

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF PENNSYLVANIA

JILL STEIN, RANDALL REITZ, ROBIN HOWE,
SHANNON KNIGHT, EMILY COOK, and
KIMBERLY KUPKA,

Plaintiffs,

v.

PEDRO A. CORTÉS, in his official capacity as
Secretary of the Commonwealth; and JONATHAN
MARKS, in his official capacity as Commissioner
of the Bureau of Commissions, Elections, and
Legislation,

Defendants.

No. 16-CV-6287 (PD)

AMENDED COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF

NOW COME Plaintiffs Jill Stein, Randall Reitz, Robin Howe, Shannon Knight, Emily Cook, and Kimberly Kupka (collectively “Plaintiffs”), by and through their attorneys, Montgomery McCracken Walker & Rhoads LLP and Emery Celli Brinckerhoff & Abady LLP, and for their Complaint for declaratory and injunctive relief against Pedro A. Cortés, in his official capacity as Secretary of the Commonwealth; and Jonathan M. Marks, in his official capacity as Commissioner of the Bureau of Commissions, Elections, and Legislation, hereby allege as follows.

INTRODUCTION

1. The Pennsylvania election system is a national disgrace. Voters are forced to use vulnerable, hackable, antiquated technology banned in other states, essentially relying on the

kindness of machines. That kindness is misplaced. At least some of the plaintiffs' votes were almost certainly not counted in the 2016 election. They were disenfranchised.

2. Compounding the problem, there is no paper trail in the majority of Pennsylvania election districts. Voting machines are electoral black sites: No one permits voters or candidates to examine them.

3. After election day, voters are equally helpless to make sure their votes are counted. The Election Code requires 27,474 voters in 9,158 districts to bring notarized petitions to county boards, in time for shifting, divergent, and secret deadlines known to no one except, perhaps, 67 separate county election boards. In court recounts, voters must pay exorbitant fees, and (according to boards of elections) should only one voter fail to sign a single petition in a single district anywhere in the State, no one can seek a recount anywhere.

4. This labyrinthine, incomprehensible, and impossibly burdensome election regime might make Kafka proud. But for ordinary voters, it is a disaster.

5. These arbitrary, unreasonable rules place an impossible burden on the right to vote, the right to have one's vote counted, and the right to pursue recounts in Pennsylvania. As a result, Defendants have violated the United States Constitution.

JURISDICTION AND VENUE

6. This Court has jurisdiction over this action pursuant to 28 U.S.C. §§ 1331, 1343(a)(3) and 1357; and 42 U.S.C. § 1983.

7. This Court has authority to issue declaratory and injunctive relief pursuant to 28 U.S.C. §§ 2201 and 2202.

8. Venue in this district is proper pursuant to 28 U.S.C. § 1391(b).

PARTIES

9. Plaintiff Jill Stein was the Green Party presidential candidate for the November 2016 election, and her name appeared on the ballot in Pennsylvania.

10. Plaintiff Randall Reitz is a voter in Montgomery County of the State of Pennsylvania, and voted in the 2016 presidential election. After the election, Mr. Reitz was one of 100 voters to file petitions formally contesting the election results.

11. Plaintiff Robin Howe is a voter in Montgomery County in the State of Pennsylvania, and voted in the 2016 presidential election. She attempted to vote on a direct recording election (“DRE”) machine. However, her vote for President and for other candidates was almost certainly counted as a “no vote” by the machine. Ms. Howe was disenfranchised in the 2016 election.

12. Plaintiff Shannon Knight is a voter in Montgomery County in the State of Pennsylvania, and voted in the 2016 presidential election. She attempted to vote on a DRE machine. However, her vote for President and for other candidates was almost certainly counted as a “no vote” by the machine. Ms. Knight was disenfranchised in the 2016 election.

13. Plaintiff Emily Cook is a voter in Montgomery County in the State of Pennsylvania, and voted in the 2016 presidential election. Ms. Cook is a registered Green Party member, and at least attempted to vote for Jill Stein in the 2016 presidential election.

14. Plaintiff Kimberly Kupka is a voter in Montgomery County in the State of Pennsylvania, and voted in the 2016 presidential election. She attempted to vote on a DRE machine. However, her vote for President and for other candidates was almost certainly counted as a “no vote” by the machine. Ms. Kupka was disenfranchised in the 2016 election. Ms. Kupka also served as a volunteer coordinator for the post-election recount effort in Montgomery

County. She organized hundreds of Montgomery County voters to sign petitions and helped to compile those petitions and deliver them for filing. She personally petitioned the Court of Common Pleas for a recount in her precinct, but her petition was rejected.

15. Mr. Reitz, Ms. Howe, Ms. Knight, Ms. Cook, and Ms. Kupka are collectively referred to as the “Voter Plaintiffs.”

16. Defendant Pedro Cortés is the Secretary of the Commonwealth and is being sued in his official capacity. In his capacity as Secretary of the Commonwealth, Mr. Cortés heads the Pennsylvania Department of State (“DoS”) and is the chief election official in Pennsylvania.

17. Defendant Jonathan Marks is the Commissioner of the Bureau of Commissions, Elections, and Legislation in the DoS, and is being sued in his official capacity. In his capacity as Commissioner, Mr. Marks oversees the administration of elections in Pennsylvania and is responsible for planning, developing, and coordinating statewide implementation of the Pennsylvania Election Code.

18. Both Defendants enforce and implement the Pennsylvania Election Code.

STANDING

19. All Pennsylvania voters have the constitutional right to make sure their votes are counted, and have standing to vindicate that constitutional right. In addition, given that Pennsylvania voters (at least on paper) have a right to a recount under Pennsylvania law, the U.S. Constitution makes “clear that the State could not use arbitrary or unreasonable procedural rules to make that right a nullity.” *Stein v. Thomas*, --- Fed. App’x ---, 2016 WL 7131508, at *3 (6th Cir. 2016). Pennsylvania voters, including the Voter Plaintiffs, have standing to pursue their right to a recount, and to ensure that their recount rights are not subject to “arbitrary or unreasonable procedural rules.”

20. As set forth below, none of the Voter Plaintiffs was able to ensure his or her vote was counted in the 2016 election. Nor, absent relief from the Court, will the Voter Plaintiffs be able to ensure their votes are counted in future elections. In the case of Plaintiffs Knight, Howe, and Kupka, it is almost certain that their votes for President and for other candidates were **not** counted in the 2016 election.

21. In addition, Pennsylvania voters, including the Voter Plaintiffs, were unable to pursue their right to a recount, or to ensure their votes were counted in any way, as a result of arbitrary, unreasonable, byzantine, and absurdly burdensome election rules, as well as Defendants' conduct set forth below. Nor, absent relief from the Court, will the Voter Plaintiffs be able to ensure their right under Pennsylvania law to a recount in future elections, unburdened by an arbitrary and unreasonable election regime.

22. Stein has standing to ensure that every vote cast for her was actually counted. In addition, whether or not Stein had a "realistic" possibility of winning the entire Pennsylvania vote, the number of votes counted for Stein affects, *inter alia*, (i) her ability to run as a viable presidential candidate in future elections; (ii) her ability to be renominated as a candidate by the Green Party; (iii) fundraising for her and the Green Party; and (iv) public perception of her candidacy and of the Green Party.

23. Stein also has standing derivative of Pennsylvania voters (such as Plaintiff Emily Cook) who attempted to vote for her in the 2016 election.

FACTUAL ALLEGATIONS

Voting Machines Are Susceptible to Attack and Error

24. In Pennsylvania, more than 85% of voters vote on DRE machines with no paper trail. Ex. 41. The remaining Pennsylvania voters fill out paper ballots tabulated on optical scan

machines. *Id.* In contrast, 70% of voters nationwide have their votes recorded on some form of paper. Declaration of J. Alex Halderman, dated Dec. 5, 2016 (“Halderman Decl.”), Dkt. #8 ¶ 18.¹ Pennsylvania thus relies disproportionately and primarily on electronic voting with no paper trail. Though the Commonwealth uses a wide variety of electronic voting machines, all are unreliable, vulnerable to interference and error, and susceptible to hacking.

25. DRE machines with no paper trail give voters no way to ensure that their intended choices were accurately recorded by the machine, and no way for election officials to verify those choices in the case of a recount.

26. Experts have repeatedly documented in peer-reviewed and state-sponsored studies that electronic voting machines—including both DRE machines *and* optical scan machines—have serious cybersecurity problems. “Voting machines are computers with reprogrammable software. An attacker who can modify that software by infecting the machines with malware can cause the machines to provide any result of the attacker’s choosing.” Halderman Decl. ¶ 11. As demonstrated in laboratory tests, in just a few seconds, anyone can install vote-stealing malware on a voting machine that silently alters the electronic records of every vote. *Id.*²

27. That the machines themselves may never be connected to the Internet is irrelevant; memory media and other devices are routinely connected to the machines, and those provide opportunities for the insertion of malware. *See, e.g., id.* ¶ 12; Affidavit of Daniel Lopresti, dated Dec. 2, 2016 (“Lopresti Aff.”), Dkt. #11 ¶ 13 (viruses can be spread through the use of contaminated memory cards); Affidavit of Harri Hursti, dated Dec. 5, 2016 (“Hursti Aff.”), Dkt. #10 ¶¶ 15-18 (fraudulent firmware can be installed through the audio-ballot

¹ All previously docketed materials cited in the Amended Complaint are incorporated by reference into the Amended Complaint.

² A video documenting this result is publicly available at <https://youtu.be/aZws98jw67g>.

cartridge); Affidavit of Duncan A. Buell, dated Dec. 2, 2016 (“Buell Aff.”), Dkt. #12 ¶¶ 17-24 (malware can be spread by removable media connected to voting machines).

28. For example, shortly before each election—after the candidates have been chosen—poll workers copy the ballot design from a regular desktop computer in a government office (or at a company that services the voting machines) and use removable media (akin to the memory card in a digital camera) to load the ballot design on to each machine. Halderman Decl. ¶ 12. “That initial computer is almost certainly not well enough secured to guard against attacks by foreign governments. If technically sophisticated attackers infect that computer, they can spread vote-stealing malware to every voting machine in the area.” *Id.* Sophisticated attackers including nation-states have developed a variety of techniques to attack non-Internet-connected systems. *Id.* (discussing the Stuxnet virus, which is spread through flash drives).

29. Most voting machines also have reprogrammable software (“firmware”) easily manipulated in advance of the election to introduce vote-sealing malware. *Id.* “Technically sophisticated attackers can accomplish this with ease.” *Id.*

30. Optical scan machines can also be attacked in a number of ways, including attacks on the precinct scanners, election media processors, high-speed scanners, and central tabulators. Hursti Aff. ¶¶ 40-58 (detailing various attack vectors to which optical scan voting systems are vulnerable).

31. Because of these vulnerabilities, *paper* ballots are the best and most secure technology available for casting votes. Paper cannot be hacked. It is the only method that allows voters to be confident that their vote is recorded accurately.

32. DREs with voter-verifiable paper audit trails (“VVPAT”) are the next best option. A DRE with a VVPAT at least allows the voter to review a printed record of the vote he has just

cast on a computer. That paper record is then stored in the machine for later audit and recount purposes. “Only a paper record documents the vote in a manner that cannot later be modified by malware or other forms of cyberattacks.” Halderman Decl. ¶ 17. None of the DREs used by Pennsylvania has VVPAT, meaning none gives voters any way to verify that their votes were accurately recorded.

Pennsylvania’s Electronic Voting Machines: Antiquated, Vulnerable, Dangerous

33. In the 2016 general election, Pennsylvania used six different models of DREs. Ex. 41. Each has been examined by security researchers, and all have security vulnerabilities easily exploited by attackers to alter the outcome of elections Halderman Decl. ¶ 20 (“[E]very DRE in use in Pennsylvania is vulnerable to cyberattacks.”).

34. Each of the six systems used in Pennsylvania is outdated and susceptible to malicious or inadvertent interference or error.

Election Systems & Software iVotronic

35. The iVotronic is used by 35% of Pennsylvania’s registered voters, including in Allegheny County, one of the state’s largest counties. Ex. 41.³

36. The machine was studied by security experts as part of Project EVEREST, commissioned by the Ohio Secretary of State. Halderman Decl. ¶ 27; *see also* EVEREST: Evaluation and Validation of Election-Related Equipment, Standards and Testing (Dec. 7, 2007) [hereinafter “EVEREST”], *available at* <http://www.patrickmcdaniel.org/pubs/everest.pdf>.⁴ The investigation found that firmware on these machines contained buffer overflow vulnerabilities,

³ According to publicly available data, 2,813,186 voters were registered in counties that use primarily iVotronic voting machines, out of a total of 8,077,727 registered voters. Ex. 41.

⁴ The EVEREST report was prepared by teams from Pennsylvania State University, the University of Pennsylvania, and WebWise Security, Inc.

which could be exploited to infect the machines with malware and alter the election outcome. Halderman Decl. ¶ 27.

37. Further vulnerabilities in the machines include that the Personalized Electronic Ballot module (“PEB”), used to program the ballot design before the election, has easily circumventable security protections. *Id.* As Professor Duncan Buell explains, an attacker could use a PEB or another device that emulates a PEB, like a Palm Pilot, to upload malicious code to an iVotronic machine. Buell Aff. ¶ 15.

38. The EVEREST researchers also found that the cryptographic keys used by the machines to encrypt votes could be easily extracted by attackers, who could then read or manipulate the vote data. Halderman Decl. ¶ 27.

39. The machines are also susceptible to inadvertent error, as the complexity of the system invites mistakes from poll workers, and software failures can disrupt the accurate tally of votes. Buell Aff. ¶¶ 25-26.

Danaher Shouptronic 1242

40. Approximately 29% of registered Pennsylvania voters rely on the Shouptronic machines. Ex. 41.⁵ These DRE machines are used in Philadelphia, among other counties. *Id.*

41. This model was introduced in the 1980s. Its security features have not been updated in more than 30 years. Halderman Decl. ¶ 24.

42. Researchers at Lehigh University, led by computer science professor Daniel Lopresti, analyzed the Shouptronic’s computer architecture and found that the firmware used to direct the machine’s operation and the voting records stored in the machine’s memory are vulnerable to tampering in multiple ways. Lopresti Aff. ¶ 13. “The machines’ design makes it

⁵ According to publicly available data, 2,316,151 voters were registered in counties that primarily use Shouptronic voting machines, out of a total of 8,077,727 registered voters. Ex. 41.

extremely likely that malware can infect the machines via the removable memory cartridges that are used to program the ballot design and retrieve vote totals.” Halderman Decl. ¶ 24; *see also* Lopresti Aff. ¶ 13.

43. These machines have already caused documented problems in Pennsylvania, losing around 200 votes in 2005. *Berks County May Ask People to Vote Again in Two Precincts*, May 18, 2005, *available at* <http://www.votersunite.org/article.asp?id=5408>. The machines have only grown older and more out of date since then.

Premier/Diebold (Dominion) AccuVote TSX

44. Approximately 10% of Pennsylvania voters rely on the AccuVote TSX. Ex. 41.⁶

45. Dr. Halderman performed a security analysis of the AccuVote TSX as part of the California Top-to-Bottom review; the machine was also studied as part of Ohio’s Project EVEREST and by independent security researchers. Halderman Decl. ¶ 25. All of these studies found serious security problems.

46. The security features built into the machines are inadequate to defend against cyberattacks, and vote-stealing malware can spread on the machines’ removable memory cards. *Id.* “If attackers infect counties’ election management system computers, the attacker can spread vote-stealing malware to every voting machine in the county.” *Id.* A local attacker with physical access to the machines can additionally tamper with them by manipulating the machines’ removable memory cards—and a hacker can pick the lock to the memory cards using only a BIC pen. *Id.*

47. The AccuVote TSX’s problems are well-known. In 2007, California reviewed the system, and found that the machines’ security mechanisms were “inadequate” and that the

⁶ According to publicly available data, 851,515 voters were registered in counties that primarily use AccuVote voting machines, out of a total of 8,077,727 registered voters. Ex. 41.

system was “susceptible to computer viruses . . . which could allow an attacker with access to only one voting unit or memory card to spread malicious code, between elections, to many, if not all, of a county’s voting units.”⁷ At the conclusion of this review, the state deemed the AccuVote TSX system “defective or unacceptable” and withdrew the machine’s certification for use in most California elections.

Hart InterCivic eSlate

48. Approximately 6% of voters in Pennsylvania are registered in counties that rely on the Hart InterCivic eSlate machine.⁸ Ex. 41.

49. This model was examined by security experts as part of the California “Top to Bottom” election technology review⁹ and the Ohio EVEREST election system security review. Both studies found significant vulnerabilities, and California subsequently decertified the machine. Halderman Decl. ¶ 22; *see also* EVEREST, *supra*. “The memory cards used by eSlates to transfer votes to a central counting computer are vulnerable to undetectable tampering. The internal security mechanisms of the machines are easily defeated, enabling malicious software to change or erase votes, cast extra votes, or modify the eSlate’s software or the software of the machine used to tabulate votes. These vulnerabilities could allow attackers to compromise large numbers of machines and alter the election outcome.” Halderman Decl. ¶ 22.

⁷ Withdrawal of Approval of Diebold Election Systems, Inc., Cal. Sec’y of State (Oct. 25, 2007), *available at* <http://votingsystems.cdn.sos.ca.gov/oversight/ttbr/diebold-102507.pdf>.

⁸ According to publicly available data 490,472 voters were registered in counties that primarily use eSlate voting machines, out of a total of 8,077,727 registered voters. Ex. 41.

⁹ Withdrawal of Approval of Hart InterCivic System 6.2.1 DRE & Optical Scan Voting System and Conditional Re-Approval of Use of Hart InterCivic System 6.2.1 DRE & Optical Scan Voting System, Cal. Sec’y of State (Dec. 6, 2007), *available at* <http://votingsystems.cdn.sos.ca.gov/oversight/ttbr/hart-amended-recert-final-120707.pdf>.

Sequoia (Dominion) AVC Advantage

50. Approximately 9% of registered Pennsylvania voters vote in counties that rely primarily on the AVC Advantage.¹⁰ Ex. 41.

51. This model has been studied by multiple groups of security researchers, including J. Alex Halderman and Daniel Lopresti. Halderman Decl. ¶ 23; Lopresti Aff. ¶ 5. A peer-reviewed security study of the machine in 2009 demonstrated that malware can infect the machines and alter votes. Halderman Decl. ¶ 23. Such malware can spread to the machines via the removable memory cartridges used to program the ballot design and offload votes. *Id.* Dr. Halderman's research further showed that such malware can defeat all of the hardware and software security features used by the machines. *Id.*

52. Other researchers also concluded that the AVC Advantage has significant vulnerabilities, and that it would be straightforward to install vote-stealing malware by replacing one firmware chip. *Id.* (citing Andrew W. Appel et al., Insecurities and Inaccuracies of the Sequoia AVC Advantage 9.00H DRE Voting Machine (Oct. 17, 2008), *available at* <https://mbernhard.com/advantage-insecurities-redacted.pdf>). Those researchers found, among other things, that the machine can be easily hacked with vote-stealing firmware, that fraudulent firmware can be installed into many AVC Advantage machines by viral propagation through the audio-ballot cartridges, and that the Results Cartridges can be easily manipulated to change votes. Appel et al., *supra*, at 2; *see also* Hursti Aff. ¶¶ 15-24.

53. This voting machine's deficiencies are not limited to security vulnerabilities. In the 2008 New Jersey Republican primary, 37 of these machines exhibited a software bug in which the number of votes recorded was higher than the number of voters. Andrew W. Appel et

¹⁰ According to publicly available data, 728,029 voters were registered in counties that primarily use AVC Advantage voting machines, out of a total of 8,077,727 registered voters. Ex. 41.

al., *The New Jersey Voting-machine Lawsuit and the AVC Advantage DRE Voting Machine*, available at https://www.usenix.org/legacy/event/ewtwote09/tech/full_papers/appel.pdf.

Sequoia (Dominion) AVC Edge

54. Also decertified by California in 2007,¹¹ this machine has vulnerabilities similar to those of the TSX and the eSlate. In the California Top-to-Bottom review, security experts found that remote attacks could spread malware to the machines and change, steal, or add votes. Halderman Decl. ¶ 26. “Furthermore, such malware can persist even if election workers reinstall an uncorrupted version of the election software.” *Id.*

55. The California study further discovered that malicious software on the machines could conceal vote-tampering from pre-election testing, hiding manipulation of votes and making the machine output appear otherwise normal. *Id.* The election software running inside the AVC Edge can also be tampered with by a local attacker with physical access to the machine by replacing a memory card inside the machine’s case. *Id.* Dr. Halderman himself demonstrated this vulnerability by hacking an AVC Edge machine to make it run the arcade game Pac-Man. *Id.* A real attacker could just as easily modify the software to alter votes.

56. Given the dismal performance of all of the Pennsylvania DRE systems, no Pennsylvania voter can know whether his or her vote on a paperless DRE is recorded accurately. Ordinary recanvass or recount methods reveal nothing: Such recanvasses simply review the “ballot images” retrieved from the machines’ computer memory—images created by the exact same code that creates the vote tally in the machine. Lopresti Aff. ¶ 15; Hursti Aff. ¶¶ 35-37.

¹¹ Withdrawal of Approval of Sequoia Voting Systems, Inc., Wineds V 3.1.012/AVC Edge/Insight/Optech 400-C DRE & Optical Scan Voting System and Conditional Re-Approval of Use of Sequoia Voting Systems, Inc., Wineds V 3.1.012/AVC Edge/Insight/Optech 400-C DRE & Optical Scan Voting System, Cal. Sec’y of State (Oct. 1, 2009), available at <http://votingsystems.cdn.sos.ca.gov/oversight/ttbr/sequoia-100109.pdf>.

This is like seeking a second opinion from the same doctor. It is virtually useless. Only a forensic examination of the DRE system would allow examiners to determine whether the information stored in the computer memory represents an accurate record of the votes cast on those machines.

The 2016 Election: Unprecedented Interference and Hacking of American Election Systems

57. The experts' concerns about Pennsylvania's use of antiquated and vulnerable technology have risen to alarm in the context of this year's election. The 2016 presidential election was subject to unprecedented cyberattacks. Attackers infiltrated the voter registration systems of Illinois and Arizona and stole voter data. Attackers attempted to breach election offices in more than 20 other states. Attackers broke into the email system of the Democratic National Committee.

The Statutory Scheme for Recounts in Pennsylvania: An Illusory Fraud on the Voter

58. In theory, the Pennsylvania Election Code promises voters the ability to seek a recount directly, based upon good-faith allegations of fraud or mistake. In reality, that promise is illusory in a statewide election. The recount process is byzantine, opaque, inconsistently administered, and hopelessly confusing even to Defendants, the officials in charge.

Statewide County Board Recounts Are Virtually Impossible, and No One Knows the Deadline for Filing

59. Section 1404 of the Election Code, 25 P.S. § 3154, permits voters to request recounts from their county boards of elections. To request a county board recount, three voters in a single election district (often called a precinct) must sign a petition "that an error, although not apparent on the face of the returns, has been committed therein." *Id.* § 3154(e). The petition

must be “verified by affidavit” in front of a notary. *Id.* The petition only activates a recount *in that district. Id.*

60. Pennsylvania has 9,158 election districts in 67 counties. For voters to request a statewide recount in Pennsylvania, 27,474 voters evenly spread throughout all 9,158 districts must write, print, and sign petitions, get them notarized, and bring them to their local county board of elections. Some counties are over 1,000 square miles; the distance to travel to a board of elections can be substantial.¹²

61. The deadlines for voters to accomplish this herculean feat are, at best, short. Either the deadline is “prior to the completion of the computation all of the returns for the county,” 25 P.S. § 3154(e), or “[a]t the expiration of five (5) days after the completion of the computation of votes,” *id.* § 3154(f).¹³ The Pennsylvania Supreme Court has strongly suggested that the latter deadline applies. *See In re Reading Sch. Bd. Election*, 634 A.2d 170, 172-73 (Pa. 1993). Until early December 2016, the Pennsylvania Department of State (“DoS”) apparently had not given guidance to the 67 boards of elections as to which one of these two deadlines applies; after the 2016 election, counties arbitrarily picked one or the other.

62. Because every county counts votes at its own pace, they complete the counts on different dates. Therefore the deadlines for county board recounts vary from county to county, and from election to election. It is impossible for voters to know when a county will reach “the completion of the computation of all of the returns for the county.” 25 P.S. § 3154(e). Election boards do not give notice of this date in advance. Ex. 1 ¶¶ 13-18; 27.

¹² The Court can take judicial notice that Lycoming County, for example, is 1,228.59 square miles of land area. *See* <http://www.census.gov/quickfacts/table/PST045215/42081>.

¹³ If the fifth day falls on a holiday or weekend, it is moved to the first weekday thereafter.

63. Election boards often give no notice of this date even *after* it has passed. Counties may (or may not) post unofficial election results on the Internet. *Id.* ¶ 27; Ex. 26 ¶ 7. Even if a county does post unofficial election results, those results still will not show that the county has complied with all of the procedural requirements for “the completion of the computation of votes,” including the signatures of all members of the county board. 25 P.S. § 3154(f). Election boards also often give no notice of the 5-day period following computation of the vote. Voters are therefore left to guess when the deadline might be to request a Section 1404 recount in any county. It is a guessing game, and voters are often wrong.

64. At least two large Pennsylvania counties have admitted in open court that, as a matter of standard practice, they do not comply with the requirements to complete the initial computation of the returns *at all*. Instead, they proceed straight to final computation. Delaware County has taken the position that unofficial returns are something that “doesn’t exist.” Ex. 51 at 18. *But see* 25 P.S. § 3154(f). Allegheny County has represented that it typically completes the initial computation at the same time as the final computation, without the mandatory five-day gap between the two. Ex. 50 at 37-38 (testimony of Allegheny County Director of Elections that initial computation and final computation are completed at the same meeting). In these counties—home to nearly two million Pennsylvanians—the event that supposedly determines where and when voters must seek a recount never even occurs.

65. Even the Pennsylvania DoS, which in theory supervises the county boards of elections, has no idea and does not publish when the 67 counties complete computation of the votes, or when the 5-day period ends. *See* Exs. 32A-32D (correspondence with DoS and related spreadsheets generated and produced by DoS showing shifting, inconsistent, and incomplete deadlines).

66. For example, as of November 28, 2016 at 2:55pm, DoS/Defendant Marks were unable to determine when computation was complete in 22 counties, when the 5-day period ended in 22 counties, or when certification of the vote occurred in 30 counties. Ex. 32-A. In addition, its computation of the 5-day period was incorrect in at least 11 counties. *Id.* As just two examples, DoS stated that Indiana and Jefferson counties completed the computation on November 18, but calculated that the 5-day period after computation was November 21. *Id.* Plainly, a 5-day period can never be as short as 3 days.

67. After repeated inquiries, and even as of December 1, 2016, DoS/Defendant Marks had little idea when deadlines were expiring in various counties. They were unable to determine when computation was complete in 12 counties, when the 5-day period ended in 22 counties, or when certification of the vote occurred in 13 counties. Ex. 32-D. Again, what information they did provide was, at least in part, misleading and/or wrong. *Id.* (*see, e.g.*, 5-day expiration for Northampton, which according to DoS “expired” on November 21, before the November 22 computation was even complete).

Court-Ordered Recounts Are Virtually Impossible to Obtain

68. The second option is for voters to seek recounts conducted by the Court of Common Pleas under Sections 1701 and 1702 of the Election Code. *See* 25 P.S. § 3261 (for districts that use paper ballots, such as optical scan districts); *id.* § 3262 (for districts that have no paper ballots, such as DRE districts). This method is even more of a sham than the county-board recount.

69. In a court recount, again three voters in a single election district must write, print, sign, and deliver a verified petition alleging, “upon information which they consider reliable, they believe that fraud or error . . . was committed” in the canvassing or the computation of the

votes. 25 P.S. §§ 3261(a), 3262(a)(1). In addition, every single petition must be accompanied by a deposit of \$50 in cash or a \$100 bond. 25 P.S. §§ 3261(b), 3262(a.1).

70. Thus, to seek a statewide court recount, a total of 27,474 voters must verify 9,158 petitions in 9,158 districts and pay at minimum \$457,900. In addition, county courts typically treat every petition as a separate court filing and proceeding, with additional filing fees of over \$100 or even over \$200 per petition. *See* Ex. 49, Declaration of Douglas E. Lieb dated February 14, 2017 (“Lieb Decl.”) ¶ 5. Thus, voters must file 9,158 court proceedings, at a cost of millions of dollars, simply to use this statutorily-created recount mechanism.

71. For DRE precincts, the deadline to file is the later of 20 days after election day, or “5 days after the completion of the computational canvassing of all returns” by the county board, which, again, is unknown to voters or even to DoS. 25 P.S. §§ 3262(f), 3263(a)(1). For optical scan precincts, the deadline to file is the later of 4 months after election day or “5 days after the completion of the computational canvassing of all returns” by the county board, which, again, is unknown to voters, or even to the DoS. 25 P.S. §§ 3261(f), 3263(a)(1).

72. Even worse, 25 P.S. § 3263 provides that, in any court-ordered recount, unless a petitioner “pleads that a particular act of fraud or error occurred and offers prima facie evidence supporting the allegation,” “a recount or recanvass shall include *all* election districts in which ballots were cast for the office in question,” and “petitions . . . must be filed in *each* election district in accordance with this act.” 25 P.S. § 3263(a)(1)(i)(A-B) (emphasis added).

73. The Republican Party of Pennsylvania, at least one board of elections, and apparently one Court of Common Pleas, interpret this section to mean that, unless there are 27,474 voters in Pennsylvania who have verified 9,158 petitions in 9,158 districts—enough for a statewide recount—then there can be *no* court-ordered recount of *any* district or county. Thus, if

even a single district anywhere in the State has only two petitioners instead of three, or if a single petitioner pays less than \$50, then *no one* in the entire State is entitled to a recount in *any* district, *anywhere*. Ex. 31 at 6-8 (Montgomery Court of Common Pleas), 22:23-23:4 (Montgomery Board of Elections position), 26:20-27:9 (Republican Party position). If this is correct, then the court-ordered recount statute is a sham in any statewide election. It is impossible for 27,474 voters evenly distributed in 9,158 election districts in 67 counties to file recount petitions within these deadlines, or perhaps any deadlines.

The Recount Procedure

74. “Any candidate, attorney or watcher present at any recount of ballots or recanvass of voting machines shall be entitled to examine . . . the voting machine and to raise any objections regarding the same, which shall be decided by the county board, subject to appeal, in the manner provided by this act.” 25 P.S. § 2650(c). Notwithstanding this language, none of the county boards in the 2016 election has permitted the candidates to “examine” the DRE voting system, notwithstanding multiple requests from voters and Jill Stein. Nor has any Pennsylvania court yet permitted such an examination. To the contrary, at least one Pennsylvania court has held that there is no such right under Pennsylvania law. *Stein v. Phila. Cnty. Bd. of Elections*, No. 161103335, at *4 (Phila. Cnty. Ct. Common Pleas, Dec. 7, 2016). That is also the position of Defendants in this case. Defs.’ Resp. in Opp’n to Mot. for Prelim. Inj. (Dkt. #42) at 8 (“[T]he legislature . . . chose not to provide for a forensic examination of DRE’s or of country central computers.”); *see also, id.* at 19-20.

75. In DRE counties, there is nothing to “count.” There is no paper ballot. All a candidate or a voter can do to ensure the integrity of the vote is examine the DRE voting system.

76. In optical scan counties, assuming voters have somehow overcome all the many statutory obstacles in their path, the county board “shall recount all ballots using manual, mechanical *or* electronic devices of a different type used for the specific election.” 25 P.S. § 3154(e)(3)(i) (emphasis added). Perhaps the county does a manual recount; perhaps it feeds the ballots into a separate high-speed machine. It all depends on the moment and the county. Whatever the method, the county board only counts the ballots for the specific districts for which the required number of voters submitted notarized petitions in time.

The Contest Procedure

77. The Election Code also permits voters in theory to claim the “election is illegal” in a filing in Commonwealth Court. 25 P.S. § 3456. At least 100 voters must petition, and 5 of them must set forth affidavits alleging that the “election was illegal and the return thereof not correct, and that the petition to contest the same is made in good faith.” 25 P.S. § 3457.

78. The contest proceeding, however, must be filed within 20 days of the election, 25 P.S. § 3456, *i.e.*, before there is any meaningful opportunity to recount the ballots, recanvass the machines, or examine the voting system, and before the election is even certified. This early deadline makes almost any contest petition all but impossible, unless the court agrees to hold the proceeding in abeyance pending development of a fuller record. Unless the court agrees to put a contest proceeding on hold, petitioners are forced to put on an election challenge before the results have *even been certified*, and if the case is dismissed for lack of evidence at that early stage, voters would have no recourse even if evidence later established that the election and the result were a fraud.

79. In short, the contest statute is designed to *prevent* voters from contesting elections in any meaningful way. Unless the Commonwealth Court agrees to delay the contest, the statute

is illusory. There is no statute governing when or under what circumstances the Commonwealth Court should or will delay a contest proceeding.

80. In addition, the contest statute gives the Commonwealth Court unfettered discretion to impose punishing and financially-prohibitive bonds on ordinary voters, effectively defeating contest petitions irrespective of the merits. 25 P.S. § 3459 (petitioners must file a bond “in such sum as the presiding officer of the Senate or said court shall designate”).

The 2016 Recount: Voters Are Defeated by an Impossibly Burdensome Election Code, the Department of State, and 67 Boards of Election

81. Over six millions Pennsylvanians voted in the 2016 presidential election. Before Election Day, many voters struggled to obtain absentee ballots in time for the election. On Election Day on November 8, the great majority of voters voted on DRE machines. Pennsylvania voters experienced machine malfunctions that may have erased their votes. And after the election, when over 1,300 voters across the state sought recounts to ensure the accuracy of the vote, Ex. 1 ¶ 5, they ran head-first into the brick wall that is Pennsylvania’s recount system. Despite a massive effort, these voters’ reasonable requests to ensure the accuracy of the vote were denied.

Election Day: Malfunctioning Machines and Missing Ballots

82. Pennsylvania has no early voting and limited absentee voting. Many voters who requested absentee ballots never received them in time to cast their vote. Ex. 14; Ex. 23. For example, a voter who requested his absentee ballot in early September in advance of a trip to the United Kingdom in late October and made multiple phone calls to the Montgomery County Board of Elections received no ballot until after the election. Ex. 14. Another voter spent days calling the county board regarding her absentee ballot, only to receive an electronic ballot that permitted her to vote only in federal races, not the state and local races for her home town. Ex.

23. These were not isolated incidents: There were so many problems with absentee ballots that just days before the election, a Montgomery County judge ordered that the deadline to return absentee ballots would be extended by four days, noting that “we run the risk that 17,000 people could be disenfranchised unless there’s some extension.” Laura McCrystal, *Montco Judge Extends Deadline for Absentee Ballots*, Phila. Inquirer, Nov. 4, 2016, http://www.philly.com/philly/news/politics/20161104_Montco_seeks_to_extend_deadline_for_absentee_ballots.html.

83. Voters in Pennsylvania on Election Day faced other problems: Many—including Plaintiffs Howe, Knight, and Kupka—report issues with the electronic voting machines that almost certainly did not record their votes. *See* Exs. 16-21.

84. Plaintiff Howe, voting in Montgomery County on a Sequoia AVC Advantage machine, attempted to vote a straight Democratic ticket. The ballot included a line stating, in sum and substance, “I do not want to vote for any office, candidate, or issue,” with a box next to it with the words “No Vote.” When Ms. Howe attempted to make her ballot selections, the box next to the “No Vote” entry lit up, as if to indicate that she had selected the “No Vote” option. The box remained lit as she confirmed her vote for the straight Democratic ticket and finished voting. Ms. Howe was concerned that her vote was not counted, and asked a poll worker about the “No Vote” light; the poll worker did not have any information to provide, and no way to verify that Ms. Howe’s vote had been accurately counted. *See* Ex.19.

85. Plaintiff Knight encountered a similar situation. Ms. Knight also attempted to vote in Montgomery County on a Sequoia AVC Advantage machine. The same box—for the option when a voter chooses not to vote for any candidate or office—remained lit green, even though she had chosen specific options for each race and question on the ballot. When she tried to unselect the “No Vote” button, it would not unselect. It remained lit, along with all of her

other selections, when she submitted her final vote. She had no way to confirm that her actual selections had been counted. *See* Ex. 20.

86. Plaintiff Kupka attempted to vote in Montgomery County on a Sequoia AVC Advantage machine. When she was finished selecting the candidates for whom she wanted to vote, the box corresponding with the selection, “I do not want to vote on any office, candidate, or issue” (*i.e.*, the “No Vote” button) was lit up green. She unselected one of her candidate choices, and the green “No Vote” light went out for that candidate. But when she reselected the candidate of her choice, the green light next to the No Vote button became lit again for that candidate. Despite having selected multiple candidates, the “No Vote” button remained lit. She was forced to cast her vote with the candidates *and* the No Vote button selected. She had no way to confirm that her actual selections were counted. She believes that her vote was inaccurately tabulated as a “No Vote,” as there were four “No Votes” recorded in her voting district. *See* Ex. 21.

87. Other voters experienced the same problems. *See* Exs. 16-21. There were 4,087 “no votes”—meaning no selections made for *any* candidate, office, or ballot question—in Montgomery County alone. Ex. 46. Either 4,087 people in one county took the time to go their polling place, wait in line, sign the voting book, walk into a voting booth, and decide not to cast a vote for anyone in any election, or *the machines did not work*.

88. Plainly, the machines did not work. Thousands of Pennsylvania voters were disenfranchised.

89. It is almost certain, given Stein’s percentage of the vote in Montgomery County (.85%, *see* Ex. 46), that a number of those disenfranchised voters attempted to vote for Stein.

Voters Mobilize to Seek Recounts and Forensic Evaluations of the Voting Systems

90. Given widespread voting problems in Pennsylvania and voters' concerns about the integrity of voting machines, voters throughout the state sought recounts and forensic review of voting machines. But the obstacles were insurmountable. With over 1,000 voters filing petitions with local county boards and courts for recounts, only a handful of precincts in the State agreed to recount their votes—and no forensic examination was permitted anywhere.

Voters Search in Vain To Find Reliable Information About Deadlines and Filing Requirements

91. Voters interested in seeking recounts began organizing in mid-November. Some voters called their local county board in the days and weeks after Election Day, Exs. 11, 26, but were provided no information on whether or when the boards had completed or would complete their computation or certification of the vote. *Id.* When voters in Delaware County attended a board of election meeting to request a recount, they were told to hold questions until the end; then the board promptly certified the vote, stopping any effort to file requests for a recount. Ex. 11.

92. Volunteers devoted days to organizing and mobilizing voters who wished to seek recounts, attempting to navigate the web of rules surrounding Pennsylvania's recount statutes. Ex. 1 ¶ 12. They made repeated inquiries to DoS and county boards, but could find no consistent guidance regarding when each county had computed its vote and when the deadlines to file recount petitions would expire. Different county board officials offered different interpretations of the law and its requirements. *Id.* ¶¶ 13-15; Ex. 9. For most counties, there was no publicly available information or notice of when the county completed its computation of the vote. By the time volunteers were ready to file their petitions—Monday, November 28, the first work day following Thanksgiving—organizers *still* could not determine the deadlines from any website or

government source in the vast majority of Pennsylvania counties. Ex. 1 ¶¶ 16, 27-30. As to DoS, statewide information about deadlines had not been updated since 2014. Ex. 26 ¶ 7.

The Department of State Sends Inconsistent, Incomplete, and False Information Concerning Deadlines and the Activity of County Boards

93. Beginning on the morning of November 28, and continuing over the next few days, DoS provided incomplete, contradictory, and inaccurate information about the various deadlines for petitioning for recounts in counties around the state. It became clear that DoS was no less confused and no better informed than were ordinary citizens.

94. For instance, on the morning of November 28, Defendant Marks at DoS provided a partial list of dates on which counties had supposedly finished counting votes. Ex. 32A. There were significant gaps—including Delaware and Montgomery Counties, two of the state’s largest—and the list was internally inconsistent. *Id.* It claimed, for example, that Northampton County finished computing votes on November 22, but that the five-day period after computation would end on November 21. *Id.* Deadlines noted in Crawford, Indiana, Jefferson, Mercer, Northampton, and Schuylkill Counties were also mathematically impossible. Exs. 32A-D. Gaps and errors remained even as DoS provided more information over the course of several days. Exs. 32B, 32D.

95. Finally, counsel for Stein wrote Mr. Marks: “[t]here doesn’t seem to be any rhyme or reason to the ‘expiration date of 5-day period after computation.’” Ex. 33. Counsel also asked whether the information compiled by DoS was publicly available anywhere to voters, noting that “[v]oters have tried calling county boards of elections across the state and received either no information, conflicting information, or confusing information.” *Id.* DoS did not respond.

Voters Jump Through Enormous Obstacles to File Recount Petitions

96. Over Thanksgiving weekend, volunteers and voters mobilized to sign petitions seeking manual recounts of the paper ballots and forensic analyses of the DRE machines in counties throughout the Commonwealth. Ex. 1-A & 1-B (sample petitions for recounts of electronic voting machines and optical scan machines, respectively). To file petitions, voters first needed to find two other voters in their individual voting precinct or district; petitions were complete only with three notarized affidavits from three voters in a given precinct. Over 2,000 people volunteered to help gather petitions; organizers printed hundreds of pages and hired notaries to be available to voters over the weekend. Ex. 1 ¶¶ 19-20; Ex. 3 ¶¶ 7-8; Ex. 26; Ex. 27. Many voters interested in seeking recounts were unable to file petitions, because they could not find two other voters in their precinct, could not find and/or pay for a notary, could not print the materials at home, or could not take time off of work or childcare to file petitions. Ex. 1 ¶ 19-22; Ex. 27.

97. Even in the face of these hurdles, over 1,300 voters filed recount petitions in at least 375 precincts in 16 different counties throughout the state. Ex. 1 ¶ 5. There would have been no way for voters to file these petitions without the assistance of professional legal counsel provided by the Stein campaign. *Id.* ¶ 12. Notwithstanding this massive effort by hundreds of volunteers and thousands of voters, they filed petitions in only a small fraction of precincts in the Commonwealth. Pennsylvania's rules—particularly the requirement of three voters per district in over 9,000 districts—made it impossible for voters to trigger anything close to a statewide recount.

Chaos: Voters Attempt to File Petitions with County Boards of Elections

98. When voters showed up to seek relief from their county boards of elections on November 28, 2016, all hell broke loose. Upon arrival, many were given conflicting instructions; it was clear that many county boards had no idea what to do with the petitions. Some county boards simply refused to accept petitions, Ex. 1 ¶ 30; Ex. 22; others told voters to file with the prothonotary in court, Ex. 1 ¶¶ 32-33, 38; other boards that accepted petitions at the beginning of the day rejected them by the end, and vice versa, *id.* ¶ 30; Ex. 24; Ex. 25. When voters asked for guidance as to the proper procedure, many county boards refused to provide any information at all, sometimes telling voters that they should consult with attorneys. Ex. 1 ¶ 39; Ex. 7; Ex. 28. The Delaware County Board of Elections posted a notice to voters stating that the election law “has become increasingly complex,” and advising that the “burden of accuracy of all filings” rests with the voter, with no other information provided. Ex. 1-C.

99. Many boards of elections sent voters to the courts, where they were required to pay filing fees. Ex. 1 ¶ 31. One voter was sent to the prothonotary from the Berks County Board of Elections; the prothonotary first told the voter he belonged at the board of elections, then informed him that he would need a cover sheet, a proposed order, more than \$320 in filing fees, and three copies of his petition—and that he needed to have these materials ready by 4 p.m. Ex. 4. Since the instructions were not conveyed until about 3:30 p.m., there was no time for the voter to assemble these documents. *Id.* The Butler County board of elections similarly referred a voter to the prothonotary’s office in court, and warned him that it would cost a lot of money to file. Ex. 7. Voters who did successfully file in court were given no instructions about next steps; many heard nothing further, or did not hear about scheduled hearings until after they had taken place. Exs. 2, 22.

100. Boards throughout the State issued similar conflicting instructions and raised similar roadblocks in the path of voters seeking recounts. Ex. 1 ¶¶ 27-43; *see generally* Exs. 1-

30. For example:

a. In Bucks County, the board of elections told voters it had no idea what to do with the petitions and that it was waiting for guidance from DoS. Exs. 5, 6.

b. The Butler County Solicitor refused to provide information to a voter, saying the board of elections needed to remain “neutral” and would not “get involved” in the citizen’s legal request for a recount. Ex. 7.

c. The Centre County board of elections accepted petitions from voters all day. At 4:45 p.m., after about 100 petitions had been submitted, the board announced that the petitions had all been submitted too late and would be rejected. Ex. 8.

d. A Delaware County board of elections employee demanded the name and attorney identification number of a voter seeking to file petitions. Ex. 12.

e. In Philadelphia, a City Hall employee incorrectly told a voter that she would have to pay \$50 per petition to file recount petitions, and incorrectly stated that the deadline to file petitions was November 28, 2016. Ex. 26.

f. In York County, a voter attempted to file petitions with the prothonotary in court, where other petitions had been filed earlier in the day. She was sent to the board of elections, where she learned that the board had certified the county’s vote that day at noon. Ex. 30.

101. In short, the entire process was a Kafkaesque nightmare.

DoS Pulls the Rug Out of the Recount Effort

102. Into this nightmare stepped the Department of State, which somehow managed to make the situation even worse. In the middle of the afternoon on November 28, as thousands of Pennsylvania citizens filed recount requests in county boards in counties around the State, Defendant Marks, on behalf of the DoS, sent a surprise guidance memo to the 67 county boards. Ex. 34. The memo advised county boards that recount requests were timely *only* “[i]f your county has not completed its initial computation of the returns.” *Id.* For filings made within 5 days after computation, DoS advised that “the petition for recount must be filed with the court of common pleas.” *Id.*

103. However: (i) Many voters had already filed petitions with the county board, and county boards did not then contact voters to tell them their petitions were untimely or advise that they should file with the county court, *see* Exs. 8, 9, 24, 25; and (ii) DoS was almost certainly wrong, as the Pennsylvania Supreme Court held that voters *may* file petitions with the county board within 5 days of the computation of the vote. *See In re Reading School Bd. Election*, 535 Pa. 32, 37 (1993) (computation complete on Nov. 20; voter petitioned county board on Nov. 25; court held: “Appellant cannot complain that he was misled into filing his challenge with the county board of elections, because, as our research has indicated, the suggestion that he [the voter] proceed before that body [the county board] was *correct*.”).

104. As a result, *inter alia*, of this DoS misdirection, many county boards that received recount requests within 5 days of the computation did not conduct recounts. All of those recount petitions were for naught.

County Board and Court Proceedings: Voters and Stein are Repeatedly Denied a Right to Examine the Vote

105. **Montgomery** is a DRE county. Apparently following the faulty DoS guidance, the county board refused to accept complete petitions from nearly 78 districts and instead told voters to file in the Court of Common Pleas. The board did this even though voters filed the petitions within five days of the computation of unofficial results. *See* 25 P.S. § 3154(f); *In re Reading*, 535 Pa. at 37. The voters were forced to file in the Court of Common Pleas at a cost of \$269.50/petition (or \$89.83/voter), demanded by the prothonotary, who treated every petition as a separate court filing. The total cost for the 78 petitions was \$21,021, which the Stein campaign paid on the voters' behalf. Ex. 49, Lieb Decl. ¶ 6. At an average of \$269.50/petition, in 9,158 districts, the cost to voters of a statewide recount would be \$2,468,081.

106. On November 30, the Montgomery Court of Common Pleas held a hearing, without notice to the voter-petitioners. Ex. 2. At the hearing, the county board argued that the petitions were defective because a petition was not filed from every single election district in the entire county and perhaps even the State, Ex. 31 at 22:24-23:4, and because voters did not pay \$50 each *in addition* to the \$269.50/petition, *id.* at 19:18-25. The Court dismissed all of the petitions orally on November 30, and by order dated December 1. *Id.* at 47; Ex. 42. In a later order, the Court held that unless petitions were filed in every district in every county, no one could file a petition in Pennsylvania. Ex. 52 at 7-8.¹⁴ As a result, Montgomery did not recount or recanvass a single vote, much less permit voters or Stein to do a forensic exam of the voting system.

107. In **Bucks** County, a DRE county, the county board refused to accept petitions filed within 5 days of the computation of the vote, claiming they were untimely. Ex. 5. Voters

¹⁴ The decision was affirmed on other grounds.

were forced to file in the Court of Common Pleas instead, as instructed by the county board. Exs. 5-6. At a court hearing, the petitions were dismissed.

108. In **Delaware** (DRE) and **Lancaster** (optical scan) counties, county boards initially accepted voters' petitions but later sent the voters notices that the petitions were untimely, apparently on advice of DoS. Exs. 11-13. On information and belief, those petitions were filed within 5 days of the initial computation of the vote. They certainly were in Delaware County, as the initial computation of the vote never even occurred.

109. In **Northampton**, a DRE county, the county board also rejected petitions filed within 5 days of the computation as untimely. Exs. 24-25. After a notice of appeal was filed on November 30, 2016, the Northampton Court of Common Pleas failed to set the hearing for an appeal within three days as required by statute. *See* 25 P.S. § 3157(a). Later, the County Solicitor informed Stein's counsel that a recanvass had occurred, but admitted that it was not "official" because no one—including the Solicitor himself—had received notice.

110. In **Lehigh** County, a DRE county, the county board did accept petitions fewer than five days after the computation of unofficial results. On Wednesday, December 1, Lehigh County conducted a recanvass but it failed to provide all candidates with notice as legally required. *See* 25 P.S. § 3154(e). The county board then rejected the voters' and Stein's requests for a forensic examination of the DRE voting system. Ex. 48, Declaration of Alison Frick dated February 14, 2017, at ¶ 11.

111. In **Allegheny** County, another DRE county, the county board did accept voter petitions filed fewer than five days after the board purportedly completed computing the unofficial results. It announced it would conduct a recanvass. The state and county Republican Party appealed that decision, arguing that the petitions were untimely. At a hearing in the Court

of Common Pleas, the county solicitor refused to defend the petitions' validity. Ex. 50 at 63-64. The Elections Director testified, however, that the members of the board of elections had not signed the unofficial results, as required to complete the initial computation. See 25 P.S. § 3154(f). The Court therefore dismissed the appeal and allowed the recanvass to proceed. Ex. 35. The county did a meaningless recanvass on December 5. It refused Stein's timely request for a forensic examination of the voting machines, and the same request from voters in the petitions themselves. Exs. 43, 44. The Court of Common Pleas then rejected an appeal from the board's refusal to allow a forensic examination, holding that any argument on that point had been waived even though the Court had deemed it "not relevant" on the previous appeal, Ex. 50 at 54. As a result, no voter or candidate was permitted to examine the DRE system in Allegheny, either.

112. **Philadelphia**, another DRE county, did not finish counting votes by November 28, and therefore accepted recount petitions. Notwithstanding written requests from voters and the Stein campaign, Ex. 36, and another oral request from the Stein campaign at a county board proceeding on December 1, the county board refused to permit voters or candidates to examine their DRE voting system. Ex. 47 at 5-6. The county board then conducted an essentially meaningless machine recanvass. Stein appealed the board's denial of the request for examination; that appeal was denied by the Philadelphia Court of Common Pleas.

113. **Chester**, an optical scan county, did not finish counting votes, and therefore accepted recount petitions. A hand recount of paper ballots in 143 Chester County precincts was completed on December 10, 2016. Chester is the one and *only* county in the State of Pennsylvania where a substantial subset of voters had any meaningful opportunity to make sure their votes were counted accurately.

114. This list is not exhaustive. Voters in counties across the State faced similar issues: lack of public information about whether counties completed the computation of votes, state officials confused about the law, and court hearings without notice.

115. Meanwhile, 100 voters, including Plaintiff Reitz, signed a petition in the Commonwealth Court to contest the election on November 28, the statutory deadline. *See* 25 P.S. § 3456. The deadline required that the contest be filed before voters could determine through recounts whether their votes were accurately counted. The contest petition was explicitly a placeholder, designed to preserve petitioners' rights as they sought "[f]urther evidence supportive of [their] concern" through recounts. Ex. 37. The next day, the Commonwealth Court set a December 5 hearing. The petitioners requested that the hearing be continued and the contest petition be held in abeyance while requests for recounts were pending throughout the state to allow for the development of a fuller record. Ex. 38. The Commonwealth Court denied the request and required the voters to post a \$1 million bond to continue the case. Ex. 39. In response, the voters withdrew the case: "Your Honor: Petitioners are regular citizens of ordinary means. They cannot afford to post the \$1,000,000 bond required by the Court. Accordingly, the petition is withdrawn." Ex. 40.

116. This federal case does not seek review of the Commonwealth Court's imposition of a \$1 million bond on the parties in that case, only one of whom (Reitz) is a plaintiff here. This case, however, does seek review, *inter alia*, of an election scheme that, among many other burdens, (i) requires contest proceedings to be filed before elections are certified, before recounts are concluded, and before evidence of mistake or fraud can be fully developed, and (ii) gives state courts unfettered discretion to impose punishing bonds on ordinary voters that effectively make contest proceedings financially prohibitive.

STATE COURT PROCEEDINGS

117. To Plaintiffs' knowledge, there are no pending or ongoing Pennsylvania state court proceedings related to this case or to the 2016 presidential election.

FIRST CAUSE OF ACTION

42 U.S.C. § 1983; Fourteenth Amendment, Equal Protection

118. Plaintiffs incorporate by reference the foregoing as if set forth word for word.

119. Pennsylvania voters have the right to vote, to have their votes counted, and seek recounts of their votes. All of these rights are impossibly burdened in Pennsylvania, and subjected to arbitrary and unreasonable procedural rules that makes these rights a nullity. These burdens include, among others:

a. Pennsylvania voting machines often do not work; they fail to register votes actually cast by voters. For example, Plaintiffs Knight, Howe, and Kupka cast their votes on DRE machines, but their votes were almost certainly not counted by the machines. Thousands of voters in Montgomery County were also disenfranchised because of faulty DRE machines.

b. Pennsylvania voting machines are vulnerable, hackable, and more easy to penetrate and manipulate than an iPhone.

c. In all of the DRE counties, there is a total lack of a voter-verifiable paper trail. Voters in these counties can do nothing on Election Day to verify that their votes were counted.

d. Deadlines to seek recounts/re canvassing are kept secret from voters. Deadlines vary from county to county, and from election to election. Deadlines often

change arbitrarily, and in secret. In short, voters have no notice as to when they can or must seek recounts/re canvassing of the vote.

e. As set forth above, voters face insurmountable logistical and practical obstacles to seek recounts/re canvassing of the vote. The right exists on paper; in practice it is illusory.

f. As set forth above, voters face insurmountable financial obstacles to seek recounts/re canvassing of the vote. Again the right exists on paper; in practice it is illusory.

g. The re canvassing of DREs permitted under Pennsylvania law is a substantially useless exercise. It does not help voters or candidates know whether votes that were cast were actually counted.

h. Pennsylvania law apparently does not provide for any meaningful inspection or examination of DRE or optical scan machines by voters or candidates, before or after an election. As a practical matter, voters in DRE counties can do nothing after Election Day to verify that their votes were counted.

i. Voters in different districts and counties are treated differently in arbitrary and unreasonable ways, including different deadlines, different fees, different election boards with different recount/re canvassing policies, and different methods of voting.

120. The burdens on seeking a state-wide recount/re canvassing are greater for recount initiatives led by small party candidates such as Stein, who have fewer logistical and financial resources to mobilize thousands of voters throughout the Commonwealth in a short period of time.

121. Defendants cannot identify precise interests that require Plaintiffs' rights to be burdened. For example, Defendants have no valid interest in failing to provide notice of deadlines to seek recounts, in changing deadlines arbitrarily, or in imposing insurmountable logistical and financial obstacles for voters to seek anything approaching a statewide recount. Nor do Defendants have any valid interest in imposing arbitrary, unreasonable, and insurmountable burdens on voters' rights under Pennsylvania law to ensure their votes were counted.

122. Acting under color of state law, Defendants, by the above, are maintaining and implementing a system of voting that denies Pennsylvania voters the right to vote, to have their votes counted, and to seek recounts/re canvassing of the vote.

123. Defendants, acting under color of state law, have deprived and severely burdened and threatened to deprive and will severely burden and deprive Pennsylvania voters, including Voter Plaintiffs, of their fundamental right to vote. The state's interest does not justify that severe burden.

124. This burden falls unequally on smaller political parties, such as the Green Party; their candidates, such as Jill Stein; and their members.

SECOND CAUSE OF ACTION
42 U.S.C. § 1983; Fourteenth Amendment, Due Process

125. Plaintiffs incorporate by reference the foregoing as if set forth word for word.

126. Acting under color of state law, Defendants, by the above, are maintaining and implementing a system of voting that is fundamentally unfair and that denies and severely burdens the right to vote, to have votes counted, and to recounts/re canvassing of the vote, and that violates substantive Due Process under the Fourteenth Amendment to the United States Constitution.

127. As a result, Pennsylvania citizens, including Voter Plaintiffs, have been and will be denied the right to vote.

THIRD CAUSE OF ACTION
42 U.S.C. § 1983; First Amendment

128. Plaintiffs incorporate by reference the foregoing as if set forth word for word.

129. Acting under color of state law, Defendants, by the above, are maintaining and implementing a system of voting that is fundamentally unfair and that denies and severely burdens the right to vote, to have votes counted, and to recounts/re canvassing of the vote, and that violates the First Amendment to the United States Constitution. The state's interest does not justify that severe burden.

130. As a result, Pennsylvania citizens, including Voter Plaintiffs, will be denied the right to vote.

FOURTH CAUSE OF ACTION
42 U.S.C. § 1983; Fourteenth Amendment, Due Process/Equal Protection

131. Plaintiffs incorporate by reference the foregoing as if set forth word for word.

132. Pennsylvania voters have statutory rights to a recount of the vote.

133. Acting under color of state law, Defendants, by the above, are maintaining and implementing a system of vote recount procedures that are fundamentally arbitrary, unreasonable, and unfair and that deny, severely burden, and nullify the right to a recount of the vote, and that violates Due Process and Equal Protection under the Fourteenth Amendment to the United States Constitution.

134. As a result, Pennsylvania citizens, including Voter Plaintiffs, have been and will be denied the right to recounts/re canvassing of the vote.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs ask that the Court:

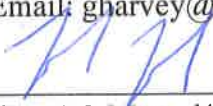
1. Declare that Defendants:
 - a. Violated the Equal Protection Clause of the Fourteenth Amendment to the United States Constitution by unreasonably burdening the right to vote of all Pennsylvania citizens;
 - b. Violated the Due Process Clause of the Fourteenth Amendment to the United States Constitution by instituting a fundamentally unfair process that denies and severely burdens the right to vote;
 - c. Violated the First Amendment to the United States Constitution by effectively denying the right to vote of all Pennsylvania citizens;
2. Declare applicable sections of the Pennsylvania Election Code in violation of Equal Protection, Due Process, and the First Amendment in statewide elections, both on their face and as applied in the 2016 presidential election;
3. Declare that the rights and privileges of Plaintiffs and other citizens will be irreparably harmed without the intervention of this Court to secure those rights for the exercise thereof in a timely and meaningful manner;
4. Enjoin permanently the Defendants, their agents, officers and employees from enforcing applicable sections of the Pennsylvania Election Code that violate Equal Protection, Due Process, and the First Amendment in future statewide elections;
5. Enjoin permanently the Defendants, their agents, officers and employees to comply with Equal Protection, Due Process, and the First Amendment in future statewide elections;

6. Enjoin Defendants to permit forensic examination by Plaintiffs of electronic voting machines and systems used in Pennsylvania, including in Montgomery County;
7. Award Plaintiffs disbursements, costs, and attorneys' fees; and
8. Grant such other relief as the Court deems just and proper.

Dated: February 14, 2017

Respectfully submitted,

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* *Admitted pro hac vice*

Exhibit 1

AFFIDAVIT and DECLARATION OF AQUENE FREECHILD

AQUENE FREECHILD, being duly sworn, declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

1. I am a resident of Mount Rainier, Maryland.

2. I voted in the 2016 general election in Mount Rainier, Maryland.

3. I am normally employed by Public Citizen, Inc., 215 Pennsylvania Ave. SE, Washington, DC 20003. I took a leave of absence Wednesday, November 23rd through Sunday, December 4th to work for Jill Stein's team on the Pennsylvania recount and continue to assist as a volunteer.

4. I am the volunteer coordinator in charge of the entire recount effort in Pennsylvania. I started working on the Pennsylvania recount as a volunteer passionate about making sure every vote was counted correctly.

5. Through our efforts, more than 1,300 individual Pennsylvania voters filed petitions for recounts in their voting precincts, representing at least 375 different voting precincts in 16 different counties throughout the State. Had the process of filing for a recount not been so inaccessible, this number would be much higher. All numbers in this affidavit are provided as information to the best of my knowledge, based on reports from individual volunteers and staff in the County boards of elections and the County courts.

6. To date, four counties—Allegheny, Chester, Lehigh, and Philadelphia—have conducted recounts of at least some precincts, started the process, or announced that the recount process will begin soon.

7. I have been following with great concern the problems with the reliability and security of our voting systems, and the ability to accurately verify the vote, since 2008. I have

long supported verifiable voting systems such as paper ballots (or lever) voting and public audits with random sampling adequate to detect any possible problems. The now widely available videos of esteemed professors easily hacking into the most commonly used touch screen and ballot scanning machines sounded the alarm.

8. My worries about the security of the vote increased this year when voter files in Illinois and Arizona, voting technology provider VR Systems, and the Democratic National Committee were all apparently attacked by hackers. As I understand it, most of these systems are far more resilient to hacking than our voting machines. Clearly there were skilled hackers taking an interest in this election.

9. I learned that Jill Stein was looking to conduct a recount in states with voting irregularities, and I reached out to connect with the campaign. I messaged some people on Facebook and through an online petition I started, and asked them to consider finding people in their precincts to file notarized petitions for a recount.

10. The response was like an overwhelming avalanche: Over 2,500 people wanted to participate in efforts to request a recount in Pennsylvania. Once the word got out, 50 and then 100 people were signing up per hour. Democrats, Republicans, Greens, and Libertarians volunteered to file affidavits. I was so encouraged by the outpouring of support for a recount. At least one Republican commented when they signed up to file an affidavit that they were happy with the election results but wanted to make help ensure that every vote had been counted.

11. Because this issue is so important, and because I feel so strongly about working across all parties to make sure every vote was counted properly and is verifiable in the future, I decided to take off work and volunteer full-time to help these fellow citizens file for a recount. I and dozens if not hundreds of other volunteers gave up our Thanksgiving time with family to try

to make sure everyone who volunteered had the resources they needed to file. My future in-laws in York county Pennsylvania supported my effort, allowing me to remain in Pennsylvania after Thanksgiving during this hectic organizing period.

Our Attempts to Organize Recount Petitions

12. The Election Code in Pennsylvania is so confusing that it took days for us to determine exactly what we needed to do to seek recounts. Without professional election lawyers paid for by the Jill Stein campaign, there is no way we could have moved forward. The election laws are impenetrable to ordinary citizens.

13. Indeed, we discovered almost immediately that the election laws appear just as confusing for election officials: Directors of different County Boards of Elections had totally different views of the law, one telling us it was too late to file after the five-day window including weekends, another saying we had plenty of time because it was five business days and many others who had no idea what to say or simply refused to answer our calls or emails. Our volunteers, who called their boards of elections as the very first step they took, were told conflicting information by various County Boards of Elections statewide.

14. It quickly became clear the County Boards were as confused as we were about how a recount was supposed to work. It is hard to blame them: The byzantine law on recounts is not clear or even internally consistent.

15. Our confusion was compounded by the fact that most County Boards of Elections did not post online when they had finished the first computation of the vote in the County.

16. For much of the weekend before the filing deadline, we were only pretty sure volunteers could file in about eight counties; the vast majority of counties we listed as “to be determined.” As volunteers without funds to hire expert legal advice in the initial organizing

period, and without clear information from the County Boards, we had to make our game plan based on the limited information available.

17. Some of the questions for which there was no answer and which volunteers debated endlessly included:

- a. Were we supposed to file petitions for a statewide recount only, or seek recounts through each county (or do both)?
- b. When we filed recount petitions with the counties, should we file in them court or with the County Board of Elections?
- c. By what date did the filing need to take place?
- d. Did all three petitioners from a given precinct or district need to take the day off of work and appear in person at the county seat to file, or could one filer submit petitions for multiple petitioners?
- e. How could voters find out which precinct they were in if multiple people from different precincts voted in the same location?
- f. When the state law refers to three voters per district, does “district” mean county, ward, division, or precinct?
- g. Will a recount be conducted only if three voters from every single precinct in a county file petitions?
- h. Where will recounts take place: in each precinct or somewhere else?
- i. Do petitioners have to pay a fee or not? If there is a fee, is the fee applied per petitioner or per precinct? And is the fee \$50 or \$100? Does that amount of the fee depend on the machines or the number of voters filing? Must the fee be paid in cash or do they take checks or credit cards?

- j. Is there a difference between the unofficial vote count posting date and the end of the canvass? Can a canvass go more than one day?
- k. Is there a difference between the computation of the vote and the certification of the vote?
- l. Given that we had five days after the canvass, can counties certify first thing in the morning of the fifth day and subsequently block citizen access on that fifth day?
- m. Was it worth organizing in one of the many precincts where no one was sure what the filing deadlines were?

18. There were no official answers to these questions available online, and we got conflicting answers every time we were able to reach a county staff person.

19. The cost of filing recount petitions, in time and money, represented an enormous barrier for voters who wished to seek recounts. Literally hundreds of people who wished to file a petition did not have the money or time to make copies, find a notary, arrange for transportation to the County Board, and pay potential filing fees, even if we could reimburse them afterward. When we asked voters if a \$50 petition fee would be a barrier to their filing, 420 out of over 2,000 volunteers indicated the fee was a barrier. Because we could not assure people that there would be no fee, some of those voters stayed home. If only one person was delivering petitions on behalf of three voters, that person had to have anywhere from \$150 to \$300 cash on hand, in case the fee was charged per person. If the volunteer planned to file petitions for more than one precinct, the volunteer would have to bring even more cash—something many volunteers were unable to do.

20. Other voters were not able to file petitions because they could not find two other voters from their voting district or precinct who were able to take time from work or childcare to get to a notary in the short window we had.

21. Even in counties where we had begun organizing early, we faced roadblocks and confusion. For example, our volunteers in Northampton had met frequently with election officials, and had gotten no clear answers or guidance on how to seek recounts. One volunteer in Delaware County went to the County Board of Elections meeting to request a recount, only to watch the Board certify the election results before she had a chance to speak. Jill Stein's ability to raise funds adequate to pay election lawyers to sort out the law over several days and draft an affidavit for voters to use was essential to making voter initiated recounts possible.

22. A woman called me from Philadelphia angry and distressed that she could not file petitions from her division, after learning about the recount on TV on Monday. Everyone she knew in her division was already at work, and she could not gather enough petitions to seek a recount. She subsequently called her state Representative, who in turn, called me to try to offer help. Our volunteers are smart, politically active people who know how to interact with their government, if only given enough information to do so.

23. There was no reasonable way for ordinary voters to navigate the legal process to file recount petitions without our help.

24. Given all of these unanswered questions, we could not assure voters, even on the day of filing, that if they took the time and effort to gather petitions and file them, potentially paying fees, their petitions would be accepted and recounts would be scheduled. This presented an enormous barrier that confused people and prevented hundreds, if not thousands of people, from filing petitions seeking recounts.

