thing is clear: the Bush White House abandoned ECRMS after devoting many years to its development and spending millions of dollars. Just as troubling, the White House replaced ECRMS with a dysfunctional system that failed to meet fundamental record keeping requirements.

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<sup>197</sup> *Id.*

<sup>198</sup> [OAP00038538](#) (full document: [OAP00038534](#)).

<sup>199</sup> [OAP00038535](#) (full document: [OAP00038534](#)).

<sup>200</sup> [OAP00005034-35](#) (full document: [OAP00005029](#)).

## OTHER POST-2005 ACTIONS BY THE BUSH WHITE HOUSE

The 2005 investigation by OA of the missing email problem revealed significant problems with the Bush White House's email archiving system and confirmed OA's prior warnings about the inadequacies of that system. In response, OA took certain remedial steps that improved the White House's ability to keep track of PST files and search for emails, but still fell far short of resolving the system's fundamental shortcomings. Most significantly, the Bush White House still refused to implement a comprehensive automated email record keeping system, and instead continued to rely on the makeshift journaling/PST file solution implemented during the changeover from ARMS to Microsoft Exchange. And it took OA years to implement the more modest improvements the Bush White House was willing to make to support the ad hoc archiving system, including improvements to PST file management and OA's standard operating procedures.

### *Efforts To Develop An Automated Email Record Keeping System*

Without question, a comprehensive automated email record keeping system would have avoided most if not all of the problems that resulted in the disappearance of millions of emails. The Bush White House appeared to recognize the critical need for such a system as early as 2002, when it attempted unsuccessfully to make ARMS compatible with the Exchange email system. The Bush White House then turned to ECRMS, a system designed to resolve all of the issues leading to the vanishing emails. As explained above, the White House abruptly cancelled the project in the fall of 2006, just before ECRMS was to become operational.

In its place OA recommended Documentum, a commercial, off-the-shelf records management system.<sup>201</sup> According to OA, Documentum could be installed faster than ECRMS.<sup>202</sup> OA's prospective time-line, drafted in November 2006, called for deploying Documentum within nine months.<sup>203</sup> OA claimed Documentum could ingest all the old PST files within another 9 to 12 months, so that they could be included in the system by the fall of 2008, well before their transfer to NARA as part of the transition to the next administration.<sup>204</sup> What appears to be a later version of this time-line, drafted in April 2007, also projected the new

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<sup>201</sup> [OAP00038536](#) (full document: [OAP00038534](#)).

<sup>202</sup> [OAP00038537](#) (full document: [OAP00038534](#)).

<sup>203</sup> *Id.*

<sup>204</sup> *Id.* One of the main reasons OA argued ECRMS should be terminated was that it purportedly could not ingest the PST files before the end of the administration. [OAP00038536-37](#) (full document: [OAP00038534](#)).

system could be fully deployed, with the PST files ingested, by January 2009.<sup>205</sup>

This schedule proved to be little more than a fantasy. Funding for the first phase of the plan was not approved until June 2007, many months after the Bush White House cancelled ECRMS.<sup>206</sup> Even then, OA delayed moving forward on the project, and instead sought quotes for a pilot email and electronic records management system to be put in place by the end of August 2007, with a full roll-out to follow.<sup>207</sup> OA awarded the sole-source contract for this pilot to EMC, the company that made Documentum and a related software product called EmailXtender, because it had the only system that met federal information processing standards and certifications and was NARA-approved.<sup>208</sup> OA also justified using a sole-source contract on the ground the purchase needed to be “expedited” to ensure it was operational before the next presidential term.<sup>209</sup>

The documents do not provide a full picture of what happened between June 2007 and the end of the Bush administration, but it is clear the White House did not implement any automated records management system that effectively archived email. Despite the need for expedited action, development of a new system was stalled as OA followed new detours. For example, in September 2007, OA added a new process by contracting with EMC to conduct a backup, recovery, and archive “assessment.”<sup>210</sup> As to the Documentum pilot OA originally said needed to be completed by the end of August 2007, it was not actually implemented until “late 2007,” according to the testimony of then-White House Chief Information Officer Theresa Payton before the House Oversight and Government Reform Committee on February 26, 2008.<sup>211</sup>

Moreover, contrary to Ms. Payton’s claim before Congress in February 2008 that OA was in the process of deploying Documentum, the system was not even close to being deployed at that time. Months later, in October 2008, EMC was still working on an “EmailXtender

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<sup>205</sup> [OAP00032821](#) (full document: [OAP00032821](#)).

<sup>206</sup> [OAP00047706](#) (full document: [OAP00047704](#)).

<sup>207</sup> [EOP0000127-33](#) (full document: [EOP 113-224](#)).

<sup>208</sup> [EOP0000157](#) (full document: [EOP 113-224](#)).

<sup>209</sup> *Id.*

<sup>210</sup> [OAP00006602-03](#) (full document: [OAP00006602](#)), [OAP00006622-23](#) (full document: [OAP00006622](#)).

<sup>211</sup> Payton testimony [at 4-5](#). Ms. Payton claimed the system “will meet the EOP’s records management and archiving needs for the foreseeable future and will address many, if not all, of the alleged concerns raised about the current archiving process.” *Id.*

Enterprise Solution Design” for Bush White House email.<sup>212</sup> This solution design was intended to “answer all the questions necessary to budget and make a purchasing decision” on a system that would store all emails in a central repository, allow them to be segregated by component, allow searches to be run, prevent unauthorized deletions, enable email to be transferred to NARA, and implement a records retention policy.<sup>213</sup> In other words, seven months after Ms. Payton’s testimony and nearly two years after OA cancelled ECRMS, the Bush White House still had failed to deploy any replacement system, and clearly could not do so before the end of the administration.

The documents do not shed any light on why deployment of EMC’s Documentum and EmailXtender system took so long, and why it was not in place before the January 2009 transition. In the end, the EMC system was not implemented until the onset of the Obama administration, ensuring effective electronic records management and archiving for only the incoming administration.<sup>214</sup> As a result, the Bush White House email records NARA ingested were seriously incomplete; copies of the missing emails – to the extent they exist – continue to reside on backup tapes now in NARA’s custody.

