

~~SECRET//ORCON/NOFORN~~ [REDACTED]

related to communicating around holidays, and it was often necessary to communicate in code or do the best you could to convey the information considering the e-mail system you were using.<sup>503</sup> In reference to the same e-mail, Clinton believed if the foreign press was to obtain information from that e-mail, it would not cause damage to the US Government.<sup>504</sup> When asked, Clinton recalled being briefed on SAP information but could not recall any specific briefing on how to handle SAP information.<sup>505</sup> Clinton stated she knew SAP information was of great importance and needed to be handled carefully.<sup>506</sup>

*F. (U//~~FOUO~~) Gaps in Clinton E-mail Recovered from Personal Server Systems*

(U//~~FOUO~~) There were no e-mails provided by Williams & Connolly to State or the FBI dated from January 21, 2009 to March 18, 2009. FBI investigation identified an additional 18 days where Clinton did not provide State any responsive e-mail. FBI investigation determined 14 of the 18 days where Clinton did not provide State any responsive e-mail correspond with e-mail outages affecting Clinton's personal server systems as a result of both Hurricane Irene<sup>uuu</sup> and Hurricane Sandy<sup>vvv</sup>. FBI investigation indicated other explanations for gaps in Clinton's e-mail production could include user deletion prior to PRN's transfer of Clinton's e-mails for review, or flaws in the archiving and sorting process used to generate the responsive production to State.

**4. (U//~~FOUO~~) Results of the FBI Investigation and Analysis of Cyber Intrusion Potential**

*A. (U//~~FOUO~~) Cyber Analysis of Clinton's Personal Server Systems*

(U//~~FOUO~~) FBI investigation and forensic analysis did not find evidence confirming that Clinton's e-mail server systems were compromised by cyber means. The FBI's inability to recover all server equipment and the lack of complete server log data for the relevant time period limited the FBI's forensic analysis of the server systems. As a result, FBI cyber analysis relied, in large part, on witness statements, e-mail correspondence, and related forensic content found on other devices to understand the setup, maintenance, administration, and security of the server systems.

(U//~~FOUO~~) Investigation determined Clinton's clintonemail.com e-mail traffic was potentially vulnerable to compromise when she first began using her personal account in January 2009. It was not until late March 2009, when the Pagliano Server was set up and an SSL certificate<sup>www</sup> was acquired for the clintonemail.com domain—providing encryption of login credentials, but not e-mail content stored on the server—that access to the server was afforded an added layer of security.<sup>507,508</sup> The certificate was valid until September 13, 2013, at which time PRN obtained a new certificate valid until September 13, 2018.<sup>509</sup>

(U//~~FOUO~~) During his December 22, 2015 FBI interview, Pagliano recalled a conversation with [REDACTED] at the beginning of Clinton's tenure, in which [REDACTED] advised he would not be

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<sup>uuu</sup> (U//~~FOUO~~) The first of two extended outages occurred from August 28 to 30, 2011 (3 days) as a result of Hurricane Irene.

<sup>vvv</sup> (U//~~FOUO~~) The second extended outage occurred from October 30, 2012 to November 9, 2012 (11 days) as a result of Hurricane Sandy.

<sup>www</sup> (U//~~FOUO~~) According to FBI forensic analysis, there was no SSL certificate on the Pagliano Server between March 19, 2009, when the mail service was operational, and March 29 or 30, 2009, when the SSL certificate was installed on the server.

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