25. Attached as Exhibit A is a blank example of the petition and supporting exhibits we prepared for filing in counties using electronic voting machines, also called “DRE” machines. These petitions sought a forensic evaluation of the electronic voting machines.

26. Attached as Exhibit B is a blank example of the petition we prepared for filing in counties using paper ballots counted by optical scan machines. The petitions we filed attached the same supporting exhibits attached to those found in Exhibit A. These petitions sought a manual recount of all paper ballots.

Our Attempts to File Recount Petitions

27. For more than half the counties in the state, we literally had no way to find out by phone, email, or website search whether we could legally file for a recount on Monday, November 28. By Monday morning, there were at least 23 counties that had not certified their vote, according to Pennsylvania’s Department of State, but many of these same counties rejected our petitions. There was and is no consistent county- or state-level public record with information about when counties computed and certified their vote totals.

28. In Butler County, we were told the count was still going on Monday, November 28th morning when in fact the count had been certified.

29. In Cambria County on the 28th morning, we were told it was too late to file, when in fact the 5th day following the canvass was the 28th and it was in fact *not* too late.

30. In Schuylkill County, we called and emailed to try to find out if we could file our petitions. As of November 25, unofficial general election results were posted on the county’s website, but no date was visible to indicate when those results had been posted. We called the county’s Board of Elections first thing on the morning of November 28 and were told by the clerk that we could file our petitions. But when a volunteer named Larisa arrived at the

Schuylkill Board of Elections later that day, the clerk reportedly said to her, in sum and substance, “I know why you’re here. I am not going to take that [the notarized petition].” When the volunteer asked why, the staff member refused to tell the volunteer anything more. The volunteer asked if she could at least get some kind of receipt to show she had been there and had attempted to file her recount petitions, but the staff escorted her from the office. The volunteer called me immediately afterwards, shaken and frustrated, to relate her experience. This is not the way for public servants to treat respectful citizens exercising their rights.

31. In case after case, citizens were told to go to the courts by the County Boards of Elections, where they could be asked to pay court fees, even though they were apparently eligible to file for free with the County Boards. Some voters did not file in court because they could not afford the fees; others spent hundreds of dollars on fees if they were able to get the cash. Still others were also turned away from the courts as well, and missed the deadline because they were told they could not file by misinformed or hostile staff.

32. For example, I learned that in Berks County, the Board of Elections refused to accept petitions that volunteers attempted to file on November 28, 2016, referring the voters to the County Solicitor. The County Solicitor told the voters that they had to submit their petitions to the Prothonotary. When voters went to that office, the Prothonotary told them that they had to file with the Board of Elections. Finally, guidance from the Department of State indicated that petitions should be filed with the Prothonotary. However, the Prothonotary refused to accept petitions without a standard cover sheet, a proposed order, and filing fees totaling more than \$300. These instructions were not relayed until around 3:30 p.m., and the many of the voters were unable to assemble these materials and the requisite fees in time to file before the close of

the office at 4 p.m. Those voters' petitions were thus not filed, and all the time these voters had taken was wasted.

33. In Bucks County, I learned that a volunteer who had assembled petitions called the County Board of Elections to inquire whether they were accepting petitions. The County Board told the voter that he would need a lawyer, must file with the Prothonotary, and had to pay a fee of over \$230. When the voter called the Prothonotary, the office had no guidance and told the voter that the office needed to confer with the County Solicitor.

34. Despite these many barriers, persistent voters were able to file recount requests for 375 precincts across the state, to the best of our knowledge. People in 28 counties organized to file, though not all were ultimately able to. Sadly only four counties thus far have granted recounts.

35. The enormous gap between the number of counties where voters intended to file (28) and where they were able to file (16) reflects the profound difficulty far too many voters faced. Lack of communication by county boards of elections with voters—a problem that continues now, even as recounts are pending—is a huge problem. Hundreds of people signed up to file affidavits who reside in counties where, after much searching and calling, we were able to determine that the canvass date had been more than five days passed, making recount petitions untimely.

36. These stringent requirements ultimately favor voters in bigger cities who have access to more available notaries, transit options, and a greater numbers of volunteer lawyers who can assist voters with filing their petitions.

Misinformation and Confusion from State and County Officials

37. The lack of information available to citizens about how to access the recount process places an enormous burden on the voters' right to request a recount.

38. In many counties, just like Bucks County, I learned that voters were told by the county Boards of Elections to contact the Prothonotary, and were told by the Prothonotary to contact the Boards. I was told by volunteers in Northampton County, that the Board of Elections accepted some petitions on November 28, but then later that same day turned other petitioners away, telling them that they would have to file their petitions in court and pay filing fees. In York County, voters had filed petitions with the Prothonotary in the morning, but a voter who arrived later in the day was sent by the Prothonotary to the Board of Elections to file her petition. Because she was the third filer for her precinct, and the Prothonotary had accepted the first two affidavits from her same precinct early in the day, they were not able to file a full precinct as required by the law to request a recount. It was not until this morning, December 5, 2016—a full week after we attempted to file recount petitions, and after *daily* calls and emails—that York County Board officials told me that the County had certified its vote at noon on November 28.

39. Often County Boards refused to give our volunteers *any* information about how and where to seek recounts. I learned that in Butler County, for example, the Board of Elections refused to accept petitions and told voters nothing more than that they should consult with an attorney. Similar answers were given to some voters in Delaware County. In Montgomery County, a voter was told that the Board of Elections would accept petitions, but when asked for additional information, the clerk from the Board of Elections told the voter only that the voter should contact an attorney.

40. In fact, the Delaware County Board of Elections gave some voters, when they submitted their petitions to the Board, a letter saying, "Election law as passed by the legislature

and interpreted by the Courts has become increasingly complex,” but notes that the “burden of accuracy of all filings . . . is upon the individual the documents are submitted on behalf of.”

Attached as Exhibit C is to the best of my knowledge a true and correct copy of the letter that the County Board provided to some petitioners.

41. Further, the Delaware County Board time-stamped petitions for at least one complete precinct, but now refuses to confirm in phone calls that these petitions were received or whether a recount or any further proceedings will take place.

42. Even now more than, ten days after our efforts began, and after constant phone calls and visits to the County Boards of Election, I *still* do not know what the deadlines for filing recount petitions were in some counties, or even whether our filings were accepted.

43. A few County Boards of Elections still refuse to communicate clearly about the recount process with residents of the county—or to even acknowledge and respond about whether or not their recount petitions were accepted, and what the next steps might be.

Conclusion

44. Even with the rampant confusion wrought by unclear laws, lack of public information, and conflicting instructions from State and County officials, thousands of people across Pennsylvania took the time to read and sign petitions, get them notarized, gather petitions from their neighbors, and attempt to file them with County boards or the courts. In addition to the 1,125 people who took the time to file affidavits in groups of three for precinct recounts, 226 individual people filed individual affidavits. If the process had been accessible and clear, many more people would have exercised their rights and had time to find neighbors to take part in the filing.

45. In addition to the more than 1,300 people who volunteered to help this effort, at least another 500 people signed up on the Pennsylvania volunteer recount survey and on ally sites to file affidavits for a recount who did not end up filing. Many of these voters could not find a third person in their precinct and so they missed their opportunity to seek a recount. Even more people signed up directly through the Green Party and Stein campaign directly.

46. The effort I have expended to organize thousands of voters to file petitions for a recount has reaffirmed my belief that voters are hungry for assurance that their votes are counted accurately and fairly. I am equally convinced that Pennsylvania's laws make it nearly impossible for voters to be so assured. From the electronic voting machines with no paper receipt, to the utterly opaque procedures for seeking the recounts provided by law, to the repeated denials of any forensic inspection that could actually find a problem with the count in the first place, Pennsylvania places enormous barriers in the way of ordinary voters who want their voices heard and their votes counted.

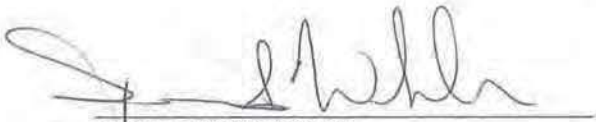
47. I am concerned that the votes of my fellow citizens were not counted accurately in the election, and would like a manual recount of every paper ballot and a forensic examination of the electronic voting systems in Pennsylvania to make the vote had integrity and every vote counted.

Dated: December 5th, 2016


AQUENE FREECHILD

Sworn to and subscribed before me

this 5 day of December, 2016.



NOTARY PUBLIC

**My Commission Expires
February 28, 2021**





[Faint, illegible text]

Exhibit A

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF _____

PETITION TO RECOUNT AND/OR RECANVASS
AND AFFIDAVIT OF [your name] _____

TO THE _____ COUNTY BOARD OF ELECTIONS, [name of
county] _____, PENNSYLVANIA:

_____, verifies, deposes and says the following under penalty of
perjury:

1. My name is _____. I am a registered voter in City, Borough,
Township of _____, Precinct [insert number] _____,
_____ County, Pennsylvania. I voted in this district in the election on
November 8, 2016. I live at [insert complete street address]
_____, _____ County, Pennsylvania.

2. Pursuant to 25 P.S. § 3154, I request a recount and recanvass of the vote for
President of the United States and for United States Senate in the November 8, 2016 election in
this district.

3. I believe that an error, although not apparent on the face of the returns, has been
committed in the vote in this district. I also believe there is a discrepancy in the returns of this
district.

4. My belief is based, in part, on the attached Affidavit of Alex Halderman, which
raises grave concerns about the integrity of DRE voting machines used in this district. *See Ex. A*
(attached).

5. I request that the county board not just recanvass the votes cast on the DRE machines, but do a forensic analysis of the software and media inside the machines, to determine whether the machines have been hacked or tampered with. As the Halderman affidavit makes clear, merely recanvassing the votes on the machines will not detect whether the machines have been compromised.

6. At minimum, I request that a reasonable subset of the DRE machines be forensically analyzed by appropriate computer experts for potential tampering, malware, and/or hacking.

7. As a voter, and as a citizen of this country, I believe it is extremely important that votes are counted accurately in this election.

8. I hereby verify under penalty of perjury that the facts contained in this petition and affidavit are true and correct to the best of my knowledge or information and belief.

[signature]

Sworn to before me this _____ day of November 2016.

Notary Public

VERIFICATION

I hereby depose and say that the statements in the foregoing Petition to Recount and/or Recanvass are true and correct to the best of my knowledge, information and belief. I understand that this statement is made subject to the penalties of 18 Pa. C. S. Sec 4904 relating to unsworn falsification to authorities.

[signature]

AFFIDAVIT OF J. ALEX HALDERMAN

J. ALEX HALDERMAN, being duly sworn, deposes and says the following under penalty of perjury:

1. My name is J. Alex Halderman. I am a Professor of Computer Science and Engineering and the Director of the Center for Computer Security and Society at the University of Michigan in Ann Arbor, Michigan.

2. I have a Ph.D., a Master's Degree, and a Bachelor's Degree in Computer Science, all from Princeton University.

3. My research focuses on computer security and privacy, with an emphasis on problems that broadly impact society and public policy. Among my areas of research are software security, data privacy, and electronic voting.

4. I have published peer-reviewed research analyzing the security of electronic voting systems used in Pennsylvania, other U.S. states, and other countries. I was part of a team of experts commissioned by the California Secretary of State to conduct a "Top-to-Bottom" review of the state's electronic voting systems. I have also investigated methods for improving the security of electronic voting, such as efficient techniques for testing whether electronic vote totals match paper vote records.

5. I have published numerous other peer-reviewed papers in these areas of research. My full curriculum vitae, including a list of honors and awards, research projects, and publications, is attached as Exhibit A.

Context: Cyberattacks and the 2016 Presidential Election

6. The 2016 presidential election was subject to unprecedented cyberattacks apparently intended to interfere with the election. This summer, attackers broke into the email

system of the Democratic National Committee and, separately, into the email account of John Podesta, the chairman of Secretary Clinton's campaign. Exhibits B and C. The attackers leaked private messages from both hacks. Attackers also infiltrated the voter registration systems of two states, Illinois and Arizona, and stole voter data. Exhibit D. The Department of Homeland Security has stated that senior officials in the Russian government commissioned these attacks. Exhibit E. Attackers attempted to breach election offices in more than 20 other states. Exhibit F.

7. Russia has sophisticated cyber-offensive capabilities, and it has shown a willingness to use them to hack elections elsewhere. For instance, according to published reports, during the 2014 presidential election in Ukraine, attackers linked to Russia sabotaged Ukraine's vote-counting infrastructure, and Ukrainian officials succeeded only at the last minute in defusing vote-stealing malware that could have caused the wrong winner to be announced. Exhibit G. Countries other than Russia also have similarly sophisticated cyberwarfare capabilities.

8. If a foreign government were to attempt to hack American voting machines to influence the outcome of a presidential election, one might expect the attackers to proceed as follows. First, the attackers might probe election offices well in advance to find ways to break into the computers. Next, closer to the election, when it was clear from polling data which states would have close electoral margins, the attackers might spread malware into voting machines into some of these states, manipulating the machines to shift a few percent of the vote to favor their desired candidate. This malware would likely be designed to remain inactive during pre-election tests, perform its function during the election, and then erase itself after the polls closed. One would expect a skilled attacker's work to leave no visible signs, other than a

surprising electoral outcome in which results in several close states differed from pre-election polling.

The Vulnerability of American Voting Machines to Cyberattack

9. As I and other experts have repeatedly documented in peer-reviewed and state-sponsored research, American voting machines have serious cybersecurity problems. Voting machines are computers with reprogrammable software. An attacker who can modify that software by infecting the machines with malware can cause the machines to provide any result of the attacker's choosing. As I have demonstrated in laboratory tests, in just a few seconds, anyone can install vote-stealing malware on a voting machine that silently alters the electronic records of every vote.¹

10. Whether voting machines are connected to the Internet is irrelevant. Shortly before each election, poll workers copy the ballot design from a regular desktop computer in a government office and use removable media (akin to the memory card in a digital camera) to load the ballot design onto each machine. That initial computer is almost certainly not well enough secured to guard against attacks by foreign governments. If technically sophisticated attackers infect that computer, they can spread vote-stealing malware to every voting machine in the area. Technically sophisticated attackers can accomplish this with ease.

11. While the vulnerabilities of American voting machines have been known for some time, states' responses to these vulnerabilities have been patchy and inconsistent at best. Many states, including Pennsylvania, continue to use out-of-date machines that are known to be insecure.

¹ A video documenting this result is publicly available at <https://youtu.be/aZws98jw67g>.

Where Paper is Available, Examining the Paper Record Is the Only Way to Ensure the Integrity of the Result; For Paperless DRE Machines, Forensic Examination is the Only Way to Ensure the Integrity of the Result

12. Paper ballots are the best and most secure technology available for casting votes. Optical scan voting allows the voter to fill out a paper ballot that is scanned and counted by a computer. Electronic voting machines with voter-verified paper audit trails allow the voter to review a printed record of the vote he has just cast on a computer. Only a paper record documents the vote in a manner that cannot later be modified by malware or other forms of cyberattacks.

13. One explanation for the results of the 2016 presidential election is that cyberattacks influenced the result. This explanation is plausible, in light of other known cyberattacks intended to affect the outcome of the election; the profound vulnerability of American voting machines to cyberattack; and the fact that a skilled attacker would leave no outwardly visible evidence of an attack other than an unexpected result.

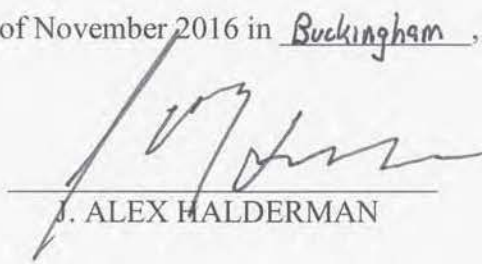
14. The only way to determine whether a cyberattack affected the outcome of the 2016 presidential election is to examine the available physical evidence—that is, to count the paper ballots and paper audit trail records, and review the voting equipment, to ensure that the votes cast by actual voters match the results determined by the computers.

15. For ballots cast through optical scanners, a manual recount of the paper ballots, without relying on the electronic equipment, must occur. Using the electronic equipment to conduct the recount, even after first evaluating the machine through a test deck, is insufficient. Attackers intending to commit a successful cyberattack could, and likely would, create a method to undermine any pre-tests. For votes cast on electronic voting machines, such as DREs, the paper audit trail records (if any) must be counted, since the electronic records stored in the machines

could have been manipulated in an attack. But this is insufficient to uncover many types of hacking and malware. Voting equipment that might yield forensic evidence of an attack includes the voting machines, removable media, and election management system computers. All of these must be forensically analyzed to ensure the integrity of the result. Paperless DRE voting machines do not create any physical record of each vote, so forensic examination of the equipment is the only way to assure that the machines were not manipulated in a cyberattack. Paper ballots, paper audit trails, and voting equipment will only be examined in this manner if there is a recount.


16. A recount is the best way, and indeed the only way, to ensure public confidence that the results are accurate, authentic, and untainted by interference. It will also set a precedent that may provide an important deterrent against cyberattacks on future elections.

This affidavit was executed on the 25th day of November 2016 in Buckingham, Pennsylvania.



J. ALEX HALDERMAN

Sworn to before me this 25th day of November 2016.



Notary Public

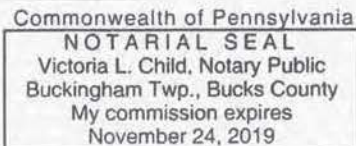


Exhibit A

J. Alex Halderman

Professor, Computer Science and Engineering
University of Michigan

November 4, 2016

2260 Hayward Street
Ann Arbor, MI 48109 USA
(mobile) +1 609 558 2312
jhalderm@eecs.umich.edu

J.AlexHalderman.com

Research Overview

My research focuses on computer security and privacy, with an emphasis on problems that broadly impact society and public policy. Topics that interest me include software security, network security, data privacy, anonymity, surveillance, electronic voting, censorship resistance, digital rights management, computer forensics, ethics, and cybercrime. I'm also interested in the interaction of technology with law, regulatory policy, and international affairs.

Selected Projects

'16: Let's Encrypt HTTPS certificate authority	'10: Vulnerabilities in India's e-voting machines
'15: Weak Diffie-Hellman and the Logjam attack	'10: Reshaping developers' security incentives
'14: Understanding Heartbleed's aftermath	'09: Analysis of China's Green Dam censorware
'14: Security problems in full-body scanners	'09: Fingerprinting paper with desktop scanners
'14: Analysis of Estonia's Internet voting system	'08: Cold-boot attacks on encryption keys
'13: ZMap Internet-wide network scanner	'07: California's "top-to-bottom" e-voting review
'12: Widespread weak keys in network devices	'07: Machine-assisted election auditing
'11: Anticensorship in the network infrastructure	'06: The Sony rootkit: DRM's harmful side effects
'10: Hacking Washington D.C.'s Internet voting	'03: Analysis of MediaMax "shift key" DRM

Positions

- University of Michigan, Ann Arbor, MI
Department of Electrical Engineering and Computer Science,
Computer Science and Engineering Division
Professor ... (2016–present)
Associate Professor ... (2015–2016)
Assistant Professor ... (2009–2015)
Director, Center for Computer Security and Society (2014–present)

Education

- Ph.D. in Computer Science, Princeton University, June 2009
Advisor: Ed Felten
Thesis: *Investigating Security Failures and their Causes: An Analytic Approach to Computer Security*
Doctoral committee: Andrew Appel, Adam Finkelstein, Brian Kernighan, Avi Rubin
- M.A. in Computer Science, Princeton University, June 2005
- A.B. in Computer Science, *summa cum laude*, Princeton University, June 2003

Honors and Awards

- Pwnie Award in the category of “Best Cryptographic Attack” for “DROWN: Breaking TLS using SSLv2,” Black Hat 2016
- Finalist for 2016 Facebook Internet Defense Prize for “DROWN: Breaking TLS using SSLv2”
- Named one of Popular Science’s “Brilliant 10” (2015) (“each year *Popular Science* honors the brightest young minds reshaping science, engineering, and the world”)
- **Best Paper Award** of the 22nd ACM Conference on Computer and Communications Security for “Imperfect Forward Secrecy: How Diffie-Hellman Fails in Practice” (2015)
- Pwnie Award in the category of “Most Innovative Research” for “Imperfect Forward Secrecy: How Diffie-Hellman Fails in Practice,” Black Hat 2015
- IRTF Applied Networking Research Prize for “Neither Snow Nor Rain Nor MITM. . . An Empirical Analysis of Email Delivery Security” (2015)
- Alfred P. Sloan Research Fellowship (2015)
- University of Michigan College of Engineering 1938 E Award (2015) (“recognizes an outstanding teacher in both elementary and advanced courses, an understanding counselor of students who seek guidance in their choice of a career, a contributor to the educational growth of his/her College, and a teacher whose scholarly integrity pervades his/her service and the profession of Engineering”)
- Morris Wellman Faculty Development Assistant Professorship (2015) (“awarded to a junior faculty member to recognize outstanding contributions to teaching and research”)
- **Best Paper Award** of the 14th ACM Internet Measurement Conference for “The Matter of Heartbleed” (2014)
- **Best Paper Award** of the 21st USENIX Security Symposium for “Mining Your Ps and Qs: Detection of Widespread Weak Keys in Network Devices” (2012)
- Runner-up for 2012 PET Award for Outstanding Research in Privacy Enhancing Technologies for “Telex: Anticensorship in the Network Infrastructure” (2012)
- John Gideon Memorial Award from the Election Verification Network for contributions to election verification (2011)
- **Best Student Paper** of the 17th USENIX Security Symposium for “Lest We Remember: Cold Boot Attacks on Encryption Keys” (2008)
- Pwnie Award in the category of “Most Innovative Research” for “Lest We Remember: Cold Boot Attacks on Encryption Keys,” Black Hat 2008
- Charlotte Elizabeth Procter Honorific Fellowship, Princeton University (2007) (“awarded in recognition of outstanding performance and professional promise, and represents high commendation from the Graduate School”)
- National Science Foundation Graduate Research Fellowship (2004–2007)

- Best Paper Award of the 8th International Conference on 3D Web Technology for “Early Experiences with a 3D Model Search Engine” (2003)
- Princeton Computer Science Department Senior Award (2003)
- Accenture Prize in Computer Science, Princeton University (2002)
- Martin A. Dale Summer Award, Princeton University (2000)
- USA Computing Olympiad National Finalist (1996 and 1997)

Refereed Conference Publications

[1] The Security Impact of HTTPS Interception

Zakir Durumeric, Zane Ma, Drew Springall, Richard Barnes, Nick Sullivan, Elie Bursztein, Michael Bailey, J. A. Halderman, and Vern Paxson
To appear in *Proc. 24th Network and Distributed Systems Symposium (NDSS)*, February 2017.
Acceptance rate: 16%, 68/423.

[2] Measuring Small Subgroup Attacks Against Diffie-Hellman

Luke Valenta, David Adrian, Antonio Sanso, Shaanan Cohney, Joshua Fried, Marcella Hastings, J. A. Halderman, and Nadia Heninger
To appear in *Proc. 24th Network and Distributed Systems Symposium (NDSS)*, February 2017.
Acceptance rate: 16%, 68/423.

[3] An Internet-Wide View of ICS Devices

Ariana Mirian, Zane Ma, David Adrian, Matthew Tischer, Thasphon Chuenchujit, Tim Yardley, Robin Berthier, Josh Mason, Zakir Durumeric, J. A. Halderman and Michael Bailey
To appear in *Proc. 14th IEEE Conference on Privacy, Security, and Trust (PST)*, December 2016.

[4] Implementing Attestable Kiosks

Matthew Bernhard, J. A. Halderman, and Gabe Stocco
To appear in *Proc. 14th IEEE Conference on Privacy, Security, and Trust (PST)*, December 2016.

[5] Measuring the Security Harm of TLS Crypto Shortcuts

Drew Springall, Zakir Durumeric, and J. A. Halderman
To appear in *Proc. 16th ACM Internet Measurement Conference (IMC)*, Santa Monica, Nov. 2016.
Acceptance rate: 25%, 46/184.

[6] Towards a Complete View of the Certificate Ecosystem

Benjamin VanderSloot, Johanna Amann, Matthew Bernhard, Zakir Durumeric, Michael Bailey, and J. A. Halderman
To appear in *Proc. 16th ACM Internet Measurement Conference (IMC)*, Santa Monica, Nov. 2016.
Acceptance rate: 25%, 46/184.

- [7] **DROWN: Breaking TLS using SSLv2**
Nimrod Aviram, Sebastian Schinzel, Juraj Somorovsky, Nadia Heninger, Maik Dankel, Jens Steube, Luke Valenta, David Adrian, J. A. Halderman, Viktor Dukhovni, Emilia Käsper, Shaanan Cohney, Susanne Engels, Christof Paar, and Yuval Shavitt
Proc. 25th USENIX Security Symposium, Austin, TX, August 2016.
Acceptance rate: 16%, 72/463.
Tied for highest ranked submission.
Pwnie award for best cryptographic attack.
Facebook Internet Defense Prize finalist.
- [8] **FTP: The Forgotten Cloud**
Drew Springall, Zakir Durumeric, and J. A. Halderman
Proc. 46th IEEE/IFIP International Conference on Dependable Systems and Networks (DSN), Toulouse, June 2016.
Acceptance rate: 22%, 58/259.
- [9] **Android UI Deception Revisited: Attacks and Defenses**
Earlence Fernandes, Qi Alfred Chen, Justin Paupore, Georg Essl, J. A. Halderman, Z. Morley Mao, and Atul Prakash
Proc. 20th International Conference on Financial Cryptography and Data Security (FC), Barbados, February 2016.
- [10] **Imperfect Forward Secrecy: How Diffie-Hellman Fails in Practice**
David Adrian, Karthikeyan Bhargavan, Zakir Durumeric, Pierrick Gaudry, Matthew Green, J. A. Halderman, Nadia Heninger, Drew Springall, Emmanuel Thomé, Luke Valenta, Benjamin VanderSloot, Eric Wustrow, Santiago Zanella-Béguélin, and Paul Zimmermann
Proc. 22nd ACM Conference on Computer and Communications Security (CCS), Denver, CO, October 2015.
Acceptance rate: 19%, 128/659.
Best paper award. Perfect review score.
Pwnie award for most innovative research.
- [11] **Censys: A Search Engine Backed by Internet-Wide Scanning**
Zakir Durumeric, David Adrian, Ariana Mirian, Michael Bailey, and J. A. Halderman
Proc. 22nd ACM Conference on Computer and Communications Security (CCS), Denver, CO, October 2015.
Acceptance rate: 19%, 128/659.
- [12] **Neither Snow Nor Rain Nor MITM... An Empirical Analysis of Email Delivery Security**
Zakir Durumeric, David Adrian, Ariana Mirian, James Kasten, Elie Bursztein, Nicholas Lidzorski, Kurt Thomas, Vijay Eranti, Michael Bailey, and J. A. Halderman
Proc. 15th ACM Internet Measurement Conference (IMC), Tokyo, October 2015.
Acceptance rate: 26%, 44/169.
IRTF Applied Networking Research Prize winner.

- [13] **The New South Wales iVote System: Security Failures and Verification Flaws in a Live Online Election**
J. A. Halderman and Vanessa Teague
Proc. 5th International Conference on E-Voting and Identity (VoteID), Bern, Switzerland, September 2015.
- [14] **The Matter of Heartbleed**
Zakir Durumeric, Frank Li, James Kasten, Johanna Amann, Jethro Beekman, Mathias Payer, Nicolas Weaver, David Adrian, Vern Paxson, Michael Bailey, and J. A. Halderman
Proc. 14th ACM Internet Measurement Conference (IMC), November 2014.
Acceptance rate: 23%, 43/188
Best paper award.
Honorable mention for Best dataset award.
- [15] **Security Analysis of the Estonian Internet Voting System**
Drew Springall, Travis Finkenauer, Zakir Durumeric, Jason Kitcat, Harri Hursti, Margaret MacAlpine, and J. A. Halderman
Proc. 21st ACM Conference on Computer and Communications Security (CCS), Scottsdale, AZ, November 2014.
Acceptance rate: 19%, 114/585.
Highest ranked submission.
- [16] **Efficiently Auditing Multi-Level Elections**
Joshua A. Kroll, Edward W. Felten, and J. A. Halderman
Proc. 6th International Conference on Electronic Voting (EVOTE), Lochau, Austria, October 2014.
- [17] **Security Analysis of a Full-Body Scanner**
Keaton Mowery, Eric Wustrow, Tom Wypych, Corey Singleton, Chris Comfort, Eric Rescorla, Stephen Checkoway, J. A. Halderman, and Hovav Shacham
Proc. 23rd USENIX Security Symposium, San Diego, CA, August 2014.
Acceptance rate: 19%, 67/350.
- [18] **TapDance: End-to-Middle Anticensorship without Flow Blocking**
Eric Wustrow, Colleen Swanson, and J. A. Halderman
Proc. 23rd USENIX Security Symposium, San Diego, CA, August 2014.
Acceptance rate: 19%, 67/350.
- [19] **An Internet-Wide View of Internet-Wide Scanning**
Zakir Durumeric, Michael Bailey, and J. A. Halderman
Proc. 23rd USENIX Security Symposium, San Diego, CA, August 2014.
Acceptance rate: 19%, 67/350.
- [20] **Elliptic Curve Cryptography in Practice**
Joppe W. Bos, J. A. Halderman, Nadia Heninger, Jonathan Moore, Michael Naehrig, and Eric Wustrow
Proc. 18th Intl. Conference on Financial Cryptography and Data Security (FC), March 2014.
Acceptance rate: 22%, 31/138.

- [21] **Outsmarting Proctors with Smartwatches: A Case Study on Wearable Computing Security**
Alex Migicovsky, Zakir Durumeric, Jeff Ringenberg, and J. A. Halderman
Proc. 18th Intl. Conference on Financial Cryptography and Data Security (FC), March 2014.
Acceptance rate: 22%, 31/138.
- [22] **Analysis of the HTTPS Certificate Ecosystem**
Zakir Durumeric, James Kasten, Michael Bailey, and J. A. Halderman
Proc. 13th ACM Internet Measurement Conference (IMC), Barcelona, Spain, October 2013.
Acceptance rate: 24%, 42/178.
- [23] **ZMap: Fast Internet-Wide Scanning and its Security Applications**
Zakir Durumeric, Eric Wustrow, and J. A. Halderman
Proc. 22nd USENIX Security Symposium, Washington, D.C., August 2013.
Acceptance rate: 16%, 45/277.
- [24] **CAGE: Taming Certificate Authorities by Inferring Restricted Scopes**
James Kasten, Eric Wustrow, and J. A. Halderman
Proc. 17th Intl. Conference on Financial Cryptography and Data Security (FC), April 2013.
- [25] **Mining Your Ps and Qs: Detection of Widespread Weak Keys in Network Devices**
Nadia Heninger, Zakir Durumeric, Eric Wustrow, and J. A. Halderman
Proc. 21st USENIX Security Symposium, pages 205–220, Bellevue, WA, August 2012.
Acceptance rate: 19%, 43/222.
Best paper award.
Named one of *Computing Reviews'* Notable Computing Books and Articles of 2012.
- [26] **Attacking the Washington, D.C. Internet Voting System**
Scott Wolchok, Eric Wustrow, Dawn Isabel, and J. A. Halderman
In Angelos D. Keromytis, editor, *Financial Cryptography and Data Security (FC)*, volume 7397 of *Lecture Notes in Computer Science*, pages 114–128. Springer, 2012.
Acceptance rate: 26%, 23/88.
Election Verification Network John Gideon Memorial Award.
- [27] **Telex: Anticensorship in the Network Infrastructure**
Eric Wustrow, Scott Wolchok, Ian Goldberg, and J. A. Halderman
Proc. 20th USENIX Security Symposium, pages 459–474, San Francisco, CA, August 2011.
Acceptance rate: 17%, 35/204.
Runner-up for 2012 PET Award for Outstanding Research in Privacy Enhancing Technologies.
- [28] **Internet Censorship in China: Where Does the Filtering Occur?**
Xueyang Xu, Z. Morley Mao, and J. A. Halderman
In Neil Spring and George F. Riley, editors, *Passive and Active Measurement*, volume 6579 of *Lecture Notes in Computer Science*, pages 133–142. Springer, 2011.
Acceptance rate: 29%, 23/79.

- [29] **Absolute Pwnage: Security Risks of Remote Administration Tools**
Jay Novak, Jonathan Stribley, Kenneth Meagher, and J. A. Halderman
In George Danezis, editor, *Financial Cryptography and Data Security (FC)*, volume 7035 of *Lecture Notes in Computer Science*, pages 77–84. Springer, 2011.
Acceptance rate: 20%, 15/74.
- [30] **Security Analysis of India’s Electronic Voting Machines**
Scott Wolchok, Eric Wustrow, J. A. Halderman, Hari K. Prasad, Arun Kankipati, Sai Krishna Sakhamuri, Vasavya Yagati, and Rop Gonggrijp
Proc. 17th ACM Conference on Computer and Communications Security (CCS), pages 1–14. ACM, Chicago, IL, October 2010.
Acceptance rate: 17%, 55/320.
Highest ranked submission.
- [31] **Sketcha: A Captcha Based on Line Drawings of 3D Models**
Steve Ross, J. A. Halderman, and Adam Finkelstein
Proc. 19th International World Wide Web Conference (WWW), pages 821–830. ACM, Raleigh, NC, April 2010.
Acceptance rate: 12%, 91/754.
- [32] **Defeating Vanish with Low-Cost Sybil Attacks Against Large DHTs**
Scott Wolchok, Owen S. Hofmann, Nadia Heninger, Edward W. Felten, J. A. Halderman, Christopher J. Rossbach, Brent Waters, and Emmett Witchel
In *Proc. 17th Network and Distributed System Security Symposium (NDSS)*. Internet Society, San Diego, CA, February–March 2010.
Acceptance rate: 15%, 24/156.
- [33] **Fingerprinting Blank Paper Using Commodity Scanners**
William Clarkson, Tim Weyrich, Adam Finkelstein, Nadia Heninger, J. A. Halderman, and Edward W. Felten
IEEE Symposium on Security and Privacy (Oakland), pages 301–314. IEEE, May 2009.
Acceptance rate: 10%, 26/254.
- [34] **Lest We Remember: Cold-Boot Attacks on Encryption Keys**
J. A. Halderman, Seth D. Schoen, Nadia Heninger, William Clarkson, William Paul, Joseph A. Calandrino, Ariel J. Feldman, Jacob Appelbaum, and Edward W. Felten
Proc. 17th USENIX Security Symposium, pages 45–60, San Jose, CA, July 2008.
Acceptance rate: 16%, 27/170.
Best student paper award.
Pwnie award for most innovative research.
- [35] **Harvesting Verifiable Challenges from Oblivious Online Sources**
J. A. Halderman and Brent Waters
Proc. 14th ACM Conference on Computer and Communications Security (CCS), pages 330–341. ACM, Washington, D.C., October 2007.
Acceptance rate: 18%, 55/302.

- [36] **Lessons from the Sony CD DRM Episode**
J. A. Halderman and Edward W. Felten
Proc. 15th USENIX Security Symposium, pages 77–92, Vancouver, BC, August 2006.
Acceptance rate: 12%, 22/179.
- [37] **A Convenient Method for Securely Managing Passwords**
J. A. Halderman, Brent Waters, and Edward W. Felten
Proc. 14th International World Wide Web Conference (WWW), pages 471–479. ACM, Chiba, Japan, May 2005.
Acceptance rate: 14%, 77/550.
- [38] **New Client Puzzle Outsourcing Techniques for DoS Resistance**
Brent Waters, Ari Juels, J. A. Halderman, and Edward W. Felten
Proc. 11th ACM Conference on Computer and Communications Security (CCS), pages 246–256. ACM, Washington, D.C., October 2004.
Acceptance rate: 14%, 35/251.
- [39] **Early Experiences with a 3D Model Search Engine**
Patrick Min, J. A. Halderman, Michael Kazhdan, and Thomas Funkhouser
Proc. 8th International Conference on 3D Web Technology (Web3D), pages 7–18. ACM, Saint Malo, France, March 2003.
Best paper award.

Book Chapters

- [40] **Practical Attacks on Real-world E-voting**
J. A. Halderman
In Feng Hao and Peter Y. A. Ryan (Eds.), *Real-World Electronic Voting: Design, Analysis and Deployment*, pages 145–171, CRC Press, 2016.

Journal Publications

- [41] **Lest We Remember: Cold-Boot Attacks on Encryption Keys**
J. A. Halderman, Seth D. Schoen, Nadia Heninger, William Clarkson, William Paul, Joseph A. Calandrino, Ariel J. Feldman, Jacob Appelbaum, and Edward W. Felten
Communications of the ACM, 52(5):91–98, 2009.
- [42] **A Search Engine for 3D Models**
Thomas Funkhouser, Patrick Min, Michael Kazhdan, Joyce Chen, J. A. Halderman, David P. Dobkin, and David Jacobs
ACM Transactions on Graphics (TOG), 22(1):83–105, 2003.

Refereed Workshop Publications

- [43] **Content-Based Security for the Web**
Alexander Afanasyev, J. A. Halderman, Scott Ruoti, Kent Seamons, Yingdi Yu, Daniel Zappala, and Lixia Zhang
Proc. 2016 New Security Paradigms Workshop (NSPW), September 2016.
- [44] **Umbra: Embedded Web Security through Application-Layer Firewalls**
Travis Finkenauer and J. A. Halderman
Proc. 1st Workshop on the Security of Cyberphysical Systems (WOS-CPS), Vienna, Austria, September 2015.
- [45] **Replication Prohibited: Attacking Restricted Keyways with 3D Printing**
Ben Burgess, Eric Wustrow, and J. A. Halderman
Proc. 9th USENIX Workshop on Offensive Technologies (WOOT), Washington, DC, August 2015.
- [46] **Green Lights Forever: Analyzing the Security of Traffic Infrastructure**
Branden Ghena, William Beyer, Allen Hillaker, Jonathan Pevarnek, and J. A. Halderman
Proc. 8th USENIX Workshop on Offensive Technologies (WOOT), San Diego, CA, August 2014.
- [47] **Zippier ZMap: Internet-Wide Scanning at 10Gbps**
David Adrian, Zakir Durumeric, Gulshan Singh, and J. A. Halderman
Proc. 8th USENIX Workshop on Offensive Technologies (WOOT), San Diego, CA, August 2014.
- [48] **Internet Censorship in Iran: A First Look**
Simurgh Aryan, Homa Aryan, and J. A. Halderman
Proc. 3rd USENIX Workshop on Free and Open Communications on the Internet (FOCI), Washington, D.C., August 2013.
- [49] **Illuminating the Security Issues Surrounding Lights-Out Server Management**
Anthony Bonkoski, Russ Bielawski, and J. A. Halderman
Proc. 7th USENIX Workshop on Offensive Technologies (WOOT), Washington, D.C., August 2013.
- [50] **Crawling BitTorrent DHTs for Fun and Profit**
Scott Wolchok and J. A. Halderman
Proc. 4th USENIX Workshop on Offensive Technologies (WOOT), Washington, D.C., August 2010.
- [51] **Can DREs Provide Long-Lasting Security?
The Case of Return-Oriented Programming and the AVC Advantage**
Steve Checkoway, Ariel J. Feldman, Brian Kantor, J. A. Halderman, Edward W. Felten, and Hovav Shacham
Proc. 2009 USENIX/ACCURATE/IAVoSS Electronic Voting Technology Workshop / Workshop on Trustworthy Elections (EVT/WOTE), Montreal, QC, August 2009.
- [52] **You Go to Elections with the Voting System You Have:
Stop-Gap Mitigations for Deployed Voting Systems**
J. A. Halderman, Eric Rescorla, Hovav Shacham, and David Wagner
In *Proc. 2008 USENIX/ACCURATE Electronic Voting Technology Workshop (EVT)*, San Jose, CA, July 2008.

- [53] **In Defense of Pseudorandom Sample Selection**
Joseph A. Calandrino, J. A. Halderman, and Edward W. Felten
Proc. 2008 USENIX/ACCURATE Electronic Voting Technology Workshop (EVT), San Jose, CA, July 2008.
- [54] **Security Analysis of the Diebold AccuVote-TS Voting Machine**
Ariel J. Feldman, J. A. Halderman, and Edward W. Felten
Proc. 2007 USENIX/ACCURATE Electronic Voting Technology Workshop (EVT), Washington, D.C., August 2007.
- [55] **Machine-Assisted Election Auditing**
Joseph A. Calandrino, J. A. Halderman, and Edward W. Felten
Proc. USENIX/ACCURATE Electronic Voting Technology Workshop (EVT), Washington, D.C., August 2007.
- [56] **Privacy Management for Portable Recording Devices**
J. A. Halderman, Brent Waters, and Edward W. Felten
Proc. 2004 ACM Workshop on Privacy in the Electronic Society (WPES), pages 16–24, ACM, Washington, D.C., October 2004.
Acceptance rate: 22%, 10/45.
- [57] **Evaluating New Copy-Prevention Techniques for Audio CDs**
J. A. Halderman
In Joan Feigenbaum, editor, *Digital Rights Management*, volume 2696 of *Lecture Notes in Computer Science*, pages 101–117. Springer, 2003.

Selected Other Publications

- [58] **The Security Challenges of Online Voting Have Not Gone Away**
Robert Cunningham, Matthew Bernhard, and J. A. Halderman
IEEE Spectrum, November 3, 2016.
- [59] **TIVOS: Trusted Visual I/O Paths for Android**
Earlence Fernandes, Qi Alfred Chen, Georg Essl, J. A. Halderman, Z. Morley Mao, and Atul Prakash
Technical report, Computer Science and Engineering Division, University of Michigan, Ann Arbor, MI, May 2014.
- [60] **Tales from the Crypto Community:
The NSA Hurt Cybersecurity. Now It Should Come Clean**
Nadia Heninger and J. A. Halderman
Foreign Affairs, October 23, 2013.

- [61] **Ethical Issues in E-Voting Security Analysis**
David G. Robinson and J. A. Halderman
In George Danezis, Sven Dietrich, and Kazue Sako, editors, *Financial Cryptography and Data Security*, volume 7126 of *Lecture Notes in Computer Science*, pages 119–130. Springer, 2011.
Invited paper.
- [62] **To Strengthen Security, Change Developers’ Incentives**
J. A. Halderman
IEEE Security & Privacy, 8(2):79–82, March/April 2010.
- [63] **Analysis of the Green Dam Censorware System**
Scott Wolchok, Randy Yao, and J. A. Halderman
Technical report, Computer Science and Engineering Division, University of Michigan, Ann Arbor, MI, June 2009.
- [64] **AVC Advantage: Hardware Functional Specifications**
J. A. Halderman and Ariel J. Feldman
Technical report, TR-816-08, Princeton University Computer Science Department, Princeton, New Jersey, March 2008.
- [65] **Source Code Review of the Diebold Voting System**
J. A. Calandrino, A. J. Feldman, J. A. Halderman, D. Wagner, H. Yu, and W. Zeller
Technical report, California Secretary of State’s “Top-to-Bottom” Voting Systems Review (TTBR), July 2007.
- [66] **Digital Rights Management, Spyware, and Security**
Edward W. Felten and J. A. Halderman
IEEE Security & Privacy, 4(1):18–23, January/February 2006.
- [67] **Analysis of the MediaMax CD3 Copy-Prevention System**
J. A. Halderman
Technical report, TR-679-03, Princeton University Computer Science Department, Princeton, New Jersey, October 2003.

Selected Legal and Regulatory Filings

- [68] **Request for DMCA Exemption: Games with Insecure DRM and Insecure DRM Generally**
Comment to the Librarian of Congress of J. A. Halderman, represented by B. Reid, P. Ohm, H. Surden, and J. B. Bernthal, regarding the U.S. Copyright Office 2008–2010 DMCA Anticircumvention Rulemaking, Dec. 2008.
(*Outcome*: Requested exemption granted in part.)
- [69] **Request for DMCA Exemption for Audio CDs with Insecure DRM**
Comment to the Librarian of Congress of E. Felten and J. A. Halderman, represented by D. Mulligan and A. Perzanowski, regarding the U.S. Copyright Office 2005–2006 DMCA Anticircumvention Rulemaking, Dec. 2005.
(*Outcome*: Requested exemption granted in part.)

Patents

- [70] **Controlling Download and Playback of Media Content**
Wai Fun Lee, Marius P. Schilder, Jason D. Waddle, and J. A. Halderman
U.S. Patent No. 8,074,083, issued Dec. 2011.
- [71] **System and Method for Machine-Assisted Election Auditing**
Edward W. Felten, Joseph A. Calandrino, and J. A. Halderman
U.S. Patent No. 8,033,463, issued Oct. 2011.

Speaking

Major Invited Talks and Keynotes

- **Let's Encrypt**
Invited speaker, TTI/Vanguard conference on Cybersecurity, Washington, D.C., Sept. 28, 2016.
- **Elections and Cybersecurity: What Could Go Wrong?**
Keynote speaker, 19th Information Security Conference (ISC), Honolulu, September 9, 2016.
- **Internet Voting: What Could Go Wrong?**
Invited speaker, USENIX Enigma, San Francisco, January 27, 2016.
- **Logjam: Diffie-Hellman, Discrete Logs, the NSA, and You**
32c3, Hamburg, December 29, 2015.
- **The Network Inside Out: New Vantage Points for Internet Security**
Invited talk, China Internet Security Conference (ISC), Beijing, September 30, 2015.
- **The Network Inside Out: New Vantage Points for Internet Security**
Keynote speaker, ESCAR USA (Embedded Security in Cars), Ypsilanti, Michigan, May 27, 2015.
- **Security Analysis of the Estonian Internet Voting System.**
31c3, Hamburg, December 28, 2014.
- **The Network Inside Out: New Vantage Points for Internet Security**
Keynote speaker, 14th Brazilian Symposium on Information Security and Computer Systems (SBSeg), Belo Horizonte, Brazil, November 4, 2014.
- **Empirical Cryptography: Measuring How Crypto is Used and Misused Online**
Keynote speaker, 3rd International Conference on Cryptography and Information Security in Latin America (Latincrypt), Florianópolis, Brazil, September 2014.
- **Healing Heartbleed: Vulnerability Mitigation with Internet-wide Scanning**
Keynote speaker, 11th Conference on Detection of Intrusions and Malware and Vulnerability Assessment (DIMVA), London, July 10, 2014.
- **Fast Internet-wide Scanning and its Security Applications.**
30c3, Hamburg, December 28, 2013.
- **Challenging Security Assumptions.** Three-part tutorial. 2nd TCE Summer School on Computer Security, Technion (Haifa, Israel), July 23, 2013.

- **Verifiably Insecure: Perils and Prospects of Electronic Voting**
Invited talk, Computer Aided Verification (CAV) 2012 (Berkeley, CA), July 13, 2012.
- **Deport on Arrival: Adventures in Technology, Politics, and Power**
Invited talk, 20th USENIX Security Symposium (San Francisco, CA), Aug. 11, 2011.
- **Electronic Voting: Danger and Opportunity**
Keynote speaker, ShmooCon 2008 (Washington, D.C.), Feb. 15, 2008.

Selected Talks (2009–present)

- **The Legacy of Export-grade Cryptography in the 21st Century.** Invited talk, Summer school on real-world crypto and privacy, Croatia, June 9, 2016.
- **Let's Encrypt: A Certificate Authority to Encrypt the Entire Web.** Invited talk, Cubaconf, Havana, April 25, 2016.
- **Logjam: Diffie-Hellman, Discrete Logs, the NSA, and You.** Invited talk, NYU Tandon School of Engineering, April 8, 2016 [host: Damon McCoy]; Invited talk, UIUC Science of Security seminar, February 9, 2016 [host: Michael Bailey].
- **The Network Inside Out: New Vantage Points for Internet Security.** Invited talk, Qatar Computing Research Institute, Doha, May 24, 2015; Invited talk, University of Chile, Santiago, April 8, 2015; Invited talk, Princeton University, October 15, 2014; Invited talk, U.T. Austin, March 9, 2014.
- **Decoy Routing: Internet Freedom in the Network's Core.** Invited speaker, Internet Freedom Technology Showcase: The Future of Human Rights Online, New York, Sep. 26, 2015.
- **The New South Wales iVote System: Security Failures and Verification Flaws in a Live Online Election.** 5th International Conference on E-Voting and Identity (VoteID), Bern, Switzerland, Sep. 3, 2015; Invited talk, IT Univ. of Copenhagen, Sep. 1, 2015; Invited talk (with Vanessa Teague), USENIX Journal of Election Technologies and Systems Workshop (JETS), Washington, D.C., Aug. 11, 2015.
- **Security Analysis of the Estonian Internet Voting System.** Invited talk, 5th International Conference on E-Voting and Identity (VoteID), Bern, Switzerland, Sep. 3, 2015; Invited talk, Google, Mountain View, CA, June 3, 2014; Invited talk, Copenhagen University, June 12, 2014.
- **Indiscreet Tweets.** Rump session talk; 24th USENIX Security Symposium, Washington, D.C., August 12, 2015.
- **How Diffie-Hellman Fails in Practice.** Invited talk, IT Univ. of Copenhagen, May 22, 2015.
- **Influence on Democracy of Computers, Internet, and Social Media.** Invited speaker, Osher Lifelong Learning Institute at the University of Michigan, March 26, 2015.
- **E-Voting: Danger and Opportunity.** Invited talk, University of Chile, Santiago, April 7, 2015; Keynote speaker, 14th Brazilian Symposium on Information Security and Computer Systems (SBSeg), Belo Horizonte, Brazil, November 3, 2014; Crypto seminar, University of Tartu, Estonia, October 10, 2013; Invited speaker, US–Egypt Cyber Security Workshop, Cairo, May 28, 2013; Invited speaker, First DemTech Workshop on Voting Technology for Egypt, Copenhagen, May

- 1, 2013; Invited keynote, 8th CyberWatch Mid-Atlantic CCDC, Baltimore, MD, Apr. 10, 2013; Invited speaker, Verifiable Voting Schemes Workshop, University of Luxembourg, Mar. 21, 2013; Invited speaker, MHacks hackathon, Ann Arbor, MI, Feb. 2, 2013; Public lecture, U. Michigan, Nov. 6, 2012.
- **Internet Censorship in Iran: A First Look.** 3rd USENIX Workshop on Free and Open Communications on the Internet (FOCI), Aug. 13, 2013.
 - **Mining Your Ps and Qs: Detection of Widespread Weak Keys in Network Devices.** Invited talk, NSA, Aug. 8, 2013; Invited talk, Taiwan Information Security Center Workshop, National Chung-Hsing University (Taichung, Taiwan), Nov. 16, 2012
 - **Securing Digital Democracy.** U. Maryland, Apr. 8, 2013 [host: Jonathan Katz]; CMU, Apr. 1, 2013 [host: Virgil Gligor]; Cornell, Feb. 28, 2013 [host: Andrew Myers].
 - **Telex: Anticensorship in the Network Infrastructure.** Invited speaker, Academia Sinica (Taipei), Nov. 14, 2012 [host: Bo-Yin Yang]; TRUST Seminar, U.C., Berkeley, Dec. 1, 2011 [host: Galina Schwartz]; Think Conference, Nov. 5, 2011; Ideas Lunch, Information Society Project at Yale Law School, Oct. 26, 2011; Invited speaker, Committee to Protect Journalists Online Press Freedom Summit (San Francisco), Sept. 27, 2011.
 - **Deport on Arrival: Adventures in Technology, Politics, and Power.** Guest lecture, U-M School of Art and Design, Nov 5, 2012 [host: Osman Khan]; Invited speaker, CS4HS Workshop, U. Michigan, Aug. 21, 2012; Invited speaker, U. Michigan IEEE, Feb. 15, 2012.
 - **Attacking the Washington, D.C. Internet Voting System.** Invited speaker, International Foundation for Election Systems (IFES), Nov. 2, 2012 [host: Michael Yard]; Invited speaker, IT University of Copenhagen, May 11, 2012 [host: Carsten Schürmann].
 - **Voter IDon't.** Rump session talk; 21st USENIX Security Symposium (Bellevue, WA), Aug. 8, 2012; Rump session talk; EVT/WOTE '12 (Bellevue, WA), Aug. 6, 2012 [with Josh Benaloh].
 - **Reed Smith's Evening with a Hacker.** Keynote speaker (New Brunswick, NJ), Oct. 20, 2011.
 - **Are DREs Toxic Waste?** Rump session talk, 20th USENIX Security Symposium (San Francisco), Aug. 10, 2011; Rump session talk, EVT/WOTE '11 (San Francisco), Aug. 8, 2011.
 - **Security Problems in India's Electronic Voting Machines.** Dagstuhl seminar on Verifiable Elections and the Public (Wadern, Germany), July 12, 2011; Harvard University, Center for Research on Computation and Society (CRCS) seminar, Jan. 24, 2011 [host: Ariel Procaccia]; U. Michigan, CSE seminar, Nov. 18, 2010 [with Hari Prasad]; MIT, CSAIL CIS Seminar, Nov. 12, 2010 [with Hari Prasad; host: Ron Rivest]; Distinguished lecture, U.C. San Diego, Department of Computer Science, Nov. 9, 2010 [with Hari Prasad; host: Hovav Shacham]; U.C. Berkeley, Center for Information Technology Research in the Interest of Society (CITRIS), Nov. 8, 2010 [with Hari Prasad; host: Eric Brewer]; Google, Inc., Tech Talk (Mountain View, CA), Nov. 5, 2010 [with Hari Prasad; host: Marius Schilder]; U.C., Berkeley TRUST Security Seminar, Nov. 4, 2010 [with Hari Prasad; host: Shankar Sastry]; Stanford University, CS Department, Nov. 3, 2010 [with Hari Prasad; host: David Dill]; Princeton University, Center for Information Technology Policy, Oct. 28, 2010 [with Hari Prasad, host: Ed Felten]; University of Texas at Austin, Department of Computer Science, Aug. 27, 2010 [host: Brent Waters].

- **Ethical Issues in E-Voting Security Analysis.** Invited talk, Workshop on Ethics in Computer Security Research (WECSR) (Castries, St. Lucia), Mar. 4, 2011 [with David Robinson].
- **Electronic Voting: Danger and Opportunity.** Invited speaker, “Interfaces 10: Technology, Society and Innovation,” Center for Technology and Society (CTS/FGV) (Rio de Janeiro), Dec. 2, 2010 [host: Ronaldo Lemos]; Invited speaker, Conference on “EVMs: How Trustworthy?,” Centre for National Renaissance (Chennai, India), Feb. 13, 2010; Google, Inc., Tech Talk (Mountain View, CA), Jan. 10, 2008; Star Camp (Cape Town, South Africa), Dec. 8, 2007; Lehigh University, Nov. 27, 2007; Princeton OiT Lunch-’n-Learn, Oct. 24, 2007; University of Waterloo (Canada), Feb. 28, 2007.
- **A New Approach to Censorship Resistance.** Think Conference, Nov. 7, 2010.
- **Practical AVC-Edge CompactFlash Modifications can Amuse Nerds [PACMAN].** Rump session, 19th USENIX Security Symposium (Washington, D.C.), Aug. 11, 2010; Rump session, EVT/WOTE ’10 (Washington, D.C.), Aug. 9, 2010.
- **Legal Challenges to Security Research.** Guest lecture, Law 633: Copyright, U. Michigan Law School, Apr. 7, 2010; Invited talk, University of Florida Law School, Oct. 12, 2006.
- **Adventures in Computer Security.** Invited talk, Greenhills School, grades 6–12 (Ann Arbor, MI), Mar. 8, 2010.
- **The Role of Designers’ Incentives in Computer Security Failures.** STIET Seminar, U. Michigan, Oct. 8, 2009.
- **Cold-Boot Attacks Against Disk Encryption.** Invited speaker, SUMIT 09 Security Symposium, U. Michigan, Oct. 20, 2009.
- **On the Attack.** Distinguished lecture, U.C. Berkeley EECS, Nov. 18, 2009.

Selected Other Speaking (2010–present)

- **Moderator: Apple & the FBI: Encryption, Security, and Civil Liberties.** Panelists: Nate Cardozo and Barbara McQuade. U-M Dissonance Speaker Series, April 12, 2016.
- **Moderator: Privacy, IT Security and Politics.** Panelists: Ari Schwartz and David Sobel. U-M ITS SUMIT_2015, Oct. 22, 2015.
- **Panelist: The Future of E-Voting Research.** 5th International Conference on E-Voting and Identity (VoteID), Bern, Switzerland, Sep. 4, 2015.
- **Moderator: Panel on Research Ethics.** 24th USENIX Security Symposium, Washington, D.C., August 13, 2015.
- **Panelist: Theories of Privacy in Light of “Big Data.”** Michigan Telecommunications and Technology Law Review Symposium on Privacy, Technology, and the Law, University of Michigan Law School, Feb. 21, 2015.
- **Panelist: Measuring Privacy.** Big Privacy symposium, Princeton University CITP, Apr. 26, 2013 [moderator: Ed Felten].

- Panelist: **Civil Society’s Challenge in Preserving Civic Participation**. The Public Voice workshop: Privacy Rights are a Global Challenge, held in conjunction with the 34th International Conference of Data Protection and Privacy Commissioners, Punta del Este, Uruguay, Oct. 22, 2012 [moderator: Lillie Coney].
- Panelist: **Election Technologies: Today and Tomorrow**. Microsoft Faculty Summit (Redmond), July 17, 2012 [moderator: Josh Benaloh].
- Panelist: **Is America Ready to Vote on the Internet?** CSPRI Seminar, George Washington University (Washington, D.C.), May 16, 2012 [moderator: Lance Hoffman].
- Panelist: **Technical Methods of Circumventing Censorship**. Global Censorship Conference, Yale Law School, Mar. 31, 2012.
- Panelist: **Internet Voting**. RSA Conference (San Francisco), Mar. 1, 2012 [moderator: Ron Rivest].
- Panelist: **The Law and Science of Trustworthy Elections**. Association of American Law Schools (AALS) Annual Meeting, Jan. 5, 2012 [moderator: Ron Rivest].
- Panelist: **Connecticut Secretary of State’s Online Voting Symposium** (New Britain, CT), Oct. 27, 2011 [moderator: John Dankosky].
- Panelist: **CS Saves the World**. Michigan CSE Mini-symposium, Mar. 19, 2011 [moderator: Prabal Dutta].
- Panelist: **Cyber Security / Election Technology**. Overseas Voting Foundation Summit, Feb. 10, 2011 [moderator: Candice Hoke].
- ~~Tutorial speaker/organizer: **Security Issues in Electronic Voting**, ICISS (Gandhinagar, India), Dec. 15, 2010 [canceled under threat of deportation].~~
- Invited testimony: **On D.C. Board of Elections and Ethics Readiness for the Nov. 2010 General Election**. D.C. Council Hearing, Oct. 8, 2010.
- Panelist and organizer: **India’s Electronic Voting Machines**. EVT/WOTE (Washington, D.C.), Aug. 9, 2010.
- Panelist: **Ethics in Networking and Security Research**. ISOC Network and Distributed System Security Symposium (San Diego, CA), Mar. 2, 2010 [moderator: Michael Bailey].

Advising and Mentoring

Graduate Students

- Allison McDonald (Ph.D. in progress)
- Matthew Bernhard (Ph.D. in progress)
- Benjamin VanderSloot (Ph.D. in progress)
- David Adrian (Ph.D. in progress)
- Andrew Springall (Ph.D. in progress; NSF Graduate Research Fellowship)
- Zakir Durumeric (Ph.D. in progress; Google Ph.D. Fellowship in Computer Security)
- Travis Finkenauer (M.S. 2016; went on to security position at Juniper Networks)
- Eric Wustrow (Ph.D. 2016; went on to tenure track faculty position at U. Colorado, Boulder)
- James Kasten (Ph.D. 2015; went on to software engineering position at Google)
- Scott Wolchok (M.S. 2011; went on to software engineering position at Facebook)

Post Docs

- Colleen Swanson (2014–15)

Doctoral Committees

- Denis Bueno (C.S. P.D. expected 2016, Michigan)
- Eric Crockett (C.S. Ph.D. expected 2016, Georgia Tech)
- Jakub Czyz (C.S. Ph.D. 2016, Michigan)
- Eric Wustrow (C.S. Ph.D. 2016, Michigan; chair)
- James Kasten (C.S. Ph.D. 2015, Michigan; chair)
- Jing Zhang (C.S. Ph.D. 2015, Michigan)
- Katharine Cheng (C.S. Ph.D. 2012, Michigan)
- Matt Knysz (C.S. Ph.D. 2012, Michigan)
- Zhiyun Qian (C.S. Ph.D. 2012, Michigan)
- Xin Hu (C.S. Ph.D. 2011, Michigan)
- Ellick Chan (C.S. Ph.D. 2011, UIUC)

Undergraduate Independent Work

- 2016: Ben Burgess, Noah Duncan
- 2015: Ben Burgess, Rose Howell, Vikas Kumar, Ariana Mirian, Zhi Qian Seah
- 2014: Christopher Jeakle, Andrew Modell, Kollin Purcell
- 2013: David Adrian, Anthony Bonkoski, Alex Migicovsky, Andrew Modell, Jennifer O’Neil
- 2011: Yilun Cui, Alexander Motalleb
- 2010: Arun Ganesan, Neha Gupta, Kenneth Meagher, Jay Novak, Dhritiman Sagar, Samantha Schumacher, Jonathan Stribley
- 2009: Mark Griffin, Randy Yao

Teaching

- **Introduction to Computer Security**, EECS 388, University of Michigan
Terms: Fall 2017, Fall 2016, Fall 2015, Fall 2014, Fall 2013, Fall 2011, Fall 2010, Fall 2009
Created new undergrad security elective that has grown to reach >750 students/year. An accessible intro, teaches the security mindset and practical skills for building and analyzing security-critical systems.
- **Computer and Network Security**, EECS 588, University of Michigan
Terms: Winter 2016, Winter 2015, Winter 2014, Winter 2013, Winter 2012, Winter 2011, Winter 2010, Winter 2009
Redesigned core grad-level security course. Based around discussing classic and current research papers and performing novel independent work. Provides an intro. to systems research for many students.
- **Securing Digital Democracy**, Coursera (MOOC)
Designed and taught a massive, open online course that explored the security risks—and future potential—of electronic voting and Internet voting technologies; over 20,000 enrolled students.

Professional Service

Program Committees

- 2017 ISOC Network and Distributed Systems Security Symposium (NDSS '17)
- 2016 ACM Internet Measurement Conference (IMC '16)
- 2016 USENIX Security Symposium (Sec '16)
- 2016 International Joint Conference on Electronic Voting (E-VOTE-ID '16)
- 2016 Workshop on Advances in Secure Electronic Voting (Voting '16)
- 2015 ACM Conference on Computer and Communications Security (CCS '15)
- 2015 ACM Internet Measurement Conference (IMC '15)
- 2015 USENIX Security Symposium (Sec '15)
- 2014 ACM Conference on Computer and Communications Security (CCS '14)
- 2014 USENIX Security Symposium (Sec '14)
- 2013 ACM Conference on Computer and Communications Security (CCS '13)
- **Program co-chair**, 2012 Electronic Voting Technology Workshop/Workshop on Trustworthy Elections (EVT/WOTE '12)
- 2012 Workshop on Free and Open Communications on the Internet (FOCI '12)
- 2012 IEEE Symposium on Security and Privacy (“Oakland” '12)
- 2012 International Conference on Financial Cryptography and Data Security (FC '12)
- 2011 Workshop on Free and Open Communications on the Internet (FOCI '11)
- 2011 Electronic Voting Technology Workshop (EVT/WOTE '11)
- 2010 ACM Conference on Computer and Communications Security (CCS '10)
- 2010 USENIX/ACCURATE/IAVOSS Electronic Voting Technology Workshop (EVT '10)
- 2010 USENIX Security Symposium (Sec '10)
- 2010 IEEE Symposium on Security and Privacy (Oakland '10)
- 2010 International World Wide Web Conference (WWW '10)
- 2009 ACM Conference on Computer and Communications Security (CCS '09)
- 2009 ACM Workshop on Digital Rights Management (DRM '09)
- 2009 ACM Workshop on Multimedia Security (MMS '09)
- 2009 USENIX Workshop on Offensive Technologies (WOOT '09)
- 2009 International World Wide Web Conference (WWW '09)
- 2008 ACM Conference on Computer and Communications Security (CCS '08)
- 2008 ACM Workshop on Privacy in the Electronic Society (WPES '08)
- 2008 USENIX/ACCURATE Electronic Voting Technology Workshop (EVT '08)
- 2008 International World Wide Web Conference (WWW '08)

Boards

- Board of Directors for the Internet Security Research Group (2014–present)
- Board of Advisors for the Verified Voting Foundation (2012–present)

- External Advisory Board for the DemTech Project, IT University of Copenhagen (2011–present)
- Advisory Council for the Princeton University Department of Computer Science (2012–2014)

Department and University Service

- Faculty Advisor for Michigan Hackers student group (2012–present)
- CSE Graduate Affairs Committee (member, 2014–present)
- CSE Undergraduate Program Advising (CS/ENG) (2011–present)
- Faculty Senate, Rules Committee of the Senate Assembly (member, 2011–12)
- CSE Graduate Admissions Committee (member, 2010–11)
- CSE Graduate Committee (member, 2009–10)

Broader Impact of Selected Projects

- **Let's Encrypt: A Certificate Authority to Encrypt the Entire Web** (2016)
Co-founded a new HTTPS certificate authority to provide free, browser-trusted, automatically validated certificates for all domains. Developed in partnership with EFF and Mozilla, Let's Encrypt has helped secure millions of websites and is now issuing certificates at a greater rate than all other CAs combined.
- **The Logjam Attack and Weak Practical Use of Diffie-Hellman** (2015)
Introduced Logjam, a practical attack on TLS that affected nearly 10% of popular HTTPS websites. Our results suggest that state-level attackers can break 1024-bit Diffie-Hellman, providing the first parsimonious explanation for how NSA is decrypting widespread VPN traffic, as revealed by Snowden.
- **Security Analysis of the Estonian Internet Voting System** (2014)
Led the first rigorous security review of world's most significant Internet voting system. Based on code review, laboratory testing, and in-person observation, our study revealed significant shortcomings that could allow state-level attackers to upset national elections.
- **ZMap Internet-Wide Scanner Open-Source Project** (2013)
Created ZMap, a network probing tool designed for Internet-wide measurement research that achieves up to 10,000× better performance than earlier tools. Now a thriving open-source project, ZMap is available in major Linux distros. We also maintain Scans.io, a public scan data repository.
- **Detection of Widespread Weak Keys in Network Devices** (2012)
After conducting the largest Internet-wide survey of HTTPS and SSH hosts, we uncovered serious flaws in cryptographic public key generation affecting millions of users. We disclosed vulnerabilities to more than 60 network device makers and spawned major changes to the Linux random number generator.
- **The Telex Anticensorship System** (2011)
Invented a fundamentally new approach to circumventing state-level Internet censorship, based on placing anticensorship technology into core network infrastructure outside the censoring country. Prototype attracted over 100,000 users, mainly in China. Now testing next-gen. schemes at partner ISP.
- **Attacking Washington, D.C.'s Internet Voting System** (2010)
Participated in the first public security trial of an Internet voting system set to be deployed in a real election. We found serious flaws that allowed us to change all votes without detection. This led to the system being scrapped, and the widespread media coverage has altered the debate on Internet voting.