#### *Efforts To Improve The Makeshift Archiving System*

In 2005, in the wake of discovering the missing email problem, the Bush White House recognized it also needed to improve its ad hoc archiving system that would remain in place until a new system was deployed. OA fixed some of the problems uncovered by the missing emails relatively quickly, such as the inconsistent naming of PST files and their storage on multiple servers, but took years to complete other important improvements.

One of the first and most problematic issues OA uncovered in its 2005 investigation was the lack of a complete inventory of the PST files and their contents. Without a complete and accurate inventory, OA could not know where all of the PST files were stored or what was in them, and could not be certain any of its searches were complete.

To address this problem, OA began designing a new system for tracking PST files in November 2005 called the PST File Management System (PFMS).<sup>215</sup> PFMS would consolidate

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<sup>212</sup> [EOP0000172-83](#) (full document: [EOP0000113-224](#)). The first version of this document was not drafted until September 2008. [EOP0000176](#) (full document: [EOP0000113-224](#)).

<sup>213</sup> [EOP0000177-83](#) (full document: [EOP0000113-224](#)).

<sup>214</sup> [Letter from Brook Colangelo, White House Chief Information Officer, to Anne Weismann and Meredith Fuchs](#), Jan. 15, 2010.

<sup>215</sup> [OAP00001476-79](#) (full document: [OAP00001476](#)).

key information about the PST files in a single database and automate the collection of that information in the future.<sup>216</sup> The information to be gathered included the location of each PST file, the total number of emails each contained, the number of emails for each date, and any issues concerning each PST file and how they were resolved.<sup>217</sup>

The goal of PFMS was to “reduce the potential for human error” by automatically capturing data about the PST files.<sup>218</sup> OA recognized it was “critical that the PFMS database be deployed as soon as possible” because some of the data was being kept in scattered files.<sup>219</sup> OA considered PFMS to be a short-term solution until ECRMS, a system not designed to rely on PSTs at all, was operational.<sup>220</sup> As one OA official said of PFMS, the “idea is NOT to spend too much effort to develop a highly automated, highly functional [system] since we need something soon and its lifespan should be short.”<sup>221</sup> The stop-gap solution, however, became the permanent one when OA cancelled ECRMS in late 2006, and then failed to implement a replacement by the end of the administration.

Perhaps as a result of the limited effort OA put into developing PFMS, the system failed to carry out its basic functions until at least 2007. OA began reviewing the PST tracking system in late 2006, and again discovered numerous problems. A December 2006 draft presentation about the email record keeping system acknowledged the PFMS database was not completely maintained and thus provided an incomplete inventory.<sup>222</sup> PFMS could not “support searches beyond November 2005,” and there were days for which no PST files were created, “which likely means the inventory of PSTs does not include every email message.”<sup>223</sup> OA further admitted the improvements made in late 2005 and early 2006 were not fully maintained as a result of high staff turnover, organizational and priority changes, and misinterpretation of documents.<sup>224</sup>

Despite OA’s efforts to automate the collection of PST data, many PFMS-related

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<sup>216</sup> [OAP00001482](#) (full document: [OAP00001476](#)).

<sup>217</sup> [OAP00001486](#) (full document: [OAP00001476](#)).

<sup>218</sup> [OAP00001479](#) (full document: [OAP00001476](#)).

<sup>219</sup> *Id.*

<sup>220</sup> [OAP00001481](#) (full document: [OAP00001476](#)).

<sup>221</sup> *Id.*

<sup>222</sup> [OAP00032845](#) (full document: [OAP00032837](#)).

<sup>223</sup> *Id.*

<sup>224</sup> *Id.*, [OAP00005047-49](#) (full document: [OAP00005029](#)).

procedures still required “manually intensive tasks.”<sup>225</sup> For example, OA used manual processes to import data into the database, leaving it “susceptible to human error.”<sup>226</sup> In addition, files meant to log errors were not always accurate.<sup>227</sup> Through its review OA also discovered CMDFI, the software it had been using to count the number of emails in PST files, stopped counting when it reached 32,767, making the count for large files incorrect.<sup>228</sup>

While OA claimed it used PFMS successfully to conduct some email searches, it also concluded the system had “deficiencies” that interfered with email searches.<sup>229</sup> Because PFMS was not designed to support searches, “querying for information related to searches [became] a fairly complex process.”<sup>230</sup> In addition, “incomplete or redundant” information in the database also caused “inefficiencies in the search process.”<sup>231</sup>

OA addressed some of these issues in early 2007 by updating the database to make it a complete inventory that supported searches.<sup>232</sup> OA also decided in April 2007 to bring in a contractor to resolve the remaining problems with PFMS.<sup>233</sup> But the process of developing an improved PST file tracking system, now called the “Exchange-Inventory Management” system, moved slowly.<sup>234</sup> OA did not select the contractor, InfoReliance, until August 2007, and subsequent delays pushed the project back several more months.<sup>235</sup> OA’s reviews of

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<sup>225</sup> [OAP00032845](#) (full document: [OAP00032837](#)), [OAP00005782-83](#) (full document: [OAP00005782](#)).

<sup>226</sup> [OAP00005783](#) (full document: [OAP00005782](#)).

<sup>227</sup> *Id.*

<sup>228</sup> *Id.*

<sup>229</sup> *Id.*

<sup>230</sup> [OAP00005783](#) (full document: [OAP00005782](#)).

<sup>231</sup> *Id.*

<sup>232</sup> [OAP00005048-50](#) (full document: [OAP00005029](#)).

<sup>233</sup> [OAP00005784](#) (full document: [OAP00005782](#)).

<sup>234</sup> [OAP00026182-85](#) (full document: [OAP00026182](#)).

<sup>235</sup> [OAP00006377-78](#) (full document: [OAP00006377](#)), [OAP00006386](#) (full document: [OAP00006386](#)).

InfoReliance's performance criticized, among other things, its quality assurance and test plans.<sup>236</sup> As of January 2008, an InfoReliance design document acknowledged the system then in place still used "a very manual set of processes" and was "highly error-prone," leaving open the possibility "that incorrect or incomplete information is provided to the end user."<sup>237</sup> In addition, Mail Attender, the program that was supposed to automatically move messages from Journal mailboxes to PSTs files, sometimes failed to move all the messages.<sup>238</sup> InfoReliance apparently delivered the final product in early 2008,<sup>239</sup> two and one-half years after OA discovered significant problems in its PST tracking system.