- **Analysis of India’s E-Voting System (2010)**
Participated in the first independent security review of the electronic voting machines used by half a billion voters in India. The flaws uncovered in our work were front-page news. After arresting my coauthor and threatening to deport me, officials eventually moved to adopt a paper trail nationwide.
- **Green Dam Youth Escort Censorware (2009)**
Uncovered security problems and copyright infringement in client-side censorship software mandated by the Chinese government. Findings helped catalyze popular protest against the program, leading China to reverse its policy requiring installation on new PCs.
- **Cold-Boot Attacks (2008)**
Developed the “cold boot” attack against software disk encryption systems, which altered widespread thinking on security assumptions about the behavior of RAM, influenced computer forensics practice, and inspired the creation of a new subfield of theoretical cryptography.
- **California “Top-to-Bottom” Review (2007)**
Helped lead the California Secretary of State’s “top-to-bottom” review of electronic voting machines, the first public review of this technology by any state. Our reports led California to discontinue use of highly vulnerable touch-screen voting systems and altered the course of election technology in the U.S.
- **DMCA Exemptions for Security (2006 and 2010)**
Worked with legal teams to successfully petition the U.S. Copyright Office to create exemptions to the Digital Millennium Copyright Act (which prohibits circumventing DRM) in order to allow the public to investigate and repair security problems caused by certain DRM. One of only six exemptions granted.
- **Sony DRM Rootkit (2005)**
Discovered dangerous security side-effects in the design of copy protection software used for music CDs. Resulted in the recall of millions of discs, class action lawsuits, and an investigation by the U.S. Federal Trade Commission in which I served as a technical expert on DRM’s harm to consumers’ security.
- **The Art of Science (2004)**
Co-founded an interdisciplinary art competition at Princeton University that showcases images and videos produced in the course of scientific research as well as creative works that incorporate tools and ideas from science. Following international attention, the concept has spread to many other campuses.

Outreach and Press Coverage

I'm a regular contributor to **Freedom-to-Tinker**, a blog hosted by Princeton's CITP. My posts discuss current issues in security and public policy or announce new research results, aiming to communicate findings to nonspecialists.

I'm happy to speak to the press when I believe the topic is important for the public to understand. Much of my research has received significant media attention.

Selected media outlets *Television:* CNN, Fox News, CBS Evening News, NBC Nightly News, MSNBC, CNBC, MTV, Al Jazeera, C-SPAN. *Radio:* NPR News, NPR Science Friday, BBC World Service, The Diane Rehms Show. *Print:* The New York Times, LA Times, USA Today (front page profile), The Wall Street Journal, Washington Post, Boston Globe, Times of India, Time, Fortune, Harpers (incl. Harpers Index), The Atlantic; The Economist, New Scientist, MIT Tech Review, Businessweek, Redbook, PC Magazine, Playboy (long-form profile). *Online:* Hacker News (dozens of top stories), Slashdot (>40 stories), Reddit (top of front page), BoingBoing, CNET News, Wired News, TechNewsDaily, Science Daily, Gizmodo, TechDirt, Ars Technica, The Register, Huffington Post, Politico, The Drudge Report, and hundreds more.

References

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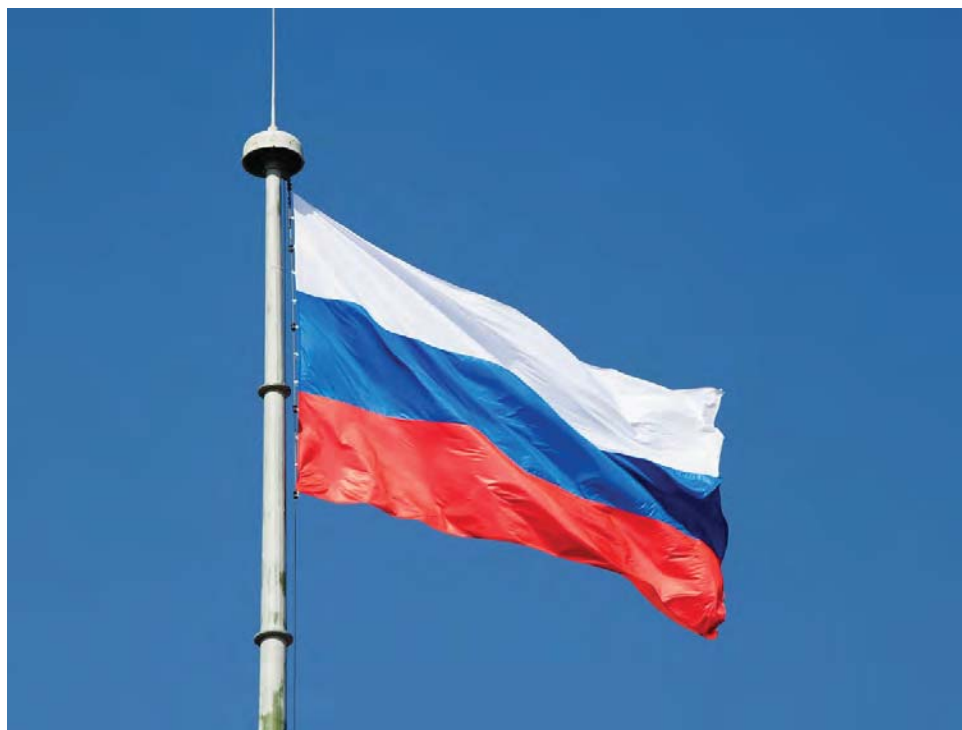
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Exhibit B

APRIL GLASER SECURITY 07.27.16 9:30 AM

HERE'S WHAT WE KNOW ABOUT RUSSIA AND THE DNC HACK



GETTY IMAGES

AS THE DEMOCRATIC National Convention continues its week-long stay in Philadelphia, accusations of Russian hacking continue to cloud the proceedings. At this point, it seems likely that Russia is responsible. What's less clear is what that will mean going forward.

It's been a bad stretch for the Democratic National Committee. Hackers broke into its servers months ago, stealing private emails, opposition research, and campaign correspondence. Last Friday, Wikileaks made nearly 20,000 of those private emails public, revealing embarrassing details of the political machine's inner workings. DNC officials allege that the Russian government is behind the breach. The *New York Times* reports that US intelligence agencies increasingly share that opinion. According to a number of top cybersecurity researchers, they're probably right.

A Brief History of a Hack

News of the hack of the Democratic National Committee first broke in mid-June. That's when CrowdStrike, a firm that analyzes threats to network security, revealed that the DNC had called it in to inspect the party's servers, where it found "two separate Russian intelligence-affiliated adversaries present in the DNC network." CrowdStrike released a comprehensive report of its findings on June 14, which accompanied a *Washington Post* article detailing the attacks. One of the hacking groups, CrowdStrike found, had access to the DNC servers for almost a year.

A day after that report, someone calling themselves Guccifer 2.0 (an allusion to notorious hacker Guccifer) claimed responsibility for the hack in a blog post. Through the blog and an accompanying Twitter account, Guccifer 2.0 refuted CrowdStrike's claims that this was a Russian operation, instead calling himself a "lone hacker." He also claimed to have handed much of the DNC bounty to Wikileaks.

The following week, two cybersecurity firms, Fidelis Cybersecurity and Mandiant, independently corroborated CrowdStrike's assessment that Russian hackers infiltrated DNC networks, having found that the two groups that hacked into the DNC used malware and methods identical to those used in other attacks attributed to the same Russian hacking groups.

But some of the most compelling evidence linking the DNC breach to Russia was found at the beginning of July by Thomas Rid, a professor at King's College in London, who discovered an identical command-and-control address hardcoded into the DNC malware that was also found on malware used to hack the German Parliament in 2015. According to German security officials, the malware originated from Russian military intelligence. An identical SSL certificate was also found in both breaches.

The evidence mounts from there. Traces of metadata in the document dump reveal various indications that they were translated into Cyrillic. Furthermore, while Guccifer 2.0 claimed to be from Romania, he was unable to chat with Motherboard journalists in coherent Romanian. Besides which, this sort of hacking wouldn't exactly be outside of Russian norms.

"It doesn't strain credulity to look to the Russians," says Morgan Marquis-Boire, a malware expert with CitizenLab. "This is not the first time that Russian hackers has been behind intrusions in US government, and it seems unlikely that it will be the last." Last year Russian hackers were able to breach White House and State

Department email servers, gleaning information even from President Obama's Blackberry.

Meanwhile, the Kremlin has denied Russian involvement in the DNC breach. But the reverberations continue; DNC Chairwoman Debbie Wasserman Schultz will resign at the end of the week, after emails revealed what many view as the unfair treatment of Bernie Sanders.

From Russia With Love

As compelling as the evidence is, there's still a small amount of room to argue that Guccifer 2.0 was a lone actor, an individual motivated by hacktivist ideals of dismantling state power. He wouldn't be the first. And in a recent interview on NBC, Julian Assange of Wikileaks gave a soft disavowal of claims that his whistleblowing organization is in cahoots with Russian intelligence, "Well, there is no proof of that whatsoever," he said. "We have not disclosed our source, and of course, this is a diversion that's being pushed by the Hillary Clinton campaign."

This is, of course, the same Assange who boasts responsibility for helping find Snowden a home in Russia and Wikileaks publicly criticized the Panama Papers for implicating Putin in financial misdeeds. He's also an outspoken frequent critic of Hillary Clinton's time at the State Department. A damning document dump the weekend before Clinton's nomination arguably aligns with both Russian interests and his own.

If the allegations do prove correct, this is an unprecedented step for Russia. Hacking is nothing new, but publicizing documents to attempt to sway an election certainly is. Putin would clearly prefer a Trump presidency. The billionaire Republican candidate is a longtime admirer of Putin's, and has publicly stated that he wouldn't necessarily defend NATO allies against a Russian invasion. To top it all off, Trump's campaign manager, Paul Manafort, formerly worked as an advisor to Viktor Yanukovich, the Russian-backed President of Ukraine before he was ousted in 2014.

"Due to the nature and timing of this hack, it all seems very political," says Marquis-Boire.

And there's a whole lot of election left—and likely more leaks to come with it. On Sunday, a Twitter user asked Wikileaks if more DNC leaks were on their way. The reply: "We have more coming."

Update: In a press conference Wednesday, Republican presidential candidate Donald Trump invited Russia to retrieve “missing” emails from Hillary Clinton’s campaign and release them. Cybersecurity experts described the remarks as “unprecedented” and “possibly illegal.”

Exhibit C

The New York Times | <http://nyti.ms/2eqNSVY>

 ELECTION 2016 | [Full Results](#) | [Exit Polls](#) | [Trump's Cabinet](#)

Private Security Group Says Russia Was Behind John Podesta's Email Hack

By NICOLE PERLROTH and MICHAEL D. SHEAR OCT. 20, 2016

SAN FRANCISCO — At the start of 2014, President Obama assigned his trusted counselor, John D. Podesta, to lead a review of the digital revolution, its potential and its perils. When Mr. Podesta presented his findings five months later, he called the internet's onslaught of big data “a historic driver of progress.” But two short years later, as chairman of Hillary Clinton's presidential campaign, Mr. Podesta would also become one of the internet's most notable victims.

On Thursday, private security researchers said they had concluded that Mr. Podesta was hacked by Russia's foreign intelligence service, the GRU, after it tricked him into clicking on a fake Google login page last March, inadvertently handing over his digital credentials.

For months, the hackers mined Mr. Podesta's inbox for his most sensitive and potentially embarrassing correspondence, much of which has been posted on the WikiLeaks website. Additions to the collection on Thursday included three short

email exchanges between Mr. Podesta and Mr. Obama himself in the days leading up to his election in 2008.

Mr. Podesta's emails were first published by WikiLeaks earlier this month. The release came just days after James R. Clapper Jr., the director of national intelligence, and the Department of Homeland Security publicly blamed Russian officials for cyberattacks on the Democratic National Committee, in what they described as an effort to influence the American presidential election.

To date, no government officials have offered evidence that the same Russian hackers behind the D.N.C. cyberattacks were also behind the hack of Mr. Podesta's emails, but an investigation by the private security researchers determined that they were the same.

Threat researchers at Dell SecureWorks, an Atlanta-based security firm, had been tracking the Russian intelligence group for more than a year. In June, they reported that they had uncovered a critical tool in the Russian spy campaign. SecureWorks researchers found that the Russian hackers were using a popular link shortening service, called Bitly, to shorten malicious links they used to send targets fake Google login pages to bait them into submitting their email credentials.

The hackers made a critical error by leaving some of their Bitly accounts public, making it possible for SecureWorks to trace 9,000 of their links to nearly 4,000 Gmail accounts targeted between October 2015 and May 2016 with fake Google login pages and security alerts designed to trick users into turning over their passwords.

Among the list of targets were more than 100 email addresses associated with Hillary Clinton's presidential campaign, including Mr. Podesta's. By June, 20 staff members for the campaign had clicked on the short links sent by Russian spies. In June, SecureWorks disclosed that among those whose email accounts had been targeted were staff members who advised Mrs. Clinton on policy and managed her travel, communications and campaign finances.

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Two security researchers who have been tracking the GRU's spearphishing campaign confirmed Thursday that Mr. Podesta was among those who had inadvertently turned over his Google email password. The fact that Mr. Podesta was among those breached by the GRU was first disclosed Thursday by Esquire and the Motherboard blog, which published the link Russian spies used against Mr. Podesta.

"The new public data confirming the Russians are behind the hack of John Podesta's email is a big deal," Jake Sullivan, Mrs. Clinton's senior policy adviser, said Thursday. "There is no longer any doubt that Putin is trying to help Donald Trump by weaponizing WikiLeaks."

The new release of Mr. Podesta's email exchange with Mr. Obama from 2008 made clear that Mr. Obama's team was confident he would win.

In one of the emails, Mr. Podesta wrote Mr. Obama a lengthy memo in the evening on Election Day recommending that he not accept an invitation from President George W. Bush to attend an emergency meeting of the Group of 20 leaders.

"Attendance alongside President Bush will create an extremely awkward situation," the memo said. "If you attempt to dissociate yourself from his positions, you will be subject to criticism for projecting a divided United States to the rest of the world. But if you adopt a more reserved posture, you will be associated not only with his policies, but also with his very tenuous global standing."

The White House did not respond to questions about the email.

Correction: October 22, 2016

An article on Friday about suspected email hacking by Russia's foreign intelligence service misstated the name of one organization that first disclosed that a presidential counselor, John D. Podesta, was among those whose accounts were breached. The blog is Motherboard, not VICE Motherload.

Nicole Perlroth reported from San Francisco, and Michael D. Shear from Washington.

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A version of this article appears in print on October 21, 2016, on page A14 of the New York edition with the headline: Private Security Group Says Russia Was Behind Hack of Clinton Campaign Chairman.

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Exhibit D

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NEWS > U.S. NEWS

WORLD INVESTIGATIONS CRIME & COURTS ASIAN AMERICA LATINO NBCBLK

NEWS AUG 30 2016, 4:54 AM ET

Russians Hacked Two U.S. Voter Databases, Officials Say

by ROBERT WINDREM, WILLIAM M. ARKIN and KEN DILANIAN

SHARE

Hackers based in Russia were behind two recent attempts to breach state voter registration databases, fueling concerns the Russian government may be trying to interfere in the U.S. presidential election, U.S. intelligence officials tell NBC News.

The breaches included the theft of data from as many as 200,000 voter records in Illinois, officials say.

The incidents led the FBI to send a "flash alert" earlier this month to election officials nationwide, asking them to be on the lookout for any similar cyber intrusions.

One official tells NBC News that the attacks have been attributed to Russian intelligence agencies.

"This is the closest we've come to tying a recent hack to the Russian government," the official said.

That person added that "there is serious concern" that the Kremlin may be seeking to sow uncertainty in the U.S. presidential election process.



Voters cast their ballots at ChiArts High School on March 15 in Chicago, Illinois. © Scott Olson / Getty Images

Two other officials said that U.S. intelligence agencies have not yet concluded that the Russian government is trying to do that, but they are worried about it.

They said the Russians have long conducted cyber espionage on political targets. The question now is whether they are moving into a covert intelligence operation designed to destabilize the U.S. political process.

The alert, first reported by Yahoo News, provided IP addresses associated with the hack attempts, though it did not mention Russia.

One of the IP addresses was involved in both breaches, the FBI alert said.

"The FBI is requesting that states contact their Board of Elections and determine if any similar activity to their logs, both inbound and outbound, has been detected," the alert said.

The bulletin does not identify the targeted states, but officials told NBC News they were Illinois and Arizona. Illinois officials said in July that they shut down their state's voter registration after a hack. State officials said Monday the hackers downloaded information on as many 200,000 people.

State officials told the Chicago Tribune they were confident no voter record had been deleted or altered.

In Arizona, officials said, hackers tried to get in using malicious software but were unsuccessful. The state took its online voter registration down for nine days, beginning in late June, after malware was discovered on a county election official's computer. But the state concluded that the system was not successfully breached.

Those incidents led Homeland Security Secretary Jeh Johnson to host a call earlier this month with state election officials to talk about cybersecurity and election infrastructure.


Johnson said DHS isn't aware of any specific cyber threat against election-related networks, but he urged officials to examine how to better secure their systems, according to a summary of the call put out by the department.

U.S. intelligence officials have previously said Russian intelligence agencies were behind hacks into the Democratic National Committee and related organizations. There has been a long running debate among intelligence analysts about what Russia is up to.

Voting systems have not been considered "critical infrastructure," by the Department of Homeland Security, so they are not subject to federal government protections.

Independent assessments have found that many state and local voting system are extremely vulnerable to hacking. 🌈

 ROBERT WINDREM   

WILLIAM M. ARKIN  

KEN DILANIAN  

TOPICS U.S. NEWS, INVESTIGATIONS, SECURITY, WORLD

FIRST PUBLISHED AUG 29 2016, 6:05 PM ET

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Homeland Security



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Joint Statement from the Department Of Homeland Security and Office of the Director of National Intelligence on Election Security

Release Date: October 7, 2016



For Immediate Release
DHS Press Office
Contact: 202-282-8010

The U.S. Intelligence Community (USIC) is confident that the Russian Government directed the recent compromises of e-mails from US persons and institutions, including from US political organizations. The recent disclosures of alleged hacked e-mails on sites like DCLeaks.com and WikiLeaks and by the Guccifer 2.0 online persona are consistent with the methods and motivations of Russian-directed efforts.

These thefts and disclosures are intended to interfere with the US election process. Such activity is not new to Moscow—the Russians have used similar tactics and techniques across Europe and Eurasia, for example, to influence public opinion there. We believe, based on the scope and sensitivity of these efforts, that only Russia's senior-most officials could have authorized these activities.

Some states have also recently seen scanning and probing of their election-related systems, which in most cases originated from servers operated by a Russian company. However, we are not now in a position to attribute this activity to the Russian Government. The USIC and the Department of Homeland Security (DHS) assess that it would be extremely difficult for someone, including a nation-state actor, to alter actual ballot counts or election results by cyber attack or intrusion. This assessment is based on the decentralized nature of our election system in this country and the number of protections state and local election officials have in place. States ensure that voting machines are not connected to the Internet, and there are numerous checks and balances as well as extensive oversight at multiple levels built into our election process.

Nevertheless, DHS continues to urge state and local election officials to be vigilant and seek cybersecurity assistance from DHS. A number of states have already done so. DHS is providing several services to state and local election officials to assist in their cybersecurity. These services include cyber “hygiene” scans of Internet-facing systems, risk and vulnerability assessments, information sharing about cyber incidents, and best practices for securing voter registration databases and addressing potential cyber threats. DHS has convened an Election Infrastructure Cybersecurity Working Group with experts across all levels of government to raise awareness of cybersecurity risks potentially affecting election infrastructure and the elections process. Secretary Johnson and DHS officials are working directly with the National Association of Secretaries of State to offer assistance, share

information, and provide additional resources to state and local officials.

#

Last Published Date: October 7, 2016

Exhibit F

U.S. official: Hackers targeted voter registration systems of 20 states



In this June 5, 2015, file photo, the Homeland Security Department headquarters in northwest Washington. A Homeland Security Department official says hackers have targeted the voter registration systems of more than 20 states in recent months. FBI Director James Comey told lawmakers this week that the agency is looking "very, very hard" at Russian hackers who may try to disrupt the U.S. election. (Susan Walsh / AP)

By Tribune news services

SEPTEMBER 30, 2016, 4:42 PM | WASHINGTON

Hackers have targeted the voter registration systems of more than 20 states in recent months, a Homeland Security Department official said Friday.

The disclosure comes amid heightened concerns that foreign hackers might undermine voter confidence in the integrity of U.S. elections. Federal officials and many cybersecurity experts have said it would be nearly impossible for hackers to alter an election's outcome because election systems are very decentralized and generally not connected to the internet.

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The official who described detecting the hacker activity was not authorized to speak publicly on the subject and spoke to The Associated Press on condition of anonymity. It was unclear, the official said, whether the hackers were foreign or domestic, or what their motives might be. ABC News earlier reported that more than 20 states were targeted.

The FBI last month warned state officials of the need to improve their election security after hackers targeted systems in Illinois and Arizona. FBI Director **James Comey** told lawmakers this week that the agency is looking "very, very hard" at Russian hackers who may try to disrupt the U.S. election.

Last month, Donald Trump, the GOP nominee for president, suggested that he feared the general election "is going to be rigged."

The Homeland Security Department has stepped up its outreach to states and localities, but it is up to them to ask for help. So far, 19 states have expressed interest in a general "cyber hygiene" scan of key websites — akin to ensuring that windows in a home are properly closed, according to another Homeland Security official directly involved in securing local elections who also was not authorized to speak publicly about ongoing efforts.

The FBI has detected a variety of "scanning activities" that are early indications of hacking, Comey told the House Judiciary Committee this week.

The FBI held a conference call on Friday with the local officials who run elections in the battleground state of Florida. Meredith Beatrice, a spokeswoman for Secretary of State Ken Detzner, called it an "informational call related to elections security," but a person on the call who was not authorized to discuss it and requested anonymity said authorities had seen evidence of someone probing a local elections website.

Homeland Security Secretary **Jeh Johnson** spoke to state election officials by phone last month, encouraging them to implement existing technical recommendations to secure their election systems and ensure that electronic voting machines are not connected to the internet.

DHS is offering states more comprehensive, on-site risk and vulnerability checks. Only four states have expressed interest in the assessment, and because the election is only weeks away, the department will likely only be able to conduct an assessment of one state before Election Day on Nov. 8, the official said.

Two of the hacking attempts involved efforts to mine data from the Arizona and Illinois voter registration systems, according to Kay Stimson, a spokeswoman for the National Association of Secretaries of State. She said in Arizona a hacker tried to probe voter registration data, but never infiltrated the system, while in Illinois hackers got into the system, but didn't manipulate any data.

These systems have "nothing to do with vote casting or counting," Stimson said in an email. "While it is theoretically possible to disrupt an election by infiltrating a voter registration system, their compromise would not affect election results" and there are system controls in place to catch any fraud.

Rep. [Henry Johnson](#), D-Ga., introduced two bills earlier this month that would require voting systems be designated as critical infrastructure and limit purchases of new voting systems that don't provide paper ballots, among other measures. It's unlikely the bills will be passed before the election.

The Homeland Security Department is already considering designating voting systems as critical infrastructure in the future, though it is unlikely to happen before the election, the second official said.

A presidential directive released in 2013 details 16 sectors that are considered critical infrastructure, including energy, financial services, healthcare, transportation, food and agriculture, and communications. The designation places responsibilities on the Homeland Security secretary to identify and prioritize those sectors, considering physical and cyber threats. The secretary is also required to conduct security checks and provide information about emerging and imminent threats.

Associated Press

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This article is related to: [Jeh Johnson](#), [James Comey](#)

Exhibit G

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Ukraine election narrowly avoided 'wanton destruction' from hackers (+video)

A brazen three-pronged cyber-attack against last month's Ukrainian presidential elections has set the world on notice - and bears Russian fingerprints, some say.

By Mark Clayton, Staff writer | JUNE 17, 2014

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David Mdzinarishvili/Reuters | View Caption

A three-pronged wave of cyber-attacks aimed at wrecking Ukraine's presidential vote - including an attempt to fake computer vote totals - was narrowly defeated by government cyber experts, Ukrainian officials say.

The still little-known hacks, which surfaced May 22-26, appear to be among the most dangerous cyber-attacks yet deployed to sabotage a national election - and a warning shot for future elections in the US and abroad, political scientists and cyber experts say.

National elections in the Netherlands, Norway, and other nations have seen hackers probe Internet-tied election systems, but never with such destructive abandon, said experts monitoring the Ukraine vote.

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"This is the first time we've seen a cyber-hacktivist organization act in a malicious way on such a grand scale to try to wreck a national election."

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Staff writer | Jack is the Mark Clayton Fellow in Cybersecurity

malicious way on such a grand scale to try to wreck a national election, says Joseph Kiniry, an Internet voting systems cyber-security expert. "To hack in and delete everything on those servers is just pillaging, wanton destruction."

That wanton destruction began four days ahead of the national vote, when CyberBerkut, a group of pro-Russia hackers, infiltrated Ukraine's central election computers and deleted key files, rendering the vote-tallying system inoperable. The next day, the hackers declared they had "destroyed the computer network infrastructure" for the election, spilling e-mails and other documents onto the web as proof.

A day later, government officials said the system had been repaired, restored from backups, and was ready to go. But it was just the beginning.

Only 40 minutes before election results were to go live on television at 8 p.m., Sunday, May 25, a team of government cyber experts removed a "virus" covertly installed on Central Election Commission computers, Ukrainian security officials said later.

If it had not been discovered and removed, the malicious software would have portrayed ultra-nationalist Right Sector party leader Dmytro Yarosh as the winner with 37 percent of the vote (instead of the 1 percent he

actually received) and Petro Poroshenko (the actually winner with a majority of the vote) with just 29 percent, Ukraine officials told reporters the next morning.

Curiously, Russian Channel One aired a bulletin that evening declaring Mr. Yarosh the victor with 37 percent of the vote over Mr. Poroshenko with 29 percent, Ukraine officials said.

"Offenders were trying by means of previously installed software to fake election results in the given region and in such a way to discredit general results of elections of the President of Ukraine," the Ukrainian Security Service (SBU) said in a statement.

Still, there was more to come.

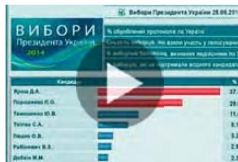
In the wee hours of the morning after polls closed, as results flowed in from Ukrainian election districts, Internet links feeding that data to the vote tally system were hit with a barrage of fake data packets – known as distributed denial of service (DDoS) attacks. So from about 1 to 3 a.m. on May 26, election results were blocked, delaying the finally tally until the early



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Sascha Meinrath
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Lysa Myers
Columnist | Lysa Myers is a security researcher at ESET.



Bruce Schneier
Columnist | Bruce is a noted cryptographer and security expert.



Evan Selinger
Columnist | Evan is a philosophy professor at Rochester Institute of Technology.



Melanie Teplinsky
Columnist | Melanie teaches information privacy law at American University.



Nicole Wong
Columnist | Nicole served as deputy chief technology officer at the White House.



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morning, a preliminary report by international election observers recounted.

An analysis of the DDoS attack by Arbor Networks, a Burlington, Mass., cyber-security company, ties it to CyberBerkut.

In the end, international observers declared Ukraine's vote "a genuine election." But US researchers say it's clear that Ukraine dodged a major cyber-bullet.

"We've seen vote fraud before in Ukraine, including a rigged computer system in 2004," says Peter Ordeshook, a California Institute of Technology political scientist. "But this wasn't an effort to steal the election outcome, so much as to steal the election itself – by entirely discrediting it in the eyes of key segments of the population in Ukraine and in Russia, too."

While it was well understood across most of Ukraine and internationally that the far-right candidate Yarosh had little political support, the faked results would have lent credibility to Russian-inspired accounts that the popular revolt last fall against the Ukraine government was fomented by ultra-nationalists.

"In that light, the cyber fakery looks incredibly clumsy from the outside because no one there would have believed it," Dr. Ordeshook says. "But these faked results were geared for a specific audience in order to feed the Russian narrative that has claimed from the start that ultra-nationalists and Nazis were behind the revolution in Ukraine."

If the virus with the faked computer results had not been discovered, it would have fomented unrest across the volatile ethnic-Russian Donetsk region now under the shadow of Russian forces on the border with Ukraine, he says. Such spurious results also would have undermined the credibility of the new Ukraine government and could have paved the way for Russian military action, say political scientists who monitor Ukraine elections.

The Ukraine hack is a stark warning for the US and other democracies that use the Internet for tabulation and even direct voting, election security experts say. One clear lesson, they say, is to always have paper ballots to back up election results – like Ukraine – and to avoid Internet voting.

"The Ukraine attack story demonstrates there is no shortage of methods which a determined adversary will make use of to sabotage an election," says Pamela Smith, president of the Verified Voting Foundation, a US group that has researched US election systems security.

In the runup to the election, President Obama on May 2 warned Russia not to interfere or the US "will not have a choice but to move forward with additional, more severe sanctions."

Since then, US officials appear reluctant to make too much of the attacks. References to the cyber-attacks have been brief and oblique. With anonymity cloaking cyber-attacks across the Internet it's difficult to tell



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anybody cracking cyber attacks across the internet, it's difficult to tell how deeply involved Russia's government might have been.

Ukraine experienced "cyber-attacks on the Central Election Commission of the kind that generally would require outside support," Victoria Nuland, assistant secretary of State for European affairs, acknowledged in a May 27 interview on the Charlie Rose show. Mark Green, a former congressman, said in Senate testimony June 6 that he had been told by a US diplomat of a failed Russian cyber-attack on the election.

Ukrainian officials have been unabashed in throwing blame at Russia, saying that arrests were made in the case, although no names have yet been made public.

"It was prepared in advance and stored on Russian (Internet) re-sources," Volodymyr Zverev, head of the Ukraine's Administration of Public Service of Special Communication and Protection of Information said of the malware that was intended to deliver the fake election results, according to Interfax-Ukraine. "They wanted to, and made the preparations, but they did not succeed."

While Russian hacktivists appear to be linked to at least some of the attacks, not everyone agrees the Russian government had a hand in the most devious element. Internet security expert Mr. Kiniry, for instance, says there is no solid proof yet to back the Ukrainian government claim of a virus carrying fake election results.

Others say Russia's paw prints are all over the attack.

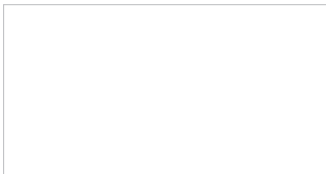
"Did Russia attempt to sway the Ukrainian Presidential Election? I honestly don't know the answer to that," says Jeffery Stutzman, CEO of Red Sky Alliance, a cyber-security group in New Hampshire.

But, he adds, "the idea that these guys were trying to poison the election result by compromising the election commission computers is amazing to me – and this coincidence with the Russian channel showing the same fake results – is just too much. If it walks like a duck and quacks like one, maybe it's a duck." ■

Next up



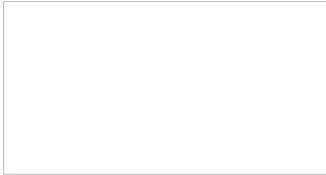
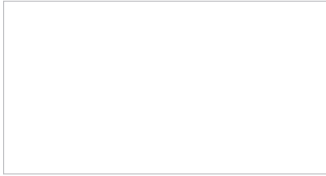
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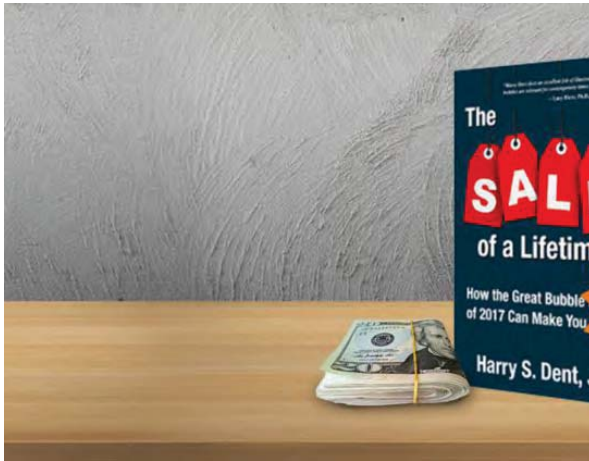
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Exhibit B

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF _____

PETITION TO RECOUNT AND/OR RECANVASS
AND AFFIDAVIT OF [your name] _____

TO THE _____ COUNTY BOARD OF ELECTIONS, [name of
county] _____, PENNSYLVANIA:

_____, verifies, deposes and says the following under penalty of
perjury:

1. My name is _____. I am a registered voter in City, Borough,
Township of _____, Precinct [insert number] _____,
_____ County, Pennsylvania. I voted in this district in the election on
November 8, 2016. I live at [insert complete street address]
_____, _____ County, Pennsylvania.

2. Pursuant to 25 P.S. § 3154, I request a recount and recanvass of the vote for
President of the United States and for United States Senate in the November 8, 2016 election in
this district.

3. I believe that an error, although not apparent on the face of the returns, has been
committed in the vote in this district. I also believe there is a discrepancy in the returns of this
district.

4. My belief is based, in part, on the attached Affidavit of Alex Halderman, which
raises grave concerns about the integrity of optical scan voting machines used in this district.
See Ex. A (attached).

5. Because this election district “uses an electronic voting system utilizing paper ballots,” the “county board shall recount all ballots using manual, mechanical or electronic devices of a different type used for the specific election.” 25 P.S. § 3154(e)(3)(i).

6. I request that the county board manually count all of the paper ballots for President of the United States and United States Senate in the district, and compare those tallies to the optical scan results. As the Halderman Affidavit makes clear, the only way to ensure the integrity and accuracy of the vote is to count all of the paper ballots manually.

7. As a voter, and as a citizen of this country, I believe it is extremely important that votes are counted accurately in this election.

8. I hereby verify under penalty of perjury that the facts contained in this petition and affidavit are true and correct to the best of my knowledge or information and belief.

[Signature]

Sworn to before me this _____ day of November 2016.

Notary Public

VERIFICATION

I hereby depose and say that the statements in the foregoing Petition to Recount and/or Recanvass are true and correct to the best of my knowledge, information and belief. I understand that this statement is made subject to the penalties of 18 Pa. C. S. Sec 4904 relating to unsworn falsification to authorities.

[signature]

Exhibit C



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The Bureau of Elections will accept documents submitted by the filer.

HOWEVER, acceptance of documents by the Bureau of Elections does not constitute approval of the document. The **burden of accuracy** of all filings (Nomination Petitions, Campaign Finance, Absentee Applications ect.) is upon the individual the documents are submitted on behalf of. Issues stemming from incomplete, outdated or incorrect documents may have legal ramifications.

Election law as passed by the legislature and interpreted by the Courts has become increasingly complex. The Bureau of Elections encourages you to consult with your political party or an attorney regarding your election questions.

Thank you.

Delaware County Bureau of Elections

Exhibit 2

AFFIDAVIT and DECLARATION OF RANDALL REITZ

Randall Reitz declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

1. I am a resident of Lafayette Hills, Pennsylvania, in Montgomery County.
2. I voted in the 2016 general election in my district, Whitemarsh West #2. I am registered as "Independent."
3. I am a software developer, though I am currently unemployed and looking for work.
4. I was one of the petitioners who petitioned to contest the results of the 2016 election in Pennsylvania. On December 2, 2016, I was informed by the court that we petitioners would have to post a \$1 million bond. I am a person of ordinary financial means, and I cannot take the risk of being responsible for such an enormous bond. Therefore, I was forced to withdraw my petition to contest the election.
5. I submit this affidavit/declaration to explain my experience in trying to seek a recount of the vote and an audit of the electronic voting machines used in my precinct and county.
6. After the election, I read an article by J. Alex Halderman, a computer expert, which discussed the vulnerabilities of electronic voting machines like those used in Pennsylvania. As a software developer who worked for a company with a publicly-facing website, I am well aware of the sophisticated attacks and hacking attempts that target companies and others in the United States, and how often our cyber defenses are not strong enough to counter these attacks.
7. Given these concerns about the security of the voting systems, I was eager to join the efforts to seek a recount of the vote and a forensic analysis of the electronic voting machines

in Pennsylvania. When I learned about the effort to gather petitioners to seek this recount and forensic analysis, I decided to join their efforts and submit a petition. My girlfriend, Catherine Cox, who lives with me and voted in this election as well, also submitted a petition.

8. Originally, I believed that the law required a county to recount the vote if three voters from the county filed petitions asking them to do so. I then learned that three voters from each *precinct* or voting district were required to submit petitions. I do not understand how ordinary voters can be expected to assemble that many petitions in order to launch a county-wide recount, let alone a state-wide recount.

9. Cathy and I submitted our petitions to Ben Jerner, a local organizer who was collecting petitions to submit to the Montgomery County Board of Elections on Monday, November 28, 2016.

10. I later learned that the Board of Elections refused to accept our petitions, and that they were filed in court instead.

11. On Friday, December 2, Cathy received a letter from the prothonotary of the Montgomery County Court of Common Pleas. The letter was dated November 29, 2016, and notified Cathy that a recount would begin on November 30. At the bottom of the letter, attached as Exhibit A, there was a note stating: "This document was docketed and sent on 11/30/2016." The postmark on the envelope was also November 30, 2016.

12. I never received a letter from the prothonotary or notice of any kind relating to a recount.

13. I did not know that the recount did not begin on November 30, and that, instead, there was a hearing in court to determine whether a recount should be conducted at all. I never received notice of that hearing.

14. I did not learn until after the hearing that the judge denied the petitions and the request for a recount, and that no recount of any precinct in Montgomery County is currently scheduled to take place.

15. Because the electronic machines in my district had no voter-verified paper trail, I believe it is crucial to have a full forensic analysis of the electronic voting system to ensure that the vote tally was accurate and reliable.

16. I have been shocked by the difficulty in seeking a recount of the vote in Pennsylvania. I do not understand how voters on their own could be expected to gather enough petitions in a county to trigger a recount, let alone a state-wide recount. Nor do I understand how voters on their own could be expected to pay for the legal costs associated with seeking these recounts.

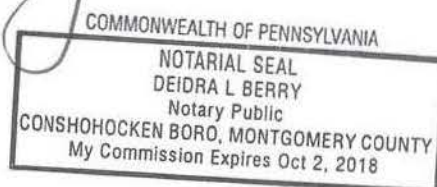
17. I believe a recount is absolutely necessary to instill trust in the vote and ensure the integrity of our voting system.

Dated: December 3, 2016
Lafayette Hill, Pennsylvania


RANDALL REITZ

Sworn to and subscribed before me
this 3 day of Dec, 2016.


NOTARY PUBLIC



IN THE COURT OF COMMON PLEAS OF MONTGOMERY COUNTY, PENNSYLVANIA
CIVIL ACTION – LAW

DOROTHY L. ANROM, et al

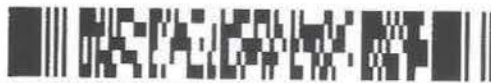
VS.

No. 16-28357

MONTGOMERY COUNTY
BOARD OF ELECTIONS

ORDER

AND NOW, this 29th day of November, 2016 the
Petition to Recount and/or Recanvass is scheduled for a **HEARING** before the **Honorable
Bernard A. Moore** on **Wednesday, November 30, 2016 at 1:30 p.m.** in Courtroom C of
the Montgomery County Courthouse, Norristown, Pennsylvania.



2016-28357-0001 11 29 2016 3:38 PM = 11061405

Order

Rept#72955325 Fee:\$0.00

Mark Levy - MontCo Prothonotary

Court Administrator

**THE FILING PARTIES RESPONSIBLE
TO NOTIFY YOUR OPPONENT(S)
OF THE ABOVE HEARING DATE.**

Copies Sent to Doug Lieb, Esq. via e-mail on Tuesday, November 29, 2016.

Copies Sent to Nicole Forzato, Esq. via e-mail on Tuesday, November 29, 2016.

Exhibit 3

AFFIDAVIT and DECLARATION OF MICHELLE ZUCKERMAN-PARKER

Dr. Michelle Zuckerman-Parker, being duly sworn, declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

1. I am a resident of Pittsburgh, Pennsylvania, in Allegheny County.
2. I voted in the 2016 general election in my district, Precinct 14-19.
3. I voted by absentee ballot and hand delivered the ballot to the Allegheny County

Board of Elections. As such, I cannot be sure that my vote was accurately included in the November 8, 2016 Presidential Election.

4. My husband, Steve Parker, voted at our local precinct, in Pittsburgh at 14-19 using the DRE Machine on November 8, 2016.

5. I have worked in manufacturing environments as a Quality Engineer, coached high school students in annual "Data Jam" competitions, taught statistics at Duquesne University, earned a doctorate in instructional technology, and work as a humanitarian engineering consultant to provide opportunities for greater equity using substantiated facts in evidence-based research and routinely dig for data.

6. I submit this affidavit/declaration to explain the hurdles I have faced in trying to seek a recount of votes in Allegheny County.

7. On Sunday, November 27, I helped coordinate the gathering of over 200 affidavits from Allegheny voters seeking a recount of votes and a forensic audit of the electronic voting machines in the county. I personally stated to each person who I met, over 150 people, my concern about the integrity of the vote based on my analysis of the voting returns and the vulnerability to hacking and interference. Each person I spoke with stated they shared the same concerns and was grateful to hand over their notarized documents for me to file on their behalf. I paid \$100 at a local copy shop to print out the affidavits and supporting paperwork from J. Alex

Halderman, a computer security expert. After I left the meeting at 8:30 p.m., voters continued to drop off petitions at my house until 1:30 a.m.

8. I spent hours that night organizing and collating the hundreds of petitions by precinct. Attached as Exhibit A is a blank sample petitions I filed.

9. At 8:00 a.m. on Monday, November 28, I took the more than 200 petitions I had collected to the County Board of Elections.

10. The first employee I met there, named David, told me that I was in the wrong place and could not file the petitions. He then asked a co-worker, Mark, who also told me I was in the wrong place. They stated I should go to the County Clerk's office to file with the Court of Common Pleas.

11. Soon thereafter, the county solicitor arrived. He referred to the state statute and confirmed that I was in the right place, that the Board would accept my petitions, and that there was no fee to file the petitions.

12. I was allowed to sit at a table in a conference room and log and take photographs of each time-stamped petition filed with the Board that day. I was there from 8:30 a.m. until 5:00 p.m.

13. At the end of the day, I asked the Board staff what the next steps would be. No one was able to give me an answer.

14. I never received any other notification from the Board about a recount or court hearing.

15. Later that week, other voters who had filed petitions called me to tell me they had received a 400-plus page document in the mail regarding a court hearing scheduled for Friday,

December 2, 2016. I received this same package late in the afternoon of December 2, after the hearing had concluded.

16. The first page of the package was a letter from a lawyer named Ronald L. Hicks, Jr. Mr. Hicks did not specify in the letter who he represents, but the rest of the package suggested that he represents the local Republican Party, which had filed a motion to stop the recount in Allegheny County. Attached as Exhibit B is a true and correct copy of the letter I received signed by Mr. Hicks.

17. The letter states that a hearing was scheduled for December 2, 2016, and includes this sentence: "You are hereby notified to appear and be heard."

18. The package included a list of dozens of petitioners and includes their home address. This was sent to hundreds of petitioners.

19. Many people who called me interpreted this as a subpoena ordering them to come to court. They told me they felt intimidated and scared. Because I had not yet received the package, I could not tell them one way or the other whether they were required to attend the court proceeding.

20. I was angry that my address, and the address of so many other petitioners, was sent to hundreds of people in my town, without any notice to us that this would happen.

21. I have been surprised by the difficulty of seeking a recount. I believe there is evidence that the election in Pennsylvania and elsewhere was subjected to cyber-attack or other malicious interference. Because of this, the electronic voting machines must be forensically reviewed to look for any sign of malicious tampering with the voting process. That is why I have worked so hard to organize a recount and forensic review of dozens of precincts in Allegheny county.

22. I am concerned that my vote and the votes of my fellow citizens were not counted accurately in the election, and would like a manual recount of every paper ballot and a forensic examination of the electronic voting to ensure the election had integrity and that every vote was fairly counted.

Dated: December 4, 2016
Pittsburgh, Pennsylvania



MICHELLE ZUCKERMAN-PARKER

Sworn to and subscribed before me
this ___ day of _____, 2016.

NOTARY PUBLIC

Exhibit A

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF _____

PETITION TO RECOUNT AND/OR RECANVASS
AND AFFIDAVIT OF [your name] _____

TO THE _____ COUNTY BOARD OF ELECTIONS, [name of
county] _____, PENNSYLVANIA:

_____, verifies, deposes and says the following under penalty of
perjury:

1. My name is _____. I am a registered voter in City, Borough,
Township of _____, Precinct [insert number] _____,
_____ County, Pennsylvania. I voted in this district in the election on
November 8, 2016. I live at [insert complete street address]
_____, _____ County, Pennsylvania.

2. Pursuant to 25 P.S. § 3154, I request a recount and recanvass of the vote for
President of the United States and for United States Senate in the November 8, 2016 election in
this district.

3. I believe that an error, although not apparent on the face of the returns, has been
committed in the vote in this district. I also believe there is a discrepancy in the returns of this
district.

4. My belief is based, in part, on the attached Affidavit of Alex Halderman, which
raises grave concerns about the integrity of DRE voting machines used in this district. *See Ex. A*
(attached).

5. I request that the county board not just recanvass the votes cast on the DRE machines, but do a forensic analysis of the software and media inside the machines, to determine whether the machines have been hacked or tampered with. As the Halderman affidavit makes clear, merely recanvassing the votes on the machines will not detect whether the machines have been compromised.

6. At minimum, I request that a reasonable subset of the DRE machines be forensically analyzed by appropriate computer experts for potential tampering, malware, and/or hacking.

7. As a voter, and as a citizen of this country, I believe it is extremely important that votes are counted accurately in this election.

8. I hereby verify under penalty of perjury that the facts contained in this petition and affidavit are true and correct to the best of my knowledge or information and belief.

[signature]

Sworn to before me this _____ day of November 2016.

Notary Public

VERIFICATION

I hereby depose and say that the statements in the foregoing Petition to Recount and/or Recanvass are true and correct to the best of my knowledge, information and belief. I understand that this statement is made subject to the penalties of 18 Pa. C. S. Sec 4904 relating to unsworn falsification to authorities.

[signature]

Exhibit B



MEYER UNKOVIC SCOTT
ATTORNEYS AT LAW

Writer's direct dial phone number and e-mail address:
412-456-2837 ~ rlh@muslaw.com

November 30, 2016

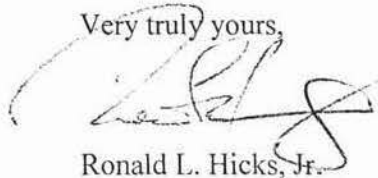
TO: VOTER (See attached)

RE: In Re: Recount and/or Recanvass of the Vote for President of the United States
Senate in the November 8, 2016 General Election
No: GD 16-022954

Dear Sir/Madam:

Enclosed please find a copy of the Notice of Appeal and Emergency Petition that was filed today in the Court of Common Pleas of Allegheny County, Pennsylvania. A hearing on the appeal/petition will be held at 11:00 a.m., this Friday, December 2, 2016, before the Honorable Joseph M. James, Senior Judge of the Court of Common Pleas of Allegheny County, Court Room 707, City County Building, 414 Grant Street, Pittsburgh, PA 15219. You are hereby notified to appear and be heard.

Very truly yours,



Ronald L. Hicks, Jr.

RLHjr/rac

Enclosure

MUS2363396.1

Exhibit 4

AFFIDAVIT and DECLARATION OF RICHARD P. ALMQUIST, JR.

RICHARD P. ALMQUIST, JR. being duly sworn, declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

1. I am a resident of Exeter Township, Pennsylvania, in Berks County.
2. I voted in the 2016 general election in the 6th Precinct.
3. I work in land development.
4. On November 28, 2016, I went to the Berks County Courthouse in Reading, PA to file a petition with affidavits seeking a recount on behalf of myself, my wife, and my daughter.
5. When I arrived at the courthouse at around 2 p.m., I went to Elections Services, and I was told to go file my petition with the County Clerk's Office.
6. I went to the County Clerk's Office and told an administrator that I wanted to file the affidavits. I was told that I needed to speak with the County Solicitor directly about what to do, but that he was at Elections Services and I had to return there. At that point, the Solicitor walked through the door holding a large pile of statutes. I asked him where I was supposed to file the affidavits.
7. The Solicitor told me that I needed to go Prothonotary's Office because I was trying to make a court filing. I told him that I believed that I was in the right place because the applicable regulations stated to file with the Clerk, but at his insistence, I walked over to the old courthouse where the Prothonotary's Office is located to again attempt to file my affidavits.
8. When I arrived at the Prothonotary's Office, I had to wait in line with other people making regular court filings. When I arrived at the counter and stated that I wanted to file a petition for election recount, the administrators started rolling their eyes. I learned from the administrators that other people had been the Prothonotary's Office earlier that day to file their affidavits, and they were sent back to Election Services.

9. I told the administrators that I had already been to Elections Services, and that I needed to find out where to file the affidavits. At that point, another person entered the room and conferred with the administrative staff. Then, someone told me that they had received an email saying that it was proper for me to file at the Prothonotary's Office.

10. Glad to finally have an answer, I told the administrator that I wanted to proceed with my filing. She told me I would need a Pennsylvania Supreme Court cover sheet, a proposed order for the Judge, \$324 in filing fees (including a \$197 filing fee and a \$50 bond)—payable only in cash or cashier's check, and three copies of each of the 80-page petition for myself, my wife, and my daughter. She told me that the law library was on the 11th floor if I needed help with a proposed order, and that there were signs posted around the room with information about the nearest ATM machines. There were no photocopiers around. She told me that I needed all of these materials by 4 p.m. when the office closed.

11. At this point, it was 3:30 p.m. and I realized there was no way I was going to get everything I needed to file on time. I filled out the cover sheet, went to the law library and paid 25 cents to print a blank proposed order. But I still needed to make copies of my documents and obtain cash. The nearest copy center was miles from the courthouse, and I knew I would not make it in time.

12. I decided to go back to Elections Services. I told an Elections Services administrator that I was getting the runaround with respect to my filing. I said that the statute did not include any of the requirements that the Prothonotary's Office had given me. I asked to speak to her manager, but he refused to speak with me. She told me that the email from the Pennsylvania Secretary of State said I had to file with the Court of Common Pleas and, therefore with the Prothonotary, and that was it.

13. I left the building without filing my petition, feeling frustrated and disenfranchised.


14. I decided to become involved in the recount effort in Pennsylvania because I believe that the vote in Pennsylvania usually reflects the opinion of the majority of voters, but that was not the case in the 2016 presidential election. I believe that there is a likelihood that the Pennsylvania vote was interfered with, and I want to ensure the integrity of the vote.

15. I am concerned that my vote and the votes of my fellow citizens were not counted accurately in the election, and would like a manual recount of every paper ballot and a forensic examination of the electronic voting systems in Pennsylvania to make sure the vote had integrity and every vote was counted.

16. I am concerned that, due to the absence of paper ballots or receipts, the electronic voting systems in Pennsylvania do not adequately record the votes of all those who voted in the election.

17. Attached as Exhibit A is a blank copy of the form that I attempted to file.

Dated: December 4th, 2016
Reading, Pennsylvania



[signature]

Sworn to and subscribed
before me this ____ day
of _____, 2016.

NOTARY PUBLIC

EXHIBIT A

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF _____

PETITION TO RECOUNT AND/OR RECANVASS
AND AFFIDAVIT OF [your name] _____

TO THE _____ COUNTY BOARD OF ELECTIONS, [name of
county] _____, PENNSYLVANIA:

_____, verifies, deposes and says the following under penalty of
perjury:

1. My name is _____. I am a registered voter in City, Borough,
Township of _____, Precinct [insert number] _____,
_____ County, Pennsylvania. I voted in this district in the election on
November 8, 2016. I live at [insert complete street address]
_____, _____ County, Pennsylvania.

2. Pursuant to 25 P.S. § 3154, I request a recount and recanvass of the vote for
President of the United States and for United States Senate in the November 8, 2016 election in
this district.

3. I believe that an error, although not apparent on the face of the returns, has been
committed in the vote in this district. I also believe there is a discrepancy in the returns of this
district.

4. My belief is based, in part, on the attached Affidavit of Alex Halderman, which
raises grave concerns about the integrity of DRE voting machines used in this district. *See* Ex. A
(attached).

5. I request that the county board not just recanvass the votes cast on the DRE machines, but do a forensic analysis of the software and media inside the machines, to determine whether the machines have been hacked or tampered with. As the Halderman affidavit makes clear, merely recanvassing the votes on the machines will not detect whether the machines have been compromised.

6. At minimum, I request that a reasonable subset of the DRE machines be forensically analyzed by appropriate computer experts for potential tampering, malware, and/or hacking.

7. As a voter, and as a citizen of this country, I believe it is extremely important that votes are counted accurately in this election.

8. I hereby verify under penalty of perjury that the facts contained in this petition and affidavit are true and correct to the best of my knowledge or information and belief.

[signature]

Sworn to before me this _____ day of November 2016.

Notary Public

VERIFICATION

I hereby depose and say that the statements in the foregoing Petition to Recount and/or Recanvass are true and correct to the best of my knowledge, information and belief. I understand that this statement is made subject to the penalties of 18 Pa. C. S. Sec 4904 relating to unsworn falsification to authorities.

[signature]

Exhibit 5

AFFIDAVIT and DECLARATION OF LINDSAY FORNESS

LINDSAY FORNESS being duly sworn, declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

1. I am a resident of Langhorne, Pennsylvania, in Bucks County.
2. I voted in the 2016 general election in the Upper 9th precinct, number 22210-1.
3. My background is in hospitality and private fundraising, but for many years I have been a stay-at-home mom and active volunteer.
4. I served as a County Captain for Bucks County in connection with efforts to obtain a recount of the 2016 presidential vote. As County Captain, I managed and recruited volunteers to file petitions for a recount, and I was a contact point for people seeking information about the recount.
5. On the evening of Sunday, November 27, I hosted a notary at my home so that people from my precincts and neighboring precincts could come over and have their challenge affidavits notarized. I also instructed other people in my area that they could bring their materials to my home before 7 a.m. on Monday, November 28, and that I would file them for them.
6. On the morning of Monday, November 28, I drove to Doylestown, Pennsylvania, the county seat, to file petitions for my precinct and several others. The petition from my precinct included an affidavit from me and two of my neighbors, Julie Smith, and Andrea Pfancook.
7. I arrived at the office of the Board of Elections in Doylestown at around 8:30 a.m. We told a person at the Board of Elections that we were there to seek a recount and recanvass of

the vote. The person said she did not know what to do about our request, but that someone would arrive between 8:30 a.m. and 9:00 a.m. who could help us.

8. At around 9:00 a.m., a second Board of Elections employee arrived. We repeated that we were there to seek a recount of the vote, and she told us that she could not accept anything from us because the Board of Elections "sent their counts in on Tuesday." I asked her whether Bucks County had certified the vote, and she would not give me a straight answer.

9. At that point, I called Larry Otter, a pro bono attorney. Larry drove to the Board of Elections to meet us and went into the office to speak with Board of Elections administrators. After that meeting, the Board of Elections informed us that we could leave our petitions at the desk in a pile, but they would not be stamped.

10. I asked Larry what to make of the fact that the Board of Elections "sent their counts in Tuesday," and I asked him if he knew whether the county had certified the vote. He also did not know the answers to these questions, but said that we should file the petitions anyway.

11. At around 11:00 a.m., I left my petition in the pile and left to go pick up more petitions from other people's homes, as well as from my home, where several more had been dropped off. While I was gone, I received a call from Janice Hobbs-Pellechio, a fellow petitioner and volunteer, who told me that the Board of Elections had decided that it was no longer accepting petitions, and that people needed to file them with the Prothonotary's Office instead.

12. After picking up the additional petitions, I drove back to Doylestown to the Prothonotary's Office that afternoon. When I arrived, I learned that the Prothonotary's Office was charging people \$50 to file petitions. I stayed at the Prothonotary's Office throughout the

afternoon to answer questions from people seeking to file petitions, and to tried to compile complete petition packets for the precincts (since some people only brought a single affidavit, instead of the three required per precinct).

13. Though I was happy that I was able to file my own petition and assist numerous others to file theirs, I feel that recount system in Pennsylvania makes it practically impossible for voters to seek a recount. I was perplexed by how the rules seemed to shift as the day went on. The entire process felt like a huge brick wall saying to the citizens of Pennsylvania, “you are never going to get a recount no matter what the reasons are.”

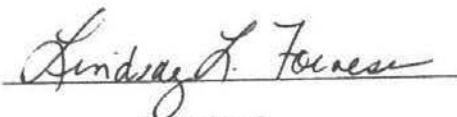
14. For me, this recount is not about getting a new result for the election. It is about unraveling the process. What if there was concrete evidence—or even proof—of been large-scale hacking of the election system in Pennsylvania? Even then—and even with incredible, large-scale organization, the citizens of this state would still not be able to obtain a recount. That is my concern.

15. In addition, there were many volunteers in my county, and with whom I worked, who not only voted, but cared enough about this election to help seek a recount. These people all obtained and signed an affidavit, found a notary, paid a notary, paid the Prothonotary, and made all-around enormous efforts to engage in their democracy and seek a recount. It saddens me that their voices are not heard.

16. I am concerned that my vote and the votes of my fellow citizens were not counted accurately in the election, and would like a manual recount of every paper ballot and a forensic examination of the electronic voting systems in Pennsylvania to make sure that the vote had integrity and every vote counted.

17. A copy of the blank copy of the petition that I filed is attached as Exhibit A.

Dated: December 4, 2016
Langhorne, Pennsylvania


[signature]

Sworn to and subscribed
before me this ____ day
of _____, 2016.

NOTARY PUBLIC

EXHIBIT A

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF _____

PETITION TO RECOUNT AND/OR RECANVASS
AND AFFIDAVIT OF [your name] _____

TO THE _____ COUNTY BOARD OF ELECTIONS, [name of
county] _____, PENNSYLVANIA:

_____, verifies, deposes and says the following under penalty of
perjury:

1. My name is _____. I am a registered voter in City, Borough,
Township of _____, Precinct [insert number] _____,
_____ County, Pennsylvania. I voted in this district in the election on
November 8, 2016. I live at [insert complete street address]
_____, _____ County, Pennsylvania.

2. Pursuant to 25 P.S. § 3154, I request a recount and recanvass of the vote for
President of the United States and for United States Senate in the November 8, 2016 election in
this district.

3. I believe that an error, although not apparent on the face of the returns, has been
committed in the vote in this district. I also believe there is a discrepancy in the returns of this
district.

4. My belief is based, in part, on the attached Affidavit of Alex Halderman, which
raises grave concerns about the integrity of DRE voting machines used in this district. *See Ex. A*
(attached).

5. I request that the county board not just recanvass the votes cast on the DRE machines, but do a forensic analysis of the software and media inside the machines, to determine whether the machines have been hacked or tampered with. As the Halderman affidavit makes clear, merely recanvassing the votes on the machines will not detect whether the machines have been compromised.

6. At minimum, I request that a reasonable subset of the DRE machines be forensically analyzed by appropriate computer experts for potential tampering, malware, and/or hacking.

7. As a voter, and as a citizen of this country, I believe it is extremely important that votes are counted accurately in this election.

8. I hereby verify under penalty of perjury that the facts contained in this petition and affidavit are true and correct to the best of my knowledge or information and belief.

[signature]

Sworn to before me this _____ day of November 2016.

Notary Public

VERIFICATION

I hereby depose and say that the statements in the foregoing Petition to Recount and/or Recanvass are true and correct to the best of my knowledge, information and belief. I understand that this statement is made subject to the penalties of 18 Pa. C. S. Sec 4904 relating to unsworn falsification to authorities.

[signature]

Exhibit 6

AFFIDAVIT and DECLARATION OF ROBERT WOODRUFF

ROBERT WOODRUFF being duly sworn, declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

1. I am a resident of Buckingham Township, Pennsylvania, in Bucks County.
2. I voted in the 2016 general election in Buckingham Township, Upper 1.
3. I am a chemist by training, but I am currently retired. I previously served as the Vice President of Research at Rohmax Oil Additives, a division of Evonik Industries.
4. On Monday November 28, 2016, I filed a petition with affidavits seeking a recount of the presidential election vote with the Prothonotary's Office in Doylestown, Pennsylvania. My petition contained affidavits on behalf of myself, Ms. Robin Rosenthal, and her son, Mr. Sam Rosenthal.
5. When I arrived at the Bucks County Courthouse, I went to the Board of Elections to file my petition. I encountered a crowd of 5-10 fellow filers who were waiting outside the Board of Elections and trying to figure out what to do with their petitions.
6. The administrator at the Board of Elections told me that she did not know anything about the petitions or how to deal with them. She said that the Board of Elections had communicated with Harrisburg about what to do, but they were still waiting to hear back with instructions.

RW

7. In the meantime, the Board of Elections had decided that they would not accept or stamp our petitions, but they agreed to let people leave them in a pile on the desk. I decided that I would leave my petition in the pile and tried to take a photograph of it, but was instructed that photographs were not allowed. I then decided to take my petition back because I did not want to leave it in the pile without any documentation of it whatsoever.

8. At that point, someone in the crowd suggested that we should try to file our petitions at the Prothonotary's Office. I walked across the street to the Prothonotary's Office, and an administrator accepted my petition and stamped it. I had to pay a \$50 filing fee. It was about 3 p.m. when I filed my petition.

9. After I filed my petition, I communicated to others still at the Board of Elections that they should come to the Prothonotary's Office. A group of people came over, bringing the petitions which had been left there, and we sorted the affidavits by precinct, since three affidavits per precinct were required for filing. After the sorting, we determined that we had about 13 additional complete petitions. I filed those petitions and paid \$50 for each.

10. After filing the additional petitions, I left the Prothonotary's Office. A woman from the Bucks County League of Women Voters stayed behind with the remaining partial petitions, just in case other affidavits came in.

RAW

11. On December 3, 2016, I received a letter from the President Judge of the Bucks County Court informing me that a hearing would be held on Tuesday morning at 9 a.m., and instructing me that, as a petitioner, I am required to give notice to all of the candidates for office. I am not able to provide such notice in a timely manner, but I now believe that notice has been provided from legal counsel to the Jill Stein campaign.

12. I am concerned that my vote and the votes of my fellow citizens were not counted accurately in the election, and would like a manual recount of every paper ballot and a forensic examination of the electronic voting systems in Pennsylvania to make sure the vote had integrity and every vote counted.

13. Attached as Exhibit A is a blank copy of the form that I filed on November 28, 2016.

A handwritten signature in cursive script that reads "Robert A. Woduff".

Dated: December 4, 2016

Doylestown, Pennsylvania

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF _____

PETITION TO RECOUNT AND/OR RECANVASS
AND AFFIDAVIT OF [your name] _____

**TO THE _____ COUNTY BOARD OF ELECTIONS, [name of
county] _____, PENNSYLVANIA:**

_____, verifies, deposes and says the following under penalty of
perjury:

1. My name is _____. I am a registered voter in City, Borough,
Township of _____, Precinct [insert number] _____,
_____ County, Pennsylvania. I voted in this district in the election on
November 8, 2016. I live at [insert complete street address]
_____, _____ County, Pennsylvania.

2. Pursuant to 25 P.S. § 3154, I request a recount and recanvass of the vote for
President of the United States and for United States Senate in the November 8, 2016 election in
this district.

3. I believe that an error, although not apparent on the face of the returns, has been
committed in the vote in this district. I also believe there is a discrepancy in the returns of this
district.

4. My belief is based, in part, on the attached Affidavit of Alex Halderman, which
raises grave concerns about the integrity of DRE voting machines used in this district. *See Ex. A*
(attached).

5. I request that the county board not just recanvass the votes cast on the DRE machines, but do a forensic analysis of the software and media inside the machines, to determine whether the machines have been hacked or tampered with. As the Halderman affidavit makes clear, merely recanvassing the votes on the machines will not detect whether the machines have been compromised.

6. At minimum, I request that a reasonable subset of the DRE machines be forensically analyzed by appropriate computer experts for potential tampering, malware, and/or hacking.

7. As a voter, and as a citizen of this country, I believe it is extremely important that votes are counted accurately in this election.

8. I hereby verify under penalty of perjury that the facts contained in this petition and affidavit are true and correct to the best of my knowledge or information and belief.

[signature]

Sworn to before me this _____ day of November 2016.

Notary Public

VERIFICATION

I hereby depose and say that the statements in the foregoing Petition to Recount and/or Recanvass are true and correct to the best of my knowledge, information and belief. I understand that this statement is made subject to the penalties of 18 Pa. C. S. Sec 4904 relating to unsworn falsification to authorities.

[signature]

Exhibit 7

AFFIDAVIT and DECLARATION OF CAROLYN M. SMITH

CAROLYN M. SMITH, being duly sworn, declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

1. I am a resident of Valencia Borough, Pennsylvania, in Butler County.
2. I voted in the 2016 general election in my district: Valencia Borough.
3. I am a retired elementary school teacher.
4. I submit this affidavit/declaration to explain the problems I have faced in trying to seek a recount of votes in Butler County.
5. On Monday, November 28, 2016, I went to the office of the Bureau of Elections at 124 West Diamond Street, Butler, PA to file notarized affidavits seeking a recount. I met with the Bureau Director, Shari Brewer, who informed me that her office was told not to accept affidavits. She told me that I had to get an attorney and go through a legal process in court. I asked Ms. Brewer who told her office not to accept affidavits and she said it was the Bureau's solicitor, Mike English.
6. I then went upstairs to Mr. English's office and met with him. Mr. English confirmed that the Bureau of Elections was not accepting any affidavits seeking a recount. He told me that the reason for this was so that the Board of Elections would be "neutral" on the issue of any recount and not "get involved" in the process. He told me that I should submit the affidavits to the prothonotary office and warned me that I might incur a several hundred dollar fee. I explained to him how concerned I was that the Bureau was not accepting affidavits and that he was giving out different information than the Bureau Director who made no effort to direct me to the proper office to submit the affidavits.

7. Our conversation ended at approximately 3:50 pm. Since Butler County offices usually close at 4:00 pm I decided not to try to go to the prothonotary office that same day since the office is located in a different building across the street.

8. Later that same day, I learned that Monday November 28 was the last day for filing affidavits to request a recount. Therefore, I did not go to the prothonotary office to file the affidavits on any subsequent day.

9. Because I was given incorrect and conflicting information by the Director of the Bureau of Elections and the Bureau's solicitor – two people who should have known the correct process – I was unable to submit affidavits requesting a recount. I am concerned that the Bureau treated the process as a discretionary or optional one that it was not required to participate in and had no responsibility to provide correct information about the process to the voters.

10. I am concerned that my vote and the votes of my fellow citizens were not counted accurately in the election, and would like a manual recount of every paper ballot and a forensic examination of the electronic voting systems in Pennsylvania to make sure the voting process had integrity and every vote counted.

Dated: December 4, 2016

Allegheny County, Pennsylvania

Carolyn M. Smith
CAROLYN M. SMITH

Sworn to and subscribed before me

this 4th day of December, 2016.

Thomas G. Zenewicz Jr.
NOTARY PUBLIC

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Thomas G. Zenewicz Jr., Notary Public
Richland Twp., Allegheny County
My Commission Expires Nov. 14, 2017
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Exhibit 8

AFFIDAVIT and DECLARATION OF JOANNE TOSTI-VASEY

JOANNE TOSTI-VASEY being duly sworn, declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

1. I am a resident of Bellefonte, Pennsylvania, in Centre County.
2. I voted in the 2016 general election in Precinct 5.
3. I am a community organizer, the former Pennsylvania state president of NOW (the National Organization for Women), and an elected member of the Bellefonte Borough Council.
4. I am a longtime advocate for voter integrity. For approximately 10-12 years, I have been an active member of Concerned Voters of Centre County and Votes PA. In 2006, as a poll observer, I witnessed firsthand the serious malfunctions of DRE machines, including vote-flipping. Following that experience, I successfully worked and advocated to convert Centre County to a paper ballot county.
5. In 2016, I served as an election judge at my local precinct. At the end of the day, I noticed that one provisional ballot had been incorrectly scanned and included with the regular ballots. I made multiple attempts to alert elections officials to this issue, and to ensure that the stray vote was not counted without being properly verified. Despite my efforts, I was ultimately told by Joyce McKinley, director at the Office of Elections, that the vote was counted but never verified because “once votes are scanned they are counted.” This is just one of many reasons that I believe a statewide hand recount of votes is necessary in Pennsylvania.
6. On November 28, 2016, at approximately 11:15 a.m., I went to the county seat in Bellefonte, PA to file a packet of affidavits seeking a recount with the Board of Elections in my county. I brought affidavits on behalf of myself, my husband, and a third person.