OA's late 2005 investigation also highlighted the complete lack of standard operating procedures for managing email.<sup>240</sup> SOPs provide step-by-step instructions on how to perform specific processes, and are often vital to the operation of a large and complex enterprise such as the management of White House email. The need for SOPs was particularly important in managing the Bush White House's email system because much of it was operated by contractor employees who turned over frequently.<sup>241</sup> The lack of SOPs before 2005 led in part to the inconsistent naming of PST files, their storage on different servers, and failures to verify their creation.<sup>242</sup>

Recognizing the continuing dangers of not having clear SOPs for some of its most vital operations, OA began drafting SOPs for key email archiving processes in October 2005.<sup>243</sup> These SOPs gave operators detailed instructions for setting up the archiving system, converting Journal mailboxes to PSTs, verifying that PSTs were created each day and saved in the right location, ensuring all Journal mailboxes were converted to PSTs, identifying any anomalies, and

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<sup>236</sup> [OAP00026333-40](#) (full document: [OAP00026333](#)), [OAP00006407-08](#) (full document: [OAP00006407](#)).

<sup>237</sup> [OAP00026473](#) (full document: [OAP00026468](#)).

<sup>238</sup> [OAP00004585](#) (full document: [OAP00004555](#)).

<sup>239</sup> [OAP00005136](#) (full document: [OAP00005111](#)).

<sup>240</sup> [OAP00015687](#) ("Standard operating procedures for email management do not exist.") (full document: [OAP00015684](#)), [OAP00000400](#) (full document: [OAP00000399](#)).

<sup>241</sup> [OAP00005033](#) (full document: [OAP00005029](#)), [OAP00004986](#) (full document: [OAP00004986](#)).

<sup>242</sup> [OAP00000400](#) (full document: [OAP00000399](#)).

<sup>243</sup> [OAP00008236](#) (full document: [OAP00008236](#)), [OAP00000264](#) (full document: [OAP00000264](#)).

monitoring the system.<sup>244</sup>

In mid-November, Mr. McDevitt sought approval of these SOPs, which Mr. McDevitt considered to be “interim” and subject to being revisited or replaced after OA implemented ECRMS.<sup>245</sup> His efforts to secure approvals, however, quickly ran into roadblocks. An email sent by an unidentified OA employee just days after Mr. McDevitt recommended approving the SOPs voiced concern they were getting “bogged down” and would never be approved.<sup>246</sup> The author noted OA had little motivation to implement the SOPs because of the lack of accountability caused by vacancies in key OA positions. The author also warned that “[b]y delaying deployment of the SOP and the oversight and monitoring . . . , the EOP is in serious risk of additional Email problems.”<sup>247</sup> Despite this foot-dragging, the SOPs apparently were approved in December 2005 or January 2006.<sup>248</sup>

OA’s development and approval of the SOPs was a step in the right direction. Nevertheless, it is unclear if the SOPs were sufficient, if OA kept them current over the next year, or if OA followed them consistently. In its late 2006 internal review, OA found many procedures still required “manually intensive tasks” that were applied inconsistently during contractor and staff turnovers.<sup>249</sup> OA then drafted another set of SOPs that provided more detail on how to execute key processes.<sup>250</sup> These new SOPs were necessary, in part, because some of the processes developed in 2005 “were never fully documented.”<sup>251</sup>

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<sup>244</sup> *Id.*

<sup>245</sup> [OAP00000404](#) (full document: [OAP00000399](#)), [OAP00000365](#) (full document: [OAP00000365](#)).

<sup>246</sup> [OAP00038293](#) (full document: [OAP00038293](#)).

<sup>247</sup> *Id.*

<sup>248</sup> [OAP00009709](#) (full document: [OAP00009709](#)).

<sup>249</sup> [OAP00005033](#) (full document: [OAP00005029](#)), [OAP00005049](#) (full document: [OAP00005029](#)).

<sup>250</sup> [OAP00004555-60](#) (full document: [OAP00004555](#)).

<sup>251</sup> [OAP00004595](#) (full document: [OAP00004555](#)).

## RESTORATION OF THE MISSING EMAILS

During the 2005 investigation, OA also focused on a solution to the missing email problem and designed a plan that called for restoring email from existing disaster recovery backup tapes. OA presented the plan to then-White House Counsel Harriet Miers, but apparently never received her authorization to proceed, as the Bush White House failed to act on OA's plan or any other restoration plan until years later. Only after CREW revealed that White House emails had gone missing and CREW and the National Security Archive brought lawsuits did the White House embark on an expensive and time-consuming effort to reevaluate the extent of the missing email problem and eventually select a small group of days to restore. This effort resulted in the recovery of some additional emails, but a significant number of emails still are missing and serious questions remain about the reevaluation and selection processes. Indeed, it now appears that implementing OA's original restoration plan would have cost far less and produced a much more complete email archive than the course OA ultimately followed.

OA first focused on restoring days of missing emails from the OVP that were the subject of subpoenas from Special Counsel Patrick Fitzgerald. In late 2005, as discussed, OA devised a plan to recover the OVP emails using the backup tapes for PST files, Journal mailboxes, and individual mailboxes.<sup>252</sup> In November 2005, in a proposal submitted to the White House Counsel's Office, OA proposed using the same method for a broader restoration.<sup>253</sup> The Bush White House, however, took no action on the plan.<sup>254</sup>

Nevertheless, OA continued to explore a broader restoration. A May 10, 2006 memorandum to OA's director presented four options for restoring different amounts of the missing email.<sup>255</sup> OA estimated that the broadest option – restoring all dates of low-volume emails from all White House components – would cost \$2.4 million and take 46 months to complete.<sup>256</sup> A handwritten note accompanying the memorandum states the three-step plan for this full recovery “was never approved so we never did it.”<sup>257</sup> A subsequent April 2007 internal OA presentation discusses restoration options,<sup>258</sup> but at that point the cost estimate to restore just

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<sup>252</sup> [OAP00026701-06](#) (full document: [OAP00026701](#)).

<sup>253</sup> [OAP00005040](#) (full document: [OAP00005029](#)), [OAP00005047](#) (full document: [OAP00005029](#)).

<sup>254</sup> [OAP00005040](#) (full document: [OAP00005029](#)).

<sup>255</sup> [OAP00026114-15](#) (full document: [OAP00026112](#)).

<sup>256</sup> *Id.*

<sup>257</sup> [OAP00026113](#) (full document: [OAP00026112](#)).

<sup>258</sup> [OAP00005040](#) (full document: [OAP00005029](#)).

60 component days had risen to \$3.5 million.<sup>259</sup>

Just as OA was finalizing its April 2007 presentation, CREW released *WITHOUT A TRACE: The Story Behind the Missing White House E-Mails and the Violations of the Presidential Records Act*, revealing publicly for the first time the October 2005 discovery of millions of missing emails and the Bush White House's failure to act on the restoration plan presented to White House Counsel Miers.<sup>260</sup> NARA soon began pressing the White House to restore missing emails,<sup>261</sup> and continued to do so over the next several months.<sup>262</sup> In addition, CREW and the National Security Archive sued the White House and NARA in September 2007, seeking in part an order requiring restoration of the missing emails from the backup tapes.<sup>263</sup>

Sometime in 2007, most likely in response to these events, the White House finally began taking steps toward restoring some emails. But before undertaking any actual restoration, the White House determined it needed to reevaluate completely the extent of the missing email problem, rather than relying on the extensive analysis performed in late 2005 and early 2006. The reevaluation was part of a three-phase plan that called for reevaluating the missing email problem and selecting dates for restoration based on the new analysis. In the end, this new plan cost well over \$10 million, took years to execute, and was plagued with problems. Ironically, the White House was motivated largely by a desire to keep costs as low as possible, even if it meant not all of the missing emails were recovered.<sup>264</sup>

As part of its reevaluation of the missing email problem, OA developed a new method to find and sort more email and a statistical model for selecting the days to restore. To create a more accurate inventory, the new plan sorted messages based on their "headers" – information

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<sup>259</sup> [OAP00005042](#) (full document: [OAP00005029](#)). For the Bush White House, each calendar day of emails contained 12 "component days," corresponding to one of the 12 White House components (e.g., Office of the Vice President, Office of Administration). Frequently email was missing from more than one component on a given calendar day.

<sup>260</sup> <http://www.citizensforethics.org/node/27607>.

<sup>261</sup> [OAP00053786-87](#) (full document: [OAP00053786](#)).

<sup>262</sup> [OAP00053848](#) (full document: [OAP00053847](#)), [OAP00053534](#) (full document: [OAP00053532](#)).

<sup>263</sup> *CREW v. EOP*, [Complaint](#), Sept. 25, 2007.

<sup>264</sup> The significant delay caused by implementing this plan – at a time when Congress and the public were pressing the Bush White House for an explanation of the missing email problem – suggests the White House also may have been motivated by a desire to prolong public confirmation of the politically sensitive missing email problem.

about the sender and recipient of the email – rather than by the name of the PST file in which they were stored.<sup>265</sup> To accomplish this, OA’s contractor, InfoReliance, created a new software tool called the PST Inventory Verification and Investigation Tool (PIVIT).<sup>266</sup>

Contemporaneous documents make clear the White House’s goal was to come up with a much narrower universe of missing email than previously had been identified. As OA acknowledged, PIVIT’s “focus . . . was to answer the question” of whether OA could “properly identify” days with zero and low email counts “so as to limit the number of days that we would have to restore from backup tapes[.]”<sup>267</sup> In an evaluation of the first part of the plan, OA noted similarly that “[f]or every zero day we are able to recover without physical data restoration, we are able to save significant time and dollars.”<sup>268</sup> Yet, as discussed below, the process of assembling a narrower universe of missing emails proved to be very costly.

While PIVIT purportedly produced a more accurate inventory, there are serious questions about its reliability. Because the project had to be completed very quickly, InfoReliance could not properly test it to verify whether PIVIT could handle all the data at once.<sup>269</sup> Further, because the system was supposed to be run only once, InfoReliance did not implement important features “such as logging, descriptive error reports, and user interface.”<sup>270</sup>

After PIVIT was used, OA was unable to fully confirm its validity. At the end of the counting and sorting process, OA tried, but failed to find a third party to conduct the critically important independent verification and validation. None of the vendors or government offices OA contacted was interested in conducting the IV&V out of fear of “the potential notoriety in the media.”<sup>271</sup> The best the White House could do was a company called NAID that “did not have the skill to review the actual coding and other technical aspects” of PIVIT, and therefore was

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<sup>265</sup> *CREW v. EOP*, [Defendants’ Motion to Dismiss and Memorandum of Points and Authorities in Support](#) (hereinafter *Ds’ Motion to Dismiss*), Jan. 21, 2009, [at 20-23](#).

<sup>266</sup> *Id.* [at 20](#).

<sup>267</sup> [OAP00005360](#) (full document: [OAP00005355](#)). This passage is highlighted on one version of this document produced by the White House with the words “crucial element” handwritten in the margin.

<sup>268</sup> [OAP00005142](#) (full document: [OAP00005111](#)).

<sup>269</sup> [OAP00004818](#) (full document: [OAP00004811](#)).

<sup>270</sup> *Id.*

<sup>271</sup> [OAP00005439-40](#) (full document: [OAP00005439](#)).

charged with conducting a less comprehensive “quality check.”<sup>272</sup> Even the quality check turned up problems; NAID found 279 PST files that were not in the PIVIT database. OA agreed some of those files should have been included in PIVIT and subsequently added them to the inventory.<sup>273</sup>

The methodology behind the statistical model the Bush White House used in the next phase of this plan to select the days to restore and the model’s application raises even more significant concerns. In its 2005 analysis, OA used a running average to identify days with low email messages, taking into account whether the day was a weekday, weekend, or national holiday, “natural seasonal fluctuations in email volume” such as “when the President is on vacation,” and “spikes in email volume as a result of world events.”<sup>274</sup> Days with less than 30 percent of the expected average were identified as low days.<sup>275</sup>

Notwithstanding this effort, OA now claimed it needed a “more sophisticated statistical approach” as part of its three-phase plan.<sup>276</sup> Accordingly, OA hired statistician Dr. Nancy Kirkendall to develop an abstract statistical model called the Auto-Regressive Integrated Moving Average (ARIMA) to identify low days.<sup>277</sup> While more complex than the 2005 analysis, ARIMA largely took into account the same factors.<sup>278</sup> But ARIMA’s implementation was deeply flawed.<sup>279</sup> Among other problems, the data ARIMA analyzed and the methodology it used kept changing. For example, in the middle of the process OA found more PST files, and had to re-run ARIMA using the new data set.<sup>280</sup> And the days ARIMA considered likely to have low email counts, such as federal holidays and days around them, snow days, and Inauguration Day, kept

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<sup>272</sup> *Id.*

<sup>273</sup> [OAP00004908](#) (full document: [OAP00004907](#)).