7. When I arrived at the Board of Elections, I learned from other people there that there was a lot of confusion and difficulty earlier in the day with respect to filing affidavits. When I arrived to file my affidavits, however, the Assistant Director/Supervisor of Elections accepted them and time-stamped my packet. My affidavit was accepted by the county Elections Office at 11:28:41 a.m. according to my time-stamped receipt.

8. I did not think that there were any issues, and I believed that the affidavits were successfully filed.

9. After filing the affidavits, I stayed at the Board of Elections as a volunteer to assist other people with their filings. I sat at a desk across from the Board of Elections office and answered questions from other people seeking to file. I observed approximately 30 people go into the Board of Elections office and have their affidavits time-stamped and accepted. A total of about 100 affidavits were filed during the day. Several people also gave me the copies of their time-stamped affidavits after filing.

10. At approximately 4:45 p.m. on November 28, 2016, Ms. McKinley came out of the Board of Elections office and informed me that all of the affidavits filed today were too late because they needed to be filed within 5 calendar days—not 5 business days—of the vote certification. I told her that I believed that she was incorrect, and that the proper deadline was November 28.

11. The next day, I found out that the Board of Elections denied the recount for my county because of their interpretation of the 5-day rule. Even though I and many others filed affidavits that were accepted and time-stamped, they were ignored by the Board of Elections and no recount happened.

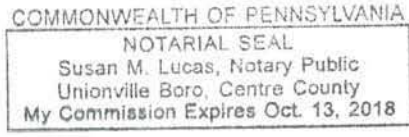
12. I am concerned that my vote and the votes of my fellow citizens were not counted accurately in the election, and would like a manual recount of every paper ballot and a forensic examination of the electronic voting systems in Pennsylvania to make the vote had integrity and every vote counted.

13. Attached as Exhibit A to my affidavit is a blank copy of the form that I filed with the Board of Elections on November 28, 2016.

Dated: December 4, 2016
Unionville, Pennsylvania

Joanne L. Tosti-Vasey
[signature]

Sworn to and subscribed
before me this 4 day
of December, 2016.



S. Lucas
NOTARY PUBLIC

Exhibit 9

AFFIDAVIT and DECLARATION OF MARY VOLLERO

MARY VOLLERO, being duly sworn, declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

1. I am a resident of Fleming, Pennsylvania, in Centre County. I am an instructor of art at Penn State University.
2. I voted in the 2016 general election in my district of Unionville #35.
3. I helped to organize the collection of petitions for a recount in Centre County.
4. I worked almost non-stop for three days to collect petitions, and ultimately we collected nearly 100 petitions representing approximately 31 separate districts in Centre County.
5. Because the petitions needed to be notarized, I hired a notary, for \$25, to be available to notarize petitions. Each petitioner had to pay that notary \$5.
6. On Monday, November 28, I and other volunteers delivered the petitions seeking a recount and forensic audit of the electronic voting machines to the County Board of Elections. The Board originally accepted our petitions.
7. Attached as Exhibit A is a blank sample of the petitions that we filed.
8. But when the Board members met the next day, on Tuesday, they announced that, on guidance from the State and the County, the petitions were too late to be accepted. I was present for the meeting of the Board on Tuesday and heard this announcement.
9. Prior to Monday, I had asked the County Commissioner when the vote would be

certified on Tuesday, November 29. Accordingly, I believed that our petitions on Monday, November 28 were timely.

9. However, it was not until Tuesday, November 29, that I learned that the Board conducts what it calls the first signing or computation earlier, and it is at that date that the five-day clock begins to run. I had never heard of this first signing, and there was no notice about it provided to the public, as far as I am aware.

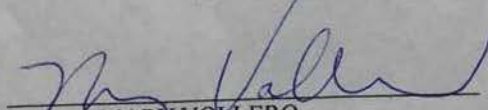
10. It is not clear to me how a voter is supposed to know when they can make timely petitions for a recount under 25 P.S. § 3154, because there does not appear to be any public notice about when the votes in the county are being tabulated or when the first computation has been completed.

11. There was and is no guidance online or anywhere else from Centre County or the Board of Elections about when the County had completed its computation of the vote or when the five days to seek a recount began to be counted or expired.

12. I am concerned that my vote and the votes of my fellow citizens were not counted accurately in the election, and would like a manual recount of every paper ballot and a forensic examination of the electronic voting systems in Pennsylvania to make the vote had integrity and every vote counted.

Dated: December 3, 2016

Fleming, Pennsylvania


MARY VOLLERO

Sworn to and subscribed before me
this ___ day of _____, 2016

NOTARY PUBLIC

Exhibit A

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF _____

PETITION TO RECOUNT AND/OR RECANVASS
AND AFFIDAVIT OF [your name] _____

TO THE _____ COUNTY BOARD OF ELECTIONS, [name of
county] _____, PENNSYLVANIA:

_____, verifies, deposes and says the following under penalty of
perjury:

1. My name is _____. I am a registered voter in City, Borough,
Township of _____, Precinct [insert number] _____,
_____ County, Pennsylvania. I voted in this district in the election on
November 8, 2016. I live at [insert complete street address]
_____, _____ County, Pennsylvania.

2. Pursuant to 25 P.S. § 3154, I request a recount and recanvass of the vote for
President of the United States and for United States Senate in the November 8, 2016 election in
this district.

3. I believe that an error, although not apparent on the face of the returns, has been
committed in the vote in this district. I also believe there is a discrepancy in the returns of this
district.

4. My belief is based, in part, on the attached Affidavit of Alex Halderman, which
raises grave concerns about the integrity of optical scan voting machines used in this district.
See Ex. A (attached).

5. Because this election district “uses an electronic voting system utilizing paper ballots,” the “county board shall recount all ballots using manual, mechanical or electronic devices of a different type used for the specific election.” 25 P.S. § 3154(e)(3)(i).

6. I request that the county board manually count all of the paper ballots for President of the United States and United States Senate in the district, and compare those tallies to the optical scan results. As the Halderman Affidavit makes clear, the only way to ensure the integrity and accuracy of the vote is to count all of the paper ballots manually.

7. As a voter, and as a citizen of this country, I believe it is extremely important that votes are counted accurately in this election.

8. I hereby verify under penalty of perjury that the facts contained in this petition and affidavit are true and correct to the best of my knowledge or information and belief.

[Signature]

Sworn to before me this _____ day of November 2016.

Notary Public

VERIFICATION

I hereby depose and say that the statements in the foregoing Petition to Recount and/or Recanvass are true and correct to the best of my knowledge, information and belief. I understand that this statement is made subject to the penalties of 18 Pa. C. S. Sec 4904 relating to unsworn falsification to authorities.

[signature]

Exhibit 10

AFFIDAVIT and DECLARATION OF MARY ELLEN BALCHUNIS

MARY ELLEN BALCHUNIS, being duly sworn, declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

1. I am a resident of Haverford Township, Ardmore, Pennsylvania, in Delaware County.
2. I voted in the 2016 general election in my district, the 3rd Ward, 4th Precinct.
3. I voted on an electronic voting machine that had no paper receipt for me to review, so I cannot be sure that my vote was accurately recorded or counted.
4. I appeared on the ballot this year as a candidate for Congress, in Pennsylvania's 7th Congressional District. I ran as a Democrat.
5. I submit this affidavit/declaration to explain the hurdles I have faced in trying to seek a recount of votes in Delaware County.
6. I joined a group of volunteers who were trying to file petitions for a recount of votes and a forensic analysis of electronic voting machines in Pennsylvania.
7. There was no clear information from the Pennsylvania Department of State or the Delaware County Board of Elections about when the County had completed its computation of the vote or whether/when it had certified the vote, meaning that there was no clear information about the deadline by which to file petitions for a recount. I was a candidate in the race, and I never received notice of certification or a meeting about certification from the State or Board of Elections.
8. Originally, the volunteers believed that Delaware County was not eligible for a recount and so I and other volunteers were told not to bother gathering petitions to file.

9. However, I later spoke with a volunteer attorney who believed it may not be too late to file petitions for a recount. Accordingly, I gathered petitions for myself and two neighbors.

10. I attempted to deliver petitions to the Delaware County Board of Elections. I arrived at the office a few minutes before the office was set to close. At first, the employee at the Board told me that the office was closed, but I pointed out that it still had a few minutes before it closed. She initially refused to accept my petitions, but eventually she relented and agreed to time-stamp them.

11. When I asked the Chief Clerk whether I had followed the appropriate procedures, she told me that she would not give me any information and could not even tell me if I was in the right place.

12. I felt like the County Board of Elections was giving me the run-around and refusing to provide any clear instructions or answers. It appeared to me that the Board was uninterested in helping citizens seek recounts. In addition, as our judges and County Council in Delaware County are Republicans as well as most of the County employees, I felt that the employee recognized my name, as a congressional candidate, and may not have wanted to help a Democrat.

13. I am concerned that my vote and the votes of my fellow citizens were not counted accurately in the election, and would like a manual recount of every paper ballot and a forensic examination of the electronic voting systems in Pennsylvania to make sure the vote had integrity and every vote counted. My race was also part of DNC emails that the intelligence community said were hacked by the Russians; therefore, the forensic exam of the DRE machines is extremely important to me.

Dated: December 5, 2016
Haverford, Pennsylvania

Mary Ellen Balchunis

MARY ELLEN BALCHUNIS

Sworn to and subscribed before me
this 5th day of December, 2016.

Kelly Marie Miller-Luciani

NOTARY PUBLIC

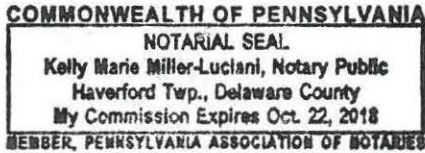


Exhibit 11

AFFIDAVIT and DECLARATION OF REBECCA LUZI

REBECCA LUZI, being duly sworn, declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

1. I am a resident of Havertown, Pennsylvania, in Delaware County.
2. I voted in the 2016 general election in my precinct, #4-2.
3. I voted on an electronic voting machine that had no paper receipt for me to review, so I cannot be sure that my vote was accurately recorded or counted.
4. I submit this affidavit/declaration to explain the hurdles I have faced in trying to seek a recount of votes in Delaware County.
5. On Tuesday, November 22, 2016, I heard from a fellow Delaware County resident, Janet Lee, that she had called the Pennsylvania Department of State to request an audit of the election results, and that the Department told her she needed to take her request to the County Board of Elections. Ms. Lee was told that the Board was meeting the following morning, November 23.
6. I decided to attend the Delaware County Board of Elections meeting on November 23 so that I could join in the request for an audit of the vote, particularly the votes coming from electronic voting machines.
7. At the meeting, there were approximately 10 other observers present, in addition to the three Board members, a clerk and a solicitor.
8. At the start of the meeting, an observer raised her hand to request an audit of the vote, but was told that questions would be addressed at the end.
9. At that point, the Board proceeded to "certify" the vote. It was not clear to us exactly what was happening, but the clerk read off vote totals, and the Board members announced, in sum and substance, that the vote was "certified."

10. At the end of the meeting, Ms. Lee explained that she had been instructed to by the Department of State to take her request for an audit to the County Board itself. A Board member stated that there was “no such thing” as an audit of the vote, only a recount request.

11. It was clear that the Board members were annoyed by our presence, our concerns about the security of the vote, and our request for an audit. When Ms. Lee expressed her concerns about the security and integrity of the vote, given the vulnerabilities of the electronic voting machines, the Board said that her concern was “paranoid.”

12. The following day, I heard about the recount efforts led by the Jill Stein campaign. I volunteered to get involved.

13. During a conference call later that week with volunteers organized through the Stein campaign, I told the group that I had seen the vote being “certified” in Delaware County. Accordingly, it was decided on that call that it was too late to file petitions seeking a recount.

14. Late on Sunday evening, I was in touch with a volunteer attorney who told me that there might be time still to seek a recount in Delaware County. I gathered petitions from myself, my husband, and a neighbor, and found a notary to notarize them. This happened sometime around 10 p.m. on Sunday night.

15. I gave the three petitions to a volunteer who was able to submit them to the Board of Elections on Monday, November 28. Attached as Exhibit A is a blank sample of the petitions we signed seeking a forensic evaluation of the electronic voting machines.

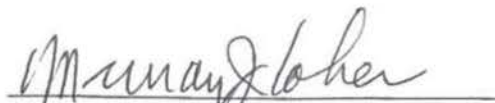
16. On Thursday, December 1, my husband and I received a letter, attached as Exhibit B, from the Delaware County Board of Elections, explaining that it did “not have the authority to consider” our petitions. The letter was dated November 29. I have not heard anything else from the County about how to proceed.

17. I am concerned that my vote and the votes of my fellow citizens were not counted accurately in the election, and would like a manual recount of every paper ballot and a forensic examination of the electronic voting systems in Pennsylvania to make the vote had integrity and every vote counted.

Dated: December 4, 2016
Havertown, Pennsylvania


REBECCA LUZI

Sworn to and subscribed before me
this 4th day of DECEMBER, 2016.


NOTARY PUBLIC
COMMONWEALTH OF PENNSYLVANIA

NOTARIAL SEAL
MURRAY J. COHEN, Notary Public
Marple Township, Delaware County
My Commission Expires October 29, 2020

Exhibit 12

AFFIDAVIT and DECLARATION OF EMILY NELSON

Emily Nelson, being duly sworn, declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

1. I am a resident of Delaware County, Pennsylvania. I am also a licensed and practicing attorney.
2. I voted in the 2016 general election.
3. After the election, I volunteered to assist in efforts to seek a recount of the vote for president in Delaware County.
4. On or about November 27, 2016, I participated in a conference call for recount volunteers and learned from a woman named Rebecca Luzi that she and a group of other Delaware County citizens had attended a Delaware County Bureau of Elections meeting on November 23, 2016.
5. Ms. Luzi informed me and other people on conference call that her group had announced at the beginning of the meeting that they intended to seek an audit or recount of the presidential vote. They were told to hold all questions or comments until the end of the meeting. Then, during the meeting, the Election Board apparently voted to certify the results of the 2016 election.
6. Ms. Luzi reported that when the meeting was opened up for questions, Ms. Luzi and her group reiterated that they were seeking an audit of the election results. After conferring with the County Solicitor, who was present, the Board responded that there was no such thing as an audit. The Board indicated that while citizens could request a recount, any such request would now be untimely because the election results had already been certified. The Board

conveyed the impression that citizens had no remaining avenue available to question or challenge the results.

7. I have since learned that this is untrue; Pennsylvania law allows for citizens to petition for a recount within five days after the results in their precinct have been certified, pursuant to 25 Pa. C.S. 3154(e), and that petitions filed during this period are properly brought before the Board of Elections and not the court of common pleas. *In re Reading School Bd. Election*, 535 Pa. 32, 37-38. However, on the basis of the information Ms. Luzi conveyed to me (which originated from the County and which I therefore assumed would be authoritative and correct), I did not personally undertake any further efforts to organize the filing of affidavits to request a recount in my precinct. Many other Delaware County residents acted similarly, and as a result efforts at requesting recounts in precincts within the County were severely dampened.

8. On or about November 28, 2016, I learned about efforts that some other Delaware County residents were undertaking to file recount requests with the County. I learned that, notwithstanding the misinformation that had been provided at the Election Board meeting, the Board was accepting affidavits requesting a recount for filing. Although it was too late for me to effectively organize such an effort with respect to my own precinct, I volunteered to assist others in the County who were doing so.

9. I personally delivered a set of affidavits to the Bureau of Elections office on Monday, November 28. When I arrived, there was another woman in line ahead of me who was waiting to file recount requests. There were two individuals working behind the counter, but they said that we would have to wait to speak with the Chief Clerk Laureen Hagan, because she

was the only person who could help us with issues relating to requesting a recount. They informed us that the Chief Clerk was on the phone.

10. The Chief Clerk did not see us for at least 20 minutes. Eventually, she came out of her office and spoke to us. The Chief Clerk directed our attention to a notice posted in the office with the heading "**ATTENTION.**" A copy of that notice is attached hereto as Exhibit A. The notice said, among other things, that "The Bureau of Elections will accept documents submitted by the filer." It also said: "Election law as passed by the legislature and interpreted by the Courts has become increasingly complex. The Bureau of Elections encourages you to consult with your political party or an attorney regarding your election questions."

11. Without explaining her basis for doing so, the Chief Clerk then demanded to know whether the woman standing in line ahead of me was the affiant swearing to the affidavits she was submitting. The woman explained that she was delivering her own affidavits and others. The Chief Clerk then demanded to know whether I was a signatory to the affidavits I was delivering. I told her that I was not.

12. The Chief Clerk then demanded that I identify myself. I explained that I am an attorney, and explained that my identity was irrelevant because I was only there to deliver affidavits for filing. The Chief Clerk demanded that I provide my contact information and attorney identification number. I explained that this was unnecessary as I was not entering any kind of appearance. Nevertheless, I complied with these demands, largely because I did not wish to hold up the business of the office any further. Based on her demeanor and the tone of the exchange, I was left with the distinct impression that the Chief Clerk was seeking to learn identifying information about me to use for future retaliation of some kind.

13. While I was at the office, I asked the Chief Clerk who would be overseeing any recount if one were to be performed. Her response was that she could not tell me the answer. I asked who would be deciding whether to conduct a recount, and was again told that the Chief Clerk could not tell me. I asked when a decision could be expected, and was again told that the Chief Clerk could not answer me..

14. No one at the Bureau of Elections told me or the other woman that our affidavits were being rejected, nor were we told that we needed to file anything in court (or do anything else) to request a recount.

15. Also on Monday, November 28, the Pennsylvania Department of State issued a memorandum providing guidance to the various counties on how to handle recount petitions. A copy of that memorandum is attached hereto as Exhibit C. The memorandum explained that the validity of a recount petition would depend on when each county had finished or would finish computing the results of the election. On the morning of Tuesday, November 29, I personally called the Pennsylvania Department of State, using the telephone number for Jonathan M. Marks listed on the memorandum. The person who answered the phone identified herself as Tina Lynch. I asked the person who answered the phone how I could find out the status of the computation of the election results in my county. The person said, in sum and substance: "I'm in Commissions; I'll have to transfer you to Elections." My phone call was then immediately disconnected. I called back immediately and my call went directly to voicemail. I attempted to call back repeatedly with the same result.

16. On December 1 and December 2, 2016, the individuals whose affidavits I had delivered to the Bureau of Elections on November 28 received letters in the mail from the Chief

Clerk. The letters were dated November 29, 2016, even though they were not received that day. An example of one such letter, which was sent to Francis and Rebecca Luzi, is attached hereto as Exhibit B. The letter stated, in relevant part: “I am returning to you the original documents you filed with the Bureau of Elections on Monday, November 28, 2016. I have reviewed your filing with my Solicitor and neither the Bureau of Elections nor the County Board of Elections has the statutory authority to consider your request.” The letter also enclosed a copy of the notice that had been posted at the Bureau of Elections office on Monday, November 28 when I was there.


17. By statute, an affiant has only two days to appeal the denial of a recount request. Normally, mail sent from the Bureau of Elections—which is located across the street from the Post Office—should take no more than one business day to arrive at a destination within Delaware County. Accordingly, I find the fact that the letters were dated November 29, but received on December 1 and December 2 (arguably after any appeal would have been untimely), very suspicious.

18. Even though I provided my contact information and attorney identification number to the Chief Clerk, I was never told anything about what became of the affidavits that we submitted.

19. To my knowledge, no recount was conducted based on the affidavits I or anyone else in Delaware County submitted.

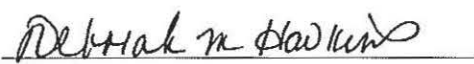
20. I am concerned that my vote and the votes of my fellow citizens were not counted accurately in the election, and would like a manual recount of every paper ballot and a forensic examination of the electronic voting systems in Pennsylvania to make the vote had integrity and every vote counted.

Dated: December A, 2016
Media, Pennsylvania


Emily Nelson

Sworn to and subscribed
before me this 4th day
of December, 2016.

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
DEBORAH M. HAWKINS, Notary Public
Media Boro., Delaware County
My Commission Expires December 6, 2017


NOTARY PUBLIC

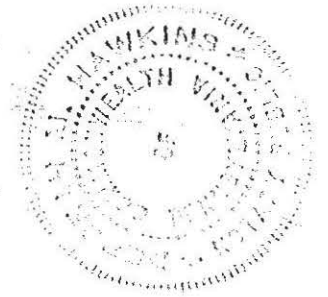


Exhibit 13

AFFIDAVIT and DECLARATION OF TIMOTHY JOHN RUNKLE

TIMOTHY JOHN RUNKLE, being duly sworn, declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

1. I am a resident of Elizabethtown, Pennsylvania, in Lancaster County.
2. I voted in the 2016 general election in my district: District Number 1601 and Voting District Elizabethtown Borough 1-W.
3. I have a B.S. in geology from Millersville University and work as a geologist.
4. I submit this affidavit/declaration to explain the hurdles I have faced in trying to seek a recount of votes in Lancaster County.
5. On Monday, November 28, 2016, I personally went to the Lancaster County Board of Elections office in Lancaster, PA with three notarized affidavits, including my own, from voters in my precinct, along with the required supporting documents to request a recount. I arrived at the office before it first opened in the morning.
6. I met with Randall O. Wenger, Chief Clerk, Lancaster County Board of Elections, shortly after the office first opened at 8:30 a.m. on November 28, 2016. I gave Mr. Wenger the three affidavits with supporting documents and he time stamped each affidavit at 8:37 a.m.. Attached as Exhibit A is the first page of each affidavit with the time stamp. Mr. Wenger told me that the Board of Elections would review the petitions.
7. When we met, Mr. Wenger told me that the Board had not yet certified the final voting results. He explained that he had just come from delivering the results to the Board members that morning to be reviewed and signed by them. Based on what he told me, I believed the computation of the returns was not yet complete for Lancaster County when I filed the request for a recount in my district.

8. On Friday December 2, 2106, I received a letter, dated November 30, 2016, from Mr. Wenger. The letter stated that the Board met on Wednesday November 30, 2016 and rejected my petition for a recount because it had completed its computation on November 23, 2016. The letter further stated that any petition for recount would need to be filed with the Lancaster County Court of Common Pleas. Attached as Exhibit B is the November 30, 2016 Wenger letter.

9. I am concerned that my vote and the votes of my fellow citizens were not counted accurately in the election. I would like a manual recount of every paper ballot and a forensic examination of the electronic voting systems in Pennsylvania done to make sure the vote had integrity and every vote counted.

Dated: December 4, 2016
211 N Poplar St, ELIZABETHTOWN Pennsylvania

Timothy J Runkle
TIMOTHY JOHN RUNKLE

Sworn to and subscribed before me
this 4th day of December, 2016.

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
Kathy A. Yordy, Notary Public
Mount Joy Twp., Lancaster County
My Commission Expires June 25, 2018
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Kathy A Yordy
NOTARY PUBLIC

Exhibit A

EX.A

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF LANCASTER

2016 NOV 23 AM 8 36

PETITION TO RECOUNT AND/OR RECANVASS
AND AFFIDAVIT OF [your name] Alisha Runkle

2016 NOV 28 AM 8 7

TO THE LANCASTER COUNTY BOARD OF ELECTIONS, [name of
county] LANCASTER, PENNSYLVANIA:

Alisha Runkle, verifies, deposes and says the following under penalty of
perjury:

1. My name is Alisha Runkle. I am a registered voter in City, Borough
Township of ELIZABETHTOWN, Precinct [insert number] ELIZABETHTOWN BORO 1ST WARD (1601)
LANCASTER County, Pennsylvania. I voted in this district in the election on
November 8, 2016. I live at [insert complete street address]
211 N Poplar St. ELIZABETHTOWN, LANCASTER County, Pennsylvania.

2. Pursuant to 25 P.S. § 3154, I request a recount and recanvass of the vote for
President of the United States and for United States Senate in the November 8, 2016 election in
this district.

3. I believe that an error, although not apparent on the face of the returns, has been
committed in the vote in this district. I also believe there is a discrepancy in the returns of this
district.

4. My belief is based, in part, on the attached Affidavit of Alex Halderman, which
raises grave concerns about the integrity of optical scan voting machines used in this district.

See Ex. A (attached).

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF LANCASTER

PETITION TO RECOUNT AND/OR RECANVASS
AND AFFIDAVIT OF [your name] Timothy John Runkle

TO THE LANCASTER COUNTY BOARD OF ELECTIONS, [name of
county] LANCASTER, PENNSYLVANIA:

Timothy John Runkle, verifies, deposes and says the following under penalty of
perjury:

1. My name is Timothy John Runkle. I am a registered voter in City Borough
Township of ELIZABETHTOWN, Precinct [insert number] ELIZABETHTOWN BORO - 1ST WARD
LANCASTER County, Pennsylvania. I voted in this district in the election on
November 8, 2016. I live at [insert complete street address]
211 N Poplar St., ELIZABETHTOWN, LANCASTER County, Pennsylvania.

2. Pursuant to 25 P.S. § 3154, I request a recount and recanvass of the vote for
President of the United States and for United States Senate in the November 8, 2016 election in
this district.

3. I believe that an error, although not apparent on the face of the returns, has been
committed in the vote in this district. I also believe there is a discrepancy in the returns of this
district.

4. My belief is based, in part, on the attached Affidavit of Alex Halderman, which
raises grave concerns about the integrity of optical scan voting machines used in this district.
See Ex. A (attached).

FILED
2016 NOV 28 PM 6 37
LANCASTER COUNTY BOARD OF ELECTIONS

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF LANCASTER

PETITION TO RECOUNT AND/OR RECANVASS
AND AFFIDAVIT OF [your name] Sherrie Lardon

2016 NOV 28 4 18 37
RECORDS

TO THE LANCASTER COUNTY BOARD OF ELECTIONS, [name of
county] LANCASTER, PENNSYLVANIA:

Sherrie Lardon, verifies, deposes and says the following under penalty of
perjury:

1. My name is Sherrie Lardon. I am a registered voter in City Borough
Township of ELIZABETHTOWN, Precinct [insert number] ELIZABETHTOWN BORO 1ST WARD (100
LANCASTER County, Pennsylvania. I voted in this district in the election on
November 8, 2016. I live at [insert complete street address]
210 E. Park St. Apt. 102 Elizabethton, PA, LANCASTER County, Pennsylvania.

2. Pursuant to 25 P.S. § 3154, I request a recount and recanvass of the vote for
President of the United States and for United States Senate in the November 8, 2016 election in
this district.

3. I believe that an error, although not apparent on the face of the returns, has been
committed in the vote in this district. I also believe there is a discrepancy in the returns of this
district.

4. My belief is based, in part, on the attached Affidavit of Alex Halderman, which
raises grave concerns about the integrity of optical scan voting machines used in this district.

See Ex. A (attached).

Exhibit B



Board of Elections and Registration Commission

150 North Queen Street
Suite 117
Lancaster, PA 17603-3562
Phone: 717-299-8293
Fax: 717-209-3076

www.co.lancaster.pa.us/elections

Joshua G. Parsons, Chairman
Dennis P. Stuckey, Vice-Chairman
Craig E. Lehman

November 30, 2016

Randall O. Wenger
Chief Clerk
Chief Registrar

Timothy John Runkle
211 N. Poplar St.
Elizabethtown, PA 17022

Dear Timothy:

The Lancaster County Board of Elections met on Wednesday, November 30 and has rejected your petition for recount based upon the following section of the PA Election Code.

"Title 25 P.S. 3154

(e) Provision for Recount or Recanvass of Vote.—Whenever it shall appear that there is a discrepancy in the returns of any election district, or, upon petition of three voters of any district, verified by affidavit, that an error, although not apparent on the face of the returns, has been committed therein, or of its own motion or under subsection (g), the county board shall at **any time prior to the completion of the computation of all of the returns** for the county, summon the election officers of the district, and said officers, in the presence of said board, shall conduct a recount or recanvass of all ballots cast..."

The Lancaster County Board of Elections completed its computation and first signing on Wednesday, November 23. As such, any petition for recount after that date would need to be filed with the Lancaster County Court of Common Pleas, as confirmed by the Pennsylvania Department of State.

Best regards,

Randall O. Wenger
Chief Clerk, Lancaster County Board of Elections.



Exhibit 14

AFFIDAVIT and DECLARATION OF TOBY LEE BALLEEN AYASH

Toby Lee Ballen Ayash, being duly sworn, declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

1. I am a resident of Elkins Park, Pennsylvania, in Montgomery County.
2. I am the Recruitment and Marketing Coordinator for Ramah Israel. I have a home office in Elkins Park, PA. The national North American office of Ramah Israel is in New York, NY.
3. When voting in the November 8, 2016 election I encountered the following problems: I applied for an absentee ballot for the 2016 general election in early September because I knew I was going to be abroad on November 8, 2016. I did not receive my absentee ballot by the date I was going to depart from the United States (October 13, 2016). After calling the Montgomery County Voter Registration office multiple times to inquire about my ballot before my departure, I was told that I would be able to vote online since I was going to be abroad. The office confirmed that my request arrived on time and that there should be no problem voting online. They confirmed my address and email address. I did not receive my ballot on time, nor did I ever receive any communication via email as to how I was to vote online. Upon my return to the United States on November 13, 2016, the paper absentee ballot was waiting for me at my home address.
4. I am concerned that my vote and the votes of my fellow citizens were not counted accurately in the election, and would like a manual recount of every paper ballot and a forensic examination of the electronic voting systems in Pennsylvania to make sure the vote had integrity and every vote counted.

Dated: December 4, 2016

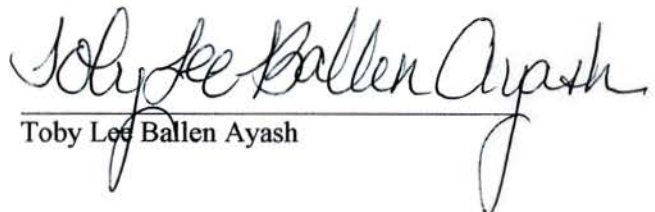

Toby Lee Ballen Ayash

Exhibit 15

AFFIDAVIT and DECLARATION OF CYNTHIA C. BAGOLA

Cynthia C. Bagola, being duly sworn, declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

1. I am a resident of Trappe Borough, Pennsylvania, in Montgomery County.
2. I voted in the 2016 general election in my precinct, Trappe Borough.
3. I voted on an electronic voting machine that had no paper receipt for me to review, so I cannot be sure that my vote was accurately recorded or counted.
4. I am an Enterprise Architect for Quest Diagnostics.
5. When voting in the November 8, 2016 election I encountered the following problems:
 - a. There was no way for me to verify that the electronic voting machine recorded my election choices correctly.
 - b. There was no way for me to verify the electronic voting machine recorded my vote.
 - c. Extremely long lines / wait time
 - d. All of the Hillary Clinton campaign signs were removed
 - e. Most of the Democratic campaign signs were removed
6. I am concerned that my vote and the votes of my fellow citizens were not counted accurately in the election, and would like a manual recount of every paper ballot and a forensic examination of the electronic voting systems in Pennsylvania to make the vote had integrity and every vote counted.

Dated: December 4, 2016

Cynthia C. Bagola

Cynthia C. Bagola

Exhibit 16

AFFIDAVIT and DECLARATION OF ANNA M. DURBIN

ANNA M. DURBIN, being duly sworn or affirming, declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

1. I am a resident of Ardmore, Lower Merion Township, Pennsylvania, in Montgomery County.
2. I voted in the 2016 general election in my precinct, LM 8-2.
3. I voted on an electronic voting machine that had no paper receipt for me to review, so I cannot be sure that my vote was accurately recorded or counted.
4. I am an attorney and I work out of my law office in Ardmore, PA, in both Pennsylvania and Federal Courts.
5. When voting in the November 8, 2016 election I encountered the following problems: There was a red light on my screen that said something to the effect: "I do not wish to cast a vote." I pushed the button to turn it off. It did not turn off, but all of the choices I had made on the touch screen were erased. I went back and put in all my choices again. Then I hit the cast my vote button. I am concerned that this red light may have been a sign of a glitch that may have caused my votes not to be recorded. I am informed and believe that there was a very high number of "no votes cast" recorded in several precincts in Montgomery County, compared to prior elections. With no paper record to verify that the vote was recorded, I have concerns about the integrity of our voting system in Montgomery County. I understand that experts have demonstrated how electronic devices outside of polling places can be used to hack the machines, as well as software implanted to cause discrepancies.
6. I attempted to file a petition for recount/re-canvass with my county Board of Elections and encountered the following problems: I sent the petition with a person who had two


other affidavits from my precinct for them to be filed with the Montgomery County Board of Elections in Norristown, Pennsylvania. According to news released from Montgomery County Board of Elections, they refused to file those petitions, but insisted they be filed in Court, despite my understanding of what the law of Pennsylvania provided. I attempted to file a petition for recount/re canvass with my county Prothonotary, through others present in the Courthouse, and encountered the following problems: I have been informed and believe that my petition was filed and a filing fee was paid, but the petitions were dismissed. It is unfair that such a high filing fee be required for each person trying to file a petition for recount/re-canvass, and that three petitions with affidavits from each precinct are required. This makes the system unworkable. The Court notified me in writing of a hearing scheduled for November 30, 2016, but mailed it to an address which contained my street address, but not Ardmore, my post office, but instead Montgomery County, PA. I received it on Saturday, December 3, 2016. I am informed and believe that the Montgomery County Court of Common Pleas found the petitions were untimely, even though the Board of Elections had not certified the vote count before the petitions were filed. This procedure makes it impossible for voters to have input when there are problems.

7. I am also concerned about whether absentee ballots were timely made available to people who could not vote on Election Day in their precinct. I am informed and believe that college students who had timely requested absentee ballots did not receive them in time to vote. Since time was extended for absentee ballots to be returned in person to Norristown by the end of Election Day, I believe they could not be counted in the individual precincts. I do not know if they were counted.

8. I am concerned that my vote and the votes of my fellow citizens were not counted accurately in the election, and would like a manual recount of every paper ballot and a forensic

examination of the electronic voting systems in Pennsylvania to make sure the vote had integrity and every vote counted.

Dated: December 4, 2016



Anna M. Durbin

Exhibit 17

AFFIDAVIT and DECLARATION OF COURTNEY R. HOWE

Courtney R. Howe, being duly sworn, declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:


1. I am a resident of Harleysville, Pennsylvania, in Montgomery County.
2. I voted in the 2016 general election in my precinct, Lower Salford Precinct 6.
3. I voted on an electronic voting machine that had no paper receipt for me to review, so I cannot be sure that my vote was accurately recorded or counted.
4. I am Front Office Manager at The Rittenhouse Hotel, 210 West Rittenhouse Square, Philadelphia, PA 19103.
5. When voting in the November 8, 2016 election I encountered the following problems: I entered my polling station at 9:00am. When I entered the polling booth, I selected "Straight Democratic". At that moment, all candidates for this party were lit with a green arrow. As I was about to cast my vote, I noticed that on the bottom right corner of the voting screen, the green arrow was also lit in the box to indicate "I Do Not Want To Vote On Any Office, Candidate or Issue". I was hesitant to cast my vote because of the green arrow lit in this box, but I did cast my vote and exited the booth. I immediately inquired with a gentleman sitting at the table assisting voters to sign in. I pointed to a sample ballot that was on the wall and asked if the light was supposed to have been lit. He could not answer the question and referred me to the woman who he said was running the polling station. She was on the

station and was very busy and walked away. I felt unsatisfied and upset that these individuals, who should have reasonable knowledge of voter questions and concerns, could not assist me or answer my questions.

6. I am concerned that my vote and the votes of my fellow citizens were not counted accurately in the election, and would like a manual recount of every paper ballot and a forensic

examination of the electronic voting systems in Pennsylvania to make the vote had integrity and every vote counted.

Dated: December 4, 2016



Courtney R. Howe

Exhibit 18

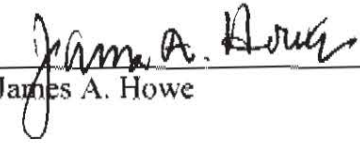
AFFIDAVIT and DECLARATION OF JAMES A. HOWE

James A. Howe, being duly sworn, declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

1. I am a resident of Harleysville, Pennsylvania, in Montgomery County.
2. I voted in the 2016 general election in my precinct, Lower Salford Precinct 6.
3. I voted on an electronic voting machine that had no paper receipt for me to review, so I cannot be sure that my vote was accurately recorded or counted.
4. I am a business owner / photographer. I work full time at our family owned business, Sports Net Action Photos, LLC, 414 Main Street, Harleysville, Pa 19438.
5. When voting in the November 8, 2016 election I encountered the following problems: When I voted (straight Democratic), there was a statement on the ballot form that read "I DO NOT WANT TO VOTE ON ANY OFFICE, CANDIDATE OR ISSUE". Alongside this statement was a box the had the words "NO VOTE". When I cast my vote, this box lit up as if to indicate "No Vote" and remained lit as I confirmed my vote and finished voting.
6. I am concerned that my vote and the votes of my fellow citizens were not counted accurately in the election, and would like a manual recount of every paper ballot and a forensic

examination of the electronic voting systems in Pennsylvania to make the vote had integrity and every vote counted.

Dated: December 4, 2016



James A. Howe

Exhibit 19

AFFIDAVIT and DECLARATION OF ROBIN T. HOWE

Robin T. Howe, being duly sworn, declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

1. I am a resident of Harleysville, Pennsylvania, in Montgomery County.
2. I voted in the 2016 general election in my precinct, Lower Salford Precinct 6.
3. I voted on an electronic voting machine that had no paper receipt for me to review, so I cannot be sure that my vote was accurately recorded or counted.
4. I am a business owner / manager. I work full time at our family owned business, Sports Net Action Photos, LLC, 414 Main Street, Harleysville, Pa 19438.
5. When voting in the November 8, 2016 election I encountered the following problems: When I voted (straight Democratic), there was a statement on the ballot form that read "I DO NOT WANT TO VOTE ON ANY OFFICE, CANDIDATE OR ISSUE". Alongside this statement was a box the had the words "NO VOTE". When I cast my vote, this box lit up as if to indicate "No Vote" and remained lit as I confirmed my vote and finished voting. I asked a poll worker why that box was lit and was told they did not know. The poll worker was on the phone with another polling station and did not show any interest in providing further clarification.

6. I am concerned that my vote and the votes of my fellow citizens were not counted accurately in the election, and would like a manual recount of every paper ballot and a forensic

examination of the electronic voting systems in Pennsylvania to make the vote had integrity and every vote counted.

Dated: December 4, 2016

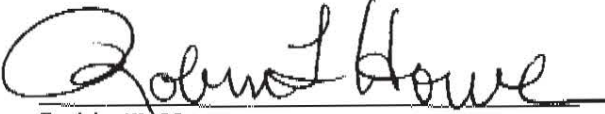

Robin T. Howe

Exhibit 20

AFFIDAVIT and DECLARATION OF SHANNON K. KNIGHT

Shannon K. Knight, being duly sworn, declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

1. I am a resident of Wynnewood, Pennsylvania, in Montgomery County.
2. I voted in the 2016 general election in my precinct, 14-2.
3. I voted on an electronic voting machine that had no paper receipt for me to review, so I cannot be sure that my vote was accurately recorded or counted.
4. I am an independent consultant, supporting the technology needs of various arts and cultural organization.
5. When voting in the November 8, 2016 election I encountered the following problems: The “choose not to vote” button was lit up green even though I had chosen specific options for all races and had made a choice for the question on the ballot. When I tried to unselect the “choose not to vote” button, it would not unselect. It remained lit up green along with all of my other selections when I hit “submit.”
6. I am concerned that my vote and the votes of my fellow citizens were not counted accurately in the election, and would like a manual recount of every paper ballot and a forensic examination of the electronic voting systems in Pennsylvania to make the vote had integrity and every vote counted.

Dated: December 4, 2016



Shannon K. Knight

Exhibit 21

AFFIDAVIT and DECLARATION OF KIMBERLY KUPKA

KIMBERLY KUPKA, being duly sworn, declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

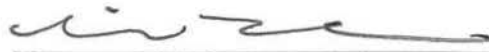
1. I am a resident of Gladwyne, Pennsylvania, in Montgomery County.
2. I voted in the 2016 general election in my precinct, Lower Merion 2-1.
3. I voted on an electronic voting machine that had no paper receipt for me to review, so I cannot be sure that my vote was accurately recorded or counted.
4. I believe that my vote was not accurately recorded or counted as a result of the issue set forth in Paragraph 6 below.
5. I am a commercial real estate attorney and run my own law practice with my husband.
6. When voting in the November 8, 2016, election I encountered the following problems:
 - a. When I was done selecting the candidates for whom I wanted to vote, the “I do not want to vote on any office, candidate or issue” box on the right also had a green light in it, as did all of the candidates. I went back and unselected a candidate (the green light went out) and reselected the candidate (the green light became lit again) to confirm whether the light in the “no vote” box would disappear. It did not; despite having selected candidates, the “I do not want to vote on any office, candidate or issue” box was still lit on the right hand side. I cast my vote with the candidates and the “no vote” box lit.

- b. Four “no votes” were recorded in Lower Merion 2-1, and I believe that my vote was inaccurately recorded as a “no vote” because of a faulty electronic voting machine or a voting machine hack.
- c. Notably, there are 4,062 “no votes” in Montgomery County, Pennsylvania alone, which means that 4,062 people in Montgomery County came to their voting place on November 8 and either did not lodge a vote for any candidate, which I believe to be highly unlikely, or this extraordinary large number of “no votes” is a result of electronic voting machine errors or hacks.
- d. In some precincts, the percentage of “no votes” is greater than 2.5% of the cartridge turnout, such as Norristown 2-3, which registered a 2.8% “no vote” in a precinct that voted 91.5% for Clinton.

7. In addition to the voting issue above, I attempted to file a petition for recount/re canvass with the Montgomery County Board of Elections on Monday, November 28, 2016, and the county Board of Elections rejected my petition as “untimely” even though I attempted to file my petition, along with two others from my precinct in Lower Merion 2-1, within five days following completed computation of the votes in accordance with 25 PA C.S. 3154(e).

8. I am concerned that my vote and the votes of my fellow citizens were not counted accurately in the election, and would like a manual recount of every paper ballot and a forensic examination of the electronic voting systems in Pennsylvania to make the vote had integrity and every vote counted.

Dated: December 4, 2016



Kimberly Kupka

Exhibit 22

AFFIDAVIT and DECLARATION OF Douglas T. Ross

Douglas T. Ross being duly sworn, declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

1. I am a resident of North Wales Borough, Pennsylvania, in Montgomery County.
2. I voted in the 2016 general election in my precinct, North Wales Borough Ward 2.
3. I voted on an electronic voting machine that had no paper receipt for me to review, so I cannot be sure that my vote was accurately recorded or counted.
4. I am a self-employed pharmaceutical development scientist at DT Ross Consulting, LLC.
5. When voting in the November 8, 2016 election I encountered the following problems: I had a valid poll Watcher certificate issued by Montgomery County PA for Joe Toresella, candidate for State Treasurer and was present when the two voting machines for North Wales Ward 2 were canvassed after voting ended at 8PM on Tuesday 8 November 2016. The vote count of Presidential electors from the first machine showed 164 votes for the Clinton/Kaine Ticket and the second machine count indicated 160 votes for the Clinton/Kaine ticket. There were 9 absentee ballots all of which included votes for the Clinton/Kaine ticket. There was only a small undervote for Presidential Electors of $n=5$ on the first machine and $n=7$ for the second machine. Yesterday, 3 Dec 2016 while reviewing the pdf of the Montgomery County Unofficial Precinct report online I was surprised to find that the Count for the Clinton/Kaine ticket included only the 324 votes registered on the two machine cartridges and did not include the 9 votes for Clinton/Kaine on absentee ballots. Instead these 9 votes appeared to have been added to the undervote count, $\text{Undervote} = (\text{Turnout} - \text{Total POTUS elector votes}) = (566 - 545) = 21$. Given the small apparent margin of victory in this election, approximately 46,435 votes, and the number of

polling districts in the Commonwealth, approximately 9000, this margin represents less than 6 votes per Election District. A systemic software error that excluded Democratic absentee votes for the Clinton/Kaine ticket from the total vote and added them instead to the undervote may very well have misrepresented the result of the election and the will of the Commonwealth's citizens.

6. I attempted to file a petition for recount/re canvass with my county Board of Elections and encountered the following problems: At about 9:30AM on Monday 28 November 2016 I was the first petitioner to the counter at the Montgomery County Voter Services Division and when I explained to a clerk that I was there to file a petition to recount/re canvass for North Wales Borough Ward 2 she said she'd have to get someone to help. She returned with Nicole Forzato, Esq., the Solicitor for the Election Board. I explained that I wanted to file a petition for recount/re canvass as part of the Jill Stein election challenge, acknowledged that I was not an attorney myself but a voter whose affidavit was included in the petition and asked Ms. Forzato what the procedure was to file this type of petition she informed me, "I am not your attorney, I represent the Montgomery County Election Board." An attorney with the Stein effort was a witness to this exchange (Teri R. Simon, Esq) and upon asking Ms Forzato to accept and time-stamp the petitions pursuant to 25 P.S. § 3154 was told that she would not accept them, that they must be filed with the prothonatory. It appeared to me that Ms Forzato's allegiance was not to the conduct of fair and accurate elections and bore animus to the Stein effort right from the start.

7. I am concerned that my vote and the votes of my fellow citizens were not counted accurately in the election, and would like a manual recount of every paper ballot and a forensic

examination of the electronic voting systems in Pennsylvania to make the vote had integrity and every vote counted.

Dated: December 4, 2016



Douglas T. Ross

Exhibit 23

AFFIDAVIT and DECLARATION OF Elizabeth Walters

Dr. Elizabeth Walters, being duly sworn, declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

1. I am a resident of 509 General Knox Rd, King of Prussia, in Upper Merion Township, Montgomery County, Pennsylvania.
2. I voted in the 2016 general election by absentee ballot in my precinct, Belmont-4.
3. I work as a Lecturer at Liverpool Hope University, UK.
4. When voting in the November 8, 2016 election I encountered the following problems:
 - On Wednesday, the 21st of September, 2016 I mailed an FPCA requesting an absentee ballot from Liverpool, United Kingdom.
 - On Friday, the 21st of October, 2016 at approximately 4:45pm I telephoned Montgomery County Voter Services enquiring about the status of my request for an absentee ballot, as I had not received any return communication. I was told that my FPCA request was not found in the office and I was advised to send another FPCA form via email.
 - On Sunday, the 23rd of October, I emailed an FPCA form requesting an absentee ballot. My email was not acknowledged.
 - On Sunday, the 30th of October, I sent an email explaining all the difficulties I had encountered receiving my absentee ballot. I informed the office that I was very concerned that I would be denied my constitutional right to vote. I had contacted Montgomery County Voting Services by mail, telephone and email for over a

month even though I had voted by absentee ballot twice before in Montgomery County.

- On Monday, the 31st of October I tried phoning Montgomery County Voter Services twice, but the phone was busy. I could not get through.
- On Tuesday, 1st of November I received an email about my “absentee application on 11/01/2016. This application has been processed and has been Approved.”
- On Wednesday, the 2nd of November I received an email that stated my electronic ballot was ready. I discovered to my disappointment, however, that this ballot only allowed a “Federal” Ballot: the ballot only included the choice of President, Senator and Member of Congress. Hence, I was unable to exercise my right to cast a ballot in the state office races (Attorney General, Treasurer etc.). In contrast, my husband, who applied for an absentee ballot in person, had a complete absentee ballot.
- On approximately the 2nd or 3rd of November I phoned Montgomery County Voter Services and left a message on their machine asking why I did not receive a state ballot. I left my name and email address twice on this message and asked them to contact me. My telephone message was never returned.

I am curious to know how many ballots cast in Pennsylvania were Federal-only ballots. If this processing snafu were common, it seems that it could potentially disenfranchise a significant number of voters and skew the results. Similarly, I am curious to know if other people encountered the unreasonable difficulties and obstacles that I faced in trying to exercise my constitutional right to vote, which also could affect final results.

5. I am concerned that my vote and the votes of my fellow citizens were not counted accurately in the election, and would like a manual recount of every paper ballot and a forensic examination of the electronic voting systems in Pennsylvania to make the vote had integrity and every vote counted.

Dated: December 5, 2016

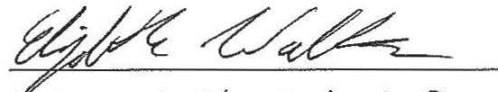

Elizabeth Walters

Exhibit 24

AFFIDAVIT and DECLARATION OF BEVERLY A. DESIGNOR

Beverly A. DeSignor, being duly sworn, declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

1. I am a resident of Northampton County, Pennsylvania.
2. I voted in the 2016 general election in my district at the Bushkill Center precinct.
3. On Monday, November 28, 2016, I went to the offices of the Northampton County Election Board, along Angela Trilli-Braun and Jade Braun. Each of us had filled out a signed and notarized affidavit seeking a recount of the vote for president in our precinct.
4. Election technician Jenna Gerbino, who was working in the office, welcomed us and told us we were not the first people to have filed similar affidavits that day. Apparently, another group had come in the morning.
5. I asked the staff at the Election Board to time-stamp our affidavits. The young woman charged us each a copying fee of twenty-five cents, and then she time-stamped them.
6. At that point, a man who had been working in the back of the office came out and began busying himself nearby, but did not say anything.
7. We asked if we needed to pay a fee to file our affidavits and were told we did not. Our affidavits were accepted, and we left. While the staff did mention that they were waiting for guidance from the State, as far as I know, our affidavits were filed. We were told that a recount would be performed on Wednesday.
8. On the way home, we heard that a group of voters from the neighboring Cherry Hill precinct had been told by the same office we had just left that their affidavits could not be accepted there and would have to be filed in court for a fee of about \$150

each.

9. I was never told anything about what became of the affidavits that we submitted.

10. To my knowledge, no recount was conducted based on the affidavits we submitted.

11. I am concerned that my vote and the votes of my fellow citizens were not counted accurately in the election, and would like a manual recount of every paper ballot and a forensic examination of the electronic voting systems in Pennsylvania to make the vote had integrity and every vote counted.

Dated: December 4, 2016
Nazareth, Pennsylvania



Beverly A.

DeSignor

Sworn to and subscribed

before me this ____ day

of _____, 2016.

NOTARY PUBLIC

Exhibit 25

AFFIDAVIT and DECLARATION OF ANGELA R. TRILLI-BRAUN

Angela R. Trilli-Braun, being duly sworn, declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

1. I am a resident of Wind Gap, Pennsylvania, in Northampton County.
2. I voted in the 2016 general election in my district at the Bushkill Center precinct.
3. I work for the United States Postal Service as a maintenance support clerk.
4. On Monday, November 28, 2016, I went to the offices of the Northampton

County Election Board, along with my daughter, Jade Braun, and another woman named Beverly DeSignor, both of whom also voted in the Bushkill Center precinct. Each of us had filled out a signed and notarized affidavit seeking a recount of the vote for president in our precinct.

5. The staff at the Election Board accepted our affidavits and time-stamped them. They told us that they did not know how they were supposed to proceed and were waiting to hear back from the State. It seemed clear that they did not have experience dealing with anything like this before.

6. Once the staff accepted our affidavits, we left.

7. No more than thirty minutes later, I heard from an acquaintance of mine, who voted in the neighboring Cherry Hill precinct, that she had gone to the Northampton County Election Board's offices to submit three substantively identical affidavits from voters in her precinct requesting a recount. Election Board staff told my acquaintance that they could not accept affidavits calling for a recount, and that any such requests would have to be made in a court filing. My acquaintance was escorted to the courthouse, where she was told that a fee of \$147.50 per person would be required to file each recount request.

8. I was never told anything about what became of the affidavits that Beverly, my daughter and I submitted. I assumed I would receive some kind of information in the mail because my affidavit included my address, but I have not received anything.

9. To my knowledge, no recount was conducted based on the affidavits we submitted. I was never contacted and told that no recount would be performed based on the affidavits that Beverly, my daughter and I submitted. Nor was I told that I needed to file anything in court, or do anything else, to request a recount.

10. I am concerned that my vote and the votes of my fellow citizens were not counted accurately in the election, and would like a manual recount of every paper ballot and a forensic examination of the electronic voting systems in Pennsylvania to make sure the vote had integrity and every vote counted.

Dated: December 5, 2016
Wind Gap, Pennsylvania

Angela R. Trilli-B...
[signature]

Sworn to and subscribed
before me this 5 day
of December, 2016.

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
Emily Phillips, Notary Public
North Whitehall Twp., Lehigh County
My Commission Expires Sept. 23, 2020
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Emily Phillips
NOTARY PUBLIC

Exhibit 26

DECLARATION OF GRACE PALLADINO

GRACE PALLADINO, declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

1. I am a resident of the City of Philadelphia, Pennsylvania.
2. I voted in the 2016 general election in my district: Ward 36, Division 38.
3. I have a master's degree and teach American history and government for the City of Philadelphia public school district.
4. As described below, I volunteered my time to help other voters file affidavits requesting a recount in the City.
5. I submit this declaration to explain the problems I and my fellow organizers encountered in Philadelphia with efforts to request a recount of votes in the City.
6. Starting in mid-November, I began to try to determine the process for voters to request a recount in Philadelphia. I contacted the Board of Elections, City Commissioners, and other City employees and elected officials. I also researched state and city websites for information about the process. And I contacted the Committee of 70, a nonprofit nonpartisan organization that provides election information.
7. I found that it was very difficult to obtain correct information. For example, I was first told that the law required three voters per county to request a recount and then I was informed that it was three voters per voting division. I also found that the most recent information on the state government website with deadlines for a recount was from 2014. This meant that all the specific dates provided on the website were incorrect. Different offices

provided me with different deadlines and procedures so that it became impossible to determine what I, as a voter, should do to request a recount.

8. The one consistent piece of information I received over and over was that a City-wide recount would be very hard and it had never been done before.

9. By the time I finally determined what were the correct procedures, the necessary forms, and the deadlines, it was the Wednesday before Thanksgiving and there was almost no time to educate and inform other voters of their rights.

10. I took a day off from work on Monday November 28, 2016 and arrived at City Hall at 7:00 am with my affidavit and to volunteer my time that day to help other voters. I remained at City Hall until 6:00 pm that day. I was not able to find any other voters from my Division before I went to City Hall or while I was at City Hall on November 28. Consequently, I was not able to file my petition for a recount.

11. Initially, on November 28 at City Hall, I was cautioned by Fred Voigt who I believe is an attorney for the Board of Elections that a citizen driven petition for a recount would be very difficult and useless. Later that day, a City Commissioner incorrectly told me that voters would have to pay a \$50 fee to file petitions. I explained to him, even though I am not an attorney, that there was no fee required.

12. Early in the day, employees at the Board gave out incorrect information about how many days after the vote certification recount affidavits could be filed. I was informed initially that November 28 was the deadline and then learned later in the day that the deadline was Wednesday November 30 – much too late to inform other voters that they could bring petitions to City Hall after November 28.

13. During Monday November 28, I observed the difficulties many voters had trying to comply with the byzantine process imposed in the City of Philadelphia. One 80-year-old woman walked 12 blocks from her assisted living facility to a Kinkos to print out an affidavit, then walked to a bank to obtain a notary, and then walked to City Hall to submit her petition. Unfortunately we had to tell her that since her affidavit was the only one from her Division, it did not meet the minimum requirement of three affidavits. We held her affidavit for her in case we could find two more affiants, but we were never able to find matches for her. She offered to go back to her building and try to find neighbors who could sign affidavits, but since her single polling place had two Divisions within it, she did not know, and we did not know, which of her neighbors were in her specific Division.

14. In several instances during the day on November 28, voters brought in the requisite three affidavits from their Division but the forms were incorrectly notarized. There was not enough time for them to reassemble the two additional voters to re-sign and notarize the necessary forms.

15. I also observed throughout the process that very few voters from low-income minority areas of the City came to City Hall with affidavits. Based on my experience as a City resident and public school teacher, I believe the cost for voters to file petitions for a recount placed an undue burden on people who are elderly, disabled, or low income. They would have to travel a distance to find a notary, especially if they live in a low-income neighborhood that does not have bank branches. They may not have sufficient funds to pay for a babysitter if they have children or to take unpaid time off of work to go to a notary and then to the Board of Elections office at City Hall. And they may not have the money to pay a notary fee.

16. Since the sample petition forms were only available on-line through the volunteer efforts I helped with, voters had to print out the forms themselves. If they did not have their own printer at home, they had to go to a store and pay a per page printing fee.

17. For voters who overcame all these hurdles and went to City Hall on November 28 only to find out that the notary signature was on the wrong page or one of their affiants was in an adjacent Division or a form was missing from their package, there was simply not enough time for them start the process over and return to City Hall.

18. I teach my students about the principles of democracy, the American election system, and the importance of participating as a voter. I believe that all voters should have access to accurate information about their right to vote and should be able to exercise that fundamental right without undue burden or artificial barriers that serve only to render the process futile. I provide this declaration in support of the voters of the City of Philadelphia and the efforts to create a more transparent and accountable election system in Pennsylvania.

Dated: December 4, 2016
Philadelphia, Pennsylvania

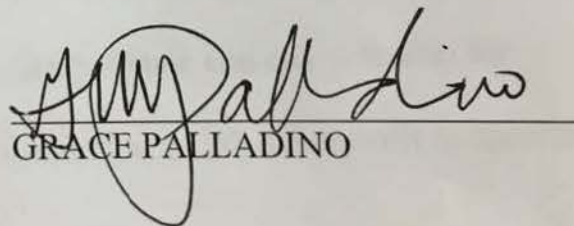

GRACE PALLADINO

Exhibit 27

DECLARATION OF KATHERINE RUBIN

KATHERINE RUBIN, declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

1. I am a resident of the City of Philadelphia, Pennsylvania.
2. I voted in the 2016 general election in my district: Ward 5, Division1.
3. I have a master's degree and am a self-employed financial advisor.
4. I submit this declaration to explain the problems I and my fellow organizers

encountered in Philadelphia with efforts to request a recount of votes in the City. As I understand it, there are 1686 Divisions in the City and at least three (3) voters from each Division must request a recount in order for the votes in a Division to be recounted. This means that nearly 6,000 individual petitions would need to be filed with the Board of Elections within a very short time frame to obtain a City-wide recount.

5. Since Thanksgiving, I have volunteered my time to help request a recount of votes in the City of Philadelphia. As a volunteer, I organized other volunteers throughout the City to:

- a) provide information to voters about how to request a recount;
- b) answer questions from voters about how to file a request for a recount;
- c) provide sample affidavits to voters to use to request a recount;
- and d) connect voters by Ward and Division so they could submit at least three petitions from each Division requesting a recount.

6. I also helped to organize volunteers to go to City Hall on November 28 to assist with matching voters by Division to meet the requirement that a minimum of three voters per Division make each recount request. These volunteers also researched Ward and Division numbers for voters to ensure that the correct information was provided in affidavits.

7. On Monday, November 28, 2016, I spent approximately three hours at City Hall directly assisting voters with petitions and I volunteered my time from home on the phone and by email to provide assistance the weekend before, on November 28 and during the rest of that week. I also coordinated communications with other organizers and provided updates to them and individual voters throughout the process.

8. Based on my personal observations and working with volunteers throughout this process I became very concerned that voters were being denied a meaningful opportunity to request a recount. First, because of the very short time provided to assemble three voters per Division and provide fully completed and notarized affidavits to the Board of Elections, it was extremely difficult, if not impossible, to identify the minimum number of voters needed for 1686 Divisions. Additionally, voters caring for children at home or caring for elderly or disabled family members did not have an adequate opportunity to make arrangements for a substitute care giver so they could go to a notary and then go to the Board of Elections. It was difficult over the Thanksgiving holiday weekend for voters to find notaries and to take time off from work on Monday November 28 to go to a notary and then to the Board of Elections.

9. Second, it was difficult for voters to obtain accurate and complete information on the recount process and thus, extremely difficult for voters to comply with recount requirements that were never fully disclosed. For example, it was difficult for voters to even find the office of the Board of Elections. The building has no sign on the side located on the same street as the building address, the building entrance is on a different street than the building address, and the building, which looks like a warehouse, is at an intersection where the street name changes from one name to another. None of this information is made generally available to the voter. Consequently, volunteers worked many hours to let voters know they could come to City Hall on

November 28 to request a recount. Given the short amount of time and limited resources, we were unable to reach voters in all Divisions.

10. Third, other than efforts by volunteers like myself, there was no mechanism in place for voters to identify other voters in their Division with whom to assemble three affidavits. Some polling places included more than one Division and some Division lines are confusing – just because you have a neighbor that lives across the street from you or a block away or voted at your polling place, does not mean that person is in the same Division as you. This confusion led to many mismatches of affidavits throughout the petition process on November 28 and 29. Based on reports to me from the volunteers I work with who kept a spreadsheet tracking this information, I believe there were at least 97 Divisions in which only one or two voters presented completed affidavits requesting a recount and thus, did not meet the required minimum of three voters.

11. Fourth, the process for filing an affidavit requesting a recount was so onerous that it excluded many voters including those without access to a printer, without access to the Internet, and without knowledge of how to find and use a notary.

12. In Philadelphia, the voters were failed by a system that imposed opaque and onerous requirements, the opposite of what the Democratic process should be. As a resident and voter in the City of Philadelphia, I was failed by the very laws that should protect the integrity of my vote and that of my fellow citizens.

Dated: December 4, 2016
Philadelphia, Pennsylvania


KATHERINE RUBIN

Exhibit 28

AFFIDAVIT and DECLARATION OF CAROL CUTLER

CAROL CULTER, being duly sworn, declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

1. I am a resident of North Huntingdon Township, Pennsylvania, in Westmoreland County.
2. I voted in the 2016 general election, in the 6th ward, 3rd precinct.
3. I cast my ballot on a touch-screen electronic voting machine that had no paper ballot or receipt for me to review. As such, I cannot be sure that my vote was accurately recorded and counted.
4. I submit this affidavit/declaration to explain the hurdles I have faced in trying to seek a recount of votes in Westmoreland County.
5. Around 8:30 a.m. on November 28, 2016, I called the Westmoreland County Board of Elections to check whether the Board would be able to accept petitions seeking a recount of the vote.
6. The employee at the Board of Elections refused to answer whether it would receive petitions, and referred my inquiry to the County solicitor's office.
7. The County Solicitor gave me no guidance as to whether and where I could serve petitions for a recount. Instead, the solicitor told me only that I needed to seek advice from an attorney.
8. I was not able to file any petitions.
9. There was no notice or guidance available to the public when and where voters could submit petitions for a recount of the vote. When I called for more information, no one could provide me any guidance, telling me to consult with an attorney.

10. The system does not allow an ordinary voter, unassisted by a lawyer, to vindicate her statutory right to request a recount of the vote.

11. I am concerned that my vote and the votes of my fellow citizens were not counted accurately in the election, and would like a manual recount of every paper ballot and a forensic examination of the electronic voting systems in Pennsylvania to make the vote had integrity and every vote counted.

Dated: December 3, 2016
WESTMORELAND COUNTY, Pennsylvania

Carol Cutler

CAROL CUTLER

Sworn to and subscribed before me

this ____ day of _____, 2016.

NOTARY PUBLIC

Exhibit 29

AFFIDAVIT and DECLARATION OF RITA DRAPKIN

RITA DRAPKIN, being duly sworn, declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

- I am a resident of Murrysville, Pennsylvania, in Westmoreland County.
- I voted in the 2016 general election in my district, Sardis #35012.
- I cast my ballot on an touch-screen electronic voting machine that had no paper ballot or receipt for me to review. As such, I cannot be sure that my vote was accurately recorded and counted.
- I work as a psychologist and a professor at Indiana University of Pennsylvania.
- I submit this affidavit/declaration to explain the hurdles I have faced in trying to seek a recount of votes in Westmoreland County.
- On the morning of November 28, 2016, I called the Westmoreland County Board of Elections to check whether the Board would be able to accept petitions seeking a recount of the vote, including a forensic evaluation of the electronic voting machines.
- The employee at the Board of Elections could not answer my questions, and repeatedly promised to call me back later with an answer.
- I called multiple times. Around 11:30 a.m., I was told that I needed to speak to the County Solicitor, but that she was in a meeting.
- Finally, around 1:30 or 2:00 p.m., I received a call from an employee of the County Solicitor's Office, who told me that she was not allowed to provide me with any advice regarding filing recount petitions.
- I asked whether the County was eligible for and would accept petitions for a

recount. She responded, "We can't answer any questions."

- The County Solicitor gave me no guidance as to whether and where I could serve petitions for a recount.
- I was not able to file petitions for a recount.
- There was no notice or guidance available to the public regarding when the Westmoreland County Board was conducting its computation of the vote, when it would certify the vote, and when and where voters could submit petitions for a recount of the vote.
- It seems clear to me that Pennsylvania's system does not allow an ordinary voter, unassisted by a lawyer, to vindicate her statutory right to request a recount of the vote.
- I am concerned that my vote and the votes of my fellow citizens were not counted accurately in the election, and would like a manual recount of every paper ballot and a forensic examination of the electronic voting systems in Pennsylvania to make the vote had integrity and every vote counted.

Dated: December 5, 2016
Indiana, Pennsylvania

Rita Draphi

NAME

Sworn to and subscribed before me
this 5 day of December, 2016.

Kristen F. Stiles

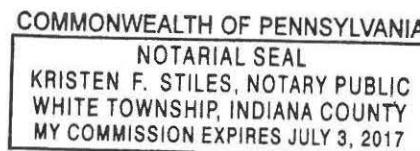


Exhibit 30

RACHEL PREIBISCH, being duly sworn, declares, under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

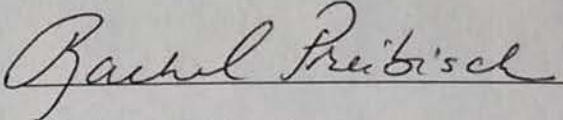
1. I am a resident of Seven Valleys, Pennsylvania, in York County.
2. I voted in the 2016 general election in my district, Springfield Township.
3. I voted on an electronic voting machine that had no paper receipt for me to review, so I cannot be sure that my vote was accurately recorded or counted.
4. I submit this affidavit/declaration to explain the hurdles I have faced in trying to seek a recount of votes in York County.
5. I had heard from other volunteers that the other York County petitions had been filed with the Prothonotary, and so that is where I went to file my petition. I arrived around 3:30 p.m. on Monday, November 28, 2016.
6. Attached as Exhibit A is a blank example of the petition I filed.
7. The Prothonotary's office told me that I was in the wrong place, and directed me to the County Board of Elections.
8. When I arrived at the County Board of Elections, the employees there were confused. They had not received any petitions that day. There were two other voters trying to file petitions at the same time as I.
9. The County Board of Elections workers told us that the Board had already certified the final vote around noon that day.
10. Eventually, after making some calls, a supervisor at the office took our petitions. She told us she would time-stamp them but we were not able to stay to watch. She took our petitions sometime after 4 p.m.

11. The experience was very frustrating and confusing. No one, including County officials, appeared to know the proper procedure.

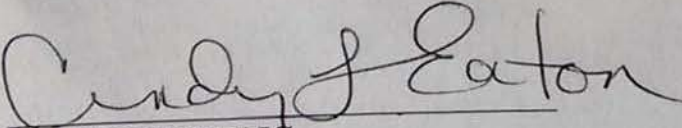
12. Since filing my petition, I have not heard anything further from the Board of Elections or anyone else about whether our petitions were accepted and whether and when a recount will take place.