<sup>274</sup> McDevitt responses, [part 2, at 6](#).

<sup>275</sup> [OAP00026678](#) (full document: [OAP00026677](#)).

<sup>276</sup> *CREW v. EOP*, Ds’ Motion to Dismiss [at 20](#).

<sup>277</sup> *Id.* [at 22](#), [OAP00048075](#) (full document: [OAP00048073](#)).

<sup>278</sup> [OAP00005191-94](#) (full document: [OAP00005187](#)).

<sup>279</sup> *Nat’l Sec. Archive v. Executive Office of the President*, Civil No. 07-1577 (D.D.C.), [Opposition to Defendant’s Second Motion to Dismiss Plaintiff’s First Four Claims](#), Feb. 20, 2009, [at 40-43](#).

<sup>280</sup> [OAP00005439](#) (full document: [OAP00005439](#)), [OAP00005304](#) (full document: [OAP00005289](#)).

growing.<sup>281</sup> In the end, OA had to make multiple “passes” through the data between June and September 2008, each time coming up with different results.<sup>282</sup> All of these changes caused even Dr. Kirkendall to question the accuracy of PIVIT and ARIMA. In a September 2008 memorandum, Dr. Kirkendall noted that PIVIT seemed like “a wonderful, but complex tool,” but the changes were impacting email counts.<sup>283</sup> “ARIMA is only as good as the input data,” she warned.

Even with its flaws, ARIMA identified 106 component days on 48 calendar days as having low email counts.<sup>284</sup> In the end, however, and after spending months on this statistical analysis, the Bush White House disregarded ARIMA’s results. Senior White House officials with far less expertise than Dr. Kirkendall arbitrarily decided to restore less than half of the 48 days ARIMA had identified. In late 2008, OA officials recommended excluding some of the dates identified by ARIMA.<sup>285</sup> Their rationale, in part, was that particular days fell on a Monday or a Friday, or fell on or around a federal or religious holiday – factors ARIMA should have taken into account to exclude those dates.<sup>286</sup> Even OA’s recommendations were subject to change; according to one document, the White House Counsel’s Office, not OA, made the final decision on which dates to restore.<sup>287</sup>

Ultimately, the Bush White House decided to restore only 48 component days on 21 calendar days.<sup>288</sup> Having successfully met its goal of saving money, even at the expense of leaving a large body of missing email unrestored,<sup>289</sup> the White House considered the issue of the missing emails closed. By operation of law, the backup tapes are now at NARA and the

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<sup>281</sup> [OAP00005303](#) (full document: [OAP00005289](#)).

<sup>282</sup> [OAP00005302](#) (full document: [OAP00005289](#)).

<sup>283</sup> [OAP00005188](#) (full document: [OAP00005187](#)).

<sup>284</sup> *CREW v. EOP*, Ds’ Motion to Dismiss [at 24](#).

<sup>285</sup> [OAP00005413-15](#) (full document: [OAP00005413](#)), [OAP00005416-17](#) (full document: [OAP00005416](#)), [OAP00005418-20](#) (full document: [OAP00005418](#)), [OAP00005445-49](#) (full document: [OAP00005445](#)).

<sup>286</sup> *Id.*

<sup>287</sup> [OAP00005162](#) (full document: [OAP00005160](#)).

<sup>288</sup> *CREW v. EOP*, Ds’ Motion to Dismiss [at 25](#).

<sup>289</sup> Even so, the Bush White House claimed in January 2009 it had spent \$10 million on its restoration efforts, and it appears the Obama White House spent an additional \$3 to \$5 million after that time. *Id.* [at 26](#).

archivist, not the president, has legal custody and control over the records of the Bush presidency.

A recent analysis of this limited restoration project confirms what the serious flaws with PIVIT and ARIMA forebode – a large volume of missing email residing on backup tapes has yet to be restored. In December 2009, after years of litigation, CREW and the National Security Archive reached settlements of their lawsuits.<sup>290</sup> Under the terms of the settlements, the White House agreed to perform a comparison of the number of emails from 21 days restored from the backup tapes to the number of emails previously archived by the Bush White House for that 21-day period.<sup>291</sup> The comparison, conducted independently by Microsoft, yielded shocking results. For the 21 days in question, the Bush White House failed to archive and preserve nearly 90 percent of the universe of known emails.<sup>292</sup>

This new and definitive evidence that the Bush White House did not come close to resolving the problem of the missing emails raises serious questions about the White House's motives. Simply following OA's original recommendation to restore all missing emails from backup tapes certainly would have cost far less than the more than \$10 million the Bush White House spent to restore only 48 component days, and would have yielded a far more complete archive of emails from the Bush presidency.

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<sup>290</sup> CREW v. EOP, [Terms of Agreement](#), Dec. 14, 2009.

<sup>291</sup> *Id.*

<sup>292</sup> Weismann/Blanton letter [at 1](#). As discussed above, the comparison also found the disaster recovery backup system failed to preserve 3.9 percent of the universe of known emails for those 21 days, calling into question the effectiveness of the backup system.

## NARA'S ROLE IN THE BUSH WHITE HOUSE EMAIL SCANDAL

### *The Development Of ECRMS*

When the Bush White House began a planned migration from Lotus Notes to Microsoft Exchange in 2002, it knew ARMS was not compatible with Microsoft Exchange and therefore could not serve as an archival system for email created on Microsoft Exchange. Accordingly, beginning in 2001, the White House, in coordination with NARA, began to develop a successor to ARMS. By 2003, the White House had developed a concept design for ECRMS, the system chosen to replace ARMS.<sup>293</sup>

Initially, OA officials met frequently with NARA to collect feedback on the ECRMS design.<sup>294</sup> The White House solicited technical evaluations and accepted many of NARA's proposed changes.<sup>295</sup> After the initial stages, however, the White House and NARA stopped meeting. By the first half of 2004, the parties had met only a few times and eventually all meetings ceased until February 2007, when the meetings resumed.<sup>296</sup>

Throughout the development of ECRMS, NARA warned the White House about the potential problems associated with Microsoft Exchange. Specifically, since ARMS was not compatible with Microsoft Exchange, the White House had no archiving system in place to capture emails. In reference to the temporary stop-gap solution for storing Exchange emails that the White House had in place – which called for using Microsoft Exchange's journaling function to put emails in PST files that were then stored on White House servers – one NARA official wrote, "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."<sup>297</sup>

In January 2004, NARA contacted the White House explicitly to convey a warning about the risk of losing emails. A summary of the conversation states, "**Messages in Xchange are NOT being captured in ARMS or any other system external to Xchange, nor do they have**

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<sup>293</sup> [OAP00042936-38](#) (full document: [OAP00042933](#)).

<sup>294</sup> [OAP00043038](#) (full document: [OAP00043038](#)), [OAP00043042](#) (full document: [OAP00043041](#)), [OAP00050946-47](#) (full document: [OAP00050946](#)).

<sup>295</sup> [OAP00007457](#) (full document: [OAP00007457](#)), [OAP00025938-40](#) (full document: [OAP00025938](#)).

<sup>296</sup> [OAP00042936-38](#) (full document: [OAP00042933](#)).

<sup>297</sup> [Email from Sam Watkins to Theresa Payton](#), Nov. 6, 2007 (NARA Bates No. 001634-35) (HOCR exhibits).

**plans to capture them prior to implementation of ECRMS”** (emphasis in original).<sup>298</sup> In view of these concerns, NARA wanted the White House to bring ECRMS online as soon as possible.<sup>299</sup> In the event of a transition in 2005, NARA understood the White House would use ECRMS to ingest all the Microsoft Exchange emails before transferring them to NARA.<sup>300</sup>

Even though Bush White House officials were no longer meeting with NARA, NARA continued to believe the White House was moving forward with ECRMS and would have the system online before a possible transition on January 20, 2005.<sup>301</sup> But because White House officials did not meet with NARA in 2005 and 2006, NARA was unable to confirm whether ECRMS had been implemented or whether any email messages had been lost.

In February 2007, after two years of repeatedly and unsuccessfully trying to meet with White House officials, NARA finally found out the White House was discontinuing ECRMS.<sup>302</sup> NARA did not accept OA’s subsequent explanation, provided in October 2007, that the White House had terminated ECRMS because, “1) The system would require 18 months to ingest the existing backlog of messages in the Microsoft Xchange system” and, “2) The system offered users no option to distinguish between Presidential record and political or personal materials.”<sup>303</sup>

NARA countered there was still enough time to ingest all emails before the transition. NARA also reminded the White House that OA’s counsel previously had evaluated the issue of segregating presidential and personal/political materials and had decided not to differentiate the files.<sup>304</sup> Indeed, the segregation of records was discussed widely during the design of ECRMS and was something NARA repeatedly had asked the Bush White House to include in its ECRMS system design.<sup>305</sup> Additionally, NARA explained it already had processed a mix of record/non-record documents from the Clinton Administration and therefore knew how to

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<sup>298</sup> [OAP00053988-89](#) (full document: [OAP00053987](#)).

<sup>299</sup> [OAP00042858-60](#) (full document: [OAP00042858](#)).

<sup>300</sup> [OAP00053646](#) (full document: [OAP00053646](#)).

<sup>301</sup> *Id.*

<sup>302</sup> [OAP00042938](#) (full document: [OAP00042933](#)), [OAP00053462](#) (full document: [OAP00053462](#)).

<sup>303</sup> [NARA Record of Meeting](#), Nov. 11, 2007 (NARA Bates No. 1628-30) (HOCR exhibits).

<sup>304</sup> *Id.*

<sup>305</sup> [OAP00042852-53](#) (full document: [OAP00042851](#)), [OAP00025934-35](#) (full document: [OAP00025934](#)), [OAP00042856](#) (full document: [OAP00042856](#)).

process similar documents from the Bush administration.<sup>306</sup>

In the end, NARA's worst fears were realized. By ignoring repeated warnings about the risk of losing emails created on Microsoft Exchange, the Bush White House in fact lost millions of such emails and operated under a dysfunctional archiving system. Just as troubling, the Bush White House cited the very concerns NARA had raised throughout ECRMS's development – concerns the White House ignored repeatedly – to justify its decision to abort ECRMS, at an ultimate and wasteful expenditure of millions of dollars and several years of effort.

*NARA's Repeated Attempts To Meet With The Bush White House To Prepare For The Transition*

Upon President Bush's reelection in 2004, NARA started pressing the White House for a meeting to begin planning for the 2009 transition.<sup>307</sup> Although NARA wanted to begin planning as soon as possible, the White House refused to meet.<sup>308</sup> Only after OA contacted NARA in January of 2007, to inquire about borrowing a staffer, was NARA able to convince the White House to schedule a meeting.<sup>309</sup>

Subsequently, NARA and OA started meeting to outline the transition. But NARA was hampered by OA's refusal to provide NARA with any critical information about the White House email system.<sup>310</sup> Just as NARA was starting to make headway, the planning meetings were disrupted by CREW's public revelation of the missing email scandal.<sup>311</sup> NARA and the White House did not resume the formal transition planning process until October 2007.<sup>312</sup>

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<sup>306</sup> [NARA Record of Meeting](#), Nov. 11, 2007 (NARA Bates No. 1628-30) (HOCR exhibits).

<sup>307</sup> [OAP00042878](#) (full document: [OAP00042878](#)).

<sup>308</sup> [OAP00042906](#) (full document: [OAP00042906](#)), [OAP00053462](#) (full document: [OAP00053462](#)).

<sup>309</sup> [OAP00053462](#) (full document: [OAP00053462](#)), [OAP00042938](#) (full document: [OAP00042933](#)).