13. I am concerned that my vote and the votes of my fellow citizens were not counted accurately in the election, and would like a manual recount of every paper ballot and a forensic examination of the electronic voting systems in Pennsylvania to make the vote had integrity and every vote counted.

Dated: December 5, 2016
York, Pennsylvania


RACHEL PREIBISCH

Sworn to and subscribed before me
this 5th day of December, 2016.


NOTARY PUBLIC

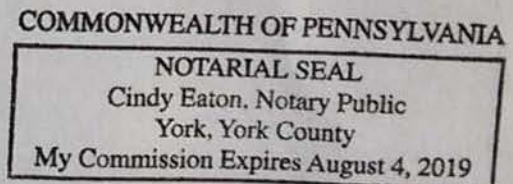


Exhibit 31

IN THE COURT OF COMMON PLEAS IN AND FOR
THE COUNTY OF MONTGOMERY, PENNSYLVANIA
CIVIL DIVISION

GLEN GADDY, et al

vs.

MONTGOMERY COUNTY BOARD
ELECTIONS

- - -

:
:
:
:
:
:
:

NO. 2016-28344

- - -

PETITION TO RECOUNT AND/OR RECANVASS

- - -

Wednesday, November 30, 2016
Commencing at 1:40 p.m.

- - -

Courtroom C
Montgomery County Courthouse
Norristown, Pennsylvania

- - -

BEFORE: THE HONORABLE BERNARD A. MOORE, SENIOR JUDGE

- - -

COUNSEL APPEARED AS FOLLOWS:

ILANN M. MAAZEL, ESQUIRE
LAWRENCE M. OTTER, ESQUIRE
for the Petitioners

NICOLE FORZATO, ESQUIRE
for the Montgomery County Election Board

LAWRENCE J. TABAS, ESQUIRE
for President-Elect Donald J. Trump,
Vice-President Michael R. Pence, Twenty
Electors, the Republican Party of
Pennsylvania

JONATHAN S. GOLDSTEIN, ESQUIRE
for the Republican Party

- - -

2 THE COURT: At this point, we a
3 have a number of requests in regard to the recount;
4 but I noticed there is a preliminary motion for
5 permission to have an attorney admitted pro hac vice?

6 MR. OTTER: That's correct.

7 THE COURT: Mr. Otter, is that
8 your motion?

9 MR. OTTER: Yes, it is.

10 THE COURT: Very well. Would
11 you briefly state your position and then I will hear
12 from the other attorneys.

13 MR. OTTER: It is in the
14 motion --

15 THE COURT: Sure.

16 MR. OTTER: -- the supporting
17 documents that Mr. Maazel is my cocounsel in this
18 matter. He is from Manhattan, an esteemed member of
19 the bar of New York among other bars, which are listed
20 in his verification. He has paid the proper fees and
21 I would verify that at my motion.

22 THE COURT: All right. If I can
23 inquire, did any of the other attorneys have any
24 objections to the pro hac vice?

25 MS. FORZATO: No objection.

2 MR. TABAS: No, Your Honor.

3 MR. GOLDSTEIN: No, objection.

4 THE COURT: Very well.

5 Accordingly, your motion is granted and counsel will
6 be admitted pro hac vice.

7 MR. OTTER: Thank you, Your
8 Honor.

9 THE COURT: Mr. Otter, I believe
10 you are the moving party in regard to these petitions.
11 Perhaps, you could set your legal analysis and then I
12 will give all the other attorneys an opportunity to be
13 heard.

14 MR. OTTER: I would defer to
15 counsel.

16 THE COURT: Sure. Co-counsel,
17 certainly.

18 MR. MAAZEL: Yes. Good
19 afternoon, Your Honor.

20 THE COURT: Is that Mr. Maazel?

21 MR. MAAZEL: Mr. Maazel.

22 THE COURT: Mr. Maazel. Very
23 well. Why don't we hear your analysis and then we
24 will hear from the other attorneys.

25 MR. MAAZEL: Thank you, Your

2 Honor.

3 So we are here on behalf of Jill
4 Stein, the presidential candidate Green Party, in this
5 year's presidential race in support of these petitions
6 by over two hundred voters in the County of Montgomery
7 who have come forward and, I believe, seventy-eight
8 separate precincts, election districts, requesting
9 recount, recanvass of the vote in their districts.

10 It is just an outpouring of
11 support from people who want to make sure their votes
12 are accurately counted.

13 We are here on what is now a
14 3262 petition. They originally gotten the County
15 Board on 3154. They were told to go to court. They
16 went to court. And I think there's no question that
17 they have satisfied all of the prerequisites under
18 3262.

19 Three qualified electors in
20 every one of the seventy-eight precincts, and some
21 precincts I believe more than three qualified
22 electors, all notarized, all verified, all of them
23 allege an error in the counts in Montgomery County.
24 Actually, they allege in their petition more than what
25 is required under the 3262.

2 And in addition, the
3 prothonotary demanded that each division pay a fee of
4 two hundred and sixty-nine dollars and fifty cents,
5 which adds up to a total fee of twenty-one thousand,
6 twenty-one dollars for all of these petitions, which
7 is well in excess of the fifty dollar requirement set
8 forth in 3262.

9 So for whatever reason -- and
10 Miss Stein actually paid those fees on these
11 petitioners' behalf, so whatever reason, we paid much
12 more than the required fee.

13 Under the circumstances, there's
14 no discretion here for the Board of Elections not to
15 recanvass the vote. All the statutory environments
16 have been made; and if they are met, they must
17 recanvass.

18 The issue that is before the
19 Court today --

20 THE COURT: Counsel, let me just
21 ask you preliminarily --

22 MR. MAAZEL: Yes.

23 THE COURT: -- under 25 Purdon's
24 Statute 3263 --

25 MR. MAAZEL: Yes.

2 THE COURT: -- they talk about
3 any recount or recanvass shall include all election
4 districts in which the ballots were cast in the office
5 in question. Wouldn't that mean the entire State of
6 Pennsylvania? Can you have an isolated recount in a
7 handful of precincts, you know, with candidates for
8 the president statewide and the candidates to the U.S.
9 Senate statewide?

10 MR. MAAZEL: Yes. Yes, I
11 believe we can, Your Honor.

12 I don't think it is conceivable
13 that the State of Pennsylvania would require -- there
14 are over nine thousand election districts in the State
15 of Pennsylvania. It is absolutely inconceivable that
16 anyone could have imagined that it would be necessary
17 for over twenty-seven thousand people throughout the
18 State of Pennsylvania to file in over nine thousand
19 districts just to have a recount in any district.

20 It would be an extraordinary --
21 there's no -- there would be -- it would be an
22 imposition.

23 THE COURT: Isn't that the law?

24 MR. MAAZEL: No. I don't
25 believe it is, Your Honor.

2 I think what this -- I think
3 what this section means is that any petition must be
4 filed in accordance with the requirements of the acts,
5 a fifty dollar fee, the three voters per precinct,
6 notarization, et cetera.

7 That they have done. And so
8 whichever districts they have sought a recount or
9 recanvass those are the districts where there should
10 be a recount or recanvass.

11 THE COURT: What about the
12 language of the statute where it says recounts shall
13 include all districts in which ballots were cast for
14 the office in question? I mean doesn't the law --
15 doesn't the Court have to follow that law?

16 MR. MAAZEL: We certainly
17 wouldn't object, if the Court ordered a statewide
18 recount. I mean, there's no objection from our side.

19 THE COURT: Well, individual
20 county court doesn't have the authority to order a
21 statewide recount, do they?

22 MR. MAAZEL: Well, if -- even if
23 we read Section A of countywide, then we certainly
24 wouldn't object to a Montgomery wide recount, if
25 that's what the law requires.

2 But it is certainly -- I do not
3 believe and I don't think it possibly could mean that
4 there's a requirement with the State of Pennsylvania.
5 And I have never seen any court that says it requires
6 over twenty-seven thousand people in nine thousand
7 districts to request a recount for there to be a
8 recount in a single district. That would deny all of
9 these hundreds of voters their ability to seek
10 recounts and make sure their votes are counted
11 accurately.

12 It would deny the rights of
13 voters in counties throughout the state that have
14 requested recounts and recanvassing of the vote. So
15 can it be there's only one precinct in one county
16 anywhere in Pennsylvania that doesn't have three
17 electors, that every single other voter throughout the
18 entire State of Pennsylvania is not allowed to request
19 a recount?

20 I mean to me that's an
21 impossible reading of the law. I don't think there's
22 any intention in this law for that reading.
23 Certainly, I have not seen any court case that
24 supports that to you, which would make it absolutely
25 impossible for there ever to be a recount, a recanvass

2 anywhere in Pennsylvania from a statewide race.

3 THE COURT: Well, certainly, we
4 will hear further argument on all of these issues.

5 MR. MAAZEL: Sure.

6 THE COURT: Let me ask you this:
7 What do you perceive the scope of the recount you are
8 requesting?

9 MR. MAAZEL: Sure. So we
10 have -- I don't know if Your Honor had a chance to see
11 our brief yet which we only filed recently, but there
12 are a couple of things that we know in this election
13 which I think are very important to inform Your
14 Honor's consideration.

15 The first is that this was an
16 election and an election process that has been subject
17 for an interference. We know that the Department of
18 Intelligence, the Department of Homeland Security has
19 said -- and I quoting from an exhibit to the Halderman
20 Affidavit in support of the petition.

21 They have said there, quote,
22 competent that a foreign government has hacked emails
23 in the United States, quote, to interfere with the
24 U.S. election process.

25 We also know -- and this is in

2 our papers or the petitions' papers -- we know that
3 hackers infiltrated voter registration systems in
4 Arizona, Illinois, and they stole voter data in those
5 states.

6 We also have evidence that
7 hackers have attempted to breach election offices in
8 at least twenty states in this country. This is all
9 as part of the 2068 Presidential Election.

10 So we know there's an enormous
11 effort to interfere with the most important process in
12 our country, which is the right to vote. That's the
13 first thing.

14 The second thing we know is that
15 these machines, the DRE machines, used in Pennsylvania
16 and in particular the DRE machines used in Montgomery
17 County are extremely vulnerable to malware and to
18 hacking and to interference. They are easy to
19 compromise.

20 It is easier to hack into a DRE
21 machine in Montgomery County than to hack into an
22 I-phone. And this is supported by the Affidavits we
23 have submitted to the Court, the Affidavit of
24 Mr. Halderman, who is one of the leading computer
25 scientists in the country; the Affidavit of

2 Mr. Lopresti, who was the one of the founders of the
3 research at Information Technology Laboratory in
4 Princeton; and also the Affidavit of Harri Hursti, who
5 did a peer review leading study on the vulnerability
6 of the very machine used in this county.

7 As Your Honor knows, there are
8 no paper ballots in Montgomery County. There's no way
9 to look at a paper ballot.

10 THE COURT: But isn't the
11 statutory recount under the Election Code limited to
12 recomputing the numbers? It doesn't really go beyond
13 that, does it?

14 MR. MAAZEL: I think the Supreme
15 Court of Pennsylvanian and the McCracken case tells us
16 we can go beyond that; and not only we can, but we
17 must.

18 And the McCracken case, which we
19 have cited in our papers, has held squarely that in
20 the computation in the vote, the Board's functions --
21 and I am quoting here from the Supreme Court -- are
22 not limited to those of the human eyes adding machine.
23 The Board is not a multiple Comptometer.

24 And the Court went on to say
25 that the Election Code is a fraud remedial statute

2 designed to vindicate the right of voters to able to
3 make sure the votes were counted accurately.

4 In fact, the Supreme Court said
5 there could be any duty more apparent and impellent of
6 the election board than that of ascertaining for whom
7 votes were cast.

8 And then the Supreme Court said
9 that the Board of Elections has discretion. It has
10 discretion to not strictly construe the Election Code
11 only to just count numbers. They have the discretion
12 to make sure that votes were counted the way they were
13 actually cast.

14 There's absolutely no way to do
15 that in Montgomery County unless we do a forensic
16 audit of those machines and of the central election --

17 THE COURT: Well, are there any
18 cases in Pennsylvania which authorized forensic
19 analysis of the voting equipment?

20 MR. MAAZEL: There is no case
21 where it has been asked. There's no case where it has
22 been denied. There is no case where it has been
23 litigated to my knowledge.

24 I have not seen a case squarely
25 on point. I think this Court would be the first to

2 address this issue.

3 I would suggest to the Court
4 that, you know, this Election Code largely from, I
5 believe, the 1930's this was written before the
6 internet. It was written before people even knew
7 about the possibility of interfering with the vote or
8 such a thing as hacking.

9 I mean, it is -- what we know is
10 that these machines, they all have cartridges that
11 certainly -- they all come from the same place. And
12 the place they come from, the central management
13 system of the County of Montgomery, is on the
14 internet. And these experts have laid out very stark
15 terms just how easy it is, how unbelievably it is to
16 interfere with those machines.

17 You press the button. You think
18 you are voting for Donald Trump. You are actually
19 voting for Hillary Clinton and you don't even know it.

20 Or the machine just changed some
21 subset set of the votes, maybe three percent, maybe
22 five percent in the favor of one candidate or the
23 other. It is not difficult to do. These experts have
24 done it to these machines. It wasn't hard for them.
25 It wasn't even remotely hard.

2 been used in the first place, that they are so easy to
3 hack and so vulnerable, and when we know about this
4 foreign interference, I think it is really the only
5 responsible measure to ensure, not just for voters of
6 Montgomery, but to have voters of Montgomery and
7 Pennsylvania and the country know that their vote
8 mattered, and that whoever they voted for on Election
9 Day was the person to receive that vote.

10 And so following the case law of
11 the Supreme Court and the broad remedial purpose of
12 the election law, I do believe that the Board of
13 Elections and Your Honor has a discretion, the power,
14 and perhaps even the obligation to make sure that
15 these votes were counted correctly, so we don't just
16 trust these vulnerable, inadequate machines.

17 And that is why we are here
18 today. That's why over two hundred voters in the
19 County of Montgomery came forward to request this.
20 That's why the Stein Campaign paid over twenty-one
21 thousand just for this right. It is the most precious
22 right and we respectfully request that the Court
23 authorize our -- these voters this request for this
24 relief.

25 THE COURT: Very well. Ms.

2 Forzato, on behalf of the Election Board, do you have
3 any comment on any of these issues?

4 MS. FORZATO: I do, Your Honor.
5 Actually, on several of them.

6 If I may, I'm going to hand up,
7 which I handed to counsel earlier, the Election Board
8 preliminary objections.

9 THE COURT: Give our court
10 reporter a moment.

11 Sure. You may proceed.

12 MS. FORZATO: If I could start
13 back up a little bit. Preliminary, I believe that all
14 seventy-eight of these petitions should be
15 consolidated into one action. So that way we can
16 proceed under one docket number and move forward. I
17 think that would be the cleanest in light of the fact
18 that we are currently proceeding under --

19 THE COURT: Maybe I could deal
20 with that issue preliminarily. Would all counsel be
21 agreeable to that?

22 MS. FORZATO: Yes.

23 MR. TABAS: Yes.

24 MR. MAAZEL: Yes.

25 MR. GOLDSTEIN: Yes.

2 MR. OTTER: Yes, Your Honor.

3 THE COURT: Very well. And I
4 noticed there was a number on the pro hac vice motion.
5 Is that the term and number we want to go with?
6 Combine them?

7 MS. FORZATO: That would be
8 great.

9 THE COURT: Is that agreeable to
10 everyone?

11 MR. MAAZEL: Yes.

12 MR. TABAS: Yes, Your Honor.

13 THE COURT: Very well.
14 Accordingly, at this point, we will consolidate all of
15 these petitions under the term and number listed on
16 the pro hac vice petition, so that these matters are
17 now consolidated.

18 MS. FORZATO: Thank you, Your
19 Honor.

20 The second thing I would like to
21 do is I did not hear counsel ask to amend those
22 seventy-eight petitions. The Affidavits of Daniel
23 Lopresti, Poorvi L Vor, P-O-O-R-V-I, L, V-O-R, the
24 affidavits of Daniel Wallach, W-A-L-L-A-C-H, were not
25 attached to any of those seventy-eight petitions,

2 since they have not moved to amend them nor would it
3 be timely to amend them, I would ask they not be
4 considered in these proceedings today.

5 That would leave us with the
6 original Affidavits of J. Alex Halderman. And I
7 believe that is not sufficient to get us over the
8 hurdle but I will get back to that in a moment.

9 To start under 3154E, that
10 would -- they would have had to have filed that action
11 with the Board of Elections while the official
12 computation was actually occurring. They did not do
13 that. They then wrote on every single one of the
14 petitions on the coversheet that they are filing under
15 3262. That is the only two statutes that are
16 referenced anywhere in any of those seventy-eight
17 petitions are 3154 and 3262.

18 Why that is going to become
19 tremendously important is because under 3262 in
20 addition to filing fees, what the prothonotary does as
21 an independently elected official, in terms of costs
22 and fees are one thing, but they also had an
23 obligation under 3262A.1 to file either fifty dollars
24 in cash or one hundred dollar bond signed by those
25 three petitioners and with the corporate surety for

2 every single one of those cases. That would have been
3 additional thirty-nine hundred dollars if it was the
4 fifty dollars cash or seventy-eight hundred dollars if
5 they filed the bonds.

6 Those actions were not taken.
7 As a results of that, it is our opinion that the Court
8 doesn't have the ability to proceed further because
9 they have failed to conform to the requirements of the
10 law.

11 Taking it another step forward,
12 if they are filing under 3262, the only thing they are
13 asking for is the recanvass of our machines. They
14 aren't asking for a recount of the entire election.
15 That makes no sense.

16 Here is what is important to
17 know. If this gets to the point where we have
18 evidence, I will bring in our expert from Dominion,
19 who is our company that provides our software for our
20 voting machines.

21 Those machines cannot be hacked.
22 The Affidavit that these petitioners are relying on is
23 very speculative. He speaks to his rationale being
24 that the DNC emails were hacked, that John Podesta's
25 emails were hacked, that Donald Trump has a

2 It is just not the way the law works.

3 THE COURT: Ms. Forzato, I will
4 just ask you, in your opinion, are these timely
5 petitions -- what about this five-day requirement
6 under the statute?

7 MS. FORZATO: Under the statute,
8 I believe Mr. Goldstein is going to address that. It
9 would have been five days -- would have been Sunday so
10 we are supposed to certify after the fifth day which
11 would have been Monday. So I am not raising an issue
12 as to timing.

13 THE COURT: All right.

14 MS. FORZATO: But I am certainly
15 raising an issue as to 3262A1 not being complied with
16 and, therefore, this should be thrown out on its face,
17 if that's what they are proceeding under.

18 Alternatively, if they are
19 proceeding under 3154, then this Court is without
20 jurisdiction because it was supposed to go in front of
21 the Board and they didn't take that step in a timely
22 fashion.

23 Finally, I would like to make a
24 point that Your Honor brought up. Under 3263, without
25 question, you are a hundred percent correct, there's

2 an obligation in the federal election, especially, if
3 you are going to cause a recount, it has to be a
4 recount of all of those districts.

5 And this gentleman, Mr. Tabas,
6 is going to speak to that in much more detail. So I
7 will save that for him; but you are a hundred percent
8 correct. If they wanted a recount, they could not
9 cherry-pick those municipalities because that's where
10 they got volunteers to petition from.

11 They have an obligation to put
12 it before this Board in full form so that it would be
13 a fair recount and it would be an accurate recount.
14 But, again, they are not even actually asking for a
15 recount under the statutes that they are trying to
16 proceed under. They are just for a recanvass.

17 And you know this, they
18 typically go and you file under 3261 and 3262 so that
19 you would have a check of all of the votes. They have
20 not asked for that. So what they are asking for is
21 not even making sense.

22 As to your point of a forensic
23 analysis of our voting machines, that is in complete
24 contradiction of the election code. Those voting
25 machines are not to be touched. They are not to be

2 searched or manipulated in any way. But if this gets
3 to the point where we present evidence, I will bring
4 in our expert, and he will tell you those voting
5 machines would shut down if someone tried to put some
6 type of spyware or malware on them because they don't
7 have the capacity to read that.

8 THE COURT: Very well. Thank
9 you, Ms. Forzato.

10 At this point, would Mr. Tabas
11 or Mr. Goldstein like to be heard, or I will give you
12 both an opportunity to comment.

13 MR. TABAS: Thank you, Your
14 Honor. I am Lawrence Tabas. I'm chief counsel in
15 Pennsylvania for the 20 electors for President-Elect
16 Donald Trump, Vice President Elect Mike Pence, also on
17 behalf as general counsel of the Republic Party of
18 Pennsylvania, on behalf of all Republican candidates
19 on the ballot have standing under the decisions of the
20 Supreme Court of Pennsylvania. Mr. Goldstein's firm
21 is serving as cocounsel for me as these matters are
22 throughout the state at this particular time.

23 Your Honor, I agree with the
24 county solicitor's procedural arguments and the points
25 that she has made. Just one other point on the

2 requirement of the fifty dollar cash deposit or the
3 one hundred dollar bond is completely a separate
4 requirement from that of a prothonotary's finding fee,
5 because under the statute, under section 3262, if it
6 is determined that there was no fraud or error in
7 recanvass, the fifty dollars goes to the treasurer of
8 the county. If it turns out there was, the fifty
9 dollar goes back to the petitioner. That is a
10 separate item altogether from a prothonotary's filing
11 fee. So there's absolutely on the face of this a
12 fatal defect to the petition.

13 And in that regard, Your Honor,
14 I first refer to the Commonwealth Court's decision,
15 which is still very good law here in Pennsylvania of
16 Rinaldi versus Ferrett. It was the opinion by then
17 President Leadbetter in which she summarized and
18 referenced the jurisdictional basis for any proceeding
19 to contest the outcome of the election, whether it
20 would be a recount, recanvass, or an election contest.

21 Your Honor, with the Court's
22 permission, Judge Leadbetter stated that jurisdiction
23 to resolve election disputes is not of common law
24 origin but is founded entirely upon statute and cannot
25 be extended beyond the limits defined by the general

2 assembly.

3 She went on to say, the
4 statutory provisions set forth at length above
5 constitute the exclusive means for challenging the
6 accuracy of the election result.

7 So in the case of Rinaldi versus
8 Ferrett, there was a defect in the number of the
9 petitioners and the filing company. That was a fatal
10 defect just as is the failure to post either the cash
11 deposit or the one hundred dollar bond would also be
12 an absolute fatal defect which would divest this Court
13 of jurisdiction to proceed any further because there
14 is no common law despite Mr. Maazel's reference to the
15 McCracken case. There's no common law that applies to
16 the jurisdiction of this Court.

17 Your Honor, then I would like to
18 address briefly, also, the issue that the county
19 solicitor raised as well and it goes to your question
20 about the cherry-picking. The 3263, which was amended
21 actually 2004, and the internet, Your Honor, did exist
22 in 2004, when 3263 was amended to put in the provision
23 requiring that you have to recount or recanvass in all
24 of the districts for the candidate or for the
25 candidate's office, and that if you were going to

2 select a few, you had to meet the standards of that
3 section.

4 But even Your Honor if they had
5 pled sufficient grounds to not recount all of the
6 districts, either in Montgomery County, or the state
7 as a whole, and I would argue for the President of the
8 United States and the United States citizens is
9 absolutely the district is the state of the whole.

10 The United States Supreme Court
11 in Bush versus Gore recognized that the federal
12 statute on point Entitled Three of the United States
13 Code Section 5 requires that in these type of
14 situations there must be equal protection applied so
15 that every single vote that is passed is treated the
16 same.

17 In Florida, as Your Honor I'm
18 sure recalls, they cherry-picked. They picked a few
19 counties and now even within the counties, they picked
20 various different types of ballots to count, some that
21 were paper, some that weren't, some that used chads,
22 some that used other methods.

23 The Supreme Court made it clear
24 in Bush versus Gore applying historical Supreme Court
25 decision and referencing the Title Three of the United

2 States Code Section Five that the right to vote is
3 protected in more than the initial allocation of the
4 franchise. Equal protection applies as well to the
5 manner of its exercise. Having once granted the right
6 to vote on equal terms, the State may not later
7 arbitrarily allow district treatment to value one
8 person's vote over that of another.

9 That would be exactly what would
10 be happening here if they just picked to look at
11 certain of the votes, not even in the state as a
12 whole, which I do believe they have to all ninety-one
13 hundred plus districts; but within even the county, it
14 is going to be district treatment and unequal
15 protection of the law.

16 Furthermore, Bush versus Gore
17 made it clear, and it is the President of the United
18 States, that in a Presidential Election, there is a
19 federal safe harbor that would absolutely supersede
20 any right to cherry-pick under Pennsylvania Statute.
21 Whether that cherry-picking would be allowed in a case
22 for the Audit General or somebody running for the
23 State Senate is a different issue all together.

24 But for the President of the
25 United States, which Bush versus Gore recognized, is

2 the only office, that and vice president, for which
3 the electors of the United States as a whole cast a
4 ballot.

5 The requirement of the United
6 States code and the constitution demands that safe
7 harbor apply. So for the first step there's a
8 jurisdictional fatal defect for this Court under
9 Pennsylvania Election Code. The recanvass petition
10 should be dismissed and also I incorporate, as I said,
11 the county solicitor's references, too, it should
12 absolutely be dismissed because it violates the
13 federal, state -- federal safe harbor applicable to
14 Presidential Elections; and as a result, the
15 petitioner should not be able to proceed.

16 And then dealing with this other
17 issue that was raised by Mr. Maazel. Your Honor, he
18 is raising arguments relating to the machines and
19 whether or not some unnamed foreign government may
20 have hacked the DNC, which last I looked, I don't
21 think Montgomery County stores its voting machines at
22 the DNC.

23 But that's an election contest
24 issue. That is not the same as a recanvass under
25 section 3262. So he is arguing even the wrong section

2 MR. GOLDSTEIN: Yes, Your Honor,
3 quite briefly.

4 I'm grateful for the opportunity
5 to be here with you today.

6 Mr. Tabas made reference to a
7 case earlier and we happen to have a copy of it here,
8 if I may introduce it to the Court.

9 THE COURT: Sure.

10 MR. GOLDSTEIN: I have given a
11 copy to opposing counsel.

12 THE COURT: Do you have a copy
13 for the Clerk?

14 MR. GOLDSTEIN: Yes. The motion
15 contains a couple of bases which don't apply any
16 longer because I want to make sure we are very clear
17 our learned colleague from New York made it abundantly
18 clear when he rose that they are here on the basis of
19 3262. It was not clear from the face of the petition
20 whether they were here on that basis or another basis.
21 So for the parts of our motion to dismiss addressing
22 the other 3662 may no longer be applicable.

23 So on that basis, I rest on the
24 comments made my by learned colleague Mr. Tabas, and I
25 offer that motion for the Court's consideration.

2 THE COURT: Very well.

3 Mr. Maazel, would you like to respond to counsels'
4 argument?

5 MR. MAAZEL: Thank you, Your
6 Honor.

7 THE COURT: Sure.

8 MR. MAAZEL: And many points
9 were made, and I will try to address them quickly and
10 in turn.

11 First, some of the technical
12 arguments.

13 First, I should just have a
14 general response, which is somewhat really depressing
15 that the Republican Party and County Board of
16 Elections have placed any possible robot they can to
17 prevent voters from seeking a recount. That's what we
18 are hearing; every single, possible, technical
19 argument they can to stop voters from learning their
20 votes were counted accurately. I just think that it
21 is disturbing.

22 In terms of those arguments in
23 turn, this fifty dollar requirement is beyond dispute,
24 that these voters paid more than fifty dollars. They
25 have paid the fee demanded by the prothonotary, which

2 was well in excess of the fifty dollar requirement.

3 Now, if there are additional
4 court filing fees that we need to pay in order to meet
5 the fifty dollar requirement and whatever fees being
6 imposed, the Stein Campaign, if it is thirty-nine
7 hundred dollars, we will be happy to pay that on
8 behalf of these petitioner's as well.

9 But the idea that voters must
10 not only pay fifty dollars, as set forth in the
11 statute, but must pay almost twice that, which is what
12 is happening in this case, it is really incredible and
13 there's no statutory support for it.

14 I don't think I had ever seen a
15 case where a petitioner has paid too much and the
16 other side said you have not met the dollar
17 requirement. So that's the fifty dollar issue.

18 The County Board of Elections
19 said the Court should disregard all of the Affidavits
20 not in the original petition, that we need to move to
21 amend. I don't see anything in the statute that
22 requires all of the supporting materials in a case to
23 be filed on the deadline anymore than when you file a
24 regular civil complaint you need to file a hundred
25 Affidavits in support on that day.

2 The filing was made on time.
3 Supporting materials can be added at any time; and if
4 we need to move to amend all of these other
5 Affidavits, then we --

6 THE COURT: What about the issue
7 that a forensic review would not be encompassed in the
8 election code under the recount provisions? That's
9 one of the arguments opposing counsel is advancing.

10 MR. MAAZEL: Sure. Based on the
11 Rinaldi case, which is a Commonwealth Court case, we
12 cited the McCracken case, which is a Supreme Court
13 case, and we think it is the Supreme Court Case and
14 other Supreme Court cases that we cited in our papers
15 that control.

16 Those cases that say you are not
17 restricted to the strict letter of the election code
18 and the Board of Elections is not just a human adding
19 machine. They want just to have these machines, press
20 a button, and have the machine come out the way -- the
21 way that the person voted.

22 They are advocating the very
23 human adding machine approach that the Supreme Court
24 of Pennsylvania said is not the purpose of the Board
25 of Election. That this Board of Election has

2 discretion and Court certainly has discretion and
3 power to go beyond the strict letter of the statute.
4 That is absolutely necessary here under the
5 circumstances of this case.

6 THE COURT: What about the
7 section 3263, which requires that the recount be
8 called to the election precincts, where the election
9 was held, and here we are talking about a statewide
10 raise for president and statewide race of the United
11 States Senate?

12 MR. MAAZEL: I find it really
13 quite incredible that the Republican Party is coming
14 here and saying we have to have over twenty-seven
15 thousand voters in this amazing short period of time
16 come forward in nine thousand districts just to have a
17 right to a recount.

18 In most states, a candidate asks
19 for a recount and it happens. That's what is
20 happening in Wisconsin and Michigan. It cannot be
21 that there's this absolutely impossible requirement
22 that three voters in every single district in every
23 single county need to demand a recount in order for
24 there to be recount anywhere.

25 So I have seen no case, no case

2 that supports that proposition. I cannot believe that
3 such a case would be either an accurate reading of the
4 statute or would be constitutional under the
5 Pennsylvania --

6 THE COURT: The language is in
7 in statute.

8 MR. MAAZEL: The way I harmonize
9 the language with what the national intent of the
10 statute must be is that this Court can do a recount of
11 the entire county. We would support that. We have no
12 objection to -- I don't know if the other job would
13 object. I think they probably would. We would like
14 to have a recount of this county. We would like to
15 have a recount of every county.

16 And so if that's what the
17 statute means, then let's have a recount of the entire
18 county. But I see nothing in the statute that says
19 that we need three people in every single district in
20 the county in order to have that county-wide recount.

21 I think all this means is that
22 if you come forward in the district you need to
23 fulfill the statutory requirements, the fee, the
24 notarization, et cetera.

25 Then we have an argument from

2 the other side that Bush v Gore argument, that we are
3 sometimes cherry-picking within the county and within
4 the state. It is an amazing argument because, first,
5 their interpretation makes it impossible to seek a
6 statewide recount, and then they blame us for not
7 having a statewide recount.

8 You know, if Bush v Gore means
9 what they say it means, then this state has violated
10 the protection clause in many ways. Some counties use
11 obstacle scan, or use DRE's. Is that a Bush v Gore
12 violation? They are being treated differently.

13 Some counties use some type of
14 the DRE machines and others use other types of DRE
15 machines. Are they being treated differently? Is
16 that a violation of Bush v Gore? Is that really their
17 argument that every voter in the country needs to be
18 treated exactly the same way because the entire
19 election system would fall down in a minute?

20 So there's certainly no equal
21 protection violation in allowing voters their right to
22 seek a recount. And if we take their equal protection
23 argument seriously, then the Republican Party should
24 stipulate to a statewide recount.

25 Let's treat every single voter

2 in this state exactly the same and have a recount for
3 everybody. We would agree to that. We would advocate
4 for that. I would like to hear the Republican Party's
5 position on that. I doubt they would agree to that.
6 But we are certainly willing to satisfy their Bush v
7 Gore argument to advocate for that position.

8 I do want to address this
9 question of timeliness. I don't think there is any
10 questioned under 3662F, voters have twenty days from
11 the election. That was yesterday. Under the In Re
12 Canopy Case of the Supreme Court, they actually have
13 the later of twenty days from the election or five
14 days canvassing. In any event, I think it is plain
15 that they have filed timely petitions.

16 And on this question of -- the
17 Board of Elections said these machines cannot be
18 hacked. Well, we don't just have the Affidavit of
19 Mr. Halderman. We have the Affidavit of Mr. Hursti,
20 who did the leading peer review study of the
21 vulnerability of the very machine used in this county,
22 the Sequoia AVC voting machine. Mr. Hursti did that
23 peer review study and here is what Mr. Hursti said,
24 and I think respectfully we should trust what he says
25 more than what counsel says.

2 At paragraph ten of his
3 Affidavit, quote, the AVC Advantage is easily hacked
4 by tampering with the machine's firmware.

5 And then paragraph eleven,
6 without even touching a single AVC Advantage, an
7 attacker can install fraudulent firmware in machines
8 by viral propagation through audio valid cartridges.

9 Now, we heard Mr. Tabas make
10 what I think is a comment that is just incorrect which
11 is the machines are not connected to the internet.
12 Well, the cartridges in the machines telling them what
13 to do all came from the same place, the Central
14 Election Management System of the county, and that is
15 connected to the internet.

16 So it is the simplest thing to
17 have a virus or malware that gets into -- via the
18 internet into these Election Management Systems
19 headquarters, which is the nerve center of this
20 operation and then send it out through the cartridges
21 into the machines. That's just one way it can be
22 done. There are many ways it can be done.

23 So the machines are
24 unfortunately hackable. I don't believe they ever
25 should have been used in the first place.

2 Forzato, any further comment?

3 MS. FORZATO: Yes, Your Honor.

4 Very briefly.

5 The petitioner cites the appeal
6 from McCracken from 370 PA 562. It is a 1952 case.
7 It is Supreme Court case, but also our Supreme Court
8 case is the Jones Election Contest, which is
9 docketed -- which is cited at 376 PA 456. That's a
10 1954 case. And then appeal of Flood appeal, 372 PA
11 486, that's a 1953 case, so those are both after the
12 appeals of McCracken.

13 And the reason they are
14 important is they both stand for the proposition that
15 neither this Common Pleas Court nor Election Board has
16 the power to reason to an Election Code that which is
17 not specifically founded in that code. So that
18 defeats the whole argument made by him on that point.

19 Additionally, and probably most
20 importantly, the Election Board had an open official
21 tabulation with every citizen of Montgomery County,
22 was invited to attend. We published that in the
23 newspaper. We want our process to be open. We want
24 our citizens involved. But we also want it to be fair
25 and for a legitimate purpose; not for a fishing

2 expedition. Thank you, Your Honor.

3 THE COURT: Very well. Mr.
4 Tabas, any further comment?

5 MR. TABAS: Yes, briefly Your
6 Honor.

7 First, get back to the Rinaldi
8 decision. While it is a Commonwealth Court decision,
9 it actually cited two Supreme Court decisions of the
10 State of Pennsylvania as the authority for it in two
11 other decisions of the Commonwealth Court, which have
12 been long-standing law in this state, that the
13 jurisdiction of election challenges are absolutely
14 solely within the jurisdiction of the Court only if
15 the statutory requirements are being met.

16 To even suggest that they would
17 supply the cash deposit or the bond after the
18 statutory deadline is an absolute again failure to
19 meet the statutory requirement divesting this Court of
20 jurisdiction.

21 The other point that I would
22 like to make is, and I hesitate a little bit to go
23 into it, but since we are here and it was addressed by
24 Mr. Maazel a second time is, this is not an election
25 contest under 3456. This is a recanvass petition

2 under 3262.

3 In fact, interestingly enough,
4 it is not even a request for a recount under 3261. So
5 they cherry-picked -- cherry-picking actually in this
6 particular situation.

7 But I will make available to the
8 Court it is a public record and I would ask the Court
9 to accept it as a public record of the Secretary of
10 the Commonwealth in which he said -- it was his quote;
11 not mine -- that voting machines in Pennsylvania are
12 not connected to the internet. In fact, they are not
13 even connected to one another.

14 And if Mr. Maazel and the
15 petitioners had reviewed the thorough research
16 analysis and the security work that was done by the
17 secretary of the Commonwealth in working with the
18 Department of Homeland Security of the United States,
19 their searches about our machines, would have no basis
20 whatsoever I believe even in their own minds.

21 And then, finally, Your Honor,
22 the county solicitor correctly made reference to the
23 official tabulation, the computation and canvassing of
24 all of the ballots as provided for in the Election
25 Code.

2 And the Election Code gives
3 every single candidate, every political party, whether
4 it is a state one, a county one, a local political
5 matter, the right to have a watcher at those
6 tabulations and an attorney also present by statutory
7 right.

8 So there were numerous
9 opportunities, if the petitioners had reviewed the law
10 and seen what their rights and opportunities were to
11 have gone through this particular process.

12 The fact that Mr. Maazel
13 believes that Pennsylvania should have a statewide
14 recount because they have it in Michigan or Iowa or
15 Colorado or somewhere else completely ignores the
16 issue and is totally irrelevant. This is the
17 Pennsylvania statute. It has set forth procedures.

18 This Court -- and I say this
19 with all due respect -- I do not believe has
20 jurisdiction over this matter any further for the
21 failure to comply with the statutory requirements as
22 upheld by the Courts of Pennsylvania. Thank you, Your
23 Honor.

24 THE COURT: Very well.
25 Mr. Goldstein, anything further?

2 MR. GOLDSTEIN: Yes, Your Honor.
3 Briefly.

4 Mr. Maazel was admitted pro hac
5 vice two hours ago. He came to know the law in
6 Pennsylvania. Under the law in Pennsylvania, he had a
7 burden. He had a burden to pay a fee to file a
8 petition of this nature. He failed to file the
9 petition with the proper fees and he tried to make
10 much of a lot of other arguments and lay that at the
11 feet of the Republican Party who has done this, that
12 and the other.

13 But really it is a failure of
14 the petitioners to meet the very simple burden laid
15 out clearly in the statute to file the appropriate
16 documents with the appropriate fees on a timely basis.
17 And the fact they failed to do that gives us
18 everything we need to dismiss this matter and we hope
19 the Court will do so. Thank you very much.

20 THE COURT: Very well.
21 Mr. Maazel, I will give you an opportunity to make a
22 further comment.

23 MR. MAAZEL: Very briefly, Your
24 Honor.

25 Each one of these petitioners

2 paid more than the required fee. It is not disputed,
3 much more than the required fee. So that -- much more
4 than fifty dollars.

5 As to Mr. Tabas' point that
6 people can watch the tabulation, that's meaningless.
7 It is meaningless to watch someone press a button and
8 just recanvass the vote. That's not going to
9 discovery what happens in the code of the software of
10 the machine. That was for another century. The 21st
11 Century we need to do more than just stand there and
12 watch the tabulation. We need to get inside the
13 machine.

14 That leaves me to the final and
15 most important point I think of this entire
16 proceeding. We heard the county board election say
17 something very important, quote, we want our process
18 to be open. We agree with that. We want this process
19 to be open. Open up the software to the people who
20 are experts so that we can all have one hundred
21 percent confidence in the integrity of the Election of
22 Montgomery County and so the voters know their votes
23 count. Thank you, Your Honor.

24 THE COURT: Very well. Well, at
25 this point, I think everyone had an opportunity to

2 state their legal position, and there's nothing else
3 to be presented by the parties at this point, is
4 there?

5 MR. MAAZEL: No, Your Honor.

6 MR. OTTER: No, Your Honor.

7 MS. FORZATO: No, Your Honor.

8 MR. TABAS: No, Your Honor.

9 THE COURT: Very well. I have
10 heard all of the arguments of the counsel ably
11 presented to the Court, and I had an opportunity to in
12 advance of the hearing thoroughly review all of these
13 issues. And considering all of the circumstances, it
14 is the Court's determination to deny all of the
15 petitions to recount/re canvass and the Court will sign
16 an appropriate order in that regard.

17 Very well. Thank you.

18 MS. FORZATO: Thank you, Your
19 Honor.

20 MR. TABAS: Thank you, Your
21 Honor.

22 (At 2:30 p.m., the proceedings
23 were concluded.)

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C E R T I F I C A T E

I hereby certify that the proceedings and evidence are contained fully and accurately in the notes taken by me in the above cause and that this is a correct transcript of the same.

PAULA D. MESZAROS,
Official Court Reporter

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<p>B Case 2:16-cv-06287-PD</p> <p>beyond [5] 12/12 12/16 25/25 32/23 35/3 bit [2] 17/13 42/22 blame [1] 37/6 blanketly [1] 21/17 board [25] 1/10 2/6 5/15 6/14 12/23 13/6 13/9 15/8 15/17 16/12 17/2 17/7 19/11 22/21 23/12 32/15 33/18 34/18 34/24 34/25 38/17 40/6 41/15 41/20 46/16 Board's [1] 12/20 bond [4] 19/24 25/3 26/11 42/17 bonds [1] 20/5 both [3] 24/12 41/11 41/14 breach [1] 11/7 brief [1] 10/11 briefly [7] 3/11 26/18 31/3 41/4 42/5 45/3 45/23 bring [2] 20/18 24/3 broad [1] 16/11 brought [1] 22/24 burden [3] 45/7 45/7 45/14 Bush [9] 27/11 27/24 28/16 28/25 37/2 37/8 37/11 37/16 38/6 but [29] 3/4 9/2 10/11 12/10 12/16 16/6 19/8 19/22 21/14 22/14 23/7 23/14 24/2 25/24 27/4 28/13 28/24 29/23 30/14 30/20 33/9 33/11 36/18 38/6 41/7 41/24 42/23 43/7 45/13 button [3] 14/17 34/20 46/7</p>	<p>37/3 43/5 43/5 cherry-pick [2] 23/9 28/20 cherry-picked [2] 27/18 43/5 cherry-picking [4] 26/20 28/21 37/3 43/5 chief [1] 24/14 circumstances [4] 6/13 35/5 40/21 47/13 cited [5] 12/19 34/12 34/14 41/9 42/9 cites [1] 41/5 citizen [1] 41/21 citizens [2] 27/8 41/24 civil [2] 1/4 33/24 clause [1] 37/10 cleanest [1] 17/17 clear [5] 27/23 28/17 31/16 31/18 31/19 clearly [1] 45/15 Clerk [1] 31/13 Clinton [1] 14/19 Co [1] 4/16 Co-counsel [1] 4/16 cocounsel [2] 3/17 24/21 code [17] 12/11 12/25 13/10 14/4 23/24 27/13 28/2 29/6 29/9 30/2 34/8 34/17 41/16 41/17 43/25 44/2 46/9 colleague [2] 31/17 31/24 Colorado [1] 44/15 Combine [1] 18/6 come [6] 5/7 14/11 14/12 34/20 35/16 36/22 coming [1] 35/13 Commencing [1] 1/17 comment [7] 17/3 24/12 30/25 39/10 41/2 42/4 45/22 comments [1] 31/24 common [5] 1/2 25/23 26/14 26/15 41/15 Commonwealth [8] 25/14 30/7 30/15 34/11 42/8 42/11 43/10 43/17 company [2] 20/19 26/9 competent [1] 10/22 complaint [1] 33/24 complete [1] 23/23 completely [3] 25/3 30/13 44/15 complied [1] 22/15 comply [1] 44/21 compromise [1] 11/19 Comptometer [1] 12/23 computation [3] 12/20 19/12 43/23 computer [3] 11/24 15/11 40/10 conceivable [1] 7/12 concluded [1] 47/23 confidence [1] 46/21 conform [1] 20/9 connected [6] 30/9 30/10 39/11 39/15 43/12 43/13 consider [1] 21/22 consideration [2] 10/14 31/25 considered [1] 19/4 considering [1] 47/13 consolidate [1] 18/14 consolidated [2] 17/15 18/17 constitute [1] 26/5 constitution [1] 29/6 constitutional [1] 36/4 construe [1] 13/10 contained [1] 48/5 contains [1] 31/15 contest [6] 25/19 25/20 29/23 30/19 41/8 42/25 context [1] 15/2 continues [1] 21/6 contradiction [1] 23/24 control [1] 34/15</p>	<p>copy [3] 31/7 31/11 31/12 corporate [1] 19/25 correct [4] 3/6 22/25 23/8 48/7 correctly [2] 16/15 43/22 costs [1] 19/21 could [9] 4/11 7/16 9/3 13/5 15/15 17/12 17/19 23/8 40/9 counsel [14] 2/2 4/5 4/15 4/16 6/20 17/7 17/20 18/21 24/14 24/17 31/11 34/9 38/25 47/10 counsels' [1] 32/3 count [3] 13/11 27/20 46/23 counted [9] 5/12 9/10 13/3 13/12 15/22 15/24 16/15 32/20 40/4 counties [5] 9/13 27/19 27/19 37/10 37/13 country [5] 11/8 11/12 11/25 16/7 37/17 counts [1] 5/23 county [43] 1/3 1/10 1/20 2/6 5/6 5/14 5/23 8/20 9/15 11/17 11/21 12/6 12/8 13/15 14/13 15/21 16/19 24/24 25/8 26/18 27/6 28/13 29/11 29/21 30/5 30/14 32/15 33/18 35/23 36/11 36/14 36/15 36/18 36/20 36/20 37/3 38/21 39/14 41/21 43/22 44/4 46/16 46/22 county-wide [1] 36/20 countywide [1] 8/23 couple [2] 10/12 31/15 court [58] Court's [4] 25/14 25/21 31/25 47/14 Courthouse [1] 1/20 Courtroom [1] 1/19 Courts [1] 44/22 coversheet [1] 19/14 currently [1] 17/18</p> <p>D</p> <p>dangerous [1] 30/17 Daniel [2] 18/22 18/24 data [1] 11/4 day [4] 16/9 22/5 22/10 33/25 days [4] 22/9 38/10 38/13 38/14 deadline [2] 33/23 42/18 deal [1] 17/19 dealing [1] 29/16 decision [4] 25/14 27/25 42/8 42/8 decisions [3] 24/19 42/9 42/11 defeats [1] 41/18 defect [5] 25/12 26/8 26/10 26/12 29/8 defer [1] 4/14 defined [1] 25/25 demand [1] 35/23 demanded [2] 6/3 32/25 demands [1] 29/6 democracy [1] 15/23 denied [1] 13/22 deny [3] 9/8 9/12 47/14 Department [4] 10/17 10/18 15/3 43/18 deposit [3] 25/2 26/11 42/17 depressing [1] 32/14 designed [1] 13/2 despite [1] 26/14 detail [1] 23/6 detecting [1] 40/12 determination [1] 47/14 determined [1] 25/6 did [7] 3/23 12/5 18/21 19/12 26/21 38/20 38/22 didn't [1] 22/21 different [3] 21/3 27/20 28/23 differently [2] 37/12 37/15 difficult [1] 14/23 discovery [1] 46/9 discretion [8] 6/14 13/9 13/10 13/11</p>
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<p>today [4] 6/19 16/18 19/4 31/5 together [1] 28/23 told [1] 5/15 tomorrow [1] 15/18 too [2] 29/11 33/15 total [1] 6/5 totally [1] 44/16 touch [1] 15/14 touched [1] 23/25 touching [2] 39/6 40/7 transcript [1] 48/7 treasurer [1] 25/7 treat [1] 37/25 treated [4] 27/15 37/12 37/15 37/18 treatment [2] 28/7 28/14 tremendous [1] 40/9 tremendously [1] 19/19 tried [2] 24/5 45/9 Trump [4] 2/7 14/18 20/25 24/16 trust [2] 16/16 38/24 try [2] 21/25 32/9 trying [2] 15/4 23/15 turn [2] 32/10 32/23 turns [1] 25/8 twenty [10] 2/8 6/5 6/6 7/17 9/6 11/8 16/20 35/14 38/10 38/13 twenty-one [3] 6/5 6/6 16/20 twenty-seven [3] 7/17 9/6 35/14 twice [1] 33/11 two [7] 5/6 6/4 16/18 19/15 42/9 42/10 45/5 type [3] 24/6 27/13 37/13 types [2] 27/20 37/14 typically [1] 23/18</p>	<p>16/25 18/3 18/13 20/23 24/8 25/15 30/22 31/16 32/2 34/22 38/21 40/17 40/25 41/4 42/3 44/24 45/14 45/19 45/20 45/23 46/17 46/24 47/9 47/17 via [1] 39/17 vice [9] 2/8 3/5 3/24 4/6 18/4 18/16 24/16 29/2 45/5 Vice-President [1] 2/8 vindicate [3] 13/2 15/9 40/23 violated [1] 37/9 violates [1] 29/12 violation [3] 37/12 37/16 37/21 viral [1] 39/8 virus [1] 39/17 volunteers [1] 23/10 Vor [1] 18/23 vote [14] 5/9 6/15 9/14 11/12 12/20 14/7 15/9 16/7 16/9 27/15 28/2 28/6 28/8 46/8 voted [2] 16/8 34/21 voter [5] 9/17 11/3 11/4 37/17 37/25 voters [21] 5/6 8/5 9/9 9/13 13/2 15/20 16/5 16/6 16/18 16/23 32/17 32/19 32/24 33/9 35/15 35/22 37/21 38/10 40/18 40/23 46/22 votes [14] 5/11 9/10 13/3 13/7 13/12 14/21 15/22 15/24 16/15 23/19 28/11 32/20 40/3 46/22 voting [13] 13/19 14/18 14/19 20/20 21/18 21/21 23/23 23/24 24/4 29/21 30/6 38/22 43/11 vulnerability [2] 12/5 38/21 vulnerable [3] 11/17 16/3 16/16</p>	<p>33/15 35/8 whether [5] 25/19 28/21 29/19 31/20 44/3 which [37] 3/19 6/5 6/6 7/4 8/13 9/24 10/11 10/13 11/12 12/18 13/18 17/7 21/9 22/10 25/15 25/17 26/12 26/20 28/12 28/25 29/2 29/20 30/12 31/15 32/14 32/25 33/11 34/11 34/12 35/7 39/10 39/19 41/8 41/9 41/16 42/11 43/10 whichever [1] 8/8 while [2] 19/11 42/8 who [10] 5/7 5/11 11/24 12/2 12/4 20/19 21/8 38/20 45/11 46/19 whoever [1] 16/8 whole [5] 27/7 27/9 28/12 29/3 41/18 whom [1] 13/6 why [6] 4/23 15/10 16/17 16/18 16/20 19/18 wide [2] 8/24 36/20 will [22] 3/11 4/5 4/12 4/24 10/4 15/13 15/15 15/16 18/14 19/8 20/18 22/3 23/7 24/3 24/4 24/11 32/9 33/7 43/7 45/19 45/21 47/15 willing [2] 15/19 38/6 Wisconsin [1] 35/20 wish [1] 30/24 within [5] 27/19 28/13 37/3 37/3 42/14 without [6] 22/19 22/24 39/6 40/5 40/7 40/15 work [4] 15/16 15/20 40/10 43/16 working [1] 43/17 works [1] 22/2 worry [1] 40/15 would [62] wouldn't [3] 7/5 8/17 8/24 written [2] 14/5 14/6 wrong [2] 29/25 30/16 wrote [1] 19/13</p>
<p>U U.S [2] 7/8 10/24 unbelievably [1] 14/15 under [37] 5/17 5/25 6/13 6/23 12/11 15/16 17/16 17/18 18/15 19/9 19/14 19/19 19/23 20/12 22/6 22/7 22/17 22/19 22/24 23/15 23/16 23/18 24/19 25/5 25/5 28/20 29/8 29/24 34/8 35/4 36/4 38/10 38/11 42/25 43/2 43/4 45/6 unequal [1] 28/14 unfortunately [2] 39/24 40/2 uninformed [1] 30/17 United [12] 10/23 27/8 27/8 27/10 27/12 27/25 28/17 28/25 29/3 29/5 35/10 43/18 unless [1] 13/15 unnamed [1] 29/19 unsubstantiated [1] 30/13 up [5] 6/5 17/6 17/13 22/24 46/19 upheld [2] 40/22 44/22 upon [1] 25/24 us [7] 12/15 15/4 19/5 19/7 37/6 40/16 45/17 use [4] 37/10 37/11 37/13 37/14 used [8] 11/15 11/16 12/6 16/2 27/21 27/22 38/21 39/25</p>	<p>W W-A-L-L-A-C-H [1] 18/24 Wallach [1] 18/24 want [11] 5/11 18/5 30/20 31/16 34/19 38/8 41/23 41/23 41/24 46/17 46/18 wanted [1] 23/8 was [30] 10/15 12/2 14/5 14/6 16/9 18/4 19/12 20/3 22/20 25/6 25/8 25/16 26/8 26/9 26/20 26/22 29/17 31/19 33/2 34/2 35/9 38/11 40/12 40/12 41/22 42/23 43/10 43/16 45/4 46/10 wasn't [2] 14/24 14/25 watch [3] 46/6 46/7 46/12 watcher [1] 44/5 way [12] 12/8 13/12 13/14 17/15 22/2 24/2 34/20 34/21 36/8 37/18 39/21 40/3 ways [2] 37/10 39/22 we [91] Wednesday [1] 1/17 well [29] 3/10 4/4 4/23 6/7 8/19 8/22 10/3 13/17 16/25 18/3 18/13 24/8 26/19 28/4 30/21 30/22 32/2 33/2 33/8 38/18 39/12 40/25 42/3 44/24 45/20 46/24 46/24 47/9 47/17 went [3] 5/16 12/24 26/3 were [25] 5/15 7/4 8/13 13/3 13/7 13/12 13/12 15/22 15/24 16/15 18/24 20/6 20/24 20/25 21/3 21/5 26/25 27/21 31/20 32/9 32/20 40/3 44/8 44/10 47/23 weren't [1] 27/21 what [32] 5/13 5/24 8/2 8/3 8/11 8/25 10/7 14/9 15/7 19/20 20/16 21/3 21/20 22/5 22/17 23/20 28/9 32/17 33/11 34/6 35/6 35/19 36/9 36/16 37/9 38/23 38/24 38/25 39/10 39/12 44/10 46/9 whatever [3] 6/9 6/11 33/5 whatsoever [1] 43/20 when [6] 16/3 26/22 30/2 30/8 31/18 33/23 where [14] 8/9 8/12 13/21 13/21 13/22 15/3 15/5 15/8 15/8 20/17 23/9 24/3</p>	<p>Y year [1] 30/8 year's [1] 5/5 Yes [18] 3/9 4/18 6/22 6/25 7/10 7/10 17/22 17/23 17/24 17/25 18/2 18/11 18/12 31/2 31/14 41/3 42/5 45/2 yesterday [1] 38/11 yet [1] 10/11 York [2] 3/19 31/17 you [61] your [51]</p>
<p>V V-O-R [1] 18/23 valid [1] 39/8 value [1] 28/7 various [1] 27/20 verification [1] 3/20 verified [1] 5/22 verify [1] 3/21 versus [6] 25/16 26/7 27/11 27/24 28/16 28/25 very [30] 3/10 4/4 4/22 10/13 12/6 14/14</p>	<p>16/25 18/3 18/13 20/23 24/8 25/15 30/22 31/16 32/2 34/22 38/21 40/17 40/25 41/4 42/3 44/24 45/14 45/19 45/20 45/23 46/17 46/24 47/9 47/17 via [1] 39/17 vice [9] 2/8 3/5 3/24 4/6 18/4 18/16 24/16 29/2 45/5 Vice-President [1] 2/8 vindicate [3] 13/2 15/9 40/23 violated [1] 37/9 violates [1] 29/12 violation [3] 37/12 37/16 37/21 viral [1] 39/8 virus [1] 39/17 volunteers [1] 23/10 Vor [1] 18/23 vote [14] 5/9 6/15 9/14 11/12 12/20 14/7 15/9 16/7 16/9 27/15 28/2 28/6 28/8 46/8 voted [2] 16/8 34/21 voter [5] 9/17 11/3 11/4 37/17 37/25 voters [21] 5/6 8/5 9/9 9/13 13/2 15/20 16/5 16/6 16/18 16/23 32/17 32/19 32/24 33/9 35/15 35/22 37/21 38/10 40/18 40/23 46/22 votes [14] 5/11 9/10 13/3 13/7 13/12 14/21 15/22 15/24 16/15 23/19 28/11 32/20 40/3 46/22 voting [13] 13/19 14/18 14/19 20/20 21/18 21/21 23/23 23/24 24/4 29/21 30/6 38/22 43/11 vulnerability [2] 12/5 38/21 vulnerable [3] 11/17 16/3 16/16</p>	

Exhibit 32-A

RE: urgent/recounts/list of counties**Marks, Jonathan [jmarks@pa.gov]**

Sent: Monday, November 28, 2016 2:55 PM
To: Ilann M. Maazel
Cc: Doug Lieb; Ali Frick
Attachments: Copy of 2016 Gen Election~1.xlsx (11 KB)

Mr. Maazel,

Attached is the updated information we obtained from counties to this point. We will send updates as they become available.

Kind regards,

Jonathan M. Marks | Commissioner
Department of State
Bureau of Commissions, Elections and Legislation
210 North Office Building | Harrisburg, PA 17120
Phone: 717.787.9201 | Fax: 717.705.0721
Email: jmarks@pa.gov



From: Ilann M. Maazel [mailto:imaazel@ecbalaw.com]
Sent: Sunday, November 27, 2016 6:55 PM
To: Marks, Jonathan <jmarks@pa.gov>
Cc: Doug Lieb <dlieb@ecbalaw.com>; Ali Frick <africk@ecbalaw.com>; Ilann M. Maazel <imaazel@ecbalaw.com>
Subject: urgent/recounts/list of counties

Dear Mr. Marks,

My law firm has been retained by the Jill Stein campaign in connection with request for recounts of the U.S. presidential election, to be filed in various counties throughout Pennsylvania. We expect that many voters will file recounts with boards of elections tomorrow, pursuant to 25 P.S. 3154(e).

I understand that different counties finished the computing the vote at different times, others have yet to finish, and yet others have certified the vote. To ensure that these voters go to the appropriate counties (i.e., counties where they can file timely recount requests), could you send me a list of all the counties, whether they finished computing the vote, and if so, the date on which they finished computing the vote.

Many thanks in advance,
Ilann M. Maazel

[Ilann M. Maazel](mailto:imaazel@ecbalaw.com)

Partner
Emery Celli Brinckerhoff & Abady LLP
600 Fifth Avenue at Rockefeller Center, 10th Floor
New York, NY 10020
phone: 212-763-5000
fax: 212-763-5001
imaazel@ecbalaw.com

www.ecbalaw.com

This electronic message transmission contains information from the law firm of Emery Celli Brinckerhoff & Abady LLP which may be confidential or privileged. The information is intended to be for the use of the individual or entity named above. If you are not the intended recipient, be aware that any disclosure, copying, distribution, or use of the contents of this information is prohibited. If you have received this electronic transmission in error, please notify us by telephone (212-763-5000) or by electronic mail (imaazel@ecbalaw.com) immediately.

County	Expiration Date of 5-Day Period After			Certification Date
	Computation Complete	Computation in Progress	Computation	
ADAMS	16-Nov		21-Nov	23-Nov
ALLEGHENY	23-Nov		28-Nov	
ARMSTRONG				
BEAVER	18-Nov		23-Nov	28-Nov
BEDFORD				
BERKS	17-Nov		28-Nov	
BLAIR				
BRADFORD	16-Nov		28-Nov	21-Nov
BUCKS	23-Nov		28-Nov	
BUTLER				
CAMBRIA	16-Nov		28-Nov	22-Nov
CAMERON	14-Nov		21-Nov	23-Nov
CARBON	28-Nov		5-Dec	5-Dec
CENTRE	17-Nov		23-Nov	29-Nov
CHESTER		In Progress		
CLARION				
CLEARFIELD				28-Nov
CLINTON	14-Nov		21-Nov	21-Nov
COLUMBIA	15-Nov		21-Nov	21-Nov
CRAWFORD	18-Nov		21-Nov	23-Nov
CUMBERLAND				
DAUPHIN	16-Nov		21-Nov	23-Nov
DELAWARE				
ELK				
ERIE	16-Nov		23-Nov	
FAYETTE				
FOREST	14-Nov		21-Nov	21-Nov
FRANKLIN	15-Nov		21-Nov	22-Nov
FULTON				
GREENE				28-Nov

HUNTINGDON	16-Nov	21-Nov	23-Nov
INDIANA	18-Nov	21-Nov	22-Nov
JEFFERSON	18-Nov	21-Nov	23-Nov
JUNIATA			
LACKAWANNA	16-Nov	21-Nov	22-Nov
LANCASTER	23-Nov	28-Nov	28-Nov
LAWRENCE			
LEBANON	14-Nov	21-Nov	
LEHIGH	23-Nov	28-Nov	
LUZERNE	15-Nov	21-Nov	21-Nov
LYCOMING	15-Nov	21-Nov	28-Nov
MCKEAN	14-Nov	21-Nov	21-Nov
MERCER	23-Nov	21-Nov	
MIFFLIN	15-Nov	21-Nov	23-Nov
MONROE	14-Nov	21-Nov	21-Nov
MONTGOMERY			
MONTOUR	11-Nov	21-Nov	16-Nov
NORTHAMPTON	22-Nov	21-Nov	29-Nov
NORTHUMBERLAND			
PERRY			
PHILADELPHIA	In Progress		
PIKE			
POTTER			
SCHUYLKILL	18-Nov	21-Nov	28-Nov
SNYDER	14-Nov	21-Nov	21-Nov
SOMERSET			
SULLIVAN	14-Nov	21-Nov	21-Nov
SUSQUEHANNA	15-Nov	21-Nov	23-Nov
TIOGA			
UNION	14-Nov	21-Nov	23-Nov
VENANGO			
WARREN	15-Nov	21-Nov	18-Nov
WASHINGTON			
WAYNE	15-Nov	21-Nov	23-Nov

WESTMORELAND	15-Nov		21-Nov	22-Nov
WYOMING	14-Nov		28-Nov	
YORK	21-Nov		28-Nov	
67	42	2		35

Exhibit 32-B

Reply Reply All Forward

RE: urgent/recounts/list of counties

Marks, Jonathan [jmarks@pa.gov]

To: Ilann M. Maazel

Cc: Doug Lieb; Ali Frick

Attachments: Copy of 2016 Gen Election~1.xlsx (12 KB) [Open as Web Page]

Monday, November 28, 2016 5:12 PM

You forwarded this message on 11/29/2016 2:00 PM.

Mr. Maazel,

Attached is the updated list of information we've received from the counties at this point.

Kind regards,

Jonathan M. Marks | Commissioner
Department of State
Bureau of Commissions, Elections and Legislation
210 North Office Building | Harrisburg, PA 17120
Phone: 717.787.9201 | Fax: 717.705.0721
Email: jmarks@pa.gov



From: Ilann M. Maazel [mailto:imaazel@ecbalaw.com]
Sent: Monday, November 28, 2016 3:20 PM
To: Marks, Jonathan <jmarks@pa.gov>
Cc: Doug Lieb <dlieb@ecbalaw.com>; Ali Frick <africk@ecbalaw.com>
Subject: Re: urgent/recounts/list of counties

Thank you.

Sent from my iPhone

On Nov 28, 2016, at 2:56 PM, Marks, Jonathan <jmarks@pa.gov> wrote:

Mr. Maazel,

Attached is the updated information we obtained from counties to this point. We will send updates as they become available.

Kind regards,

Jonathan M. Marks | Commissioner
Department of State
Bureau of Commissions, Elections and Legislation
210 North Office Building | Harrisburg, PA 17120
Phone: 717.787.9201 | Fax: 717.705.0721
Email: jmarks@pa.gov

County	Expiration Date of 5-Day Period After			Certification Date
	Computation Complete	Computation in Progress	Computation	
ADAMS	16-Nov		21-Nov	23-Nov
ALLEGHENY	23-Nov		28-Nov	
ARMSTRONG				
BEAVER	18-Nov		23-Nov	28-Nov
BEDFORD				
BERKS	17-Nov		28-Nov	
BLAIR				
BRADFORD	16-Nov		28-Nov	21-Nov
BUCKS	23-Nov		28-Nov	
BUTLER				28-Nov
CAMBRIA	16-Nov		28-Nov	22-Nov
CAMERON	14-Nov		21-Nov	23-Nov
CARBON	28-Nov		5-Dec	5-Dec
CENTRE	17-Nov		23-Nov	29-Nov
CHESTER		In Progress		
CLARION				
CLEARFIELD				28-Nov
CLINTON	14-Nov		21-Nov	21-Nov
COLUMBIA	15-Nov		21-Nov	21-Nov
CRAWFORD	18-Nov		21-Nov	23-Nov
CUMBERLAND				22-Nov
DAUPHIN	16-Nov		21-Nov	23-Nov
DELAWARE				23-Nov
ELK				22-Nov
ERIE	16-Nov		23-Nov	
FAYETTE	17-Nov			23-Nov
FOREST	14-Nov		21-Nov	21-Nov
FRANKLIN	15-Nov		21-Nov	22-Nov
FULTON				
GREENE				28-Nov

HUNTINGDON	16-Nov	21-Nov	23-Nov
INDIANA	18-Nov	21-Nov	22-Nov
JEFFERSON	18-Nov	21-Nov	23-Nov
JUNIATA			21-Nov
LACKAWANNA	16-Nov	21-Nov	22-Nov
LANCASTER	23-Nov	28-Nov	28-Nov
LAWRENCE	16-Nov		22-Nov
LEBANON	14-Nov	21-Nov	
LEHIGH	23-Nov	28-Nov	
LUZERNE	15-Nov	21-Nov	21-Nov
LYCOMING	15-Nov	21-Nov	28-Nov
MCKEAN	14-Nov	21-Nov	21-Nov
MERCER	23-Nov	28-Nov	30-Nov
MIFFLIN	15-Nov	21-Nov	23-Nov
MONROE	14-Nov	21-Nov	21-Nov
MONTGOMERY			
MONTOUR	11-Nov	21-Nov	16-Nov
NORTHAMPTON	22-Nov	21-Nov	29-Nov
NORTHUMBERLAND	23-Nov	30-Nov	30-Nov
PERRY			21-Nov
PHILADELPHIA	In Progress		
PIKE			
POTTER			
SCHUYLKILL	18-Nov	21-Nov	28-Nov
SNYDER	14-Nov	21-Nov	21-Nov
SOMERSET			
SULLIVAN	14-Nov	21-Nov	21-Nov
SUSQUEHANNA	15-Nov	21-Nov	23-Nov
TIOGA			23-Nov
UNION	14-Nov	21-Nov	23-Nov
VENANGO			
WARREN	15-Nov	21-Nov	18-Nov
WASHINGTON	22-Nov	28-Nov	29-Nov
WAYNE	15-Nov	21-Nov	23-Nov

WESTMORELAND	15-Nov		21-Nov	22-Nov
WYOMING	14-Nov		28-Nov	
YORK	21-Nov		28-Nov	
67	46	2		47

Exhibit 32-C

[Reply](#) [Reply All](#) [Forward](#)

RE: urgent/recounts/list of counties

Marks, Jonathan [jmarks@pa.gov]

To: Ilann M. Maazel
Cc: Doug Lieb; Ali Frick; Lowell Finley [lfinley51@gmail.com]
Attachments: (2) Download all attachments
DOS Email - Update regarding ...; DOS Email - Additional Update...