<sup>310</sup> [OAP00042902](#) (full document: [OAP00042902](#)), [OAP00042906](#) (full document: [OAP00042906](#)), [OAP00053532](#) (full document: [OAP00053532](#)), [OAP00053535-38](#) (full document: [OAP00053535](#)), [OAP00054006](#) (full document: [OAP00054005](#)), [OAP00053464-66](#) (full document: [OAP00053464](#)).

<sup>311</sup> [OAP00053571-73](#) (full document: [OAP00053571](#)), [OAP00042906](#) (full document: [OAP00042906](#)), [OAP00054006](#) (full document: [OAP00054005](#)).

<sup>312</sup> [OAP00053462](#) (full document: [OAP00053462](#)), [OAP00053819](#) (full document: [OAP00053819](#)).

Throughout 2007, NARA continued to urge the White House to begin planning for the transition. One email from October 5, 2007, states, “Here, at last, is the invite to what they claim will be the beginning of real transition meetings.”<sup>313</sup> Several documents from October 2007 express frustration at the lack of cooperation from the White House.<sup>314</sup> On November 27, 2007, NARA officials finally met with staff from OCIO to discuss how to transfer electronic records to NARA, and an April 29, 2008 presentation states, “periodic meetings targeting specific subject areas are continuing.”<sup>315</sup>

### *NARA Repeated Efforts To Learn About The Missing Email Scandal*

Significant documentation confirms the Bush White House knew about the missing emails as early as October of 2005, and knew about problems with the Exchange email system well before that date. The White House, however, failed to inform NARA about the missing emails – consisting of both presidential and federal records that by law had to be preserved – until much later.<sup>316</sup> The first press reports about missing emails appeared in February of 2006, when Special Prosecutor Patrick Fitzgerald wrote in a letter to attorneys for Mr. Libby that emails might be missing from the Office of the Vice President and from the Executive Office of the President.<sup>317</sup> When NARA contacted the White House about these reports, the White House advised NARA, “they did not believe there was 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.”<sup>318</sup>

Apparently after this contact by NARA, the White House directed its employees not to cooperate with NARA. Steven McDevitt advised the House Oversight and Government Reform Committee he was told not to communicate with NARA officials about any problems with missing email:

Sometime during the Summer of 2006, I was directed by the CIO that I was not allowed to discuss the potential email retention issues and the analysis that was performed by OCIO with the

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<sup>313</sup> [OAP00053819](#) (full document: [OAP00053819](#)).

<sup>314</sup> [OAP00053532](#) (full document: [OAP00053532](#)), [OAP00042936-38](#) (full document: [OAP00042933](#)).

<sup>315</sup> [OAP00005140](#) (full document: [OAP00005111](#)).

<sup>316</sup> [OAP00053571-74](#) (full document: [OAP00053571](#)).

<sup>317</sup> Fitzgerald letter [at 7](#), [OAP00042936-38](#) (full document: [OAP00042933](#)).

<sup>318</sup> [OAP00042936-38](#) (full document: [OAP00042933](#)).

NARA staff. I was to inform any NARA staff who contacted me about these issues to direct all inquires about email records management to White House Counsel and White House Records Management.<sup>319</sup>

Even when White House officials met with NARA, they withheld the fact of the missing emails. On February 6, 2007, several NARA officials met with OA to discuss ECRMS and begin planning for the transition. According to NARA, during this meeting, “OA [gave] NARA no indication that there [was] a problem with any missing emails.”<sup>320</sup>

Following the release of CREW’s report on the missing email scandal, NARA officials requested a briefing with the White House about the missing emails on April 14, 2007.<sup>321</sup> On April 25, 2007, White House counsel met with NARA senior staff and then-Archivist Allen Weinstein to discuss the situation. In a follow-up letter dated May 1, 2007, the archivist urged the White House to “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.”<sup>322</sup> The archivist’s letter also reiterated the need for NARA to meet with White House officials to begin planning for the transition. Once again, however, the White House dragged its feet on these requests.<sup>323</sup>

On May 6, 2007, NARA sent another letter to the White House requesting that the White House, “look into [the missing emails] to determine whether instances of alienation of Federal records actually occurred and then notify [NARA] of [their] findings.”<sup>324</sup> As of February 26, 2008, NARA still had not received a reply to that letter.<sup>325</sup>

In a subsequent meeting with NARA on May 21, 2007, the White House explained

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<sup>319</sup> McDevitt responses, [part 2, at 8](#).

<sup>320</sup> [OAP00042936-38](#) (full document: [OAP00042933](#)), [OAP00053469](#) (full document: [OAP00053469](#)).

<sup>321</sup> [OAP00042936-38](#) (full document: [OAP00042933](#)).

<sup>322</sup> [OAP00042954-56](#) (full document: [OAP00042954](#)).

<sup>323</sup> [OAP00053819](#) (full document: [OAP00053819](#)).

<sup>324</sup> [OAP00042959](#) (full document: [OAP00042959](#)), [OAP00053785](#) (full document: [OAP00053785](#)).

<sup>325</sup> [Allen Weinstein, Written testimony before the House Oversight and Government Reform Committee](#), Feb. 26, 2008.

several facets of the missing email situation, but refused to provide crucial details.<sup>326</sup> NARA's notes from the meeting detail many of the shortcomings of the White House's response to the missing email problem. First, although the "gaps in emails on the EOP system" were "from late 2003 to late 2005," the White House was unable to "assure that the problem does not extend beyond that timeframe, and even into the present." Second, although NARA pressed for "more specifics on what they [the White House] know so far" the White House responded it "could not at this point answer any of these questions." Third, not until this meeting was NARA able to confirm a fundamental fact about the White House's system, specifically "how many emails systems [sic] existed for Bush EOP emails."<sup>327</sup> In response, NARA stressed to the White House 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."<sup>328</sup> Both parties agreed that even as the White House was looking into the missing email problem, they needed to "move ahead as quickly as possible with meetings for the transition planning."<sup>329</sup>

NARA continued to press for more information about the missing emails, particularly "more technical information,"<sup>330</sup> and to urge speed with any email recovery project. The White House continued to ignore NARA's requests. On June 20, 2007, NARA sent another letter to the White House requesting more information and advising, "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."<sup>331</sup> The letter continues, "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."<sup>332</sup> The White House refused to provide NARA with the requested information and much obfuscation by the Bush White House followed.