Tuesday, November 29, 2016 6:36 PM

Mr. Maazel,

Attached is an updated tracking spreadsheet. We made changes to Bradford, Cambria, Montour and Warren counties to address typos and one misunderstanding about of the questions. I am also attaching a copiers of two emails I sent to the counties yesterday.

Kind regards,

Jonathan M. Marks | Commissioner
Department of State
Bureau of Commissions, Elections and Legislation
210 North Office Building | Harrisburg, PA 17120
Phone: 717.787.9201 | Fax: 717.705.0721
Email: jmarks@pa.gov



From: Ilann M. Maazel [mailto:imaazel@ecbalaw.com]
Sent: Tuesday, November 29, 2016 1:00 PM
To: Marks, Jonathan <jmarks@pa.gov>
Cc: Doug Lieb <dlieb@ecbalaw.com>; Ali Frick <africk@ecbalaw.com>; Lowell Finley <lfinley51@gmail.com>; Ilann M. Maazel <imaazel@ecbalaw.com>
Subject: RE: urgent/recounts/list of counties

Thank you. A few followup questions:

-Could you forward us an updated list, if you have one?

-We were unclear about some of the dates in the attachment. Some of them, for example, Cambria, have a 5-day expiration date after the certification date. Others are before the certification date. Are these perhaps typographical errors?

-Finally, I read that your office sent an email to the county boards with some guidance yesterday. Could you forward that email to us as well?

Many thanks,
Ilann Maazel

From: Marks, Jonathan [jmarks@pa.gov]
Sent: Monday, November 28, 2016 5:12 PM
To: Ilann M. Maazel
Cc: Doug Lieb; Ali Frick

DOS Email - Update regarding Recount Requests

Marks, Jonathan [jmarks@pa.gov]

Sent: Monday, November 28, 2016 2:50 PM

To: Adams - Crouse, Angie [acrouse@adamscounty.us]; Adams - Dutko, Monica [mdutko@adamscounty.us]; Allegheny - Wolosik, Mark [mwolosik@county.allegheny.pa.us]; Armstrong - Bellas, Jennifer B. [jbbellas@co.armstrong.pa.us]; Beaver - Mandity, Dorene [dmandity@beavercountypa.gov]; Bedford - Brown, Debra [DBrown@bedfordcountypa.org]; Bedford - Ferguson, Andrea [aferguson@bedfordcountypa.org]; Berks - Barsoum, Karen [KBarsoum@countyofberks.com]; Berks - Olivieri, Deborah [dolivieri@countyofberks.com]; Blair - Clapper, Virginia [vclapper@blairco.org]; Blair - Seymour, Sarah [sseymour@blairco.org]; Bradford - Smithkors, Renee [smithkors@bradfordco.org]; Bucks - Dean, Deena K. [dkdean@buckscounty.org]; Butler - Brewer, Shari [sbrewer@co.butler.pa.us]; Cambria - Crawl, Shirley [scrawl@co.cambria.pa.us]; Cameron - Lupro, Misty [mlupro@cameroncountypa.com]; Cameron - Munz, Brenda [brenda@cameroncountypa.com]; Carbon - Dart, Lisa [LisaDart@carboncounty.net]; Carbon - Elections Account [carbonelections@carboncounty.net]; Centre - McKinley, Joyce [jemckinley@centrecountypa.gov]; Centre - Neidig, Jodi [jlneidig@centrecountypa.gov]; Centre - Stefanko, Tisha [lmstefanko@centrecountypa.gov]; Chester - Christman, Bill [wchristman@chesco.org]; Chester - Rahn, Kara C. [krahnc@chesco.org]; Clarion - Callihan, Cindy [ccallihan@co.clarion.pa.us]; Clarion - Moore, Sally [smoore@co.clarion.pa.us]; Clearfield - Bumbarger, Donna [voterreg@clearfieldco.org]; Clearfield - Graham, Dawn E. [elections@clearfieldco.org]; Clinton - Boileau, Maria [mboileau@clintoncountypa.com]; Columbia - Repasky, Matthew [mrepasky@columbiapa.org]; Crawford - Chatfield, Gina [gchatfield@co.crawford.pa.us]; Crawford - Teuta, Stacey [steuta@co.crawford.pa.us]; Cumberland - Orris, Megan [morrisc@cpa.net]; Cumberland - Salzarulo, Bethany [bsalzarulo@cpa.net]; Dauphin - Feaser, Gerald [jfeaser@dauphinc.org]; Dauphin - Roach, Taryll [troach@dauphinc.org]; Delaware - Hagan, Laureen [haganLT@co.delaware.pa.us]; Delaware - Headley, Mary Jo [headleym@co.delaware.pa.us]; Elk - Frey, Kim [elkvoter@countyofelkpa.com]; Erie - Alexander, Kim [kalexander@eriecountygov.org]; Erie - Smith, Doug [Dsmith@eriecountygov.org]; Fayette - Blosser, Larry [lblosser@fayettepa.org]; Forest - Hitchcock, Jean Ann [jahitchcock@co.forest.pa.us]; Franklin - Aines, Jennie M. [voter@co.franklin.pa.us]; Franklin - Aines, Jennie M. [jaines@co.franklin.pa.us]; Franklin - Hart, John A. [commissioners@co.franklin.pa.us]; Fulton - Beatty, Lisa [lbeatty@co.fulton.pa.us]; Fulton - Hann, Karen [khann@co.fulton.pa.us]; Greene - Kiger, Tina [tkiger@co.greene.pa.us]; Huntingdon - Barnett, Michelle [mbarnett@huntingdoncounty.net]; Huntingdon - Cerett, Michelle [mcerett@huntingdoncounty.net]; Indiana - Maryai, Robin [robin@countyofindiana.org]; Indiana-Streams, Debra [dstreams@countyofindiana.org]; Jefferson - Lupone, Karen [klupone@jeffersoncountypa.com]; Jefferson - Truitt, Wendy [wktuitt@jeffersoncountypa.com]; Juniata - Stong, Eva M. [estong@co.juniata.pa.us]; Lackawanna - Medalis, Marion [medalism@lackawannacounty.org]; Lancaster - Skilling, Diane [dskilling@co.lancaster.pa.us]; Lancaster - Wenger, Randall [rwenger@co.lancaster.pa.us]; Lawrence - Ed Allison [cvote@co.lawrence.pa.us]; Lebanon - Anderson, Michael L. [manderson@lebcnty.org]; Lebanon - Sohn, Jo-Ellen [jsohn@lebcnty.org]; Lehigh - Benyo, Timothy A [TimothyBenyo@lehighcounty.org]; Lehigh - Harkins, Terry [TerriHarkins@lehighcounty.org]; Luzerne - Crispell, Marisa [Marisa.Crispell@luzernecounty.org]; Luzerne - Parsnik, Dave [David.Parsnik@luzernecounty.org]; Luzerne - Steinger, Mary Beth [Marybeth.steinger@luzernecounty.org]; Lycoming - Lehman, Forrest [flehman@lyco.org]; Lycoming - Shuman, Jill [jshuman@lyco.org]; McKean - Gallegos, Dianne [DLGallegos@mckeancountypa.org]; McKean - Pratt, Lisa M. [lpratt@mckeancountypa.org]; Mercer - Greenburg, Jeff [jgreenburg@mcc.co.mercer.pa.us]; Mifflin - Clever, Harry [hclever@co.mifflin.pa.us]; Mifflin - Ganoë, Rebecca [rganoë@co.mifflin.pa.us]; Monroe - May-Silfee, Sara [smay-silfee@co.monroe.pa.us]; Montgomery - Forzato, Nicole [NForzato@montcopa.org]; Montgomery - Macekura, Matt [mmacekur@montcopa.org]; Montgomery - Proietto, Sharon [sproietto@montcopa.org]; Montgomery - Sisler, Karley [KSisler@montcopa.org]; Montour - Brandon, Holly A. [hbrandon@montourco.org]; Montour - Dyer, Darlis [ddyer@montourco.org]; Montour - Woodruff, Theresa [twoodruff@montourco.org]; Northampton - Rumsey, Debi [drumsey@northamptoncounty.org]; Northumberland - Dick, Melanie [Melanie.Dick@norrycopa.net]; Northumberland - Herb, Alisha [alisha.herb@norrycopa.net]; Perry - Delancey, Bonnie L. 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[gorben@pikepa.org]; Potter - Lewis, Sandra [slewis@pottercountypa.net]; Schuylkill - Brennan, Frannie [fbrennan@co.schuylkill.pa.us]; Schuylkill - Kuperavage, Gerry [Gkuperavage@co.schuylkill.pa.us]; Snyder - Guyer, Stacy [sguyer@snydercounty.org]; Snyder - Nace, Patricia [pnace@snydercounty.org]; Somerset - Pritts, Tina [voter@co.somerset.pa.us]; Sullivan - Doyle, Francine [fdoyle@sullivancounty-pa.us]; Susquehanna - Quattrocchi, Diane [dquattrocchi@susqco.com]; Tioga - Johnson, Shaun [sjohnson@tiogacountypa.us]; Tioga - Whipple, Penny [pwhipple@tiogacountypa.us]; Union - Katherman, Gregory A [gkatherman@unionco.org]; Union - Radel, Glenda [gradel@unionco.org]; Union - Zerbe, Kim [kzerbe@unionco.org]; Venango - Hartle, Michelle A. 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Importance:High

Good afternoon everyone,

You may have received petitions for recounts today. We are providing this guidance on what you should do with the petitions.

As an initial matter, all counties should time stamp each document to indicate the date and time it was received in your office. All counties should do regardless of whether the county is accepting or rejecting

the petitions.

If your county had finished its computation, prepared a certification, waited 5 days from the date of finishing your computation and that five day period has expired, you may reject the petitions and communicate that to the filer. We recommend that you keep a copy of the stamped petition and any written documentation you may provide to the petitioner setting forth the reason(s) for rejection, if applicable.

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If your county has not completed its initial computation of the returns, under 25 P.S. § 3154, a petition for recount is appropriately directed to the county board of elections and must be accepted.

Kind regards,

Jonathan M. Marks | Commissioner
Department of State
Bureau of Commissions, Elections and Legislation
210 North Office Building | Harrisburg, PA 17120
Phone: 717.787.9201 | Fax: 717.705.0721
Email: jmarks@pa.gov



DOS Email - Additional Update regarding Recount Requests

Marks, Jonathan [jmarks@pa.gov]

Sent: Monday, November 28, 2016 4:21 PM

To: Adams - Crouse, Angie [acrouse@adamscounty.us]; Adams - Dutko, Monica [mdutko@adamscounty.us]; Allegheny - Wolosik, Mark [mwolosik@county.allegheny.pa.us]; Armstrong - Bellas, Jennifer B. [jbbellas@co.armstrong.pa.us]; Beaver - Mandity, Dorene [dmandity@beavercountypa.gov]; Bedford - Brown, Debra [DBrown@bedfordcountypa.org]; Bedford - Ferguson, Andrea [aferguson@bedfordcountypa.org]; Berks - Barsoum, Karen [KBarsoum@countyofberks.com]; Berks - Olivieri, Deborah [dolivieri@countyofberks.com]; Blair - Clapper, Virginia [vclapper@blairco.org]; Blair - Seymour, Sarah [sseymour@blairco.org]; Bradford - Smithkors, Renee [smithkors@bradfordco.org]; Bucks - Dean, Deena K. [dkdean@buckscounty.org]; Butler - Brewer, Shari [sbrewer@co.butler.pa.us]; Cambria - Crawl, Shirley [scrawl@co.cambria.pa.us]; Cameron - Lupro, Misty [mlupro@cameroncountypa.com]; Cameron - Munz, Brenda [brenda@cameroncountypa.com]; Carbon - Dart, Lisa [LisaDart@carboncounty.net]; Carbon - Elections Account [carbonelections@carboncounty.net]; Centre - McKinley, Joyce [jemckinley@centrecountypa.gov]; Centre - Neidig, Jodi [jlneidig@centrecountypa.gov]; Centre - Stefanko, Tisha [Istefanko@centrecountypa.gov]; Chester - Christman, Bill [wchristman@chesco.org]; Chester - Rahn, Kara C. [krahnc@chesco.org]; Clarion - Callihan, Cindy [ccallihan@co.clarion.pa.us]; Clarion - Moore, Sally [smoore@co.clarion.pa.us]; Clearfield - Bumbarger, Donna [voterreg@clearfieldco.org]; Clearfield - Graham, Dawn E. [elections@clearfieldco.org]; Clinton - Boileau, Maria [mboileau@clintoncountypa.com]; Columbia - Repasky, Matthew [mrepasky@columbiapa.org]; Crawford - Chatfield, Gina [gchatfield@co.crawford.pa.us]; Crawford - Teuta, Stacey [steuta@co.crawford.pa.us]; Cumberland - Orris, Megan [morrisc@cpa.net]; Cumberland - Salzarulo, Bethany [bsalzarulo@ccpa.net]; Dauphin - Feaser, Gerald [jfeaser@dauphinc.org]; Dauphin - Roach, Taryll [troach@dauphinc.org]; Delaware - Hagan, Laureen [haganLT@co.delaware.pa.us]; Delaware - Headley, Mary Jo [headleym@co.delaware.pa.us]; Elk - Frey, Kim [elkvoter@countyofelkpa.com]; Erie - Alexander, Kim [kalexander@eriecountygov.org]; Erie - Smith, Doug [Dsmith@eriecountygov.org]; Fayette - Blosser, Larry [lblosser@fayettepa.org]; Forest - Hitchcock, Jean Ann [jahitchcock@co.forest.pa.us]; Franklin - Aines, Jennie M. [voter@co.franklin.pa.us]; Franklin - Aines, Jennie M. [jaines@co.franklin.pa.us]; Franklin - Hart, John A. [commissions@co.franklin.pa.us]; Fulton - Beatty, Lisa [lbeatty@co.fulton.pa.us]; Fulton - Hann, Karen [khann@co.fulton.pa.us]; Greene - Kiger, Tina [tkiger@co.greene.pa.us]; Huntingdon - Barnett, Michelle [mbarnett@huntingdoncounty.net]; Huntingdon - Cerett, Michelle [mcerett@huntingdoncounty.net]; Indiana - Maryai, Robin [robin@countyofindiana.org]; Indiana-Streams, Debra [dstreams@countyofindiana.org]; Jefferson - Lupone, Karen [klupone@jeffersoncountypa.com]; Jefferson - Truitt, Wendy [wktuitt@jeffersoncountypa.com]; Juniata - Stong, Eva M. [estong@co.juniata.pa.us]; Lackawanna - Medalis, Marion [medalism@lackawannacounty.org]; Lancaster - Skilling, Diane [dskilling@co.lancaster.pa.us]; Lancaster - Wenger, Randall [rwenger@co.lancaster.pa.us]; Lawrence - Ed Allison [cvote@co.lawrence.pa.us]; Lebanon - Anderson, Michael L. 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Importance:High

Good afternoon everyone,

Please read the updates in the following paragraphs carefully.

In response to requests for clarification that we have received from a couple of counties, we want to provide you with this additional clarification regarding the effect of filing a petition for recount/recanvass.

Specifically, we have been asked whether a county may finalize certification today if the 5-day period is set to expire today. If a county's 5-day recount window expires today and the county knows that a recount petition has been filed, then the county CANNOT complete certification of its election returns at this time.

We also wanted to notify you that the Department released the following statement in response to questions we have received:

STATEMENT:

"The Department of State is working to gather information from the 67 counties regarding their progress in certifying election returns. We've learned that many counties have completed their certification, thereby closing the 5-day window to petition at the county level for a recount.

"The Department of State is also providing guidance to the counties on the process for handling recount petitions. We are aware of petitions filed in Berks, Bucks, Centre, Montgomery, and Philadelphia. However, we are not aware of how many have been filed in each county. We have been working to gather that information from the counties. Because the Department is not the filing agency, we are relying on reports from the counties."

BACKGROUND:

The Department of State sent the following guidance to counties today:

You may have received petitions for recounts today. We are providing this guidance on what you should do with the petitions.

As an initial matter, all counties should time stamp each document to indicate the date and time it was received in your office. All counties should do regardless of whether the county is accepting or rejecting the petitions.

If your county had finished its computation, prepared a certification, waited 5 days from the date of finishing your computation and that five day period has expired, you may reject the petitions and communicate that to the filer. We recommend that you keep a copy of the stamped petition and any written documentation you may provide to the petitioner setting forth the reason(s) for rejection, if applicable.

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If your county has not completed its initial computation of the returns, under 25 P.S. § 3154, a petition for recount is appropriately directed to the county board of elections and must be accepted.

Kind regards,

Jonathan M. Marks | Commissioner
Department of State
Bureau of Commissions, Elections and Legislation
210 North Office Building | Harrisburg, PA 17120
Phone: 717.787.9201 | Fax: 717.705.0721
Email: jmarks@pa.gov



From: Marks, Jonathan

Sent: Monday, November 28, 2016 2:51 PM

To: 'Adams - Crouse, Angie' <acrouse@adamscounty.us>; 'Adams - Dutko, Monica' <mdutko@adamscounty.us>; 'Allegheny - Wolosik, Mark' <mwolosik@county.allegheny.pa.us>; 'Armstrong - Bellas, Jennifer B.' <jbbellas@co.armstrong.pa.us>; 'Beaver - Mandity, Dorene' <dmandity@beavercountypa.gov>; 'Bedford - Brown, Debra' <DBrown@bedfordcountypa.org>; 'Bedford - Ferguson, Andrea' <aferguson@bedfordcountypa.org>; 'Berks - Barsoum, Karen' <KBarsoum@countyofberks.com>; 'Berks - Olivieri, Deborah' <dolivieri@countyofberks.com>; 'Blair - Clapper, Virginia' <vclapper@blairco.org>; 'Blair - Seymour, Sarah' <sseymour@blairco.org>; 'Bradford - Smithkors, Renee' <smithkorsr@bradfordco.org>; 'Bucks - Dean, Deena K.' <dkdean@buckscounty.org>; 'Butler - Brewer, Shari' <sbrewer@co.butler.pa.us>; 'Cambria - Crawl, Shirley' <scrawl@co.cambria.pa.us>; 'Cameron - Lupro, Misty' <mlupro@cameroncountypa.com>; 'Cameron - Munz, Brenda' <brenda@cameroncountypa.com>; 'Carbon - Dart, Lisa' <LisaDart@carboncounty.net>; 'Carbon - Elections Account' <carboneylections@carboncounty.net>; 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'Elk - Frey, Kim' <elkvoter@countyofelkpa.com>; 'Erie - Alexander, Kim' <kalexander@eriecountygov.org>; 'Erie - Smith, Doug' <Dsmith@eriecountygov.org>; 'Fayette - Blosser, Larry' <lblosser@fayettepa.org>; 'Forest - Hitchcock, Jean Ann' <jahitchcock@co.forest.pa.us>; 'Franklin - Aines, Jennie M.' <voter@co.franklin.pa.us>; 'Franklin - Aines, Jennie M.' <jaines@co.franklin.pa.us>; 'Franklin - Hart, John A.' <commissioners@co.franklin.pa.us>; 'Fulton - Beatty, Lisa' <lbeatty@co.fulton.pa.us>; 'Fulton - Hann, Karen' <khann@co.fulton.pa.us>; 'Greene - Kiger, Tina' <tkiger@co.greene.pa.us>; 'Huntingdon - Barnett, Michelle' <mbarnett@huntingdoncounty.net>; 'Huntingdon - Cerett, Michelle' <mcerett@huntingdoncounty.net>; 'Indiana - Maryai, Robin' <robin@countyofindiana.org>; 'Indiana-Streams, Debra' <dstreams@countyofindiana.org>; 'Jefferson - Lupone, Karen' <klupone@jeffersoncountypa.com>; 'Jefferson - Truitt, Wendy' <wktruitt@jeffersoncountypa.com>; 'Juniata - Stong, Eva M.' <estong@co.juniata.pa.us>; 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Subject: DOS Email - Update regarding Recount Requests

Importance: High

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Kind regards,

Jonathan M. Marks | Commissioner
Department of State
Bureau of Commissions, Elections and Legislation
210 North Office Building | Harrisburg, PA 17120
Phone: 717.787.9201 | Fax: 717.705.0721
Email: jmarks@pa.gov



Exhibit 32-D

Reply Reply All Forward

RE: urgent/recounts/list of counties

Marks, Jonathan [jmarks@pa.gov]

To: Ilann M. Maazel
Cc: Doug Lieb; Ali Frick; Lowell Finley [lfinley51@gmail.com]
Attachments: 2016 Gen Election Computa~1.xlsx (11 KB) [[Open as Web Page](#)]

Thursday, December 01, 2016 7:59 AM

Flag for follow up

Mr. Maazel,

Attached is an updated tracking sheet. We received additional information from a few counties yesterday afternoon, which are highlighted in green.

Kind regards,

Jonathan M. Marks | Commissioner
Department of State
Bureau of Commissions, Elections and Legislation
210 North Office Building | Harrisburg, PA 17120
Phone: 717.787.9201 | Fax: 717.705.0721
Email: jmarks@pa.gov



From: Ilann M. Maazel [mailto:imaazel@ecbalaw.com]
Sent: Wednesday, November 30, 2016 6:09 PM
To: Marks, Jonathan <jmarks@pa.gov>
Cc: Doug Lieb <dlieb@ecbalaw.com>; Ali Frick <africk@ecbalaw.com>; Lowell Finley <lfinley51@gmail.com>
Subject: RE: urgent/recounts/list of counties

I am just realizing now that the updated tracking spreadsheet was not attached. Would you mind sending?

From: Marks, Jonathan [jmarks@pa.gov]
Sent: Tuesday, November 29, 2016 6:36 PM
To: Ilann M. Maazel
Cc: Doug Lieb; Ali Frick; Lowell Finley
Subject: RE: urgent/recounts/list of counties

Mr. Maazel,

Attached is an updated tracking spreadsheet. We made changes to Bradford, Cambria, Montour and Warren counties to address typos and one misunderstanding about of the questions. I am also attaching a copiers of two emails I sent to the counties yesterday.

Kind regards,

Jonathan M. Marks | Commissioner
Department of State
Bureau of Commissions, Elections and Legislation
210 North Office Building | Harrisburg, PA 17120

County	Computation Complete	Computation in Progress	Expiration Date of 5-Day Period After Computation	Certification Date
ADAMS	16-Nov		21-Nov	23-Nov
ALLEGHENY	23-Nov		28-Nov	
ARMSTRONG	18-Nov		23-Nov	23-Nov
BEAVER	18-Nov		23-Nov	28-Nov
BEDFORD	18-Nov		23-Nov	29-Nov
BERKS	17-Nov		28-Nov	
BLAIR	16-Nov			23-Nov
BRADFORD	16-Nov		21-Nov	28-Nov
BUCKS	23-Nov		28-Nov	
BUTLER				28-Nov
CAMBRIA	16-Nov			22-Nov
CAMERON	14-Nov		21-Nov	23-Nov
CARBON	28-Nov		5-Dec	5-Dec
CENTRE	17-Nov		23-Nov	29-Nov
CHESTER		In Progress		
CLARION				
CLEARFIELD	15-Nov			28-Nov
CLINTON	14-Nov		21-Nov	21-Nov
COLUMBIA	15-Nov		21-Nov	21-Nov
CRAWFORD	18-Nov		21-Nov	23-Nov
CUMBERLAND				22-Nov
DAUPHIN	16-Nov		21-Nov	23-Nov
DELAWARE				23-Nov
ELK				22-Nov
ERIE	16-Nov		23-Nov	
FAYETTE	17-Nov			23-Nov

FOREST	14-Nov	21-Nov	21-Nov
FRANKLIN	15-Nov	21-Nov	22-Nov
FULTON			
GREENE			28-Nov
HUNTINGDON	16-Nov	21-Nov	23-Nov
INDIANA	18-Nov	21-Nov	22-Nov
JEFFERSON	18-Nov	21-Nov	23-Nov
JUNIATA	14-Nov		22-Nov
LACKAWANNA	16-Nov	21-Nov	22-Nov
LANCASTER	23-Nov	28-Nov	28-Nov
LAWRENCE	16-Nov		22-Nov
LEBANON	14-Nov	21-Nov	
LEHIGH	23-Nov	28-Nov	
LUZERNE	15-Nov	21-Nov	21-Nov
LYCOMING	15-Nov	21-Nov	28-Nov
MCKEAN	14-Nov	21-Nov	21-Nov
MERCER	23-Nov	28-Nov	30-Nov
MIFFLIN	15-Nov	21-Nov	23-Nov
MONROE	14-Nov	21-Nov	21-Nov
MONTGOMERY			
MONTOUR	11-Nov		16-Nov
NORTHAMPTON	22-Nov	21-Nov	29-Nov
NORTHUMBERLAND	23-Nov	30-Nov	30-Nov
PERRY	14-Nov		21-Nov
PHILADELPHIA	In Progress		
PIKE			
POTTER			29-Nov
SCHUYLKILL	18-Nov	21-Nov	28-Nov
SNYDER	14-Nov	21-Nov	21-Nov
SOMERSET	18-Nov		23-Nov
SULLIVAN	14-Nov	21-Nov	21-Nov
SUSQUEHANNA	15-Nov	21-Nov	23-Nov
TIOGA			23-Nov
UNION	14-Nov	21-Nov	23-Nov

VENANGO				
WARREN	15-Nov			21-Nov
WASHINGTON	22-Nov		28-Nov	29-Nov
WAYNE	15-Nov		21-Nov	23-Nov
WESTMORELAND	15-Nov		21-Nov	22-Nov
WYOMING	14-Nov		28-Nov	
YORK	21-Nov		28-Nov	
	67	53	2	52

Exhibit 33

Reply Reply All Forward

RE: urgent/recounts/list of counties

Ilann M. Maazel

To: Marks, Jonathan [jmarks@pa.gov]

Cc: Doug Lieb; Ali Frick; Lowell Finley [lfinley51@gmail.com]

Friday, December 02, 2016 11:08 AM

Mr. Marks,

Looking at the updated tracking sheet, it seems that there are still many counties for which you don't have information: when the vote computation ended (if it ended), when the 5-day "expiration period" ended, or when votes were certified. Could you update with whatever information you have currently?

A few other questions: why is the 5-day period after computation, depending on the county, sometimes only 3 days (e.g., Crawford, Indiana, Jefferson) or even before computation (Northampton)? There doesn't seem to be any rhyme or reason to the "expiration date of 5-day period after computation."

I am also confused by the certification dates: some are the same day as the 5-day "expiration date," others are 1, 2, 5, 6, 7, or 8 days after, any many other certification dates are missing. If a county has no certification date on the chart, does that mean those counties have not yet certified the vote?

Finally, is there a website, publication, or anyplace where voters or the Stein campaign can go to in order to find out what is happening/has happened in with respect to vote count/the 5-day period/certification in these 67 counties? Voters have tried calling county boards of elections across the state and received either no information, conflicting information, or confusing information.

I don't see how voters can know when or where to request recounts if they do not have this basic information, and in the meantime, they may be missing statutory deadlines to request recounts both at the county board level and in court.

Many thanks,
Ilann Maazel

From: Marks, Jonathan [jmarks@pa.gov]
Sent: Thursday, December 01, 2016 7:59 AM
To: Ilann M. Maazel
Cc: Doug Lieb; Ali Frick; Lowell Finley
Subject: RE: urgent/recounts/list of counties

Mr. Maazel,

Attached is an updated tracking sheet. We received additional information from a few counties yesterday afternoon, which are highlighted in green.

Kind regards,

Jonathan M. Marks | Commissioner
Department of State
Bureau of Commissions, Elections and Legislation
210 North Office Building | Harrisburg, PA 17120
Phone: 717.787.9201 | Fax: 717.705.0721
Email: jmarks@pa.gov



Exhibit 34

Good afternoon everyone,

You may have received petitions for recounts today. We are providing this guidance on what you should do with the petitions.

As an initial matter, all counties should time stamp each document to indicate the date and time it was received in your office. All counties should do regardless of whether the county is accepting or rejecting the petitions.

If your county had finished its computation, prepared a certification, waited 5 days from the date of finishing your computation and that five day period has expired, you may reject the petitions and communicate that to the filer. We recommend that you keep a copy of the stamped petition and any written documentation you may provide to the petitioner setting forth the reason(s) for rejection, if applicable.

If your county has finished its computation, prepared a certification, and the five day period expires today or later, you may inform the filer that during this five-day period, the petition for recount must be filed with the court of common pleas. If a county is directing the filer to the Court of Common Pleas, we recommend that you stamp the petition and keep a copy for your records, as this information may prove helpful later.

If your county has not completed its initial computation of the returns, under 25 P.S. § 3154, a petition for recount is appropriately directed to the county board of elections and must be accepted.

Kind regards,

Jonathan M. Marks | Commissioner
Department of State
Bureau of Commissions, Elections and Legislation
210 North Office Building | Harrisburg, PA 17120
Phone: 717.787.9201 | Fax: 717.705.0721
Email: jmarks@pa.gov



Exhibit 35

**IN THE COURT OF COMMON PLEAS OF ALLEGHENY COUNTY, PENNSYLVANIA
CIVIL DIVISION**

**IN RE: RECOUNT AND/OR RECANVASS OF
THE VOTE FOR PRESIDENT OF THE UNITED
STATES AND FOR UNITED STATES SENATE IN
THE NOVEMBER 8, 2016 GENERAL
ELECTION**

No. G.D. 16-22954

ORDER OF COURT

FILED ON BEHALF OF:
THE HONORABLE JOSEPH M. JAMES

COPIES SENT TO:

RONALD L. HICKS, JR., ESQUIRE
STUART C. GAUL, JR., ESQUIRE
ALLAN J. OPSITNICK, ESQUIRE

**IN THE COURT OF COMMON PLEAS OF ALLEGHENY COUNTY, PENNSYLVANIA
CIVIL DIVISION**

**IN RE: RECOUNT AND/OR RECANVASS OF THE
VOTE FOR PRESIDENT OF THE UNITED STATES
AND FOR UNITED STATES SENATE IN THE
NOVEMBER 8, 2016 GENERAL ELECTION**

NO. G.D. 16-22954

JAMES, J.

ORDER OF COURT

And now, to-wit this 2nd day of December 2016, after a review of the Emergency Petition to Quash the decision of the Allegheny County Elections Division to grant the recount and recanvass of certain voting districts, the Petition is denied. The recount and recanvass shall take place on Monday, December 5, 2016 at 10:00 AM.

BY THE COURT,

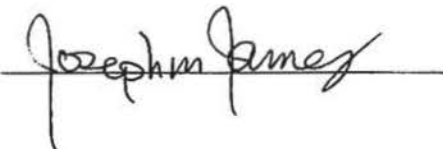
 J.

Exhibit 36

EMERY CELLI BRINCKERHOFF & ABADY LLP

RICHARD D. EMERY
ANDREW G. CELLI, JR.
MATTHEW D. BRINCKERHOFF
JONATHAN S. ABADY
EARL S. WARD
ILANN M. MAAZEL
HAL R. LIEBERMAN
DANIEL J. KORNSTEIN
O. ANDREW F. WILSON
ELIZABETH S. SAYLOR
DEBRA L. GREENBERGER
ZOE SALZMAN
SAM SHAPIRO
ALISON FRICK
DAVID LEBOWITZ
HAYLEY HOROWITZ
DOUGLAS E. LIEB
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CHARLES J. OGLETREE, JR.
DIANE L. HOUK

November 30, 2016

Deputy Commissioner Fred Voigt
County Board of Elections
City Hall, Room 142
1400 John F Kennedy Blvd.
Philadelphia, PA 19107

Dear Mr. Voigt:

We represent presidential candidate Jill Stein, in support of hundreds of Philadelphia voters who have sought a recount in Philadelphia of the 2016 vote for President and Senate. I write to explain why the Commission has the authority and the duty to permit forensic examination by independent experts of the election management computers and a sampling of the electronic voting machines and removable media used in the 2016 general election.

One of the statutory duties of the Commission is “to inspect systematically and thoroughly the conduct of primaries and elections in the several election districts of the county to the end that primaries and elections may be honestly, efficiently, and uniformly conducted.” 25 P.S. 2642(g). To that end, the Commission has broad powers, including the power

- (g) to inspect systematically and thoroughly the conduct of . . . elections in the several election districts of the county to the end that . . . elections may be honestly, efficiently, and uniformly conducted;
- (i) To investigate election frauds, irregularities and violations of this act; and
- (o) To perform such other duties as may be prescribed by law.

25 Pa. Stat. Ann. § 2642 (West).

Candidates Are Statutorily “Entitled” to “Examine” the DRE Electronic Voting System

The rights of candidates during recounts are equally broad: “Any candidate, attorney or

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Page 2

watcher present at any recount of ballots or recanvass of voting machines *shall be entitled to examine . . . the voting machine and to raise any objections regarding the same*, which shall be decided by the county board, subject to appeal, in the manner provided by this act.” 25 P.S. 2650(c) (italics added.) The statute does not define “examine,” but plainly an examination is considerably more searching than watching a recanvass. To examine means “to inspect closely,” to “test the condition of,” to “inquire into carefully.” <http://www.merriam-webster.com/dictionary/examine>.

Philadelphia of course uses a DRE electronic voting system. Jill Stein is entitled under the statute to “test the condition” of the DRE system, and to “inspect” it “closely.” That necessarily *requires* a forensic examination of the DRE software, removable media, and electronic management system. The only way to “test the condition” of the DRE system is to examine the software and electronic audit logs of the system. “Paperless DRE voting machines do not create any physical record of each vote, so forensic examination of the equipment is the only way to assure that the machines were not manipulated in a cyberattack.” Halderman Affidavit (attached to the petitions) ¶ 15. An observer watching a recanvassing is like a doctor watching a patient. In neither case can anyone give a clean bill of health. It would be election malpractice.

Finally, there is no reason why a forensic examination should itself compromise the vote tally. As an initial matter, a great deal of the examination can be done simply by examining the central election management system, before deciding whether it is even necessary to examine the machines themselves.

The statute is plain, as is the duty of the Board. Ms. Stein, by her representatives, is entitled to examine the DRE voting system used in Philadelphia. We have top computer experts ready to do so, on one day’s notice, under the supervision of the Board. Ms. Stein will even pay for these experts. The only thing standing between a voter and the election result is the DRE system. The system must be examined.

In a Voter-Initiated Recount, the Board Can Also “Open” the DRE System

As noted, entirely independent of the method of the recount, candidates have the statutory right to examine the DRE electronic voting system. In addition, the Board itself can engage in this sort of audit as part of the recount.

Under 25 P.S. 3154(e)(4), in a voter-initiated recount where, as here, electronic voting systems without paper records were used, the procedure used for the recount or recanvass shall be “*similar* to the procedure specified in [Section 3154(e)(1)] for voting machines.” “Similar” is not defined. The procedure specified for voting machines in Section 3154(e)(1) is to “(A) make a record of the number of the seal upon the voting machine and the number on the protective counter or other device; (B) make visible the registering counters of such machine; and (C) without unlocking the machine against voting, recanvass the vote cast on the machine.” 25 P.S. 3154(e)(1)(i)(A)-(4).

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Page 3

The definition of “voting machines” in the act refers to the old style mechanical lever machines, not to electronic voting machines. See Article XI (“Voting Machines”) & 25 P.S. 3001. It is noteworthy that Section 3154(e)(1) prohibits unlocking a voting machine only “against *voting*”; a machine can be unlocked for any other reason. Similarly, a DRE electronic voting system can be “unlocked,” opened, examined, as long as it does not itself interfere with the computation of the vote.

In addition, unlike a lever voting machine, visual inspection of the outside of a paperless direct recording electronic voting machine like the Shouptronic used in Philadelphia cannot yield any useful information. A meaningful examination requires access to the electronic components that record and tally votes: electronic firmware, software, audit logs, and the contents of removable media that move back and forth between election management computers and DREs—in other words, a forensic examination by computer scientists who have studied electronic voting systems.

The Supreme Court of Pennsylvania Gives the Board Broad Power to Permit Forensic Examination of the DRE System

“Nothing can be more vital towards the accomplishment of an honest and just selection than the ascertainment of the intention of the voter.” *Appeal of McCracken*, 370 Pa. 562, 566 (1952). Mere canvassing of the DRE voting machines is insufficient to fulfill the Board’s “apparent and impelling” duty to ascertain[] *for whom* votes were cast.” *McCracken*, 370 Pa. at 566 (emphasis in original). As the Pennsylvania Supreme Court held, “[i]n the computation of the vote, [the Board’s] functions are not limited to those of a humanized adding machine. The Board is not a multiple comptometer.” *Id.* at 565. Rather, “canvassing and computing necessarily embrace acts of discretion.” *Id.*; see *In re Recount of Ballots of Rome Twp., Crawford Cty.*, 397 Pa. 331, 332 (1959) (the Pennsylvania Election Code is “a *highly remedial statute* which should be *liberally construed* in order to secure a proper computation of the votes cast at an election.”).

“There could scarcely be a duty more apparent and impelling on an Election Board than that of ascertaining *for whom* votes were cast.” *McCracken*, 370 Pa. at 565. In counties with optical scan ballots, the Board can fulfill that “impelling” duty by manually counting the papers ballots. Montgomery County, though, has no paper ballots. Without paper verification, the *only* way for the Board to fulfill that duty is to permit a complete, sophisticated forensic analysis by computer experts of DRE machines, removable media, and the election management computers used to program the machines and tally results.

“The needs of our democracy require accurate and rapid ascertainment of the people’s will. And it is for that reason that the Legislature has entrusted the County Board of Elections with plenary powers in the administration of the election code.” *McCracken*, 370 Pa. at 565. In this case, in this election, and with these machines, the only way to ensure the integrity of the vote in this county is a comprehensive forensic exam.

EMERY CELLI BRINCKERHOFF & ABADY LLP

Page 4

Conclusion: The Board Should and Must Permit A Forensic Examination of the DRE System

We therefore request that, as part of the recanvass and recount scheduled to commence on December 2, 2016, the Commission permit forensic examination of the DRE electronic voting system. In addition, and in support of this request, attached please find the affidavits of leading computer experts Harri Hursti, Daniel Lopresti, Ronald Rivest, Poorvi Vora, and Dan Wallach, all of which speak to the vulnerabilities of electronic voting systems, including the DRE system used in Philadelphia in the 2016 election.

Respectfully submitted,

/s/

Ilann M. Maazel*

* *pro hac vice* pending

Exhibit 37

**IN THE COMMONWEALTH COURT OF PENNSYLVANIA
HARRISBURG, PENNSYLVANIA**

**In re: The Matter of the 2016 Presidential Election: Docket No:
: ELECTION MATTER**

CLASS II ELECTION CONTEST PURSUANT TO 25 P.S. § 3291 AND § 3351

AND NOW, come Petitioners, One Hundred (100) or more registered voters of the Commonwealth of Pennsylvania, by and through their counsel, Lawrence M. Otter, Esquire, and file the within Petition and, in support thereof, avers as follows:

1. Jurisdiction of this Court is founded upon **25 P.S. § 3351**, wherein One Hundred (100) or more registered voters of the Commonwealth of Pennsylvania, have verified this petition.
2. The Petitioners herein are duly-registered electors and voters in the Commonwealth numbering more than 100, and whose names, addresses and voting precincts are included within their individual verifications attached hereto. Each of the Petitioners voted in their assigned district in the election on November 8, 2016.
3. Upon information and belief, Petitioners believe that there is a legitimate and good faith basis to contest the Presidential Election in the Commonwealth, based upon the findings of Alex Halderman, a leading national expert in computer science and voting systems, and the findings and outcomes of the recounts that are expected to occur over the next several days.
4. Pennsylvania law requires that any Petition to Contest an election be filed within twenty (20) days after the election. 25 P. S. § 3456. November 28, 2016, being the twentieth day after the Presidential election, Petitioners file this Petition to Contest to protect their right to substantively contest the 2016 Presidential Election.

5. To the best of Petitioners' knowledge and belief, the 2016 Presidential Election was illegal and the return thereof was not correct.
6. The basis for the Petitioners' belief that the 2016 Presidential Election was illegal is: (i) the affidavit of Alex Halderman, which is annexed hereto as Exhibit A, and which outlines the vulnerabilities of the electronic voting systems used within the Commonwealth to interference or hacking; (ii) public reports of computer hacking aimed at the Democratic National Committee (DNC) and the election systems in Illinois and Arizona; and (iii) the discontinuity between pre-election polls and the result as reported by the media. According to published reports, the computer intrusions of the DNC and other election-related sites originated with a foreign government.
7. Based on the foregoing, Petitioners have grave concerns about the integrity of electronic voting machines used in their districts. *See Ex. A* (attached).
8. Further evidence supportive of Petitioners' concern may emerge from the recounts being requested across the Commonwealth today and in other states. In fact, the very purpose of the recounts now being requested, Petitioners believe, is or should be to determine if computer intrusions or hacking of electronic election systems impacted the results in the 2016 Presidential Election.

WHEREFORE, the Petitioners hereby request the following relief:

1. Leave be granted to Petitioners to amend and supplement the record pursuant to **25 P.S. § 3457** here pending the outcomes and findings of the recounts in various precincts in several counties throughout the Commonwealth; and

2. Pursuant to **25 P.S. § 3459**, Bond in this matter be set at \$25,000.00 by surety or cash.
3. The Court grant all such other relief as may be just and proper, including a full recount of the 2016 Presidential Election in all counties in the Commonwealth to determine the true winner of that Election.

Respectfully submitted,

/s/ LAWRENCE M. OTTER, ESQ.

LAWRENCE M. OTTER, ESQUIRE
ATTORNEY FOR PETITIONERS
PA ATTORNEY ID 31383
PO Box 575
SILVERDALE, PA 18901
267-261-2984
Email: larryotter@hotmail.com

Date: November 28, 2016
Harrisburg, PA

Of counsel:
Emery Celli Brimcerhoff & Abady, LLP
600 Fifth Avenue
New York NY 10019
212-763-5000

by: Andrew G. Celli, Jr.*
Ilann M. Maazel*
Alison Frick*
Douglas Lieb*

* pro hac vice pending

VERIFICATION

I hereby depose and say that the statements in the foregoing **CLASS II ELECTION CONTEST PURSUANT TO 25 P.S § 3291 AND § 3351** are true and correct to the best of my knowledge, information and belief. I voted in the General I understand that this statement is made subject to the penalties of 18 Pa. C. S. Sec 4904 relating to unsworn falsification to authorities.

/s/ Lawrence M. Otter

Lawrence M. Otter
Hilltown Twp.,
Blooming Glen 3
Bucks County, PA 18944

EXHIBIT A

AFFIDAVIT OF J. ALEX HALDERMAN

J. ALEX HALDERMAN, being duly sworn, deposes and says the following under penalty of perjury:

1. My name is J. Alex Halderman. I am a Professor of Computer Science and Engineering and the Director of the Center for Computer Security and Society at the University of Michigan in Ann Arbor, Michigan.

2. I have a Ph.D., a Master's Degree, and a Bachelor's Degree in Computer Science, all from Princeton University.

3. My research focuses on computer security and privacy, with an emphasis on problems that broadly impact society and public policy. Among my areas of research are software security, data privacy, and electronic voting.

4. I have published peer-reviewed research analyzing the security of electronic voting systems used in Pennsylvania, other U.S. states, and other countries. I was part of a team of experts commissioned by the California Secretary of State to conduct a "Top-to-Bottom" review of the state's electronic voting systems. I have also investigated methods for improving the security of electronic voting, such as efficient techniques for testing whether electronic vote totals match paper vote records.

5. I have published numerous other peer-reviewed papers in these areas of research. My full curriculum vitae, including a list of honors and awards, research projects, and publications, is attached as Exhibit A.

Context: Cyberattacks and the 2016 Presidential Election

6. The 2016 presidential election was subject to unprecedented cyberattacks apparently intended to interfere with the election. This summer, attackers broke into the email

system of the Democratic National Committee and, separately, into the email account of John Podesta, the chairman of Secretary Clinton's campaign. Exhibits B and C. The attackers leaked private messages from both hacks. Attackers also infiltrated the voter registration systems of two states, Illinois and Arizona, and stole voter data. Exhibit D. The Department of Homeland Security has stated that senior officials in the Russian government commissioned these attacks. Exhibit E. Attackers attempted to breach election offices in more than 20 other states. Exhibit F.

7. Russia has sophisticated cyber-offensive capabilities, and it has shown a willingness to use them to hack elections elsewhere. For instance, according to published reports, during the 2014 presidential election in Ukraine, attackers linked to Russia sabotaged Ukraine's vote-counting infrastructure, and Ukrainian officials succeeded only at the last minute in defusing vote-stealing malware that could have caused the wrong winner to be announced. Exhibit G. Countries other than Russia also have similarly sophisticated cyberwarfare capabilities.

8. If a foreign government were to attempt to hack American voting machines to influence the outcome of a presidential election, one might expect the attackers to proceed as follows. First, the attackers might probe election offices well in advance to find ways to break into the computers. Next, closer to the election, when it was clear from polling data which states would have close electoral margins, the attackers might spread malware into voting machines into some of these states, manipulating the machines to shift a few percent of the vote to favor their desired candidate. This malware would likely be designed to remain inactive during pre-election tests, perform its function during the election, and then erase itself after the polls closed. One would expect a skilled attacker's work to leave no visible signs, other than a

surprising electoral outcome in which results in several close states differed from pre-election polling.

The Vulnerability of American Voting Machines to Cyberattack

9. As I and other experts have repeatedly documented in peer-reviewed and state-sponsored research, American voting machines have serious cybersecurity problems. Voting machines are computers with reprogrammable software. An attacker who can modify that software by infecting the machines with malware can cause the machines to provide any result of the attacker's choosing. As I have demonstrated in laboratory tests, in just a few seconds, anyone can install vote-stealing malware on a voting machine that silently alters the electronic records of every vote.¹

10. Whether voting machines are connected to the Internet is irrelevant. Shortly before each election, poll workers copy the ballot design from a regular desktop computer in a government office and use removable media (akin to the memory card in a digital camera) to load the ballot design onto each machine. That initial computer is almost certainly not well enough secured to guard against attacks by foreign governments. If technically sophisticated attackers infect that computer, they can spread vote-stealing malware to every voting machine in the area. Technically sophisticated attackers can accomplish this with ease.

11. While the vulnerabilities of American voting machines have been known for some time, states' responses to these vulnerabilities have been patchy and inconsistent at best. Many states, including Pennsylvania, continue to use out-of-date machines that are known to be insecure.

¹ A video documenting this result is publicly available at <https://youtu.be/aZws98jw67g>.

Where Paper is Available, Examining the Paper Record Is the Only Way to Ensure the Integrity of the Result; For Paperless DRE Machines, Forensic Examination is the Only Way to Ensure the Integrity of the Result

12. Paper ballots are the best and most secure technology available for casting votes. Optical scan voting allows the voter to fill out a paper ballot that is scanned and counted by a computer. Electronic voting machines with voter-verified paper audit trails allow the voter to review a printed record of the vote he has just cast on a computer. Only a paper record documents the vote in a manner that cannot later be modified by malware or other forms of cyberattacks.

13. One explanation for the results of the 2016 presidential election is that cyberattacks influenced the result. This explanation is plausible, in light of other known cyberattacks intended to affect the outcome of the election; the profound vulnerability of American voting machines to cyberattack; and the fact that a skilled attacker would leave no outwardly visible evidence of an attack other than an unexpected result.

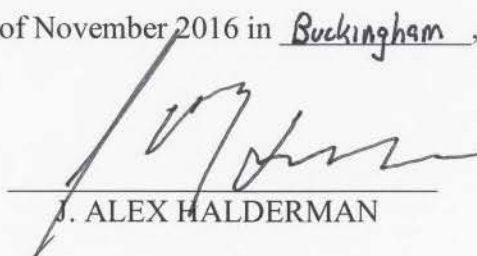
14. The only way to determine whether a cyberattack affected the outcome of the 2016 presidential election is to examine the available physical evidence—that is, to count the paper ballots and paper audit trail records, and review the voting equipment, to ensure that the votes cast by actual voters match the results determined by the computers.

15. For ballots cast through optical scanners, a manual recount of the paper ballots, without relying on the electronic equipment, must occur. Using the electronic equipment to conduct the recount, even after first evaluating the machine through a test deck, is insufficient. Attackers intending to commit a successful cyberattack could, and likely would, create a method to undermine any pre-tests. For votes cast on electronic voting machines, such as DREs, the paper audit trail records (if any) must be counted, since the electronic records stored in the machines

could have been manipulated in an attack. But this is insufficient to uncover many types of hacking and malware. Voting equipment that might yield forensic evidence of an attack includes the voting machines, removable media, and election management system computers. All of these must be forensically analyzed to ensure the integrity of the result. Paperless DRE voting machines do not create any physical record of each vote, so forensic examination of the equipment is the only way to assure that the machines were not manipulated in a cyberattack. Paper ballots, paper audit trails, and voting equipment will only be examined in this manner if there is a recount.

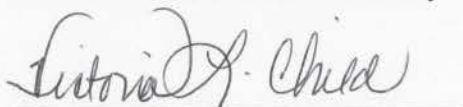
16. A recount is the best way, and indeed the only way, to ensure public confidence that the results are accurate, authentic, and untainted by interference. It will also set a precedent that may provide an important deterrent against cyberattacks on future elections.

This affidavit was executed on the 25th day of November 2016 in Buckingham, Pennsylvania.



J. ALEX HALDERMAN

Sworn to before me this 25th day of November 2016.



Notary Public

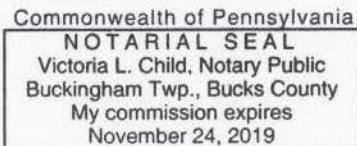


Exhibit A

J. Alex Halderman

Professor, Computer Science and Engineering
University of Michigan

November 4, 2016

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Ann Arbor, MI 48109 USA
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Research Overview

My research focuses on computer security and privacy, with an emphasis on problems that broadly impact society and public policy. Topics that interest me include software security, network security, data privacy, anonymity, surveillance, electronic voting, censorship resistance, digital rights management, computer forensics, ethics, and cybercrime. I'm also interested in the interaction of technology with law, regulatory policy, and international affairs.

Selected Projects

'16: Let's Encrypt HTTPS certificate authority	'10: Vulnerabilities in India's e-voting machines
'15: Weak Diffie-Hellman and the Logjam attack	'10: Reshaping developers' security incentives
'14: Understanding Heartbleed's aftermath	'09: Analysis of China's Green Dam censorware
'14: Security problems in full-body scanners	'09: Fingerprinting paper with desktop scanners
'14: Analysis of Estonia's Internet voting system	'08: Cold-boot attacks on encryption keys
'13: ZMap Internet-wide network scanner	'07: California's "top-to-bottom" e-voting review
'12: Widespread weak keys in network devices	'07: Machine-assisted election auditing
'11: Anticensorship in the network infrastructure	'06: The Sony rootkit: DRM's harmful side effects
'10: Hacking Washington D.C.'s Internet voting	'03: Analysis of MediaMax "shift key" DRM

Positions

- University of Michigan, Ann Arbor, MI
Department of Electrical Engineering and Computer Science,
Computer Science and Engineering Division
Professor ... (2016–present)
Associate Professor ... (2015–2016)
Assistant Professor ... (2009–2015)
Director, Center for Computer Security and Society (2014–present)

Education

- Ph.D. in Computer Science, Princeton University, June 2009
Advisor: Ed Felten
Thesis: *Investigating Security Failures and their Causes: An Analytic Approach to Computer Security*
Doctoral committee: Andrew Appel, Adam Finkelstein, Brian Kernighan, Avi Rubin
- M.A. in Computer Science, Princeton University, June 2005
- A.B. in Computer Science, *summa cum laude*, Princeton University, June 2003

Honors and Awards

- Pwnie Award in the category of “Best Cryptographic Attack” for “DROWN: Breaking TLS using SSLv2,” Black Hat 2016
- Finalist for 2016 Facebook Internet Defense Prize for “DROWN: Breaking TLS using SSLv2”
- Named one of Popular Science’s “Brilliant 10” (2015) (“each year *Popular Science* honors the brightest young minds reshaping science, engineering, and the world”)
- **Best Paper Award** of the 22nd ACM Conference on Computer and Communications Security for “Imperfect Forward Secrecy: How Diffie-Hellman Fails in Practice” (2015)
- Pwnie Award in the category of “Most Innovative Research” for “Imperfect Forward Secrecy: How Diffie-Hellman Fails in Practice,” Black Hat 2015
- IRTF Applied Networking Research Prize for “Neither Snow Nor Rain Nor MITM. . . An Empirical Analysis of Email Delivery Security” (2015)
- Alfred P. Sloan Research Fellowship (2015)
- University of Michigan College of Engineering 1938 E Award (2015) (“recognizes an outstanding teacher in both elementary and advanced courses, an understanding counselor of students who seek guidance in their choice of a career, a contributor to the educational growth of his/her College, and a teacher whose scholarly integrity pervades his/her service and the profession of Engineering”)
- Morris Wellman Faculty Development Assistant Professorship (2015) (“awarded to a junior faculty member to recognize outstanding contributions to teaching and research”)
- **Best Paper Award** of the 14th ACM Internet Measurement Conference for “The Matter of Heartbleed” (2014)
- **Best Paper Award** of the 21st USENIX Security Symposium for “Mining Your Ps and Qs: Detection of Widespread Weak Keys in Network Devices” (2012)
- Runner-up for 2012 PET Award for Outstanding Research in Privacy Enhancing Technologies for “Telex: Anticensorship in the Network Infrastructure” (2012)
- John Gideon Memorial Award from the Election Verification Network for contributions to election verification (2011)
- **Best Student Paper** of the 17th USENIX Security Symposium for “Lest We Remember: Cold Boot Attacks on Encryption Keys” (2008)
- Pwnie Award in the category of “Most Innovative Research” for “Lest We Remember: Cold Boot Attacks on Encryption Keys,” Black Hat 2008
- Charlotte Elizabeth Procter Honorific Fellowship, Princeton University (2007) (“awarded in recognition of outstanding performance and professional promise, and represents high commendation from the Graduate School”)
- National Science Foundation Graduate Research Fellowship (2004–2007)

- Best Paper Award of the 8th International Conference on 3D Web Technology for “Early Experiences with a 3D Model Search Engine” (2003)
- Princeton Computer Science Department Senior Award (2003)
- Accenture Prize in Computer Science, Princeton University (2002)
- Martin A. Dale Summer Award, Princeton University (2000)
- USA Computing Olympiad National Finalist (1996 and 1997)

Refereed Conference Publications

[1] The Security Impact of HTTPS Interception

Zakir Durumeric, Zane Ma, Drew Springall, Richard Barnes, Nick Sullivan, Elie Bursztein, Michael Bailey, J. A. Halderman, and Vern Paxson
To appear in *Proc. 24th Network and Distributed Systems Symposium (NDSS)*, February 2017.
Acceptance rate: 16%, 68/423.

[2] Measuring Small Subgroup Attacks Against Diffie-Hellman

Luke Valenta, David Adrian, Antonio Sanso, Shaanan Cohney, Joshua Fried, Marcella Hastings, J. A. Halderman, and Nadia Heninger
To appear in *Proc. 24th Network and Distributed Systems Symposium (NDSS)*, February 2017.
Acceptance rate: 16%, 68/423.

[3] An Internet-Wide View of ICS Devices

Ariana Mirian, Zane Ma, David Adrian, Matthew Tischer, Thasphon Chuenchujit, Tim Yardley, Robin Berthier, Josh Mason, Zakir Durumeric, J. A. Halderman and Michael Bailey
To appear in *Proc. 14th IEEE Conference on Privacy, Security, and Trust (PST)*, December 2016.

[4] Implementing Attestable Kiosks

Matthew Bernhard, J. A. Halderman, and Gabe Stocco
To appear in *Proc. 14th IEEE Conference on Privacy, Security, and Trust (PST)*, December 2016.

[5] Measuring the Security Harm of TLS Crypto Shortcuts

Drew Springall, Zakir Durumeric, and J. A. Halderman
To appear in *Proc. 16th ACM Internet Measurement Conference (IMC)*, Santa Monica, Nov. 2016.
Acceptance rate: 25%, 46/184.

[6] Towards a Complete View of the Certificate Ecosystem

Benjamin VanderSloot, Johanna Amann, Matthew Bernhard, Zakir Durumeric, Michael Bailey, and J. A. Halderman
To appear in *Proc. 16th ACM Internet Measurement Conference (IMC)*, Santa Monica, Nov. 2016.
Acceptance rate: 25%, 46/184.

- [7] **DROWN: Breaking TLS using SSLv2**
Nimrod Aviram, Sebastian Schinzel, Juraj Somorovsky, Nadia Heninger, Maik Dankel, Jens Steube, Luke Valenta, David Adrian, J. A. Halderman, Viktor Dukhovni, Emilia Käsper, Shaanan Cohney, Susanne Engels, Christof Paar, and Yuval Shavitt
Proc. 25th USENIX Security Symposium, Austin, TX, August 2016.
Acceptance rate: 16%, 72/463.
Tied for highest ranked submission.
Pwnie award for best cryptographic attack.
Facebook Internet Defense Prize finalist.
- [8] **FTP: The Forgotten Cloud**
Drew Springall, Zakir Durumeric, and J. A. Halderman
Proc. 46th IEEE/IFIP International Conference on Dependable Systems and Networks (DSN), Toulouse, June 2016.
Acceptance rate: 22%, 58/259.
- [9] **Android UI Deception Revisited: Attacks and Defenses**
Earlence Fernandes, Qi Alfred Chen, Justin Paupore, Georg Essl, J. A. Halderman, Z. Morley Mao, and Atul Prakash
Proc. 20th International Conference on Financial Cryptography and Data Security (FC), Barbados, February 2016.
- [10] **Imperfect Forward Secrecy: How Diffie-Hellman Fails in Practice**
David Adrian, Karthikeyan Bhargavan, Zakir Durumeric, Pierrick Gaudry, Matthew Green, J. A. Halderman, Nadia Heninger, Drew Springall, Emmanuel Thomé, Luke Valenta, Benjamin VanderSloot, Eric Wustrow, Santiago Zanella-Béguélin, and Paul Zimmermann
Proc. 22nd ACM Conference on Computer and Communications Security (CCS), Denver, CO, October 2015.
Acceptance rate: 19%, 128/659.
Best paper award. Perfect review score.
Pwnie award for most innovative research.
- [11] **Censys: A Search Engine Backed by Internet-Wide Scanning**
Zakir Durumeric, David Adrian, Ariana Mirian, Michael Bailey, and J. A. Halderman
Proc. 22nd ACM Conference on Computer and Communications Security (CCS), Denver, CO, October 2015.
Acceptance rate: 19%, 128/659.
- [12] **Neither Snow Nor Rain Nor MITM... An Empirical Analysis of Email Delivery Security**
Zakir Durumeric, David Adrian, Ariana Mirian, James Kasten, Elie Bursztein, Nicholas Lidzorski, Kurt Thomas, Vijay Eranti, Michael Bailey, and J. A. Halderman
Proc. 15th ACM Internet Measurement Conference (IMC), Tokyo, October 2015.
Acceptance rate: 26%, 44/169.
IRTF Applied Networking Research Prize winner.

- [13] **The New South Wales iVote System: Security Failures and Verification Flaws in a Live Online Election**
J. A. Halderman and Vanessa Teague
Proc. 5th International Conference on E-Voting and Identity (VoteID), Bern, Switzerland, September 2015.
- [14] **The Matter of Heartbleed**
Zakir Durumeric, Frank Li, James Kasten, Johanna Amann, Jethro Beekman, Mathias Payer, Nicolas Weaver, David Adrian, Vern Paxson, Michael Bailey, and J. A. Halderman
Proc. 14th ACM Internet Measurement Conference (IMC), November 2014.
Acceptance rate: 23%, 43/188
Best paper award.
Honorable mention for Best dataset award.
- [15] **Security Analysis of the Estonian Internet Voting System**
Drew Springall, Travis Finkenauer, Zakir Durumeric, Jason Kitcat, Harri Hursti, Margaret MacAlpine, and J. A. Halderman
Proc. 21st ACM Conference on Computer and Communications Security (CCS), Scottsdale, AZ, November 2014.
Acceptance rate: 19%, 114/585.
Highest ranked submission.
- [16] **Efficiently Auditing Multi-Level Elections**
Joshua A. Kroll, Edward W. Felten, and J. A. Halderman
Proc. 6th International Conference on Electronic Voting (EVOTE), Lochau, Austria, October 2014.
- [17] **Security Analysis of a Full-Body Scanner**
Keaton Mowery, Eric Wustrow, Tom Wypych, Corey Singleton, Chris Comfort, Eric Rescorla, Stephen Checkoway, J. A. Halderman, and Hovav Shacham
Proc. 23rd USENIX Security Symposium, San Diego, CA, August 2014.
Acceptance rate: 19%, 67/350.
- [18] **TapDance: End-to-Middle Anticensorship without Flow Blocking**
Eric Wustrow, Colleen Swanson, and J. A. Halderman
Proc. 23rd USENIX Security Symposium, San Diego, CA, August 2014.
Acceptance rate: 19%, 67/350.
- [19] **An Internet-Wide View of Internet-Wide Scanning**
Zakir Durumeric, Michael Bailey, and J. A. Halderman
Proc. 23rd USENIX Security Symposium, San Diego, CA, August 2014.
Acceptance rate: 19%, 67/350.
- [20] **Elliptic Curve Cryptography in Practice**
Joppe W. Bos, J. A. Halderman, Nadia Heninger, Jonathan Moore, Michael Naehrig, and Eric Wustrow
Proc. 18th Intl. Conference on Financial Cryptography and Data Security (FC), March 2014.
Acceptance rate: 22%, 31/138.

- [21] **Outsmarting Proctors with Smartwatches: A Case Study on Wearable Computing Security**
Alex Migicovsky, Zakir Durumeric, Jeff Ringenberg, and J. A. Halderman
Proc. 18th Intl. Conference on Financial Cryptography and Data Security (FC), March 2014.
Acceptance rate: 22%, 31/138.
- [22] **Analysis of the HTTPS Certificate Ecosystem**
Zakir Durumeric, James Kasten, Michael Bailey, and J. A. Halderman
Proc. 13th ACM Internet Measurement Conference (IMC), Barcelona, Spain, October 2013.
Acceptance rate: 24%, 42/178.
- [23] **ZMap: Fast Internet-Wide Scanning and its Security Applications**
Zakir Durumeric, Eric Wustrow, and J. A. Halderman
Proc. 22nd USENIX Security Symposium, Washington, D.C., August 2013.
Acceptance rate: 16%, 45/277.
- [24] **CAGE: Taming Certificate Authorities by Inferring Restricted Scopes**
James Kasten, Eric Wustrow, and J. A. Halderman
Proc. 17th Intl. Conference on Financial Cryptography and Data Security (FC), April 2013.
- [25] **Mining Your Ps and Qs: Detection of Widespread Weak Keys in Network Devices**
Nadia Heninger, Zakir Durumeric, Eric Wustrow, and J. A. Halderman
Proc. 21st USENIX Security Symposium, pages 205–220, Bellevue, WA, August 2012.
Acceptance rate: 19%, 43/222.
Best paper award.
Named one of *Computing Reviews'* Notable Computing Books and Articles of 2012.
- [26] **Attacking the Washington, D.C. Internet Voting System**
Scott Wolchok, Eric Wustrow, Dawn Isabel, and J. A. Halderman
In Angelos D. Keromytis, editor, *Financial Cryptography and Data Security (FC)*, volume 7397 of *Lecture Notes in Computer Science*, pages 114–128. Springer, 2012.
Acceptance rate: 26%, 23/88.
Election Verification Network John Gideon Memorial Award.
- [27] **Telex: Anticensorship in the Network Infrastructure**
Eric Wustrow, Scott Wolchok, Ian Goldberg, and J. A. Halderman
Proc. 20th USENIX Security Symposium, pages 459–474, San Francisco, CA, August 2011.
Acceptance rate: 17%, 35/204.
Runner-up for 2012 PET Award for Outstanding Research in Privacy Enhancing Technologies.
- [28] **Internet Censorship in China: Where Does the Filtering Occur?**
Xueyang Xu, Z. Morley Mao, and J. A. Halderman
In Neil Spring and George F. Riley, editors, *Passive and Active Measurement*, volume 6579 of *Lecture Notes in Computer Science*, pages 133–142. Springer, 2011.
Acceptance rate: 29%, 23/79.

- [29] **Absolute Pwnage: Security Risks of Remote Administration Tools**
Jay Novak, Jonathan Stribley, Kenneth Meagher, and J. A. Halderman
In George Danezis, editor, *Financial Cryptography and Data Security (FC)*, volume 7035 of *Lecture Notes in Computer Science*, pages 77–84. Springer, 2011.
Acceptance rate: 20%, 15/74.
- [30] **Security Analysis of India’s Electronic Voting Machines**
Scott Wolchok, Eric Wustrow, J. A. Halderman, Hari K. Prasad, Arun Kankipati, Sai Krishna Sakhamuri, Vasavya Yagati, and Rop Gonggrijp
Proc. 17th ACM Conference on Computer and Communications Security (CCS), pages 1–14. ACM, Chicago, IL, October 2010.
Acceptance rate: 17%, 55/320.
Highest ranked submission.
- [31] **Sketcha: A Captcha Based on Line Drawings of 3D Models**
Steve Ross, J. A. Halderman, and Adam Finkelstein
Proc. 19th International World Wide Web Conference (WWW), pages 821–830. ACM, Raleigh, NC, April 2010.
Acceptance rate: 12%, 91/754.
- [32] **Defeating Vanish with Low-Cost Sybil Attacks Against Large DHTs**
Scott Wolchok, Owen S. Hofmann, Nadia Heninger, Edward W. Felten, J. A. Halderman, Christopher J. Rossbach, Brent Waters, and Emmett Witchel
In *Proc. 17th Network and Distributed System Security Symposium (NDSS)*. Internet Society, San Diego, CA, February–March 2010.
Acceptance rate: 15%, 24/156.
- [33] **Fingerprinting Blank Paper Using Commodity Scanners**
William Clarkson, Tim Weyrich, Adam Finkelstein, Nadia Heninger, J. A. Halderman, and Edward W. Felten
IEEE Symposium on Security and Privacy (Oakland), pages 301–314. IEEE, May 2009.
Acceptance rate: 10%, 26/254.
- [34] **Lest We Remember: Cold-Boot Attacks on Encryption Keys**
J. A. Halderman, Seth D. Schoen, Nadia Heninger, William Clarkson, William Paul, Joseph A. Calandrino, Ariel J. Feldman, Jacob Appelbaum, and Edward W. Felten
Proc. 17th USENIX Security Symposium, pages 45–60, San Jose, CA, July 2008.
Acceptance rate: 16%, 27/170.
Best student paper award.
Pwnie award for most innovative research.
- [35] **Harvesting Verifiable Challenges from Oblivious Online Sources**
J. A. Halderman and Brent Waters
Proc. 14th ACM Conference on Computer and Communications Security (CCS), pages 330–341. ACM, Washington, D.C., October 2007.
Acceptance rate: 18%, 55/302.

- [36] **Lessons from the Sony CD DRM Episode**
J. A. Halderman and Edward W. Felten
Proc. 15th USENIX Security Symposium, pages 77–92, Vancouver, BC, August 2006.
Acceptance rate: 12%, 22/179.
- [37] **A Convenient Method for Securely Managing Passwords**
J. A. Halderman, Brent Waters, and Edward W. Felten
Proc. 14th International World Wide Web Conference (WWW), pages 471–479. ACM, Chiba, Japan, May 2005.
Acceptance rate: 14%, 77/550.
- [38] **New Client Puzzle Outsourcing Techniques for DoS Resistance**
Brent Waters, Ari Juels, J. A. Halderman, and Edward W. Felten
Proc. 11th ACM Conference on Computer and Communications Security (CCS), pages 246–256. ACM, Washington, D.C., October 2004.
Acceptance rate: 14%, 35/251.
- [39] **Early Experiences with a 3D Model Search Engine**
Patrick Min, J. A. Halderman, Michael Kazhdan, and Thomas Funkhouser
Proc. 8th International Conference on 3D Web Technology (Web3D), pages 7–18. ACM, Saint Malo, France, March 2003.
Best paper award.

Book Chapters

- [40] **Practical Attacks on Real-world E-voting**
J. A. Halderman
In Feng Hao and Peter Y. A. Ryan (Eds.), *Real-World Electronic Voting: Design, Analysis and Deployment*, pages 145–171, CRC Press, 2016.

Journal Publications

- [41] **Lest We Remember: Cold-Boot Attacks on Encryption Keys**
J. A. Halderman, Seth D. Schoen, Nadia Heninger, William Clarkson, William Paul, Joseph A. Calandrino, Ariel J. Feldman, Jacob Appelbaum, and Edward W. Felten
Communications of the ACM, 52(5):91–98, 2009.
- [42] **A Search Engine for 3D Models**
Thomas Funkhouser, Patrick Min, Michael Kazhdan, Joyce Chen, J. A. Halderman, David P. Dobkin, and David Jacobs
ACM Transactions on Graphics (TOG), 22(1):83–105, 2003.

Refereed Workshop Publications

- [43] **Content-Based Security for the Web**
Alexander Afanasyev, J. A. Halderman, Scott Ruoti, Kent Seamons, Yingdi Yu, Daniel Zappala, and Lixia Zhang
Proc. 2016 New Security Paradigms Workshop (NSPW), September 2016.
- [44] **Umbra: Embedded Web Security through Application-Layer Firewalls**
Travis Finkenauer and J. A. Halderman
Proc. 1st Workshop on the Security of Cyberphysical Systems (WOS-CPS), Vienna, Austria, September 2015.
- [45] **Replication Prohibited: Attacking Restricted Keyways with 3D Printing**
Ben Burgess, Eric Wustrow, and J. A. Halderman
Proc. 9th USENIX Workshop on Offensive Technologies (WOOT), Washington, DC, August 2015.
- [46] **Green Lights Forever: Analyzing the Security of Traffic Infrastructure**
Branden Ghena, William Beyer, Allen Hillaker, Jonathan Pevarnek, and J. A. Halderman
Proc. 8th USENIX Workshop on Offensive Technologies (WOOT), San Diego, CA, August 2014.
- [47] **Zipper ZMap: Internet-Wide Scanning at 10Gbps**
David Adrian, Zakir Durumeric, Gulshan Singh, and J. A. Halderman
Proc. 8th USENIX Workshop on Offensive Technologies (WOOT), San Diego, CA, August 2014.
- [48] **Internet Censorship in Iran: A First Look**
Simurgh Aryan, Homa Aryan, and J. A. Halderman
Proc. 3rd USENIX Workshop on Free and Open Communications on the Internet (FOCI), Washington, D.C., August 2013.
- [49] **Illuminating the Security Issues Surrounding Lights-Out Server Management**
Anthony Bonkoski, Russ Bielawski, and J. A. Halderman
Proc. 7th USENIX Workshop on Offensive Technologies (WOOT), Washington, D.C., August 2013.
- [50] **Crawling BitTorrent DHTs for Fun and Profit**
Scott Wolchok and J. A. Halderman
Proc. 4th USENIX Workshop on Offensive Technologies (WOOT), Washington, D.C., August 2010.
- [51] **Can DREs Provide Long-Lasting Security?
The Case of Return-Oriented Programming and the AVC Advantage**
Steve Checkoway, Ariel J. Feldman, Brian Kantor, J. A. Halderman, Edward W. Felten, and Hovav Shacham
Proc. 2009 USENIX/ACCURATE/IAVoSS Electronic Voting Technology Workshop / Workshop on Trustworthy Elections (EVT/WOTE), Montreal, QC, August 2009.
- [52] **You Go to Elections with the Voting System You Have:
Stop-Gap Mitigations for Deployed Voting Systems**
J. A. Halderman, Eric Rescorla, Hovav Shacham, and David Wagner
In *Proc. 2008 USENIX/ACCURATE Electronic Voting Technology Workshop (EVT)*, San Jose, CA, July 2008.

- [53] **In Defense of Pseudorandom Sample Selection**
Joseph A. Calandrino, J. A. Halderman, and Edward W. Felten
Proc. 2008 USENIX/ACCURATE Electronic Voting Technology Workshop (EVT), San Jose, CA, July 2008.
- [54] **Security Analysis of the Diebold AccuVote-TS Voting Machine**
Ariel J. Feldman, J. A. Halderman, and Edward W. Felten
Proc. 2007 USENIX/ACCURATE Electronic Voting Technology Workshop (EVT), Washington, D.C., August 2007.
- [55] **Machine-Assisted Election Auditing**
Joseph A. Calandrino, J. A. Halderman, and Edward W. Felten
Proc. USENIX/ACCURATE Electronic Voting Technology Workshop (EVT), Washington, D.C., August 2007.
- [56] **Privacy Management for Portable Recording Devices**
J. A. Halderman, Brent Waters, and Edward W. Felten
Proc. 2004 ACM Workshop on Privacy in the Electronic Society (WPES), pages 16–24, ACM, Washington, D.C., October 2004.
Acceptance rate: 22%, 10/45.
- [57] **Evaluating New Copy-Prevention Techniques for Audio CDs**
J. A. Halderman
In Joan Feigenbaum, editor, *Digital Rights Management*, volume 2696 of *Lecture Notes in Computer Science*, pages 101–117. Springer, 2003.

Selected Other Publications

- [58] **The Security Challenges of Online Voting Have Not Gone Away**
Robert Cunningham, Matthew Bernhard, and J. A. Halderman
IEEE Spectrum, November 3, 2016.
- [59] **TIVOS: Trusted Visual I/O Paths for Android**
Earlence Fernandes, Qi Alfred Chen, Georg Essl, J. A. Halderman, Z. Morley Mao, and Atul Prakash
Technical report, Computer Science and Engineering Division, University of Michigan, Ann Arbor, MI, May 2014.
- [60] **Tales from the Crypto Community:
The NSA Hurt Cybersecurity. Now It Should Come Clean**
Nadia Heninger and J. A. Halderman
Foreign Affairs, October 23, 2013.

- [61] **Ethical Issues in E-Voting Security Analysis**
David G. Robinson and J. A. Halderman
In George Danezis, Sven Dietrich, and Kazue Sako, editors, *Financial Cryptography and Data Security*, volume 7126 of *Lecture Notes in Computer Science*, pages 119–130. Springer, 2011.
Invited paper.
- [62] **To Strengthen Security, Change Developers’ Incentives**
J. A. Halderman
IEEE Security & Privacy, 8(2):79–82, March/April 2010.
- [63] **Analysis of the Green Dam Censorware System**
Scott Wolchok, Randy Yao, and J. A. Halderman
Technical report, Computer Science and Engineering Division, University of Michigan, Ann Arbor, MI, June 2009.
- [64] **AVC Advantage: Hardware Functional Specifications**
J. A. Halderman and Ariel J. Feldman
Technical report, TR-816-08, Princeton University Computer Science Department, Princeton, New Jersey, March 2008.
- [65] **Source Code Review of the Diebold Voting System**
J. A. Calandrino, A. J. Feldman, J. A. Halderman, D. Wagner, H. Yu, and W. Zeller
Technical report, California Secretary of State’s “Top-to-Bottom” Voting Systems Review (TTBR), July 2007.
- [66] **Digital Rights Management, Spyware, and Security**
Edward W. Felten and J. A. Halderman
IEEE Security & Privacy, 4(1):18–23, January/February 2006.
- [67] **Analysis of the MediaMax CD3 Copy-Prevention System**
J. A. Halderman
Technical report, TR-679-03, Princeton University Computer Science Department, Princeton, New Jersey, October 2003.

Selected Legal and Regulatory Filings

- [68] **Request for DMCA Exemption: Games with Insecure DRM and Insecure DRM Generally**
Comment to the Librarian of Congress of J. A. Halderman, represented by B. Reid, P. Ohm, H. Surden, and J. B. Bernthal, regarding the U.S. Copyright Office 2008–2010 DMCA Anticircumvention Rulemaking, Dec. 2008.
(*Outcome*: Requested exemption granted in part.)
- [69] **Request for DMCA Exemption for Audio CDs with Insecure DRM**
Comment to the Librarian of Congress of E. Felten and J. A. Halderman, represented by D. Mulligan and A. Perzanowski, regarding the U.S. Copyright Office 2005–2006 DMCA Anticircumvention Rulemaking, Dec. 2005.
(*Outcome*: Requested exemption granted in part.)

Patents

[70] **Controlling Download and Playback of Media Content**

Wai Fun Lee, Marius P. Schilder, Jason D. Waddle, and J. A. Halderman
U.S. Patent No. 8,074,083, issued Dec. 2011.

[71] **System and Method for Machine-Assisted Election Auditing**

Edward W. Felten, Joseph A. Calandrino, and J. A. Halderman
U.S. Patent No. 8,033,463, issued Oct. 2011.

Speaking

Major Invited Talks and Keynotes

– Let’s Encrypt

Invited speaker, TTI/Vanguard conference on Cybersecurity, Washington, D.C., Sept. 28, 2016.

– Elections and Cybersecurity: What Could Go Wrong?

Keynote speaker, 19th Information Security Conference (ISC), Honolulu, September 9, 2016.

– Internet Voting: What Could Go Wrong?

Invited speaker, USENIX Enigma, San Francisco, January 27, 2016.

– Logjam: Diffie-Hellman, Discrete Logs, the NSA, and You

32c3, Hamburg, December 29, 2015.

– The Network Inside Out: New Vantage Points for Internet Security

Invited talk, China Internet Security Conference (ISC), Beijing, September 30, 2015.

– The Network Inside Out: New Vantage Points for Internet Security

Keynote speaker, ESCAR USA (Embedded Security in Cars), Ypsilanti, Michigan, May 27, 2015.

– Security Analysis of the Estonian Internet Voting System.

31c3, Hamburg, December 28, 2014.

– The Network Inside Out: New Vantage Points for Internet Security

Keynote speaker, 14th Brazilian Symposium on Information Security and Computer Systems (SBSeg), Belo Horizonte, Brazil, November 4, 2014.

– Empirical Cryptography: Measuring How Crypto is Used and Misused Online

Keynote speaker, 3rd International Conference on Cryptography and Information Security in Latin America (Latincrypt), Florianópolis, Brazil, September 2014.

– Healing Heartbleed: Vulnerability Mitigation with Internet-wide Scanning

Keynote speaker, 11th Conference on Detection of Intrusions and Malware and Vulnerability Assessment (DIMVA), London, July 10, 2014.

– Fast Internet-wide Scanning and its Security Applications.

30c3, Hamburg, December 28, 2013.

– Challenging Security Assumptions. Three-part tutorial. 2nd TCE Summer School on Computer Security, Technion (Haifa, Israel), July 23, 2013.

- **Verifiably Insecure: Perils and Prospects of Electronic Voting**
Invited talk, Computer Aided Verification (CAV) 2012 (Berkeley, CA), July 13, 2012.
- **Deport on Arrival: Adventures in Technology, Politics, and Power**
Invited talk, 20th USENIX Security Symposium (San Francisco, CA), Aug. 11, 2011.
- **Electronic Voting: Danger and Opportunity**
Keynote speaker, ShmooCon 2008 (Washington, D.C.), Feb. 15, 2008.

Selected Talks (2009–present)

- **The Legacy of Export-grade Cryptography in the 21st Century.** Invited talk, Summer school on real-world crypto and privacy, Croatia, June 9, 2016.
- **Let’s Encrypt: A Certificate Authority to Encrypt the Entire Web.** Invited talk, Cubaconf, Havana, April 25, 2016.
- **Logjam: Diffie-Hellman, Discrete Logs, the NSA, and You.** Invited talk, NYU Tandon School of Engineering, April 8, 2016 [host: Damon McCoy]; Invited talk, UIUC Science of Security seminar, February 9, 2016 [host: Michael Bailey].
- **The Network Inside Out: New Vantage Points for Internet Security.** Invited talk, Qatar Computing Research Institute, Doha, May 24, 2015; Invited talk, University of Chile, Santiago, April 8, 2015; Invited talk, Princeton University, October 15, 2014; Invited talk, U.T. Austin, March 9, 2014.
- **Decoy Routing: Internet Freedom in the Network’s Core.** Invited speaker, Internet Freedom Technology Showcase: The Future of Human Rights Online, New York, Sep. 26, 2015.
- **The New South Wales iVote System: Security Failures and Verification Flaws in a Live Online Election.** 5th International Conference on E-Voting and Identity (VoteID), Bern, Switzerland, Sep. 3, 2015; Invited talk, IT Univ. of Copenhagen, Sep. 1, 2015; Invited talk (with Vanessa Teague), USENIX Journal of Election Technologies and Systems Workshop (JETS), Washington, D.C., Aug. 11, 2015.
- **Security Analysis of the Estonian Internet Voting System.** Invited talk, 5th International Conference on E-Voting and Identity (VoteID), Bern, Switzerland, Sep. 3, 2015; Invited talk, Google, Mountain View, CA, June 3, 2014; Invited talk, Copenhagen University, June 12, 2014.
- **Indiscreet Tweets.** Rump session talk; 24th USENIX Security Symposium, Washington, D.C., August 12, 2015.
- **How Diffie-Hellman Fails in Practice.** Invited talk, IT Univ. of Copenhagen, May 22, 2015.
- **Influence on Democracy of Computers, Internet, and Social Media.** Invited speaker, Osher Lifelong Learning Institute at the University of Michigan, March 26, 2015.
- **E-Voting: Danger and Opportunity.** Invited talk, University of Chile, Santiago, April 7, 2015; Keynote speaker, 14th Brazilian Symposium on Information Security and Computer Systems (SBSeg), Belo Horizonte, Brazil, November 3, 2014; Crypto seminar, University of Tartu, Estonia, October 10, 2013; Invited speaker, US–Egypt Cyber Security Workshop, Cairo, May 28, 2013; Invited speaker, First DemTech Workshop on Voting Technology for Egypt, Copenhagen, May

- 1, 2013; Invited keynote, 8th CyberWatch Mid-Atlantic CCDC, Baltimore, MD, Apr. 10, 2013; Invited speaker, Verifiable Voting Schemes Workshop, University of Luxembourg, Mar. 21, 2013; Invited speaker, MHacks hackathon, Ann Arbor, MI, Feb. 2, 2013; Public lecture, U. Michigan, Nov. 6, 2012.
- **Internet Censorship in Iran: A First Look.** 3rd USENIX Workshop on Free and Open Communications on the Internet (FOCI), Aug. 13, 2013.
 - **Mining Your Ps and Qs: Detection of Widespread Weak Keys in Network Devices.** Invited talk, NSA, Aug. 8, 2013; Invited talk, Taiwan Information Security Center Workshop, National Chung-Hsing University (Taichung, Taiwan), Nov. 16, 2012
 - **Securing Digital Democracy.** U. Maryland, Apr. 8, 2013 [host: Jonathan Katz]; CMU, Apr. 1, 2013 [host: Virgil Gligor]; Cornell, Feb. 28, 2013 [host: Andrew Myers].
 - **Telex: Anticensorship in the Network Infrastructure.** Invited speaker, Academia Sinica (Taipei), Nov. 14, 2012 [host: Bo-Yin Yang]; TRUST Seminar, U.C., Berkeley, Dec. 1, 2011 [host: Galina Schwartz]; Think Conference, Nov. 5, 2011; Ideas Lunch, Information Society Project at Yale Law School, Oct. 26, 2011; Invited speaker, Committee to Protect Journalists Online Press Freedom Summit (San Francisco), Sept. 27, 2011.
 - **Deport on Arrival: Adventures in Technology, Politics, and Power.** Guest lecture, U-M School of Art and Design, Nov 5, 2012 [host: Osman Khan]; Invited speaker, CS4HS Workshop, U. Michigan, Aug. 21, 2012; Invited speaker, U. Michigan IEEE, Feb. 15, 2012.
 - **Attacking the Washington, D.C. Internet Voting System.** Invited speaker, International Foundation for Election Systems (IFES), Nov. 2, 2012 [host: Michael Yard]; Invited speaker, IT University of Copenhagen, May 11, 2012 [host: Carsten Schürmann].
 - **Voter IDon't.** Rump session talk; 21st USENIX Security Symposium (Bellevue, WA), Aug. 8, 2012; Rump session talk; EVT/WOTE '12 (Bellevue, WA), Aug. 6, 2012 [with Josh Benaloh].
 - **Reed Smith's Evening with a Hacker.** Keynote speaker (New Brunswick, NJ), Oct. 20, 2011.
 - **Are DREs Toxic Waste?** Rump session talk, 20th USENIX Security Symposium (San Francisco), Aug. 10, 2011; Rump session talk, EVT/WOTE '11 (San Francisco), Aug. 8, 2011.
 - **Security Problems in India's Electronic Voting Machines.** Dagstuhl seminar on Verifiable Elections and the Public (Wadern, Germany), July 12, 2011; Harvard University, Center for Research on Computation and Society (CRCS) seminar, Jan. 24, 2011 [host: Ariel Procaccia]; U. Michigan, CSE seminar, Nov. 18, 2010 [with Hari Prasad]; MIT, CSAIL CIS Seminar, Nov. 12, 2010 [with Hari Prasad; host: Ron Rivest]; Distinguished lecture, U.C. San Diego, Department of Computer Science, Nov. 9, 2010 [with Hari Prasad; host: Hovav Shacham]; U.C. Berkeley, Center for Information Technology Research in the Interest of Society (CITRIS), Nov. 8, 2010 [with Hari Prasad; host: Eric Brewer]; Google, Inc., Tech Talk (Mountain View, CA), Nov. 5, 2010 [with Hari Prasad; host: Marius Schilder]; U.C., Berkeley TRUST Security Seminar, Nov. 4, 2010 [with Hari Prasad; host: Shankar Sastry]; Stanford University, CS Department, Nov. 3, 2010 [with Hari Prasad; host: David Dill]; Princeton University, Center for Information Technology Policy, Oct. 28, 2010 [with Hari Prasad, host: Ed Felten]; University of Texas at Austin, Department of Computer Science, Aug. 27, 2010 [host: Brent Waters].

- **Ethical Issues in E-Voting Security Analysis.** Invited talk, Workshop on Ethics in Computer Security Research (WECSR) (Castries, St. Lucia), Mar. 4, 2011 [with David Robinson].
- **Electronic Voting: Danger and Opportunity.** Invited speaker, “Interfaces 10: Technology, Society and Innovation,” Center for Technology and Society (CTS/FGV) (Rio de Janeiro), Dec. 2, 2010 [host: Ronaldo Lemos]; Invited speaker, Conference on “EVMs: How Trustworthy?,” Centre for National Renaissance (Chennai, India), Feb. 13, 2010; Google, Inc., Tech Talk (Mountain View, CA), Jan. 10, 2008; Star Camp (Cape Town, South Africa), Dec. 8, 2007; Lehigh University, Nov. 27, 2007; Princeton OiT Lunch-’n-Learn, Oct. 24, 2007; University of Waterloo (Canada), Feb. 28, 2007.
- **A New Approach to Censorship Resistance.** Think Conference, Nov. 7, 2010.
- **Practical AVC-Edge CompactFlash Modifications can Amuse Nerds [PACMAN].** Rump session, 19th USENIX Security Symposium (Washington, D.C.), Aug. 11, 2010; Rump session, EVT/WOTE ’10 (Washington, D.C.), Aug. 9, 2010.
- **Legal Challenges to Security Research.** Guest lecture, Law 633: Copyright, U. Michigan Law School, Apr. 7, 2010; Invited talk, University of Florida Law School, Oct. 12, 2006.
- **Adventures in Computer Security.** Invited talk, Greenhills School, grades 6–12 (Ann Arbor, MI), Mar. 8, 2010.
- **The Role of Designers’ Incentives in Computer Security Failures.** STIET Seminar, U. Michigan, Oct. 8, 2009.
- **Cold-Boot Attacks Against Disk Encryption.** Invited speaker, SUMIT 09 Security Symposium, U. Michigan, Oct. 20, 2009.
- **On the Attack.** Distinguished lecture, U.C. Berkeley EECS, Nov. 18, 2009.

Selected Other Speaking (2010–present)

- **Moderator: Apple & the FBI: Encryption, Security, and Civil Liberties.** Panelists: Nate Cardozo and Barbara McQuade. U-M Dissonance Speaker Series, April 12, 2016.
- **Moderator: Privacy, IT Security and Politics.** Panelists: Ari Schwartz and David Sobel. U-M ITS SUMIT_2015, Oct. 22, 2015.
- **Panelist: The Future of E-Voting Research.** 5th International Conference on E-Voting and Identity (VoteID), Bern, Switzerland, Sep. 4, 2015.
- **Moderator: Panel on Research Ethics.** 24th USENIX Security Symposium, Washington, D.C., August 13, 2015.
- **Panelist: Theories of Privacy in Light of “Big Data.”** Michigan Telecommunications and Technology Law Review Symposium on Privacy, Technology, and the Law, University of Michigan Law School, Feb. 21, 2015.
- **Panelist: Measuring Privacy.** Big Privacy symposium, Princeton University CITP, Apr. 26, 2013 [moderator: Ed Felten].

- Panelist: **Civil Society’s Challenge in Preserving Civic Participation**. The Public Voice workshop: Privacy Rights are a Global Challenge, held in conjunction with the 34th International Conference of Data Protection and Privacy Commissioners, Punta del Este, Uruguay, Oct. 22, 2012 [moderator: Lillie Coney].
- Panelist: **Election Technologies: Today and Tomorrow**. Microsoft Faculty Summit (Redmond), July 17, 2012 [moderator: Josh Benaloh].
- Panelist: **Is America Ready to Vote on the Internet?** CSPRI Seminar, George Washington University (Washington, D.C.), May 16, 2012 [moderator: Lance Hoffman].
- Panelist: **Technical Methods of Circumventing Censorship**. Global Censorship Conference, Yale Law School, Mar. 31, 2012.
- Panelist: **Internet Voting**. RSA Conference (San Francisco), Mar. 1, 2012 [moderator: Ron Rivest].
- Panelist: **The Law and Science of Trustworthy Elections**. Association of American Law Schools (AALS) Annual Meeting, Jan. 5, 2012 [moderator: Ron Rivest].
- Panelist: **Connecticut Secretary of State’s Online Voting Symposium** (New Britain, CT), Oct. 27, 2011 [moderator: John Dankosky].
- Panelist: **CS Saves the World**. Michigan CSE Mini-symposium, Mar. 19, 2011 [moderator: Prabal Dutta].
- Panelist: **Cyber Security / Election Technology**. Overseas Voting Foundation Summit, Feb. 10, 2011 [moderator: Candice Hoke].
- ~~Tutorial speaker/organizer: **Security Issues in Electronic Voting**, ICISS (Gandhinagar, India), Dec. 15, 2010 [canceled under threat of deportation].~~
- Invited testimony: **On D.C. Board of Elections and Ethics Readiness for the Nov. 2010 General Election**. D.C. Council Hearing, Oct. 8, 2010.
- Panelist and organizer: **India’s Electronic Voting Machines**. EVT/WOTE (Washington, D.C.), Aug. 9, 2010.
- Panelist: **Ethics in Networking and Security Research**. ISOC Network and Distributed System Security Symposium (San Diego, CA), Mar. 2, 2010 [moderator: Michael Bailey].

Advising and Mentoring

Graduate Students

- Allison McDonald (Ph.D. in progress)
- Matthew Bernhard (Ph.D. in progress)
- Benjamin VanderSloot (Ph.D. in progress)
- David Adrian (Ph.D. in progress)
- Andrew Springall (Ph.D. in progress; NSF Graduate Research Fellowship)
- Zakir Durumeric (Ph.D. in progress; Google Ph.D. Fellowship in Computer Security)
- Travis Finkenauer (M.S. 2016; went on to security position at Juniper Networks)
- Eric Wustrow (Ph.D. 2016; went on to tenure track faculty position at U. Colorado, Boulder)
- James Kasten (Ph.D. 2015; went on to software engineering position at Google)
- Scott Wolchok (M.S. 2011; went on to software engineering position at Facebook)

Post Docs

- Colleen Swanson (2014–15)

Doctoral Committees

- Denis Bueno (C.S. P.D. expected 2016, Michigan)
- Eric Crockett (C.S. Ph.D. expected 2016, Georgia Tech)
- Jakub Czyz (C.S. Ph.D. 2016, Michigan)
- Eric Wustrow (C.S. Ph.D. 2016, Michigan; chair)
- James Kasten (C.S. Ph.D. 2015, Michigan; chair)
- Jing Zhang (C.S. Ph.D. 2015, Michigan)
- Katharine Cheng (C.S. Ph.D. 2012, Michigan)
- Matt Knysz (C.S. Ph.D. 2012, Michigan)
- Zhiyun Qian (C.S. Ph.D. 2012, Michigan)
- Xin Hu (C.S. Ph.D. 2011, Michigan)
- Ellick Chan (C.S. Ph.D. 2011, UIUC)

Undergraduate Independent Work

- 2016: Ben Burgess, Noah Duncan
- 2015: Ben Burgess, Rose Howell, Vikas Kumar, Ariana Mirian, Zhi Qian Seah
- 2014: Christopher Jeakle, Andrew Modell, Kollin Purcell
- 2013: David Adrian, Anthony Bonkoski, Alex Migicovsky, Andrew Modell, Jennifer O’Neil
- 2011: Yilun Cui, Alexander Motalleb
- 2010: Arun Ganesan, Neha Gupta, Kenneth Meagher, Jay Novak, Dhritiman Sagar, Samantha Schumacher, Jonathan Stribley
- 2009: Mark Griffin, Randy Yao

Teaching

- **Introduction to Computer Security**, EECS 388, University of Michigan
Terms: Fall 2017, Fall 2016, Fall 2015, Fall 2014, Fall 2013, Fall 2011, Fall 2010, Fall 2009
Created new undergrad security elective that has grown to reach >750 students/year. An accessible intro, teaches the security mindset and practical skills for building and analyzing security-critical systems.
- **Computer and Network Security**, EECS 588, University of Michigan
Terms: Winter 2016, Winter 2015, Winter 2014, Winter 2013, Winter 2012, Winter 2011, Winter 2010, Winter 2009
Redesigned core grad-level security course. Based around discussing classic and current research papers and performing novel independent work. Provides an intro. to systems research for many students.
- **Securing Digital Democracy**, Coursera (MOOC)
Designed and taught a massive, open online course that explored the security risks—and future potential—of electronic voting and Internet voting technologies; over 20,000 enrolled students.

Professional Service

Program Committees

- 2017 ISOC Network and Distributed Systems Security Symposium (NDSS '17)
- 2016 ACM Internet Measurement Conference (IMC '16)
- 2016 USENIX Security Symposium (Sec '16)
- 2016 International Joint Conference on Electronic Voting (E-VOTE-ID '16)
- 2016 Workshop on Advances in Secure Electronic Voting (Voting '16)
- 2015 ACM Conference on Computer and Communications Security (CCS '15)
- 2015 ACM Internet Measurement Conference (IMC '15)
- 2015 USENIX Security Symposium (Sec '15)
- 2014 ACM Conference on Computer and Communications Security (CCS '14)
- 2014 USENIX Security Symposium (Sec '14)
- 2013 ACM Conference on Computer and Communications Security (CCS '13)
- **Program co-chair**, 2012 Electronic Voting Technology Workshop/Workshop on Trustworthy Elections (EVT/WOTE '12)
- 2012 Workshop on Free and Open Communications on the Internet (FOCI '12)
- 2012 IEEE Symposium on Security and Privacy (“Oakland” '12)
- 2012 International Conference on Financial Cryptography and Data Security (FC '12)
- 2011 Workshop on Free and Open Communications on the Internet (FOCI '11)
- 2011 Electronic Voting Technology Workshop (EVT/WOTE '11)
- 2010 ACM Conference on Computer and Communications Security (CCS '10)
- 2010 USENIX/ACCURATE/IAVOSS Electronic Voting Technology Workshop (EVT '10)
- 2010 USENIX Security Symposium (Sec '10)
- 2010 IEEE Symposium on Security and Privacy (Oakland '10)
- 2010 International World Wide Web Conference (WWW '10)
- 2009 ACM Conference on Computer and Communications Security (CCS '09)
- 2009 ACM Workshop on Digital Rights Management (DRM '09)
- 2009 ACM Workshop on Multimedia Security (MMS '09)
- 2009 USENIX Workshop on Offensive Technologies (WOOT '09)
- 2009 International World Wide Web Conference (WWW '09)
- 2008 ACM Conference on Computer and Communications Security (CCS '08)
- 2008 ACM Workshop on Privacy in the Electronic Society (WPES '08)
- 2008 USENIX/ACCURATE Electronic Voting Technology Workshop (EVT '08)
- 2008 International World Wide Web Conference (WWW '08)

Boards

- Board of Directors for the Internet Security Research Group (2014–present)
- Board of Advisors for the Verified Voting Foundation (2012–present)

- External Advisory Board for the DemTech Project, IT University of Copenhagen (2011–present)
- Advisory Council for the Princeton University Department of Computer Science (2012–2014)

Department and University Service

- Faculty Advisor for Michigan Hackers student group (2012–present)
- CSE Graduate Affairs Committee (member, 2014–present)
- CSE Undergraduate Program Advising (CS/ENG) (2011–present)
- Faculty Senate, Rules Committee of the Senate Assembly (member, 2011–12)
- CSE Graduate Admissions Committee (member, 2010–11)
- CSE Graduate Committee (member, 2009–10)

Broader Impact of Selected Projects

- **Let's Encrypt: A Certificate Authority to Encrypt the Entire Web** (2016)
Co-founded a new HTTPS certificate authority to provide free, browser-trusted, automatically validated certificates for all domains. Developed in partnership with EFF and Mozilla, Let's Encrypt has helped secure millions of websites and is now issuing certificates at a greater rate than all other CAs combined.
- **The Logjam Attack and Weak Practical Use of Diffie-Hellman** (2015)
Introduced Logjam, a practical attack on TLS that affected nearly 10% of popular HTTPS websites. Our results suggest that state-level attackers can break 1024-bit Diffie-Hellman, providing the first parsimonious explanation for how NSA is decrypting widespread VPN traffic, as revealed by Snowden.
- **Security Analysis of the Estonian Internet Voting System** (2014)
Led the first rigorous security review of world's most significant Internet voting system. Based on code review, laboratory testing, and in-person observation, our study revealed significant shortcomings that could allow state-level attackers to upset national elections.
- **ZMap Internet-Wide Scanner Open-Source Project** (2013)
Created ZMap, a network probing tool designed for Internet-wide measurement research that achieves up to 10,000× better performance than earlier tools. Now a thriving open-source project, ZMap is available in major Linux distros. We also maintain Scans.io, a public scan data repository.
- **Detection of Widespread Weak Keys in Network Devices** (2012)
After conducting the largest Internet-wide survey of HTTPS and SSH hosts, we uncovered serious flaws in cryptographic public key generation affecting millions of users. We disclosed vulnerabilities to more than 60 network device makers and spawned major changes to the Linux random number generator.
- **The Telex Anticensorship System** (2011)
Invented a fundamentally new approach to circumventing state-level Internet censorship, based on placing anticensorship technology into core network infrastructure outside the censoring country. Prototype attracted over 100,000 users, mainly in China. Now testing next-gen. schemes at partner ISP.
- **Attacking Washington, D.C.'s Internet Voting System** (2010)
Participated in the first public security trial of an Internet voting system set to be deployed in a real election. We found serious flaws that allowed us to change all votes without detection. This led to the system being scrapped, and the widespread media coverage has altered the debate on Internet voting.

- **Analysis of India’s E-Voting System (2010)**
Participated in the first independent security review of the electronic voting machines used by half a billion voters in India. The flaws uncovered in our work were front-page news. After arresting my coauthor and threatening to deport me, officials eventually moved to adopt a paper trail nationwide.
- **Green Dam Youth Escort Censorware (2009)**
Uncovered security problems and copyright infringement in client-side censorship software mandated by the Chinese government. Findings helped catalyze popular protest against the program, leading China to reverse its policy requiring installation on new PCs.
- **Cold-Boot Attacks (2008)**
Developed the “cold boot” attack against software disk encryption systems, which altered widespread thinking on security assumptions about the behavior of RAM, influenced computer forensics practice, and inspired the creation of a new subfield of theoretical cryptography.
- **California “Top-to-Bottom” Review (2007)**
Helped lead the California Secretary of State’s “top-to-bottom” review of electronic voting machines, the first public review of this technology by any state. Our reports led California to discontinue use of highly vulnerable touch-screen voting systems and altered the course of election technology in the U.S.
- **DMCA Exemptions for Security (2006 and 2010)**
Worked with legal teams to successfully petition the U.S. Copyright Office to create exemptions to the Digital Millennium Copyright Act (which prohibits circumventing DRM) in order to allow the public to investigate and repair security problems caused by certain DRM. One of only six exemptions granted.
- **Sony DRM Rootkit (2005)**
Discovered dangerous security side-effects in the design of copy protection software used for music CDs. Resulted in the recall of millions of discs, class action lawsuits, and an investigation by the U.S. Federal Trade Commission in which I served as a technical expert on DRM’s harm to consumers’ security.
- **The Art of Science (2004)**
Co-founded an interdisciplinary art competition at Princeton University that showcases images and videos produced in the course of scientific research as well as creative works that incorporate tools and ideas from science. Following international attention, the concept has spread to many other campuses.

Outreach and Press Coverage

I'm a regular contributor to **Freedom-to-Tinker**, a blog hosted by Princeton's CITP. My posts discuss current issues in security and public policy or announce new research results, aiming to communicate findings to nonspecialists.

I'm happy to speak to the press when I believe the topic is important for the public to understand. Much of my research has received significant media attention.

Selected media outlets *Television:* CNN, Fox News, CBS Evening News, NBC Nightly News, MSNBC, CNBC, MTV, Al Jazeera, C-SPAN. *Radio:* NPR News, NPR Science Friday, BBC World Service, The Diane Rehms Show. *Print:* The New York Times, LA Times, USA Today (front page profile), The Wall Street Journal, Washington Post, Boston Globe, Times of India, Time, Fortune, Harpers (incl. Harpers Index), The Atlantic; The Economist, New Scientist, MIT Tech Review, Businessweek, Redbook, PC Magazine, Playboy (long-form profile). *Online:* Hacker News (dozens of top stories), Slashdot (>40 stories), Reddit (top of front page), BoingBoing, CNET News, Wired News, TechNewsDaily, Science Daily, Gizmodo, TechDirt, Ars Technica, The Register, Huffington Post, Politico, The Drudge Report, and hundreds more.

References

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Exhibit B

APRIL GLASER SECURITY 07.27.16 9:30 AM

HERE'S WHAT WE KNOW ABOUT RUSSIA AND THE DNC HACK



GETTY IMAGES

AS THE DEMOCRATIC National Convention continues its week-long stay in Philadelphia, accusations of Russian hacking continue to cloud the proceedings. At this point, it seems likely that Russia is responsible. What's less clear is what that will mean going forward.

It's been a bad stretch for the Democratic National Committee. Hackers broke into its servers months ago, stealing private emails, opposition research, and campaign correspondence. Last Friday, Wikileaks made nearly 20,000 of those private emails public, revealing embarrassing details of the political machine's inner workings. DNC officials allege that the Russian government is behind the breach. The *New York Times* reports that US intelligence agencies increasingly share that opinion. According to a number of top cybersecurity researchers, they're probably right.

A Brief History of a Hack

News of the hack of the Democratic National Committee first broke in mid-June. That's when CrowdStrike, a firm that analyzes threats to network security, revealed that the DNC had called it in to inspect the party's servers, where it found "two separate Russian intelligence-affiliated adversaries present in the DNC network." CrowdStrike released a comprehensive report of its findings on June 14, which accompanied a *Washington Post* article detailing the attacks. One of the hacking groups, CrowdStrike found, had access to the DNC servers for almost a year.

A day after that report, someone calling themselves Guccifer 2.0 (an allusion to notorious hacker Guccifer) claimed responsibility for the hack in a blog post. Through the blog and an accompanying Twitter account, Guccifer 2.0 refuted CrowdStrike's claims that this was a Russian operation, instead calling himself a "lone hacker." He also claimed to have handed much of the DNC bounty to Wikileaks.

The following week, two cybersecurity firms, Fidelis Cybersecurity and Mandiant, independently corroborated CrowdStrike's assessment that Russian hackers infiltrated DNC networks, having found that the two groups that hacked into the DNC used malware and methods identical to those used in other attacks attributed to the same Russian hacking groups.

But some of the most compelling evidence linking the DNC breach to Russia was found at the beginning of July by Thomas Rid, a professor at King's College in London, who discovered an identical command-and-control address hardcoded into the DNC malware that was also found on malware used to hack the German Parliament in 2015. According to German security officials, the malware originated from Russian military intelligence. An identical SSL certificate was also found in both breaches.

The evidence mounts from there. Traces of metadata in the document dump reveal various indications that they were translated into Cyrillic. Furthermore, while Guccifer 2.0 claimed to be from Romania, he was unable to chat with Motherboard journalists in coherent Romanian. Besides which, this sort of hacking wouldn't exactly be outside of Russian norms.

"It doesn't strain credulity to look to the Russians," says Morgan Marquis-Boire, a malware expert with CitizenLab. "This is not the first time that Russian hackers has been behind intrusions in US government, and it seems unlikely that it will be the last." Last year Russian hackers were able to breach White House and State

Department email servers, gleaning information even from President Obama's BlackBerry.

Meanwhile, the Kremlin has denied Russian involvement in the DNC breach. But the reverberations continue; DNC Chairwoman Debbie Wasserman Schultz will resign at the end of the week, after emails revealed what many view as the unfair treatment of Bernie Sanders.

From Russia With Love

As compelling as the evidence is, there's still a small amount of room to argue that Guccifer 2.0 was a lone actor, an individual motivated by hacktivist ideals of dismantling state power. He wouldn't be the first. And in a recent interview on NBC, Julian Assange of Wikileaks gave a soft disavowal of claims that his whistleblowing organization is in cahoots with Russian intelligence, "Well, there is no proof of that whatsoever," he said. "We have not disclosed our source, and of course, this is a diversion that's being pushed by the Hillary Clinton campaign."

This is, of course, the same Assange who boasts responsibility for helping find Snowden a home in Russia and Wikileaks publicly criticized the Panama Papers for implicating Putin in financial misdeeds. He's also an outspoken frequent critic of Hillary Clinton's time at the State Department. A damning document dump the weekend before Clinton's nomination arguably aligns with both Russian interests and his own.

If the allegations do prove correct, this is an unprecedented step for Russia. Hacking is nothing new, but publicizing documents to attempt to sway an election certainly is. Putin would clearly prefer a Trump presidency. The billionaire Republican candidate is a longtime admirer of Putin's, and has publicly stated that he wouldn't necessarily defend NATO allies against a Russian invasion. To top it all off, Trump's campaign manager, Paul Manafort, formerly worked as an advisor to Viktor Yanukovich, the Russian-backed President of Ukraine before he was ousted in 2014.

"Due to the nature and timing of this hack, it all seems very political," says Marquis-Boire.

And there's a whole lot of election left—and likely more leaks to come with it. On Sunday, a Twitter user asked Wikileaks if more DNC leaks were on their way. The reply: "We have more coming."

Update: In a press conference Wednesday, Republican presidential candidate Donald Trump invited Russia to retrieve “missing” emails from Hillary Clinton’s campaign and release them. Cybersecurity experts described the remarks as “unprecedented” and “possibly illegal.”

Exhibit C

The New York Times | <http://nyti.ms/2eqNSVY>

 **ELECTION 2016** | [Full Results](#) | [Exit Polls](#) | [Trump's Cabinet](#)

Private Security Group Says Russia Was Behind John Podesta's Email Hack

By NICOLE PERLROTH and MICHAEL D. SHEAR OCT. 20, 2016

SAN FRANCISCO — At the start of 2014, President Obama assigned his trusted counselor, John D. Podesta, to lead a review of the digital revolution, its potential and its perils. When Mr. Podesta presented his findings five months later, he called the internet's onslaught of big data “a historic driver of progress.” But two short years later, as chairman of Hillary Clinton's presidential campaign, Mr. Podesta would also become one of the internet's most notable victims.

On Thursday, private security researchers said they had concluded that Mr. Podesta was hacked by Russia's foreign intelligence service, the GRU, after it tricked him into clicking on a fake Google login page last March, inadvertently handing over his digital credentials.

For months, the hackers mined Mr. Podesta's inbox for his most sensitive and potentially embarrassing correspondence, much of which has been posted on the WikiLeaks website. Additions to the collection on Thursday included three short

email exchanges between Mr. Podesta and Mr. Obama himself in the days leading up to his election in 2008.

Mr. Podesta's emails were first published by WikiLeaks earlier this month. The release came just days after James R. Clapper Jr., the director of national intelligence, and the Department of Homeland Security publicly blamed Russian officials for cyberattacks on the Democratic National Committee, in what they described as an effort to influence the American presidential election.

To date, no government officials have offered evidence that the same Russian hackers behind the D.N.C. cyberattacks were also behind the hack of Mr. Podesta's emails, but an investigation by the private security researchers determined that they were the same.

Threat researchers at Dell SecureWorks, an Atlanta-based security firm, had been tracking the Russian intelligence group for more than a year. In June, they reported that they had uncovered a critical tool in the Russian spy campaign. SecureWorks researchers found that the Russian hackers were using a popular link shortening service, called Bitly, to shorten malicious links they used to send targets fake Google login pages to bait them into submitting their email credentials.

The hackers made a critical error by leaving some of their Bitly accounts public, making it possible for SecureWorks to trace 9,000 of their links to nearly 4,000 Gmail accounts targeted between October 2015 and May 2016 with fake Google login pages and security alerts designed to trick users into turning over their passwords.

Among the list of targets were more than 100 email addresses associated with Hillary Clinton's presidential campaign, including Mr. Podesta's. By June, 20 staff members for the campaign had clicked on the short links sent by Russian spies. In June, SecureWorks disclosed that among those whose email accounts had been targeted were staff members who advised Mrs. Clinton on policy and managed her travel, communications and campaign finances.

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Two security researchers who have been tracking the GRU's spearphishing campaign confirmed Thursday that Mr. Podesta was among those who had inadvertently turned over his Google email password. The fact that Mr. Podesta was among those breached by the GRU was first disclosed Thursday by Esquire and the Motherboard blog, which published the link Russian spies used against Mr. Podesta.

"The new public data confirming the Russians are behind the hack of John Podesta's email is a big deal," Jake Sullivan, Mrs. Clinton's senior policy adviser, said Thursday. "There is no longer any doubt that Putin is trying to help Donald Trump by weaponizing WikiLeaks."

The new release of Mr. Podesta's email exchange with Mr. Obama from 2008 made clear that Mr. Obama's team was confident he would win.

In one of the emails, Mr. Podesta wrote Mr. Obama a lengthy memo in the evening on Election Day recommending that he not accept an invitation from President George W. Bush to attend an emergency meeting of the Group of 20 leaders.

"Attendance alongside President Bush will create an extremely awkward situation," the memo said. "If you attempt to dissociate yourself from his positions, you will be subject to criticism for projecting a divided United States to the rest of the world. But if you adopt a more reserved posture, you will be associated not only with his policies, but also with his very tenuous global standing."

The White House did not respond to questions about the email.

Correction: October 22, 2016

An article on Friday about suspected email hacking by Russia's foreign intelligence service misstated the name of one organization that first disclosed that a presidential counselor, John D. Podesta, was among those whose accounts were breached. The blog is Motherboard, not VICE Motherload.

Nicole Perlroth reported from San Francisco, and Michael D. Shear from Washington.

Follow The New York Times's politics and Washington coverage on Facebook and Twitter, and sign up for the First Draft politics newsletter.

A version of this article appears in print on October 21, 2016, on page A14 of the New York edition with the headline: Private Security Group Says Russia Was Behind Hack of Clinton Campaign Chairman.

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Exhibit D

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NEWS > U.S. NEWS

WORLD INVESTIGATIONS CRIME & COURTS ASIAN AMERICA LATINO NBCBLK

NEWS AUG 30 2016, 4:54 AM ET

Russians Hacked Two U.S. Voter Databases, Officials Say

by ROBERT WINDREM, WILLIAM M. ARKIN and KEN DILANIAN



Hackers based in Russia were behind two recent attempts to breach state voter registration databases, fueling concerns the Russian government may be trying to interfere in the U.S. presidential election, U.S. intelligence officials tell NBC News.

The breaches included the theft of data from as many as 200,000 voter records in Illinois, officials say.

The incidents led the FBI to send a "flash alert" earlier this month to election officials nationwide, asking them to be on the lookout for any similar cyber intrusions.

One official tells NBC News that the attacks have been attributed to Russian intelligence agencies.

"This is the closest we've come to tying a recent hack to the Russian government," the official said.

That person added that "there is serious concern" that the Kremlin may be seeking to sow uncertainty in the U.S. presidential election process.



Voters cast their ballots at ChiArts High School on March 15 in Chicago, Illinois. © Scott Olson / Getty Images

Two other officials said that U.S. intelligence agencies have not yet concluded that the Russian government is trying to do that, but they are worried about it.

They said the Russians have long conducted cyber espionage on political targets. The question now is whether they are moving into a covert intelligence operation designed to destabilize the U.S. political process.

The alert, first reported by Yahoo News, provided IP addresses associated with the hack attempts, though it did not mention Russia.

One of the IP addresses was involved in both breaches, the FBI alert said.

"The FBI is requesting that states contact their Board of Elections and determine if any similar activity to their logs, both inbound and outbound, has been detected," the alert said.

The bulletin does not identify the targeted states, but officials told NBC News they were Illinois and Arizona. Illinois officials said in July that they shut down their state's voter registration after a hack. State officials said Monday the hackers downloaded information on as many 200,000 people.

State officials told the Chicago Tribune they were confident no voter record had been deleted or altered.

In Arizona, officials said, hackers tried to get in using malicious software but were unsuccessful. The state took its online voter registration down for nine days, beginning in late June, after malware was discovered on a county election official's computer. But the state concluded that the system was not successfully breached.


Those incidents led Homeland Security Secretary Jeh Johnson to host a call earlier this month with state election officials to talk about cybersecurity and election infrastructure.

Johnson said DHS isn't aware of any specific cyber threat against election-related networks, but he urged officials to examine how to better secure their systems, according to a summary of the call put out by the department.

U.S. intelligence officials have previously said Russian intelligence agencies were behind hacks into the Democratic National Committee and related organizations. There has been a long running debate among intelligence analysts about what Russia is up to.

Voting systems have not been considered "critical infrastructure," by the Department of Homeland Security, so they are not subject to federal government protections.

Independent assessments have found that many state and local voting system are extremely vulnerable to hacking. 🌍

 ROBERT WINDREM   

WILLIAM M. ARKIN  

 KEN DILANIAN  

TOPICS U.S. NEWS, INVESTIGATIONS, SECURITY, WORLD

FIRST PUBLISHED AUG 29 2016, 6:05 PM ET

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Homeland Security





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Joint Statement from the Department Of Homeland Security and Office of the Director of National Intelligence on Election Security

Release Date: October 7, 2016



For Immediate Release
 DHS Press Office
 Contact: 202-282-8010

The U.S. Intelligence Community (USIC) is confident that the Russian Government directed the recent compromises of e-mails from US persons and institutions, including from US political organizations. The recent disclosures of alleged hacked e-mails on sites like DCLeaks.com and WikiLeaks and by the Guccifer 2.0 online persona are consistent with the methods and motivations of Russian-directed efforts.

These thefts and disclosures are intended to interfere with the US election process. Such activity is not new to Moscow—the Russians have used similar tactics and techniques across Europe and Eurasia, for example, to influence public opinion there. We believe, based on the scope and sensitivity of these efforts, that only Russia's senior-most officials could have authorized these activities.

Some states have also recently seen scanning and probing of their election-related systems, which in most cases originated from servers operated by a Russian company. However, we are not now in a position to attribute this activity to the Russian Government. The USIC and the Department of Homeland Security (DHS) assess that it would be extremely difficult for someone, including a nation-state actor, to alter actual ballot counts or election results by cyber attack or intrusion. This assessment is based on the decentralized nature of our election system in this country and the number of protections state and local election officials have in place. States ensure that voting machines are not connected to the Internet, and there are numerous checks and balances as well as extensive oversight at multiple levels built into our election process.

Nevertheless, DHS continues to urge state and local election officials to be vigilant and seek cybersecurity assistance from DHS. A number of states have already done so. DHS is providing several services to state and local election officials to assist in their cybersecurity. These services include cyber “hygiene” scans of Internet-facing systems, risk and vulnerability assessments, information sharing about cyber incidents, and best practices for securing voter registration databases and addressing potential cyber threats. DHS has convened an Election Infrastructure Cybersecurity Working Group with experts across all levels of government to raise awareness of cybersecurity risks potentially affecting election infrastructure and the elections process. Secretary Johnson and DHS officials are working directly with the National Association of Secretaries of State to offer assistance, share

information, and provide additional resources to state and local officials.

#

Last Published Date: October 7, 2016

Exhibit F

U.S. official: Hackers targeted voter registration systems of 20 states



In this June 5, 2015, file photo, the Homeland Security Department headquarters in northwest Washington. A Homeland Security Department official says hackers have targeted the voter registration systems of more than 20 states in recent months. FBI Director James Comey told lawmakers this week that the agency is looking "very, very hard" at Russian hackers who may try to disrupt the U.S. election. (Susan Walsh / AP)

By **Tribune news services**

SEPTEMBER 30, 2016, 4:42 PM | WASHINGTON

Hackers have targeted the voter registration systems of more than 20 states in recent months, a Homeland Security Department official said Friday.

The disclosure comes amid heightened concerns that foreign hackers might undermine voter confidence in the integrity of U.S. elections. Federal officials and many cybersecurity experts have said it would be nearly impossible for hackers to alter an election's outcome because election systems are very decentralized and generally not connected to the internet.

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The official who described detecting the hacker activity was not authorized to speak publicly on the subject and spoke to The Associated Press on condition of anonymity. It was unclear, the official said, whether the hackers were foreign or domestic, or what their motives might be. ABC News earlier reported that more than 20 states were targeted.

The FBI last month warned state officials of the need to improve their election security after hackers targeted systems in Illinois and Arizona. FBI Director **James Comey** told lawmakers this week that the agency is looking "very, very hard" at Russian hackers who may try to disrupt the U.S. election.

Last month, Donald Trump, the GOP nominee for president, suggested that he feared the general election "is going to be rigged."

The Homeland Security Department has stepped up its outreach to states and localities, but it is up to them to ask for help. So far, 19 states have expressed interest in a general "cyber hygiene" scan of key websites — akin to ensuring that windows in a home are properly closed, according to another Homeland Security official directly involved in securing local elections who also was not authorized to speak publicly about ongoing efforts.

The FBI has detected a variety of "scanning activities" that are early indications of hacking, Comey told the House Judiciary Committee this week.

The FBI held a conference call on Friday with the local officials who run elections in the battleground state of Florida. Meredith Beatrice, a spokeswoman for Secretary of State Ken Detzner, called it an "informational call related to elections security," but a person on the call who was not authorized to discuss it and requested anonymity said authorities had seen evidence of someone probing a local elections website.

Homeland Security Secretary **Jeh Johnson** spoke to state election officials by phone last month, encouraging them to implement existing technical recommendations to secure their election systems and ensure that electronic voting machines are not connected to the internet.

DHS is offering states more comprehensive, on-site risk and vulnerability checks. Only four states have expressed interest in the assessment, and because the election is only weeks away, the department will likely only be able to conduct an assessment of one state before Election Day on Nov. 8, the official said.

Two of the hacking attempts involved efforts to mine data from the Arizona and Illinois voter registration systems, according to Kay Stimson, a spokeswoman for the National Association of Secretaries of State. She said in Arizona a hacker tried to probe voter registration data, but never infiltrated the system, while in Illinois hackers got into the system, but didn't manipulate any data.

These systems have "nothing to do with vote casting or counting," Stimson said in an email. "While it is theoretically possible to disrupt an election by infiltrating a voter registration system, their compromise would not affect election results" and there are system controls in place to catch any fraud.

Rep. [Henry Johnson](#), D-Ga., introduced two bills earlier this month that would require voting systems be designated as critical infrastructure and limit purchases of new voting systems that don't provide paper ballots, among other measures. It's unlikely the bills will be passed before the election.

The Homeland Security Department is already considering designating voting systems as critical infrastructure in the future, though it is unlikely to happen before the election, the second official said.

A presidential directive released in 2013 details 16 sectors that are considered critical infrastructure, including energy, financial services, healthcare, transportation, food and agriculture, and communications. The designation places responsibilities on the Homeland Security secretary to identify and prioritize those sectors, considering physical and cyber threats. The secretary is also required to conduct security checks and provide information about emerging and imminent threats.

Associated Press

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This article is related to: [Jeh Johnson](#), [James Comey](#)

Exhibit G

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Ukraine election narrowly avoided 'wanton destruction' from hackers (+video)

A brazen three-pronged cyber-attack against last month's Ukrainian presidential elections has set the world on notice - and bears Russian fingerprints, some say.

By Mark Clayton, Staff writer | JUNE 17, 2014

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David Mdzinarishvili/Reuters | View Caption

A three-pronged wave of cyber-attacks aimed at wrecking Ukraine's presidential vote - including an attempt to fake computer vote totals - was narrowly defeated by government cyber experts, Ukrainian officials say.

The still little-known hacks, which surfaced May 22-26, appear to be among the most dangerous cyber-attacks yet deployed to sabotage a national election - and a warning shot for future elections in the US and abroad, political scientists and cyber experts say.

National elections in the Netherlands, Norway, and other nations have seen hackers probe Internet-tied election systems, but never with such destructive abandon, said experts monitoring the Ukraine vote.

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"This is the first time we've seen a cyber-hacktivist organization act in a malicious way on such a grand scale to try to wreck a national election."

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Jack Detsch
Staff writer | Jack is the Mark Clayton Fellow in Cybersecurity

malicious way on such a grand scale to try to wreck a national election, says Joseph Kiniry, an Internet voting systems cyber-security expert. "To hack in and delete everything on those servers is just pillaging, wanton destruction."

That wanton destruction began four days ahead of the national vote, when CyberBerkut, a group of pro-Russia hackers, infiltrated Ukraine's central election computers and deleted key files, rendering the vote-tallying system inoperable. The next day, the hackers declared they had "destroyed the computer network infrastructure" for the election, spilling e-mails and other documents onto the web as proof.

A day later, government officials said the system had been repaired, restored from backups, and was ready to go. But it was just the beginning.

Only 40 minutes before election results were to go live on television at 8 p.m., Sunday, May 25, a team of government cyber experts removed a "virus" covertly installed on Central Election Commission computers, Ukrainian security officials said later.

If it had not been discovered and removed, the malicious software would have portrayed ultra-nationalist Right Sector party leader Dmytro Yarosh as the winner with 37 percent of the vote (instead of the 1 percent he

actually received) and Petro Poroshenko (the actually winner with a majority of the vote) with just 29 percent, Ukraine officials told reporters the next morning.

Curiously, Russian Channel One aired a bulletin that evening declaring Mr. Yarosh the victor with 37 percent of the vote over Mr. Poroshenko with 29 percent, Ukraine officials said.

"Offenders were trying by means of previously installed software to fake election results in the given region and in such a way to discredit general results of elections of the President of Ukraine," the Ukrainian Security Service (SBU) said in a statement.

Still, there was more to come.

In the wee hours of the morning after polls closed, as results flowed in from Ukrainian election districts, Internet links feeding that data to the vote tally system were hit with a barrage of fake data packets – known as distributed denial of service (DDoS) attacks. So from about 1 to 3 a.m. on May 26, election results were blocked, delaying the finally tally until the early



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Sascha Meinrath
Columnist | Sascha founded the Open Technology Institute.



Lysa Myers
Columnist | Lysa Myers is a security researcher at ESET.



Bruce Schneier
Columnist | Bruce is a noted cryptographer and security expert.



Evan Selinger
Columnist | Evan is a philosophy professor at Rochester Institute of Technology.



Melanie Teplinsky
Columnist | Melanie teaches information privacy law at American University.



Nicole Wong
Columnist | Nicole served as deputy chief technology officer at the White House.



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morning, a preliminary report by international election observers recounted.

An analysis of the DDoS attack by Arbor Networks, a Burlington, Mass., cyber-security company, ties it to CyberBerkut.

In the end, international observers declared Ukraine's vote "a genuine election." But US researchers say it's clear that Ukraine dodged a major cyber-bullet.

"We've seen vote fraud before in Ukraine, including a rigged computer system in 2004," says Peter Ordeshook, a California Institute of Technology political scientist. "But this wasn't an effort to steal the election outcome, so much as to steal the election itself – by entirely discrediting it in the eyes of key segments of the population in Ukraine and in Russia, too."

While it was well understood across most of Ukraine and internationally that the far-right candidate Yarosh had little political support, the faked results would have lent credibility to Russian-inspired accounts that the popular revolt last fall against the Ukraine government was fomented by ultra-nationalists.

"In that light, the cyber fakery looks incredibly clumsy from the outside because no one there would have believed it," Dr. Ordeshook says. "But these faked results were geared for a specific audience in order to feed the Russian narrative that has claimed from the start that ultra-nationalists and Nazis were behind the revolution in Ukraine."

If the virus with the faked computer results had not been discovered, it would have fomented unrest across the volatile ethnic-Russian Donetsk region now under the shadow of Russian forces on the border with Ukraine, he says. Such spurious results also would have undermined the credibility of the new Ukraine government and could have paved the way for Russian military action, say political scientists who monitor Ukraine elections.

The Ukraine hack is a stark warning for the US and other democracies that use the Internet for tabulation and even direct voting, election security experts say. One clear lesson, they say, is to always have paper ballots to back up election results – like Ukraine – and to avoid Internet voting.

"The Ukraine attack story demonstrates there is no shortage of methods which a determined adversary will make use of to sabotage an election," says Pamela Smith, president of the Verified Voting Foundation, a US group that has researched US election systems security.

In the runup to the election, President Obama on May 2 warned Russia not to interfere or the US "will not have a choice but to move forward with additional, more severe sanctions."

Since then, US officials appear reluctant to make too much of the attacks. References to the cyber-attacks have been brief and oblique. With anonymity cloaking cyber-attacks across the Internet, it's difficult to tell



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anonymity crossing cyber attacks across the internet, it's difficult to tell how deeply involved Russia's government might have been.

Ukraine experienced "cyber-attacks on the Central Election Commission of the kind that generally would require outside support," Victoria Nuland, assistant secretary of State for European affairs, acknowledged in a May 27 interview on the Charlie Rose show. Mark Green, a former congressman, said in Senate testimony June 6 that he had been told by a US diplomat of a failed Russian cyber-attack on the election.

Ukrainian officials have been unabashed in throwing blame at Russia, saying that arrests were made in the case, although no names have yet been made public.

"It was prepared in advance and stored on Russian (Internet) re-sources," Volodymyr Zverev, head of the Ukraine's Administration of Public Service of Special Communication and Protection of Information said of the malware that was intended to deliver the fake election results, according to Interfax-Ukraine. "They wanted to, and made the preparations, but they did not succeed."

While Russian hacktivists appear to be linked to at least some of the attacks, not everyone agrees the Russian government had a hand in the most devious element. Internet security expert Mr. Kiniry, for instance, says there is no solid proof yet to back the Ukrainian government claim of a virus carrying fake election results.

Others say Russia's paw prints are all over the attack.

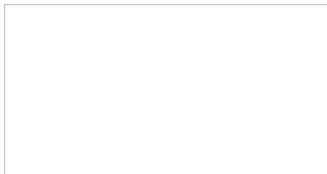
"Did Russia attempt to sway the Ukrainian Presidential Election? I honestly don't know the answer to that," says Jeffery Stutzman, CEO of Red Sky Alliance, a cyber-security group in New Hampshire.

But, he adds, "the idea that these guys were trying to poison the election result by compromising the election commission computers is amazing to me – and this coincidence with the Russian channel showing the same fake results – is just too much. If it walks like a duck and quacks like one, maybe it's a duck." ■

Next up



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Major cyber-assaults on Ukraine, then Moscow, on eve of Crimea vote (+video)

Ukraine election narrowly avoided wanton destruction from hackers (+video) CS Monitor.com

Exhibit 38

**IN THE COMMONWEALTH COURT OF PENNSYLVANIA
HARRISBURG, PENNSYLVANIA**

**In re: The Matter of the 2016 Presidential Election: Docket No:
Election Matter:**

CLASS II ELECTION CONTEST PURSUANT TO 25 P.S. 3291, 3251

PETITIONERS' REQUEST FOR BRIEF CONTINUANCE

AND NOW come Petitioners, One Hundred (100) or more registered voters of the Commonwealth of Pennsylvania, by and through their counsel, and file the within application and, in support thereof, aver as follows:

1. Petitioners respectfully request that, for the reasons set forth below, this Court adjourn the hearing on this matter, fixed by this Court's order of November 29, 2016, from Monday December 5, 2016 at 10:00 am, until no earlier than 10:00 am, Thursday December 8, 2016.
2. Three principles are clear in the election code: *first*, a contest must be filed no later than twenty days from the date of the election, 25 P.S. 3456; *second*, it is customary (in non-Presidential races) for contest petitions to be held in abeyance while recount/re canvass proceedings are being resolved; and *third*, the basis for a contest petition must be stated with precision and clarity, 25 P.S. 3457.
3. In this election, many counties have not yet certified election results, and in response to timely requests for recounts/re canvassing made by hundreds of voters throughout the State, recounts are now set to occur in multiple counties. This morning, over the objection of the Republican Party, the Philadelphia Board of Elections authorized a recount request, scheduled to begin tomorrow. That recount will take multiple days. Allegheny County authorized a voter-initiated recount, and now the Republican Party has

filed a petition to stop the recount, to be heard in Allegheny Court of Common Pleas tomorrow. Voters in Bucks County requested a recount, and a court hearing in Bucks County is scheduled for Tuesday. Other recount petitions are pending in various fora throughout the State.

4. Petitioners elected to submit a timely contest petition, filed on the last available day. Petitioners also asked this Court to hold the petition in abeyance until the recounts were concluded and the election was certified.
5. In 2016, the federal government has stated that a foreign power repeatedly tried to influence the presidential election, including through cyber attacks of election systems in Arizona, Illinois, and elsewhere. In addition, multiple, prominent computer scientists publicly offered testimony as to the extraordinary vulnerability of electronic voting machines, including voting machines used throughout Pennsylvania.
6. In order to ensure the integrity of the vote, hundreds of voters and presidential candidate Jill Stein have therefore sought two basic forms of relief before county boards of elections and in court: a hand recount of paper ballots in optical scan election districts; and a forensic examination of DRE voting systems in DRE election districts. For whatever reason, the Republican Party has done everything possible to delay, stop, and quash these efforts by Pennsylvania voters to make sure their votes were counted accurately.
7. As to the DRE districts, we believe that a forensic examination could be substantially accomplished, under governmental supervision, if necessary at the expense of the Stein campaign, and without any possibility of interfering with the vote tally in the election

machines, within a matter of days, if only computer experts were given that statutorily-entitled access by a Board of Elections or a court.

8. This Court, cognizant of various deadlines related to the Electoral College, fixed a hearing date for Monday, December 5. Respectfully, that is not enough time, and we ask the Court to adjourn the hearing for 72 hours so that the contest proceeding has the benefit of a fuller record developed in recounts and recount proceedings across the State.
9. The Petitioners' request that the hearing be delayed from Monday December 5 to Thursday, December 8 is, we submit, reasonable and consistent with the deadlines set forth in the Court's scheduling order. Given what is at stake here—the integrity of a presidential election in this state—we urge this Court to adjourn the hearing until Thursday and permit this process to proceed expeditiously, but with the benefit of a fuller record gathered in the recount process.

Respectfully submitted,

/s/ LAWRENCE M. OTTER, ESQ.

LAWRENCE M. OTTER, ESQUIRE
ATTORNEY FOR PETITIONERS
PA ATTORNEY ID 31383
PO Box 575
SILVERDALE, PA 18901
267-261-2984
Email: larryotter@hotmail.com

Date: December 1, 2016

Of counsel: Emery Celli Brimcerhoff & Abady, LLP

600 Fifth Avenue
New York NY 10019
212-763-5000

by: Andrew G. Celli, Jr.*
Ilann M. Maazel*

Alison Frick*

Douglas Lieb*

* pro hac vice pending

Exhibit 39

IN THE COMMONWEALTH COURT OF PENNSYLVANIA

In Re: Matter of the 2016	:	
Presidential Election	:	
	:	
Petition of: One Hundred (100)	:	
or more unnamed registered voters of	:	
the Commonwealth of Pennsylvania	:	No. 659 M.D. 2016

PER CURIAM

ORDER

AND NOW, this 2nd day of December, 2016, upon consideration of Petitioners' request that the Court set the statutory bond required in this matter in the amount of \$25,000, and the response thereto filed by the Pennsylvania Electors of President-Elect Donald J. Trump and Vice-President-Elect Michael Pence, *et al.*, that the bond be set at \$10,000,000, it is hereby ORDERED as follows:

1. By no later than 5:00 p.m. on Monday, December 5, 2016, Petitioners must file a bond in the amount of \$1,000,000 that complies with Section 1759 of the Pennsylvania Election Code, Act of June 3, 1937, *as amended*, P.L. 1333, 25 P.S. §3459.

2. Upon good cause shown, the amount of the bond may be modified by the Court.

Certified from the Record

DEC 02 2016

And Order Exit

Exhibit 40

**IN THE COMMONWEALTH COURT OF PENNSYLVANIA
HARRISBURG, PENNSYLVANIA**

In re: The matter of the 2016 Presidential Election: Docket No: 659 MD 2016

: ELECTION MATTER

PRAECIPE TO DISCONTINUE AND WITHDRAW

TO THE PROTHONOTARY:

Petitioners are regular citizens of ordinary means. They cannot afford to post the \$1,000,000 bond required by the Court. Accordingly, kindly mark the above captioned matter withdrawn and discontinued.

Respectfully submitted,

/s/ LAWRENCE M. OTTER, ESQ.