On June 27, 2007, NARA officials met with the White House to press for more information on the missing emails. During the meeting, White House officials stated they had not completed their review of the missing emails and had no new information. A NARA

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<sup>326</sup> [Email from Gary Stern to Allen Weinstein](#), May 23, 2007 (NARA Bates No. 001620-22) (HOCR exhibits), [OAP00053884](#) (full document: [OAP00053884](#)).

<sup>327</sup> *Id.*, [OAP00053884](#) (full document: [OAP00053884](#)).

<sup>328</sup> *Id.*

<sup>329</sup> *Id.*

<sup>330</sup> [OAP00053599](#) (full document: [OAP00053583](#)).

<sup>331</sup> [Email from Gary Stern to Emmet Flood and Christopher Oprison](#), June 20, 2007 (NARA Bates No. 001624) (HOCR exhibits).

<sup>332</sup> *Id.*

summary of the meeting states, “We did note that during the last two years NARA had experienced a notable drop off in open communication and interaction with OA.”<sup>333</sup> NARA also urged the White House to properly document all backup tapes and estimate how much space NARA would need to ingest Bush White House data.

On July 16, 2007, NARA sent an email to the White House requesting a conference call to talk about the missing emails, a request the White House rebuffed.<sup>334</sup>

On September 5, 2007, a NARA official wrote a memo to the archivist stating, “Despite a number of very positive meetings and discussions...we still have made almost zero progress in actually moving ahead with the important and necessary work that is required for a successful transition.”<sup>335</sup> The memo went on to say, “Of most importance, we still know virtually nothing about the status of the alleged missing White House emails.”<sup>336</sup>

Finally, on September 25, 2007, the White House provided NARA with a more thorough explanation of the missing email situation. White House CIO Theresa Payton explained in detail the process the White House used to store email from Microsoft Exchange and how the White House had determined that emails in fact were missing. According to Ms. Payton:

In 2005, Microsoft used Visual Basic to build a tool for EOP to count the messages in the component PST files and generate reports based on those counts. This is the report which first generated results indicating there were problems with the email collection system, i.e. all emails were not being collected.<sup>337</sup>

The White House explained further it used that same tool to verify the results, but a second run in 2007 uncovered more emails than were recorded in 2005. The White House explained that accordingly it was in the process of developing a new tool to analyze the messages and promised to have the results by the end of October 2007.<sup>338</sup>

NARA met with White House officials several times in October 2007, and specifically on

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<sup>333</sup> [OAP00042906](#) (full document: [OAP00042906](#)).

<sup>334</sup> [OAP00053864](#) (full document: [OAP00053864](#)).

<sup>335</sup> HOCR report [at 15](#).

<sup>336</sup> *Id.*

<sup>337</sup> [OAP00053848](#) (full document: [OAP00053847](#)).

<sup>338</sup> [OAP00053848-49](#) (full document: [OAP00053847](#)).

October 11, 2007, to discuss the transition and the missing emails.<sup>339</sup> A summary of the meeting states:

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.<sup>340</sup>

Moreover, although the White House initiated an investigation after discovering the missing emails in 2005 to determine the extent of the problem, and prepared a report summarizing its findings, the White House repeatedly refused to share that report with NARA, and offered no adequate explanation why NARA could not see the report.<sup>341</sup> An internal NARA email from October 15, 2007 states, “We have repeatedly asked to see [the 2005 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 [Department of Justice].”<sup>342</sup> Thus, while DOJ apparently had access to the report at a time when DOJ counsel was representing both NARA and the Executive Office of the President in litigation brought by CREW and the National Security Archive over the missing email scandal, DOJ apparently also kept the report secret from EOP’s co-defendant NARA

On October 19, 2007, NARA sent an email to the White House stating “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.”<sup>343</sup> Finally, on October 31, 2007, NARA officials were allowed to see the 2005 report, but they were not allowed to keep it. Based on their brief review of the report, NARA officials outlined a number of steps for the White House to take to understand and verify the

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<sup>339</sup> [OAP00053793](#) (full document: [OAP00053793](#)), [OAP00053838](#) (full document: [OAP00053838](#)).

<sup>340</sup> [NARA Record of Meeting](#), Nov. 11, 2007 (NARA Bates No. 1628-30) (HOCR exhibits).

<sup>341</sup> [OAP00053840](#) (full document: [OAP00053840](#)), [OAP00053534](#) (full document: [OAP00053532](#)), [OAP00053538](#) (full document: [OAP00053535](#)).

<sup>342</sup> [OAP00053534](#) (full document: [OAP00053532](#)).

<sup>343</sup> [OAP00042923](#) (full document: [OAP00042923](#)).

results of the 2005 report.<sup>344</sup>

While there are few documents regarding the interaction between the two agencies after October 2007, one document from October 2008 reveals that NARA and OA still had not agreed on how to segregate PRA and FRA records, a critical issue for NARA in its ingestion of records from the Bush presidency:

The meeting NARA needs regarding the Email transfer should address . . . the requirement to segregate the PRA and FRA records. In fact, the segregation of the records is of paramount importance to NARA because we do not know how we can accept, ingest, and service the record without the segregation of PRA and FRA occurring first. We have regularly been assured that the OA email system was separating PRA and FRA emails, and that emails could be organized and sorted by PRA and FRA components.<sup>345</sup>

This documentation suggests that once the missing email scandal broke, the White House tried to limit NARA's influence. White House officials repeatedly tried to keep NARA out of the loop and agreed to share information only after lengthy delays. Even though NARA expressed a willingness to help and offered advice, the White House largely ignored NARA. In the end, ignoring NARA's warnings and offers of help cost the Bush White House dearly in additional dollars and resources, and deprived the public of valuable historical records that still have not been located or restored.

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<sup>344</sup> [Email from Sam Watkins to Theresa Payton](#), Nov. 6, 2007 (NARA Bates No. 001634-35) (HOCR exhibits).

<sup>345</sup> [OAP00050250](#) (full document: [OAP00050250](#)). As discussed above, this assurance was false as the system was not separating PRA and FRA emails.