LAWRENCE M. OTTER, ESQUIRE
ATTORNEY FOR PETITIONERS
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Date: December 3, 2016

Of counsel: Emery Celli Brimcerhoff & Abady, LLP

600 Fifth Avenue
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212-763-5000

by: Andrew G. Celli, Jr.*

Ilann M. Maazel*

Alison Frick*

Douglas Lieb*

* pro hac vice pending

Exhibit 41

VOTING MACHINES IN PENNSYLVANIA COUNTIES

County	Precincts	Total Registration	Make	Model	Equipment Type	VVPAT
Armstrong	68	39962	Premier/Diebold (Dominion)	AccuVote TSX	DRE-Touchscreen	No
Bradford	61	35220	Premier/Diebold (Dominion)	AccuVote TSX	DRE-Touchscreen	No
Carbon	51	38775	Premier/Diebold (Dominion)	AccuVote TSX	DRE-Touchscreen	No
Clarion	42	22818	Premier/Diebold (Dominion)	AccuVote TSX	DRE-Touchscreen	No
Lehigh	153	213666	Premier/Diebold (Dominion)	AccuVote TSX	DRE-Touchscreen	No
Lycoming	86	64195	Premier/Diebold (Dominion)	AccuVote TSX	DRE-Touchscreen	No
Northumberland	74	53509	Premier/Diebold (Dominion)	AccuVote TSX	DRE-Touchscreen	No
Pike	18	35226	Premier/Diebold (Dominion)	AccuVote TSX	DRE-Touchscreen	No
Potter	33	10351	Premier/Diebold (Dominion)	AccuVote TSX	DRE-Touchscreen	No
Schuylkill	125	82438	Premier/Diebold (Dominion)	AccuVote TSX	DRE-Touchscreen	No
Somerset	68	47378	Premier/Diebold (Dominion)	AccuVote TSX	DRE-Touchscreen	No
Sullivan	15	4222	Premier/Diebold (Dominion)	AccuVote TSX	DRE-Touchscreen	No
Tioga	43	24795	Premier/Diebold (Dominion)	AccuVote TSX	DRE-Touchscreen	No
Union	27	22214	Premier/Diebold (Dominion)	AccuVote TSX	DRE-Touchscreen	No
Warren	33	28963	Premier/Diebold (Dominion)	AccuVote TSX	DRE-Touchscreen	No
Washington	184	127783	Premier/Diebold (Dominion)	AccuVote TSX	DRE-Touchscreen	No
Adams	49	60039	Election Systems & Software	AutoMARK	Ballot Marking Device/System	N/A
Centre	91	106765	Election Systems & Software	AutoMARK	Ballot Marking Device/System	N/A
Franklin	75	88698	Election Systems & Software	AutoMARK	Ballot Marking Device/System	N/A
Fulton	13	9073	Election Systems & Software	AutoMARK	Ballot Marking Device/System	N/A
Huntingdon	58	28185	Election Systems & Software	AutoMARK	Ballot Marking Device/System	N/A
Indiana	69	47640	Election Systems & Software	AutoMARK	Ballot Marking Device/System	N/A
Juniata	18	13200	Election Systems & Software	AutoMARK	Ballot Marking Device/System	N/A
Lackawanna	163	139041	Election Systems & Software	AutoMARK	Ballot Marking Device/System	N/A
Mifflin	25	24275	Election Systems & Software	AutoMARK	Ballot Marking Device/System	N/A
Montour	15	12156	Election Systems & Software	AutoMARK	Ballot Marking Device/System	N/A
Snyder	25	21235	Election Systems & Software	AutoMARK	Ballot Marking Device/System	N/A
Susquehanna	43	24765	Election Systems & Software	AutoMARK	Ballot Marking Device/System	N/A
Wayne	36	31075	Election Systems & Software	AutoMARK	Ballot Marking Device/System	N/A

Montgomery	425	531545	Sequoia (Dominion)	AVC Advantage	DRE-Push Button	No
Northampton	149	196484	Sequoia (Dominion)	AVC Advantage	DRE-Push Button	No
York	159	272227	Sequoia (Dominion)	AVC Edge	DRE-Touchscreen	No
Bedford	40	32391	Hart InterCivic	eScan	Optical Scan	N/A
Fayette	83	78114	Hart InterCivic	eScan	Optical Scan	N/A
Lancaster	242	306928	Hart InterCivic	eScan	Optical Scan	N/A
Bedford	40	32391	Hart InterCivic	eSlate	DRE-Dial	No
Blair	97	73039	Hart InterCivic	eSlate	DRE-Dial	No
Fayette	83	78114	Hart InterCivic	eSlate	DRE-Dial	No
Lancaster	242	306928	Hart InterCivic	eSlate	DRE-Dial	No
Allegheny	1319	885231	Election Systems & Software	iVotronic	DRE-Touchscreen	No
Beaver	129	106137	Election Systems & Software	iVotronic	DRE-Touchscreen	No
Butler	89	118742	Election Systems & Software	iVotronic	DRE-Touchscreen	No
Cambria	133	81321	Election Systems & Software	iVotronic	DRE-Touchscreen	No
Cameron	10	3114	Election Systems & Software	iVotronic	DRE-Touchscreen	No
Chester	226	321417	Election Systems & Software	iVotronic	DRE-Touchscreen	No
Clearfield	70	50939	Election Systems & Software	iVotronic	DRE-Touchscreen	No
Clinton	34	20361	Election Systems & Software	iVotronic	DRE-Touchscreen	No
Columbia	42	36887	Election Systems & Software	iVotronic	DRE-Touchscreen	No
Crawford	68	51921	Election Systems & Software	iVotronic	DRE-Touchscreen	No
Cumberland	118	152170	Election Systems & Software	iVotronic	DRE-Touchscreen	No
Elk	33	19148	Election Systems & Software	iVotronic	DRE-Touchscreen	No
Erie	152	178728	Election Systems & Software	iVotronic	DRE-Touchscreen	No
Forest	9	3300	Election Systems & Software	iVotronic	DRE-Touchscreen	No
Greene	44	22050	Election Systems & Software	iVotronic	DRE-Touchscreen	No
Jefferson	37	28733	Election Systems & Software	iVotronic	DRE-Touchscreen	No
Lawrence	75	53490	Election Systems & Software	iVotronic	DRE-Touchscreen	No
Lebanon	55	79444	Election Systems & Software	iVotronic	DRE-Touchscreen	No
Luzerne	189	189930	Election Systems & Software	iVotronic	DRE-Touchscreen	No
McKean	42	24201	Election Systems & Software	iVotronic	DRE-Touchscreen	No
Mercer	100	72817	Election Systems & Software	iVotronic	DRE-Touchscreen	No
Perry	31	26627	Election Systems & Software	iVotronic	DRE-Touchscreen	No

Venango	49	30839	Election Systems & Software	iVotronic	DRE-Touchscreen	No
Westmoreland	306	239461	Election Systems & Software	iVotronic	DRE-Touchscreen	No
Wyoming	31	16178	Election Systems & Software	iVotronic	DRE-Touchscreen	No
Adams	49	60039	Election Systems & Software	Model 100	Optical Scan	N/A
Centre	91	106765	Election Systems & Software	Model 100	Optical Scan	N/A
Chester	226	321417	Election Systems & Software	Model 100	Optical Scan	N/A
Columbia	42	36887	Election Systems & Software	Model 100	Optical Scan	N/A
Franklin	75	88698	Election Systems & Software	Model 100	Optical Scan	N/A
Fulton	13	9073	Election Systems & Software	Model 100	Optical Scan	N/A
Huntingdon	58	28185	Election Systems & Software	Model 100	Optical Scan	N/A
Indiana	69	47640	Election Systems & Software	Model 100	Optical Scan	N/A
Juniata	18	13200	Election Systems & Software	Model 100	Optical Scan	N/A
Lackawanna	163	139041	Election Systems & Software	Model 100	Optical Scan	N/A
Mifflin	25	24275	Election Systems & Software	Model 100	Optical Scan	N/A
Montour	15	12156	Election Systems & Software	Model 100	Optical Scan	N/A
Snyder	25	21235	Election Systems & Software	Model 100	Optical Scan	N/A
Westmoreland	306	239461	Election Systems & Software	Model 100	Optical Scan	N/A
Centre	91	106765	Election Systems & Software	Model 650	Optical Scan	N/A
Cumberland	118	152170	Election Systems & Software	Model 650	Optical Scan	N/A
Luzerne	189	189930	Election Systems & Software	Model 650	Optical Scan	N/A
Susquehanna	43	24765	Election Systems & Software	Model 650	Optical Scan	N/A
Wayne	36	31075	Election Systems & Software	Model 650	Optical Scan	N/A
Westmoreland	306	239461	Election Systems & Software	Model 650	Optical Scan	N/A
Berks	199	238729	Danaher	Shouptronic 1242	DRE-Push Button	No
Bucks	307	434371	Danaher	Shouptronic 1242	DRE-Push Button	No
Dauphin	162	173470	Danaher	Shouptronic 1242	DRE-Push Button	No
Delaware	426	380182	Danaher	Shouptronic 1242	DRE-Push Button	No
Monroe	50	98522	Danaher	Shouptronic 1242	DRE-Push Button	No
Philadelphia	1686	990877	Danaher	Shouptronic 1242	DRE-Push Button	No

Exhibit 42

Court of Common Pleas of Montgomery County--Civil Action

Glen Gaddy, et al.,	:	No. 2016-28344 (consolidated)
Petitioners	:	
	:	In re: Petitions to Recount and/or
vs.	:	Re-Canvass Votes
	:	
Montgomery County Board of Elections,	:	
Respondent	:	

ORDER

And now, this 30th day of November, 2016, upon considering the Montgomery County voters' petitions listed in the attached Exhibit "A," which we hereby incorporate in this order as fully as if a part hereof, to recount and or re-canvass votes cast in certain County electoral districts in the November 8, 2016, general election, for the offices of President of the United States, Vice President of the United States, and United States Senator, citing the authority of the Pennsylvania Election Code, 25 P.S. §§ 3154, 3262, and after hearing counsel for the parties and other interested parties in open Court, the Court hereby *orders* and *decrees* as follows: (1) By agreement of the parties, we hereby *grant* the motion of the Montgomery County Board of Elections to consolidate the petitions; all petitions listed by lead petitioner and docket number in Exhibit "A" are hereby *consolidated* for all purposes pursuant to Pa.R.C.P. 213(a), at the docket number listed in the caption above (No. 16-28344). (2) The Court hereby further *orders* that the petitions to recount and re-canvass votes, as so consolidated, are *denied*.

BY THE COURT:


 BERNARD A. MOORE, S.J.

Copies mailed 12/1/16 to:
 Ilann M. Maazèl, Esq.
 Lawrence Otter, Esq.
 Nicole Forzato, Esq.
 Lawrence Tabas, Esq.
 Jonathan S. Goldstein, Esq.
 Rebecca L. Warren, Esq.
 Bradford Richman, Esq.



2016-28344-0006 12/1/2016 10:04 AM # 11064258

Order

Rept#Z2957940 Fee:\$0.00

Mark Levy - MontCo Prothonotary


 Secretary

THIS DOCUMENT WAS DOCKETED AND SENT ON 12/01/2016

Exhibit 44



DEPARTMENT OF LAW

COUNTY OF ALLEGHENY

300 Fort Pitt Commons Bldg. ♦ 445 Fort Pitt Boulevard ♦ Pittsburgh, PA 15219
TELEPHONE: (412) 350-1120 ♦ FAX: (412) 350-1174

Rich Fitzgerald
Chief Executive

Andrew F. Szefi
County Solicitor
Andrew.Szefi@AlleghenyCounty.US

December 5, 2016

Douglas E. Leib, Esquire
Emery Celli Brinckerhoff & Abady LLP
600 Fifth Avenue at Rockefeller Center
10th Floor
New York, NY 10020

By Email:
dlieb@ecbalaw.com

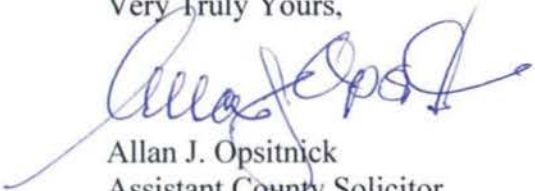
Re: Allegheny County Elections Recanvass

Dear Mr. Leib,

I received your letter of December 4th last evening. The response of Allegheny County is as follows:

1. On Friday Judge James ordered that the requested recanvass in fifty two election districts proceed. Mr. Wolosik described the mechanics of the recanvass while testifying on Friday. That process began at ten o'clock this morning and has been completed;
2. Judge James did not order any sort of forensics examination. You also confirmed that Mr. Wolosik testified in depth about the forensic measures that Allegheny County takes to ensure that its DRE machines function properly;
3. Neither of the Pennsylvania Supreme Court cases that you cite have any bearing on the instant situation.

Very Truly Yours,


Allan J. Opsitnick
Assistant County Solicitor

C: Ronald L. Hicks, Esquire
Nicholas J. Bell, Esquire
Stuart C. Gaul, Jr., Esquire
Mark Wolosik, Elections Division Manager

Exhibit 45

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

JILL STEIN, et al.,

Plaintiffs,

Case No. 16-14233

Hon. Mark A. Goldsmith

vs.

CHRISTOPHER M. THOMAS,
et al.,

Defendants.

_____ /

**OPINION & ORDER GRANTING PLAINTIFFS' MOTION
FOR TEMPORARY RESTRAINING ORDER (Dkt. 2)**

Plaintiffs Dr. Jill Stein and Louis Novak were, respectively, a presidential candidate and a Michigan voter, in the presidential election held on November 8, 2016. Defendants are officials charged with administering the election in Michigan, which includes recounting the votes and certifying the results.

On November 30, 2016, Stein filed a petition seeking a statewide recount of the election. Pl. Br. at 2 (Dkt. 2-1). The recount was set to begin on December 2, 2016, but the day before, President-elect Donald J. Trump filed objections to Stein's petition. *Id.* at 3. On December 2, 2016, the Michigan State Board of Canvassers deadlocked as to Mr. Trump's objections, resulting in an automatic rejection of Mr. Trump's objections. *See* Defs. Resp. at 3-4 & n.3 (citing Mich. Comp. Laws § 168.22d(2)) (Dkt. 6). The objections are currently the subject of litigation in the Michigan Court of Appeals, with an application for by-pass pending in the Michigan Supreme Court.

Pursuant to Michigan law, the resolution of these objections prohibited Michigan officials from beginning the recount until two business days had passed. See Mich. Comp. Laws § 168.882(3) (providing in part that “[t]he board of state canvassers shall not begin a recount unless 2 or more business days have elapsed since the board ruled on the objections under this subsection, if applicable.”). Because this two-day period spanned a weekend, the delay would amount to 4 days total, with the recount tentatively scheduled to commence on either the evening of December 6 or the morning of December 7, 2016. See Brewer Decl. at 3 (Dkt. 3).

This four-day delay made unavailable about one-third of the time allocated to complete the recount, on the assumption that the recount would have to be completed by December 13, 2016 — the so-called “safe harbor” date for the selection of presidential electors. See Pls. Br. at 4; Defs. Resp. at 13-14; 3 U.S.C. § 5. Without completion of the recount, any controversy regarding which candidate’s electors had been elected in the November 8 election might ultimately be decided by Congress, rather than conclusively determined by Michigan. Plaintiffs allege that: (i) the recount is essential for a proper recording of voters’ preferences, and (ii) if not completed by the “safe harbor date,” voters will lose the right of having their actual selection of presidential electors tabulated free from possible contravention by Congress. Accordingly, Plaintiffs filed a complaint and this motion for a temporary restraining order or preliminary injunction, asking this Court to enjoin Defendants from delaying the recount until December 7, 2016.

DISCUSSION

To determine whether to grant a preliminary injunction or temporary restraining order, a district court must consider: (i) whether the movant has a strong likelihood of success on the merits; (ii) whether the movant would suffer irreparable injury without the injunction; (iii)

whether issuance of the injunction would cause substantial harm to others; and (iv) whether the public interest would be served by the issuance of the injunction. Baker v. Adams Cnty./Ohio Valley Sch. Bd., 310 F.3d 927, 928 (6th Cir. 2002). These four factors “are factors to be balanced, not prerequisites that must be met.” Hamad v. Woodcrest Condo. Ass’n, 328 F.3d 224, 230 (6th Cir. 2003).

Plaintiffs have shown a likelihood of success on the merits of their claim that the two business day waiting period, as applied in this case, would likely violate their right to vote under the First and Fourteenth Amendments. The Supreme Court has recognized that while the Constitution itself accords no right to vote for presidential electors, a state’s decision to allow voters to make that decision creates a right to vote that is deemed “fundamental.” Bush v. Gore, 531 U.S. 98, 104 (2000) (“When the state legislature vests the right to vote for President in its people, the right to vote as the legislature has prescribed is fundamental . . .”); see also League of Women Voters of Ohio v. Brunner, 548 F.3d 463, 476 (6th Cir. 2008) (“The right to vote is a fundamental right, preservative of all rights.”). When that right is burdened, courts must engage in a careful analysis of the magnitude of the infringement and the countervailing interest of the state. As the court explained in Burdick v. Takushi, 504 U.S. 428 (1992):

A court considering a challenge to a state election law must weigh the character and magnitude of the asserted injury to the rights protected by the First and Fourteenth Amendments that the plaintiff seeks to vindicate against “the precise interests put forward by the State as justifications for the burden imposed by its rule, taking into consideration the extent to which those interests make it necessary to burden the plaintiff’s rights.

Under this standard, the rigorousness of our inquiry into the propriety of a state election law depends upon the extent to which a challenged regulation burdens First and Fourteenth Amendment rights. Thus, as we have recognized when those rights are subjected to severe restrictions, the regulation must be narrowly drawn to advance a state interest of compelling importance. But

when a state election law provision imposes only reasonable, nondiscriminatory restrictions upon the First and Fourteenth Amendment rights of voters, the State's important regulatory interests are generally sufficient to justify the restrictions.

Id. at 434 (quoting Anderson v. Celebrezze, 460 U.S. 780, 788, 789 (1983)).

Here, there is a right to a recount provided by state law, designed to ensure a fair and accurate election. Plaintiffs invoke that right, claiming that a delay in the recount will jeopardize it. Defendants do not dispute that the loss of a recount right would impair the right to vote. Rather, they claim that Mich. Comp. Laws § 168.882(3) is not unconstitutional because of the state's interest in avoiding the cost of starting a recount effort that may later be halted through judicial review of the Board of Canvassers' rejection of an objection to the recount. See Defs. Resp. at 12 ("A short waiting period helps guard against unnecessary expense should a Michigan state court determine that a recount should not go forward.").

However, with the perceived integrity of the presidential election as it was conducted in Michigan at stake, concerns with cost pale in comparison. Historically, courts have assigned diminished weight to a state's financial interest when constitutional rights are at stake. See, e.g., Shapiro v. Thompson, 394 U.S. 618, 633 (1969), overruled in part on other grounds by 394 U.S. 618, 634 (1969). Such concerns are further reduced when taking into account the fact that Plaintiffs have paid the fee required by law for the recount — \$973,250. See Brewer Decl. at 2. This fee undoubtedly covers the cost of starting the recount roughly a day or two before it would otherwise commence if the two-day rule were observed.

Plaintiffs have also shown the likelihood of irreparable harm. Where a plaintiff's constitutional rights are at issue, the movant need only show that his rights are "threatened," from which showing "a finding of irreparable injury is mandated." Am. Civil Liberties Union of Kentucky v. McCreary Cnty., Ky., 354 F.3d 438, 445 (6th Cir. 2003), aff'd sub nom. McCreary

Cty., Ky. v. Am. Civil Liberties Union of Ky., 545 U.S. 844 (2005) (citing Elrod v. Burns, 427 U.S. 347, 373 (1976)).

Plaintiffs here have shown a credible threat that the recount, if delayed, would not be completed by the “safe harbor” day. Defendant Christopher Thomas, the Director of Elections with the Michigan Secretary of State’s office, testified at the motion hearing that a recount as originally conceived — an 11- or 12-day period starting on December 2, consisting of 11-hour days, see Pls. Br. at 3 — “would have been very difficult itself.” He could not state that the recount would be completed on time even in the “best case scenario,” which entails “no delays or undue challenging.” According to Thomas, to complete a recount by December 13 if its start date were delayed until December 7 would be a “monumental undertaking.” The best he could say was that “we’ll make a run at it.” Such uncertainty shows that there is a credible threat to the voters’ right to have a determination made that Michigan’s vote for president was properly tabulated.

The issuance of temporary relief will not cause substantial harm to others. As emphasized earlier, budgetary concerns are not sufficiently significant to risk the disenfranchisement of Michigan’s nearly 5 million voters. Further, Plaintiffs’ payment of nearly a million dollar fee further reduces any such harm: in the event that the recount is canceled for whatever reason, Stein’s filing fee will be made available to the extent necessary to cover all expenses.

Finally, the public interest would be served by the issuance of temporary relief. The fundamental right invoked by Plaintiffs — the right to vote, and to have that vote conducted fairly and counted accurately — is the bedrock of our Nation. Without elections that are

conducted fairly – and perceived to be fairly conducted – public confidence in our political institutions will swiftly erode.

Defendants’ arguments in opposition to Plaintiffs’ motion are unavailing. First, Defendants have not shown that the doctrine of laches should apply. There is a strong presumption that a filing delay is reasonable when the filing complies with the limitations period, see Chirco v. Crosswinds Cmtys. Inc., 474 F.3d 227, 233 (6th Cir. 2007), and no one disputes that Stein’s petition for a recount was timely filed. In such a case, the presumption can be overcome by a showing of undue prejudice to the non-movant. Id. at 234. The Michigan governmental defendants offered no reason to believe that they have been prejudiced; indeed, accelerating the recount will likely ease their burden somewhat. Intervenor Michigan Republican Party briefly argued that the changes to the recount schedule have caused it some logistical problems concerning flight and hotel reservations booked for people it had retained to participate in the recount, but (i) this concern must yield to the constitutional rights at issue here; and (ii) the recount was scheduled to last until December 13, 2016, so it seems unlikely that all or most of these plans were significantly altered in light of the delay and the proximity of the delay to the original recount commencement date.

Defendants’ arguments concerning declaratory relief, see Defs. Resp. at 10, are likewise rejected, for the simple reason that Plaintiffs’ motion seeks a temporary restraining order – not declaratory relief. “The Court has recognized that different considerations enter into a federal court’s decision as to declaratory relief, on the one hand, and injunctive relief, on the other.” Roe v. Wade, 410 U.S. 113, 166 (1973), holding modified by Planned Parenthood of Se. Pennsylvania v. Casey, 505 U.S. 833 (1992) (citing Zwickler v. Koota, 389 U.S. 241, 252-255

(1967)). And even if the Court adopted the analytical framework advanced by Defendants, it would not change the result.

Finally, the Court rejects Defendants' arguments for Burford abstention. See Defs. Br. at 9 (citing Caudill v. Eubanks Farms, Inc., 301 F.3d 658, 660 (6th Cir. 2002)); see generally Burford v. Sun Oil Co., 319 U.S. 315 (1943). Burford involved a complex regulatory scheme, and federal intervention there "would be disruptive of state efforts to establish a coherent policy with respect to a matter of substantial public concern." Quackenbush v. Allstate Ins. Co., 517 U.S. 706, 727 (1996). "[T]he power to dismiss recognized in Burford represents an extraordinary and narrow exception to the duty of the District Court to adjudicate a controversy properly before it." Id. at 728. Here, the requested temporary restraining order would not do violence to Michigan's scheme, which does not appear complex, and the fact that the challenge to the statute is an as-applied challenge means that, with the exception of the instant case, Michigan's voting policy will remain intact.¹

CONCLUSION

For the above reasons, Defendants and any persons acting in concert with them are ordered to cease any delay in the commencement of the recount of the presidential vote cast in Michigan as of noon on December 5, 2016. At that time, the recount shall commence and must continue until further order of this Court. Defendants shall instruct all governmental units

¹ Although Defendants point out that they were not formally served, the Court conducted a hearing at which Defendants' counsel fully participated. Also present were Defendant Thomas and counsel for intervenor Republican Party of Michigan. In these circumstances, Defendants have had effective notice of the proceedings.

participating in the recount to assemble necessary staff to work sufficient hours to assure that the recount is completed in time to comply with the “safe harbor” provision of 3 U.S.C. § 5.²

SO ORDERED.

Dated: December 5, 2016
Detroit, Michigan

s/Mark A. Goldsmith
MARK A. GOLDSMITH
United States District Judge

CERTIFICATE OF SERVICE

The undersigned certifies that the foregoing document was served upon counsel of record and any unrepresented parties via the Court’s ECF System to their respective email or First Class U.S. mail addresses disclosed on the Notice of Electronic Filing on December 5, 2016.

s/Karri Sandusky
Case Manager

² No bond will be required because the recount fee paid of nearly one million dollars will provide sufficient funds from which to compensate Michigan for the start of the recount before December 7, should the recount later be halted.

Exhibit 46

Montgomery County, Pennsylvania
2016 GENERAL ELECTION
November 8, 2016
Official Results

Last Updated: December 7, 2016 12:11 PM

Registration & Turnout

575,645 Voters

	Vote Count	Percent
Cartridge Turnout	424,311	73.71%
Absentee Turnout	22,658	3.94%
Total	446,969	77.65%

President of the United States

429/429 100.00%

Under Votes 7389

Over Votes 0

	Vote Count	Percent
Dem - HILLARY CLINTON/TIM KAINE	256,082	58.91%
Rep - DONALD J TRUMP/MICHAEL R PENCE	162,731	37.44%
Con - DARRELL L CASTLE/SCOTT N BRADLEY	1,236	0.28%
Grn - JILL STEIN/AJAMU BARAKA	3,704	0.85%
Lib - GARY JOHNSON/WILLIAM WELD	10,934	2.52%
Total	434,687	100.00%

United States Senator

429/429 100.00%

Under Votes 13492

Over Votes 0

	Vote Count	Percent
Dem - KATIE MCGINTY	237,353	54.90%
Rep - PAT TOOMEY	189,574	43.85%
Lib - EDWARD T CLIFFORD III	5,431	1.26%
Total	432,358	100.00%

Attorney General

429/429 100.00%

Under Votes 15816

Over Votes 0

	Vote Count	Percent
Dem - JOSH SHAPIRO	254,710	59.35%
Rep - JOHN RAFFERTY	174,428	40.65%
Total	429,138	100.00%

Auditor General

429/429 100.00%

Under Votes 22239

Over Votes 0

	Vote Count	Percent
Dem - EUGENE A DEPASQUALE	229,623	54.37%
Rep - JOHN BROWN	183,244	43.39%
Grn - JOHN J SWEENEY	4,636	1.10%
Lib - ROY A MINET	4,826	1.14%
Total	422,329	100.00%

State Treasurer

429/429 100.00%

Under Votes 20957

Over Votes 0

	Vote Count	Percent
Dem - JOE TORSELLA	244,045	57.60%
Rep - OTTO VOIT	170,720	40.30%
Grn - KRISTIN COMBS	4,277	1.01%
Lib - JAMES BABB	4,623	1.09%
Total	423,665	100.00%

Representative in Congress District 2

46/46 100.00%

Under Votes	1512
Over Votes	0

	Vote Count	Percent
Dem - DWIGHT EVANS	27,547	71.11%
Rep - JAMES A JONES	11,194	28.89%
Total	38,741	100.00%

Representative in Congress District 6

61/61 100.00%

Under Votes	3780
Over Votes	0

	Vote Count	Percent
Dem - MIKE PARRISH	36,680	43.99%
Rep - RYAN COSTELLO	46,696	56.01%
Total	83,376	100.00%

Representative in Congress District 7

73/73 100.00%

Under Votes	3236
Over Votes	0

	Vote Count	Percent
Dem - MARY ELLEN BALCHUNIS	34,720	44.97%
Rep - PATRICK L MEEHAN	42,492	55.03%
Total	77,212	100.00%

Representative in Congress District 8

38/38 100.00%

Under Votes	1549
Over Votes	0

	Vote Count	Percent
Dem - STEVE SANTARSIERO	17,028	40.38%
Rep - BRIAN FITZPATRICK	25,143	59.62%

Total	42,171	100.00%
-------	--------	---------

Representative in Congress District 13

211/211 100.00%

Under Votes	60617
-------------	-------

Over Votes	0
------------	---

	Vote Count	Percent
Dem - BRENDAN F BOYLE	130,410	100.00%
Total	130,410	100.00%

Senator in the General Assembly District 7

36/36 100.00%

Under Votes	11262
-------------	-------

Over Votes	0
------------	---

	Vote Count	Percent
Dem - VINCENT HUGHES	21,212	100.00%
Total	21,212	100.00%

Senator in the General Assembly District 17

107/107 100.00%

Under Votes	4589
-------------	------

Over Votes	0
------------	---

	Vote Count	Percent
Dem - DAYLIN LEACH	62,675	66.82%
Rep - BRIAN GONDEK	31,125	33.18%
Total	93,800	100.00%

Representative in the General Assembly Dist. 26

5/5 100.00%

Under Votes	2071
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Over Votes	0
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	Vote Count	Percent
Rep - TIM HENNESSEY	974	100.00%
Total	974	100.00%

Representative in the General Assembly Dist. 53

34/34 100.00%

Under Votes	1449
Over Votes	0

	Vote Count	Percent
Dem - LEON ANGELICHIO	12,205	40.46%
Rep - ROBERT W GODSHALL	17,964	59.54%
Total	30,169	100.00%

Representative in the General Assembly Dist. 61

34/34 100.00%

Under Votes	1498
Over Votes	0

	Vote Count	Percent
Dem - ROBERT WILKINSON	15,732	43.47%
Rep - KATE M HARPER	20,458	56.53%
Total	36,190	100.00%

Representative in the General Assembly Dist. 70

29/29 100.00%

Under Votes	1438
Over Votes	0

	Vote Count	Percent
Dem - MATT BRADFORD	18,433	66.99%
Rep - CHUCK SPRINGER	9,084	33.01%
Total	27,517	100.00%

Representative in the General Assembly Dist. 131

6/6 100.00%

Under Votes 374

Over Votes 0

	Vote Count	Percent
Dem - JOANNE JACKSON	2,695	36.25%
Rep - JUSTIN J SIMMONS	4,739	63.75%
Total	7,434	100.00%

Representative in the General Assembly Dist. 146

21/21 100.00%

Under Votes 1213

Over Votes 0

	Vote Count	Percent
Dem - JOE CIRESI	14,381	48.85%
Rep - THOMAS J QUIGLEY	15,060	51.15%
Total	29,441	100.00%

Representative in the General Assembly Dist. 147

22/22 100.00%

Under Votes 1582

Over Votes 0

	Vote Count	Percent
Dem - RACHEL HENDRICKS	11,597	36.65%
Rep - MARCY TOEPEL	20,045	63.35%
Total	31,642	100.00%

Representative in the General Assembly Dist. 148

42/42 100.00%

Under Votes 1744

Over Votes 0

	Vote Count	Percent
Dem - MARY JO DALEY	24,669	63.48%

Rep - ED FLOCCO	14,193	36.52%
Total	38,862	100.00%

Representative in the General Assembly Dist. 149

38/38 100.00%

Under Votes	1551
Over Votes	0

	Vote Count	Percent
Dem - TIM BRIGGS	22,393	66.86%
Rep - CHIRA SMITH	11,097	33.14%
Total	33,490	100.00%

Representative in the General Assembly Dist. 150

23/23 100.00%

Under Votes	1322
Over Votes	0

	Vote Count	Percent
Dem - LINDA WEAVER	14,352	45.68%
Rep - MICHAEL N CORR	17,065	54.32%
Total	31,417	100.00%

Representative in the General Assembly Dist. 151

34/34 100.00%

Under Votes	1260
Over Votes	0

	Vote Count	Percent
Dem - JIMMY FAGAN JR	13,119	39.19%
Rep - TODD STEPHENS	20,358	60.81%
Total	33,477	100.00%

Representative in the General Assembly Dist. 152

33/33 100.00%

Under Votes	1420
Over Votes	0

	Vote Count	Percent
Dem - ALBERT J DERMOVSESIAN	11,420	36.52%
Rep - THOMAS P MURT	19,854	63.48%
Total	31,274	100.00%

Representative in the General Assembly Dist. 153

44/44 100.00%

Under Votes	1670
Over Votes	0

	Vote Count	Percent
Dem - MADELEINE DEAN	24,496	66.25%
Rep - ANTHONY SCALFARO	12,478	33.75%
Total	36,974	100.00%

Representative in the General Assembly Dist. 154

45/45 100.00%

Under Votes	1865
Over Votes	0

	Vote Count	Percent
Dem - STEVE MCCARTER	27,067	77.75%
Rep - THOM ESTILOW	7,747	22.25%
Total	34,814	100.00%

Representative in the General Assembly Dist. 157

3/3 100.00%

Under Votes	266
Over Votes	0

	Vote Count	Percent
Dem - HANS VAN MOL	2,556	40.27%
Rep - WARREN KAMPF	3,791	59.73%

Total 6,347 100.00%

Representative in the General Assembly Dist. 166

8/8 100.00%

Under Votes 256

Over Votes 0

	Vote Count	Percent
Dem - GREG VITALI	4,611	78.78%
Rep - JIM KNAPP	1,242	21.22%
Total	5,853	100.00%

Representative in the General Assembly Dist. 172

1/1 100.00%

Under Votes 56

Over Votes 0

	Vote Count	Percent
Dem - KEVIN J BOYLE	661	48.35%
Rep - JIM PIO	706	51.65%
Total	1,367	100.00%

Representative in the General Assembly Dist. 194

7/7 100.00%

Under Votes 248

Over Votes 0

	Vote Count	Percent
Dem - PAM DELISSIO	4,475	75.01%
Rep - BILL POUNDS	1,491	24.99%
Total	5,966	100.00%

Special Election Representative in Congress Dist.2

46/46 100.00%

Under Votes 2270

Over Votes 0

	Vote Count	Percent
Dem - DWIGHT EVANS	26,973	71.47%
Rep - JAMES A JONES	10,765	28.53%
Total	37,738	100.00%

Special Election Whitemarsh Supervisor

10/10 100.00%

Under Votes 494

Over Votes 0

	Vote Count	Percent
Dem - MICHAEL DROSSNER	6,345	58.04%
Rep - JOHN L WILLIAMS	4,587	41.96%
Total	10,932	100.00%

Proposed Constitutional Amendment

429/429 100.00%

Under Votes 156372

Over Votes 0

	Vote Count	Percent
NP - Yes	121,567	42.33%
NP - No	165,634	57.67%
Total	287,201	100.00%

Lower Moreland Township

7/7 100.00%

Under Votes 2432

Over Votes 0

	Vote Count	Percent
NP - Yes	1,865	35.22%
NP - No	3,431	64.78%
Total	5,296	100.00%

Upper Providence Township

5/5 100.00%

Under Votes 2353

Over Votes 0

	Vote Count	Percent
NP - Yes	4,813	51.32%
NP - No	4,565	48.68%
Total	9,378	100.00%

Choose not to Vote

429/429 100.00%

Under Votes 420279

Over Votes 0

	Vote Count	Percent
NP - No Vote	4,087	100.00%
Total	4,087	100.00%

Exhibit 47

Meeting of the Return Board
December 1, 2016

MEETING OF THE RETURN BOARD

- - - - -
December 1, 2016
- - - - -

COMMISSIONERS PRESENT:

ANTHONY CLARK, CHAIRMAN
AL SCHMIDT, VICE CHAIRMAN
LISA DEELEY, COMMISSIONER
CARLA MOSS, DEPUTY COMMISSIONER
DON GARECHT, DEPUTY COMMISSIONER
SETH BLUESTEIN, DEPUTY COMMISSIONER
TIM DOWLING, DEPUTY COMMISSIONER

PRESENT:

FRED VOIGT, LEGAL COUNSEL
JOSEPH LYNCH, ELECTION MATERIAL
KEVIN KELLY

ALSO PRESENT:

LAWRENCE TABAS, ESQUIRE,
REBECCA WARREN, ESQUIRE
ILANN MAAZEL, ESQUIRE
DAVE DAVIES, WHYY-FM SENIOR REPORTER

HELD AT: Delaware and Spring Garden Streets
Philadelphia, Pennsylvania

REPORTED BY: Serena A. Spotts

Strehlow & Associates, Inc.

(215)504-4622

STREHLOW & ASSOCIATES, INC.
(215) 504-4622

Meeting of the Return Board
December 1, 2016

Page 2	Page 4
<p>1 - - - - - 2 (Whereupon, the meeting of the 3 Return Board began at 10:00 a.m.) 4 - - - - - 5 CHAIRMAN CLARK: Good morning, 6 everyone. It is 10 o'clock a.m., Thursday, 7 December 1st, 2016. This is the meeting of 8 the Return Board. 9 COMMISSIONER SCHMIDT: 10 Commissioner Deeley will now address the 11 recanvass petitions submitted to the board 12 prior to the announcement of computation. 13 After the proceedings, we'll provide an 14 opportunity for statements by counsel, if 15 they wish. 16 COMMISSIONER DEELEY: Thank you, 17 Commissioners. The staff at the County 18 Board of Elections have evaluated the 19 petitions submitted prior to the 20 announcement of the computation and has 21 recommended to the Return Board, in 22 accordance with the provisions of the 23 Pennsylvania Election Code, that 297 24 affiance executed petitions for recanvass</p>	<p>1 12, 14, 15; 2 Ward 12, Division 22; 3 Ward 15, Divisions 6, 9, 16, 17; 4 Ward 18, Division 10; 5 Ward 21, Divisions 11, 18, 22, 6 24, 29, 30, 31, 44; 7 Ward 22, Divisions 1, 2, 5, 6, 8 and 10; 9 Ward 27, Divisions 5, 7, 15; 10 Ward 30, Divisions 1, 5, 6, 7, 11 13, 14, 15; 12 Ward 36, Divisions 29, 37, 41; 13 Ward 38, Division 11; 14 Ward 39, Division 45; 15 Ward 46, Divisions 1, 2, 10, 16, 16 19; 17 Ward 53, Division 16; 18 Ward 54, Division 6; 19 Ward 59, Divisions 10 and 19; 20 Ward 66, Division 9. 21 Counsel and representatives of 22 the candidates may obtain copies of the 23 petitions from the County Board of 24 Elections, Room 142, City Hall. It is</p>
Page 3	Page 5
<p>1 and recount and brought those before the 2 board, 282 of the affidavits were found to 3 be in conformity with the requirements of 4 the Pennsylvania Election Code. And 15 of 5 the affidavits were found not to be in 6 conformity with the requirements of the 7 Pennsylvania Election Code. 8 The County Board of Elections 9 recommends that the following divisions be 10 subject to recanvass and recount because 11 there were at least three affiance for each 12 request for recanvass or recount in 13 conformity with the requirements of the 14 Pennsylvania Election Code from each 15 division. 16 The divisions are Ward 1, 17 Divisions 11, 12, 14, 20; 18 Ward 2, Divisions 7, 11, 15, 16, 19 19, 20, 24, 25, 26; 20 Ward 3, Division 4; 21 Ward 5, Divisions 1, 3, 4, 8, 22 14, 22, 27; 23 Ward 8, Divisions 7, 9; 24 Ward 9, Divisions 2, 3, 4, 6, 9,</p>	<p>1 recommended that we not conduct a forensic 2 audit of the machines as required by the 3 petitioners, as such an examination is 4 beyond the scope of the recanvass and 5 recount provisions of the Pennsylvania 6 Election Code. 7 The recanvass and recount 8 process will be conducted as set forth in 9 the Pennsylvania Election Code T -- 25 P.S. 10 Section 3154. The recanvass and recount 11 will include a recanvass of the machine 12 vote and a recanvass of all paper ballots 13 to include absentee, provisional, and such 14 emergency ballots as there are for each of 15 the previously identified divisions. 16 The recanvass and recount will 17 commence at 1 p.m. on Friday, December 2, 18 2016 at the Board of Elections voting 19 machine warehouse, 4700 Wissahickon Avenue, 20 Philadelphia, Pennsylvania 19144. Based on 21 the recommendations of the staff of the 22 County Board of Elections, 282 petitions 23 were found to be in conformity with the 24 requirements of the Pennsylvania Election</p>

Meeting of the Return Board
December 1, 2016

Page 6	Page 8
<p>1 Code. 2 And pursuant to the requirements 3 of the code, I move that those divisions we 4 have enumerated as having at least three 5 petitioners request in conformity with the 6 requirements of the Pennsylvania Election 7 Code be subject to a recanvass and recount 8 by this board in the manner we have 9 discussed. 10 All in favor? 11 COMMISSIONER SCHMIDT: I second 12 the motion. I vote in favor. 13 CHAIRMAN CLARK: I vote in 14 favor. 15 COMMISSIONER DEELEY: The motion 16 carries. 17 COMMISSIONER SCHMIDT: We'll now 18 open the record for brief comments from 19 Counsel, if they wish. 20 MR. MAAZEL: Morning. 21 COMMISSIONER SCHMIDT: Would you 22 mind stating your name for the record? 23 MR. MAAZEL: Iann Maazel, from 24 Emery, Celli, Brinckerhoff & Abady,</p>	<p>1 But the one I'd like to start with is 2 Section 2650, which provides that any 3 candidate present at any recount of ballots 4 of recanvass of voting shall be entitled to 5 examine the voting machine and raise any 6 objections regarding the same. 7 Now, examine is not defined in 8 the Election Code. But examination plainly 9 includes something more than just standing 10 there and watching people press a button 11 and recanvass the machines. It means being 12 able to look inside the software to do a 13 search and examination, to do an 14 inspection. That's the Merriam-Webster 15 definition of examination. 16 There is only one way for any 17 candidate to do any competent examination 18 of the DRE system. And that is to look 19 inside the software, to look inside the 20 media, to see if there is anything in the 21 code that switch votes, to see if votes 22 were accurately counted. It's the only 23 way. 24 We can't simply look at a</p>
Page 7	Page 9
<p>1 appearing on behalf of presidential 2 candidate Jill Stein. 3 Would you all prefer if I stand 4 or sit? 5 COMMISSIONER SCHMIDT: Whatever 6 is convenient for you. 7 MR. MAAZEL: I'm used to 8 standing. Yesterday evening we submitted 9 to the board a request on behalf of 10 Ms. Stein, one of the presidential 11 candidates, for a forensic examination of 12 the DRE electronic voting system in 13 Philadelphia. And attached to that letter 14 were five affidavits by leading computer 15 scientists and experts throughout the 16 country describing the vulnerabilities of 17 the area machines and, in particular, the 18 area machines here in Philadelphia. 19 What I want to start with is a 20 basic proposition, which is that Ms. Stein, 21 as a candidate, has a right under the 22 Pennsylvania Election Code to do this 23 forensic audit. She has a right under 24 multiple sections of the election code.</p>	<p>1 machine from the outside and determine if 2 it's working the way it should. To examine 3 it means to look inside it. And, 4 certainly, in the old-fashioned voting 5 machine context, that means potentially 6 looking inside the machine. In the 7 electronic voting system context, it means 8 looking inside the software. 9 You know, if a -- if a doctor is 10 seeing a patient and just looks at the 11 patient, that is not an examination. That 12 doctor cannot give the patient a clean bill 13 of health. You have to check their heart. 14 You have to check their lungs. You have to 15 take a blood test. That's an examination. 16 And if a doctor saw a patient and said, oh, 17 you look fine, the examination's over, that 18 would be medical malpractice. 19 And for us to simply stand there 20 and watch a re-canvassing would be election 21 malpractice. That's not an examination. 22 So just under the plain language of the 23 Election Code 25 P.S. 2650 Section C, any 24 candidate, including Ms. Stein, is entitled</p>

3 (Pages 6 to 9)

Meeting of the Return Board
December 1, 2016

<p style="text-align: right;">Page 10</p> <p>1 to this examination. And we would like to 2 do that as part of this recanvass. 3 It's the one and only way to 4 make sure that the vote in Philadelphia had 5 integrity, that the votes were accurately 6 counted. In a paper ballot county, we 7 would look at the paper. That would be the 8 best examination we could do. But we don't 9 have any paper record at all in 10 Philadelphia. We just have machines. 11 So given that -- that is a 12 request by Ms. Stein. And I believe it's 13 not optional. I believe it's absolutely 14 required that the board permit this 15 examination. That's my first point. 16 The second point, should there 17 be no doubt about what the Board can do, 18 because the Board has broad powers here not 19 just to recanvass but to do something more. 20 The Election Code speaks -- does not 21 actually define exactly what the Board 22 should do in the case of electronic voting 23 systems. It speaks in 35 -- I'm sorry -- 24 25 P.S. 315484 to using a method similar to</p>	<p style="text-align: right;">Page 12</p> <p>1 that effected the central electronic 2 management system that was then sent to the 3 machines. 4 This is not difficult to do. 5 And we've represented in our letter that 6 Ms. Stein is willing to pay computer 7 experts to do this. They could be here as 8 soon as tomorrow to do this and -- because 9 she is so committed to making sure that the 10 votes were accurately counted. 11 I can see no conceivable 12 objection to this approach because it's 13 simply ensuring that the votes were counted 14 accurately. And so I won't spend too much 15 time going into what we all know, which is 16 that the United States government, director 17 of national intelligence, homeland 18 security, they have said that foreign 19 powers tried many times to interfere with 20 this election. 21 We know that in Illinois and 22 Arizona the voter rolls were hacked. We 23 know that voter data was stolen. We know 24 that -- we believe that at least 20 states</p>
<p style="text-align: right;">Page 11</p> <p>1 a method used for voting machines. 2 It doesn't define what similar 3 is. But we know that voting machines can 4 be opened up so long as it doesn't -- so 5 long as it doesn't effect the vote tally 6 itself. And, similarly, an electronic 7 voting system can be opened up so that it 8 doesn't effect the vote tally itself. 9 And here is how it would work: 10 Computer experts can access the central 11 electronic management system, first, 12 without even going into any machines. And 13 this is not difficult to do. You can 14 just -- you can attach an external hard 15 drive to the central electronic management 16 system, and you duplicate the software. 17 They can then take that to a lab, and they 18 can examine it. It doesn't effect a single 19 voting machine. 20 And computer scientists can 21 learn a great deal about whether there's a 22 malware, about whether there has been 23 hacking there, about whether there is 24 something in that code, that software code,</p>	<p style="text-align: right;">Page 13</p> <p>1 have been targeted. We know these things. 2 And so when we have that evidence of 3 foreign interference in an election and 4 then when we have the evidence of the 5 vulnerability of these machines and then 6 when we have the Election Code that says 7 you have not just the power but the 8 obligation to let us examine the machines 9 in this way, we think it's clear that this 10 forensic examination should take place. 11 And given the exigencies of 12 time, we ask that happen immediately. We 13 would like to start this as soon as 14 possible and are able to do business 15 tomorrow. Again, it wouldn't effect any of 16 the votes, the tally. It's just an 17 examination to make sure the votes were 18 counted accurately. 19 There can be absolutely nothing 20 more important. After all, the most 21 important thing in this country is 22 democracy and the right to vote. And the 23 way to make sure the votes were accurately 24 counted is to look in these machines.</p>

4 (Pages 10 to 13)

Meeting of the Return Board
December 1, 2016

Page 14	Page 16
<p>1 These machines are the only thing standing 2 between voters and the election result. 3 So let's examine the machines 4 and -- and make the process open and 5 transparent and fair to all the voters in 6 the County of Philadelphia -- City of 7 Philadelphia. 8 Thank you very much. 9 COMMISSIONER SCHMIDT: Thank 10 you. 11 CHAIRMAN CLARK: Okay. This 12 meeting is adjourned -- 13 COMMISSIONER SCHMIDT: Are there 14 any other comments from counsel? 15 MR. TABAS: Yes. Good morning, 16 Commissioners. I am Lawrence Tabas. I am 17 Counsel for the electors for President 18 Elect Donald Trump, Vice President Elect 19 Mike Pence, and on behalf of the Republican 20 Party of Pennsylvania, and the candidates 21 on the ballot -- the republican ballot in 22 the November 8th, 2016 election. 23 First of all, I would like to 24 just start -- I have a few points I'd like</p>	<p>1 weight, which is a violation of the United 2 States Supreme Court precedent, which is 3 binding in a presidential election on this 4 Board of Commissioners. In addition, there 5 is the Federal Safe Harbor that exists for 6 the presidency and the vice presidency 7 under the United States code, which, again, 8 the Supreme Court recognized and which 9 Pennsylvania participates in. So it is a 10 violation of the United States constitution 11 to permit this cherrypicking of these 12 petitions today. 13 In addition, just a couple of 14 comments that Counsel for Stein met. First 15 of all, the machines are absolutely secure. 16 It's not just don't take my word for it. 17 But take the word of the secretary of the 18 commonwealth, Pedro Cortés, who has 19 actually held that office for many years 20 before this current term of his. He stated 21 in a public statement on October 20th -- 22 and I have a copy that I would like the 23 commissioners to include within the record. 24 He stated, among other things</p>
Page 15	Page 17
<p>1 to make today before the commissioners. I 2 want to start by saying that these 3 petitions that have been filed that the 4 Board of Commissioners is preparing to 5 accept for a recount, recanvass absolutely 6 violate the federal provisions that do not 7 permit cherrypicking of recounts in a race 8 for the president and vice president of the 9 United States. 10 As the Supreme Court's decision 11 in Bush versus Gore made quite clear, votes 12 cast in an election for president in the -- 13 in an election for president, vice 14 president must be treated equally under the 15 14th Amendment, the Equal Protection 16 Clause. A state must treat them equally, 17 and cherrypicking divisions to do a recount 18 or a recanvass is absolutely violating the 19 14th Amendment because some voters in the 20 City of Philadelphia's votes will not be 21 re-canvassed and recounted. 22 Therefore, some of these votes 23 that are going to be the subject of these 24 282 petitions will be getting unfair</p>	<p>1 today in that statement, that our voting 2 systems are secure. He further went on to 3 state that the voting machines in 4 Pennsylvania are not connected to the 5 internet. In fact, he said they are not 6 even connected to one another. There is no 7 opportunity to hack these machines. There 8 is no opportunity to corrupt them. He 9 further went on to say that, in addition, 10 the voting machines are kept under a strict 11 chain of custody. 12 Prior to the election, they are 13 tested for logic and accuracy. The 14 machines are locked down. And the tapes 15 are locked and applied so that, if there 16 was any tampering, it would be detected. 17 This is the secretary of the commonwealth 18 who has made this statement and made it 19 public long before the election took place. 20 The opportunity for Jill Stein 21 or any other candidate, under the Election 22 Code, to exam the machines gave her that 23 opportunity prior to November 8th. She 24 chose not to take it. The County Board of</p>

5 (Pages 14 to 17)

Meeting of the Return Board
December 1, 2016

Page 18	Page 20
<p>1 Elections, the commissioners here in 2 Philadelphia, you make a public 3 announcement of the day when people can 4 come in and examine the machines prior to 5 election day as allowed under the Election 6 Code. She did not come forward. 7 Now she's only coming forward 8 for reasons that are completely beyond 9 comprehension. She sat on her right. She 10 didn't exercise it. She made no challenge 11 before. These allegations from this 12 supposed expert, who by the way has a 13 patented product that he claims would solve 14 these problems -- so I question his actual 15 independence here -- all reference things 16 that occurred prior to election day. 17 So she knew about these issues 18 before November 8th, but she chose not to 19 do anything about it because she thought 20 that the results on election day would be 21 different. 22 In addition, the counsel for 23 Ms. Stein said that the election code has 24 no guidance on how to handle the voting</p>	<p>1 trying to interfere with the dually 2 electoral process of president and vice 3 president of the United States. 4 So I would just ask the 5 commissioners to take into account the 14th 6 Amendment controls here. Equal protection 7 is one of our most cherished rights. The 8 binding precedent of the United States 9 Supreme Court in Bush versus Gore and the 10 Federal Safe Harbor statute, which 11 Pennsylvania has absolutely opted in, 12 demand that these petitions be dismissed as 13 violating the constitution of the United 14 States. 15 COMMISSIONER SCHMIDT: Thank 16 you, Mr. Tabas. 17 MR. TABAS: I'll leave the 18 statement from Secretary Cortés here for 19 the record. 20 MR. MAAZEL: May I be just very 21 briefly just to respond? 22 COMMISSIONER SCHMIDT: If it's 23 very brief. So it's not a -- this is not a 24 conversarial situation. It's to put</p>
Page 19	Page 21
<p>1 machines as part of a recount or recanvass. 2 That's absolutely not true. Not only does 3 the code itself have specific provisions, 4 but the Department of State has annually 5 reinforced and reissued its directive on 6 electronic voting machines in this state. 7 Finally, there has been no 8 allegation whatsoever, either in the 9 affidavit of this alleged expert or in the 10 comments of Counsel for Mr. Stein [sic] 11 today or anywhere else, that there has been 12 any tampering or any interference with any 13 of the machines in the entire Commonwealth 14 of Pennsylvania, let alone Philadelphia 15 County. 16 The references are to Arizona, 17 Illinois, and the Democratic National 18 Committee. And the last I checked, the 19 City of Philadelphia does not store its 20 voting machines at the Democratic National 21 Committee headquarters. There is 22 absolutely no factual basis whatsoever. 23 This is not even a fishing 24 expedition. This is nothing more than</p>	<p>1 comments on the record. 2 MR. MAAZEL: I just want to 3 complete the record with a couple of those 4 points quickly. Just responding to this 5 Bush/Gore argument, we would be happy to do 6 a recount throughout all of Philadelphia. 7 We would be happy to do a recount 8 throughout all of the state. It's the 9 republican party that does not want that. 10 So if they are claiming that 11 we're cherrypicking, that's just an insult 12 to the volunteers and citizens who came 13 forward to demand a recount. There is no 14 cherrypicking. We would like a recount 15 everywhere. If they agree to that, we'll 16 be happy to do that. They don't want a 17 recount anywhere. 18 The allegation that Ms. Stein 19 slept on her rights, she has a right today 20 under 2650 C as part of the recount and the 21 recanvass to examine the DRE voting system. 22 That's in the statute today and tomorrow 23 not months ago. So she's exercising her 24 right in a timely way, and she's exercising</p>

6 (Pages 18 to 21)

Meeting of the Return Board
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Page 22

1 it now.
 2 And, finally, we all know that
 3 the central voting system is connected to
 4 the internet. And the machines are then
 5 connected to -- all the information on the
 6 machines comes from that central location.
 7 The idea that the machines can't be hacked
 8 is absurd. And there is no top computer
 9 scientist who will say that these machines
 10 are impregnable. That's an absurd comment.
 11 We have five experts -- not one but five --
 12 who all said the same thing.
 13 So we would respectfully request
 14 a vote on our request for this forensic
 15 examination. And I thank you very much for
 16 your time.
 17 CHAIRMAN CLARK: And we're going
 18 to let Mr. Davis [sic] respond to that and
 19 then if there's any other questions or
 20 comments.
 21 MR. TABAS: I'll give the board
 22 an early Christmas present. I have no
 23 response.
 24 CHAIRMAN CLARK: Thank you.

Page 23

1 COMMISSIONER SCHMIDT: Are there
 2 any other comments from counsel?
 3 (No response.)
 4 CHAIRMAN CLARK: Okay. It
 5 appears that that's it. This meeting is
 6 adjourned at the Call of -- this meeting is
 7 adjourned at the -- I'm sorry. The Return
 8 Board is adjourned. Thank you very much
 9 for coming.
 10 - - - - -
 11 (At this time, Exhibit-1 has been
 12 marked for identification.)
 13 - - - - -
 14 (Whereupon, the meeting of the
 15 Return Board was adjourned at the Call of
 16 the Chair at 10:24 a.m.)
 17 - - - - -
 18
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Page 24

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 2 CERTIFICATION
 3
 4 I, hereby, certify that the
 5 proceedings and evidence noted are
 6 contained fully and accurately in the
 7 stenographic notes taken by me in the
 8 foregoing matter, and that this is a
 9 correct transcript of the same.
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 13 _____
 14 Court Reporter - Notary Public
 15
 16
 17
 18 (The foregoing certification of
 19 this transcript does not apply to any
 20 reproduction of the same by any means,
 21 unless under the direct control and/or
 22 supervision of the certifying reporter.)
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Meeting of the Return Board
December 1, 2016

Page 1

A	annually 19:4	brief 6:18	15:7,17	1:7 2:17	counsel 1:13	19:4	2:23 3:4,7
a.m. 2:3,6	ANTHONY	20:23	16:11 21:11	14:16 15:1	2:14 4:21	DEPUTY 1:9	3:14 5:6,9
23:16	1:8	briefly 20:21	21:14	15:4 16:4	6:19 14:14	1:10,10,11	5:24 6:6
Abady 6:24	appearing	Brinckerhoff	chose 17:24	16:23 18:1	14:17 16:14	describing	7:22,24 8:8
able 8:12	7:1	6:24	18:18	20:5	18:22 19:10	7:16	9:20,23
13:14	appears 23:5	broad 10:18	Christmas	committed	23:2	detected	10:20 12:20
absentee 5:13	applied 17:15	brought 3:1	22:22	12:9	counted 8:22	17:16	13:3,6 14:2
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Exhibit 48

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF PENNSYLVANIA

JILL STEIN, RANDALL REITZ, ROBIN HOWE,
SHANNON KNIGHT, EMILY COOK, and
KIMBERLY KUPKA,

Plaintiffs,

v.

PEDRO A. CORTÉS, in his official capacity as
Secretary of the Commonwealth; and JONATHAN
MARKS, in his official capacity as Commissioner
of the Bureau of Commissions, Elections, and
Legislation,

Defendants.

No. 16-CV-6287 (PD)

DECLARATION IN SUPPORT OF MOTION FOR PRELIMINARY INJUNCTION

ALISON FRICK declares, under penalty of perjury, pursuant to 28 U.S.C. § 1746, that the following is true and correct:

1. I am a member in the firm of Emery Celli Brinckerhoff & Abady, LLP (“ECBA”). We represent the Plaintiffs in this matter. I am admitted *pro hac vice* in this action.
2. On Wednesday, November 30, 2016, I observed a recount conducted at the Lehigh County Board of Elections, in Allentown, Pennsylvania.
3. Before the recount started, I made a formal request of the Chief Clerk and County Solicitor John M. Ashcraft, III, that the electronic voting machines and election management system be forensically analyzed by an independent team of experts to assess whether malware, tampering, or other error may have altered the computation of the vote.

4. I reminded Mr. Ashcraft and the Chief Clerk that the petitions filed by voters seeking recounts had explicitly asked for a forensic evaluation of the electronic voting machines.

5. The three members of the Lehigh County Board of Elections were present in the office.

6. Mr. Ashcraft conferred with the Board members. He then told me that the Board would proceed with the recount as planned, after which the Board would formally meet to consider my request and vote on it.

7. I agreed to this plan.

8. The Chief Clerk led the recount. He permitted all of the volunteers who had arrived at the office to observe the entire process.

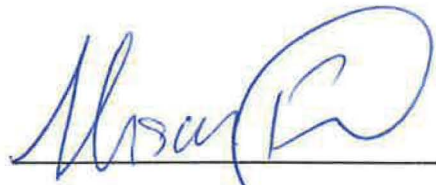
9. Midway through the process, the Board convened its meeting. I argue that, because the electronic voting machines produced no voter-verifiable paper record, and because a recanvass of the machines would simply reprint the vote tallies from the machine, a forensic examination of the machines and management system was necessary to ensure that the votes had been tabulated correctly without interference. I answered questions posed by the Board. The members of the public present were also permitted to speak; everyone who spoke requested that the Board allow the forensic audit of the machines.

10. Mr. Ashcraft informed the Board that, in his interpretation of the law, the Board was authorized but not required to permit a forensic examination.

11. Ultimately, the Board voted unanimously to deny the petitions for a forensic evaluation of the voting machines.

I declare under penalty of perjury that the foregoing is true and correct.

Dated: February 14, 2017

A handwritten signature in blue ink, appearing to read "Alison Frick", written over a horizontal line.

ALISON FRICK

Exhibit 49

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF PENNSYLVANIA

JILL STEIN, RANDALL REITZ, ROBIN HOWE,
SHANNON KNIGHT, EMILY COOK, and
KIMBERLY KUPKA

Plaintiffs,

v.

No. 16-CV-8287 (PD)

PEDRO A. CORTÉS, in his official capacity as
Secretary of the Commonwealth; and JONATHAN
MARKS, in his official capacity as Commissioner
of the Bureau of Commissions, Elections, and
Legislation,

Defendants.

DECLARATION OF DOUGLAS E. LIEB

I, DOUGLAS E. LIEB, hereby declare under penalty of perjury:

1. I am an attorney admitted to practice in California, New York, and the United States District Courts for the Southern and Eastern Districts of New York. I am admitted *pro hac vice* in this action.

2. I am an associate at the firm of Emery Celli Brinckerhoff & Abady LLP, counsel for Plaintiffs in this action and counsel for Jill Stein and the Jill Stein for President Campaign (the "Campaign") in connection with 2016 election recounts in Pennsylvania, Michigan, and Wisconsin.

3. On November 28, 2016, I was helping voters file recount petitions in Chester County when I received a call from a volunteer explaining that the Montgomery County Board of Elections was rejecting voter petitions.

4. I went to the Montgomery County Board of Elections in Norristown and spoke with two county attorneys. They explained their position that the voters' petitions were untimely and needed to be filed in the Court of Common Pleas. They said that the Board of Elections would not accept the original petitions but would accept a "service copy" of the petitions.

5. At the instruction of these County officials, I coordinated the filing of the petitions across the street with the Prothonotary in the Court. The Prothonotary advised us that a \$269.50 filing fee was required for each complete petition supported by three voter affidavits.

6. The Campaign paid the cost of filing 78 voter petitions with the Prothonotary, or \$21,021.00 total.

I declare under penalty of perjury that the foregoing is true and correct.

Dated: February 14, 2017


DOUGLAS E. LIEB

Exhibit 50

IN THE COURT OF COMMON PLEAS OF ALLEGHENY COUNTY, PENNSYLVANIA

IN RE: RECOUNT AND/OR
RECANVASS OF THE VOTE
FOR PRESIDENT OF THE
UNITED STATES AND FOR
THE UNITED STATES
SENATE IN THE NOVEMBER
8, 2016 GENERAL
ELECTION

CIVIL DIVISION

2016-22954

MOTION TRANSCRIPT

FILED BY:

Jennifer Cox
Official Court Reporter

DATE:

December 2, 2016

BEFORE:

Honorable Joseph James

COUNSEL OF RECORD:

For the Republican State
Committee of Pennsylvania
t/d/b/a Republican Party of
Pennsylvania; Republican
Committee of Allegheny County

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1 THE COURT: All right. We scheduled a
2 hearing this morning. There was a notice of an
3 appeal filed in opposition. An emergency petition
4 to quash, a notice of appeal of the decision of
5 the Allegheny County Board of Elections.

6 We have an array of people sitting here.
7 Let's see who is representing whom.

8 MR. HICKS: Good morning, Your Honor. Ron
9 Hicks and Nick Bell for the Republican State
10 Committee of Pennsylvania and the Republican
11 Committee of Allegheny County.

12 THE COURT: Good morning, Mr. Hicks.

13 MR. GAUL: Your Honor, Stuart Gall on behalf
14 of the Jill Stein for President Campaign and Jill
15 Stein.

16 With me today is Douglas Lieb, whose
17 admission we will seek pro hac vice. He is with
18 the firm Emery, Celli, Brinckerhoff & Abday, and
19 he's here as well.

20 MR. OPSITNICK: Judge, Allan Opsitnick,
21 Assistant County Solicitor on behalf of
22 Allegheny County for the district.

23 THE COURT: I guess we should start with
24 the motion for admission pro hac vice. That's
25 your motion, Mr. Gaul.

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MR. GAUL: It is our motion, Your Honor. This is the original receipt we received back from the Department of Court Records.

Mr. Lieb, as I mentioned earlier, is with the Emery, Celli firm. He is admitted to practice the bar in the state of New York and California.

He indicated he would be willing to abide by the rules of this Court, and he has submitted the required fee and certification to the IOLTA Board.

I have indicated that I will supervise and monitor his work in this action, and I will.

On that basis, Your Honor, I ask that he be admitted pro hac vice.

THE COURT: Any objections?

MR. OPSITNICK: None, Your Honor.

MR. HICKS: None, Your Honor.

THE COURT: Well, let's see how you monitor his behavior. Sounds like a tall order, Mr. Gaul. Motion is granted.

Mr. Lieb, you're admitted pro hac vice to argue this matter before this Court.

There's a second petition, Mr. Gaul, that you filed, and also Mr. Lieb, assuming that he

1 had been admitted, but that petition is for
2 intervention in opposition to this appeal filed
3 on behalf of Jill Stein for President and Jill
4 Stein as an individual.

5 It's your motion, Mr. Gaul.

6 MR. GAUL: That's correct, Your Honor.
7 Dr. Stein, is, in fact, interested in the
8 results of the election in Pennsylvania, having
9 appeared on the ballot, having received votes,
10 and in that sense, we have essentially the same
11 argument that the Republican Committee has.

12 We would like to make sure that all the
13 votes are counted fully and fairly. We believe
14 that the petition that has been presented by the
15 petitioner here carries that process, and we
16 would respectfully ask the Court --

17 THE COURT: To be fair, Mr. Gaul, it would
18 have be thrown out of Court, if it was granted,
19 but be that as it may. Okay. You believe you
20 have standing?

21 MR. GAUL: We do.

22 THE COURT: Anyone want to speak to this
23 motion for intervention in opposition?

24 MR. OPSITNICK: No, Your Honor.

25 THE COURT: You're two for two, Mr. Gaul.

1 MR. GAUL: Here is the original petition
2 from the Department of Court records.

3 THE COURT: Okay. We are ready to proceed
4 on the underlying motion, which was filed on
5 behalf of the Republican Party, and that would
6 be your motion, Mr. Hicks.

7 MR. HICKS: Yes, Your Honor. From a
8 procedural standpoint, does your file have a
9 copy of the Affidavit of Service that was filed
10 yesterday?

11 THE COURT: Probably not.

12 MR. HICKS: I will hand that up to you.
13 So setting that issue aside then, there are
14 basically two ways we want to present this, Your
15 Honor.

16 This morning, we spent the morning going
17 through a stipulation of facts, and I have that
18 here, and I would like to present that to the
19 Court.

20 It's been signed by counsel for all the
21 parties. Let me just explain how it's been
22 formatted.

23 So you'll see on the first page, the first
24 several pages, there are stipulations and there
25 are several handwritten notations on it. Those

1 are the changes that we made, based on our
2 meeting this morning, with Counsel.

3 You can see that there are certain
4 paragraphs that have been stricken from the
5 stipulations. Those are paragraphs two, three
6 five and six.

7 Paragraph two and three are issues that
8 Mr. Opsitnick is going to raise with regard to
9 our standing, which I believe is more of a legal
10 issue.

11 Then paragraph five and six is the only
12 ones where we need to take some testimony on an
13 issue as to what constitutes signing by the
14 board.

15 Other than that, the rest of the
16 stipulations have been changed to reflect the
17 agreement of the parties, and just so we're
18 clear as to what some of those changes were, so
19 that you know there is no dispute as to what the
20 handwriting says, I'll read some of those
21 changes.

22 So in Paragraph 7, Paragraph 7 should now
23 read: At no time prior to November 23, 2016 did
24 any voter file a petition for recount or
25 recanvass with the Election Division. Under the

1 Elections Code, Section 1404(c), 25 PS, Section
2 3154(c), contending that there was an error
3 committed during the Election Board's Election
4 Code Section 1404 canvass.

5 Paragraph 8, that should now read: On
6 November 23, 2016, the Elections Division posted
7 on its website, and then the rest of the
8 paragraph, there should be -- there would be a
9 paren and it is actually the URL for the
10 website.

11 Both summary and detailed reports of the
12 unofficial results for Allegheny County. Those
13 reports indicate the "run date" and the "end
14 times" were "November 23, 2016 and 2:32 am."

15 THE COURT: I think it says 10:32 a.m.

16 MR. HICKS: Yes.

17 THE COURT: I don't think they were
18 running this at 2:00 in the morning.

19 MR. HICKS: I am sorry. Paragraph 10
20 should now read --

21 THE COURT: Nine is in tact?

22 MR. HICKS: Nine is in tact. Paragraph 10
23 should now read: On the same website, the
24 Elections Board provided the following notice in
25 bold print and in separately boarded box. That

1 quote is: "These results will become official
2 on Monday, November 28, unless a petition for
3 recanvass or recount has been filed with the
4 appropriate Court awaiting disposition."

5 In Paragraph 11, the two changes were the
6 Election Board should be changed to Election
7 Division and that the number should be 305
8 instead of 304.

9 Paragraph 12 should now read: Some of --

10 THE COURT: I apologize for interrupting,
11 but it reads the petition to recount and/or
12 recanvass an affidavit of blank, and I assume
13 they were filled in or were they just left
14 blank?

15 MR. HICKS: They were filled in.

16 THE COURT: So it's 305. So you agree we
17 have 305 names?

18 MR. HICKS: That is correct. Paragraph 12
19 now reads: Some of the 305 documents were
20 presented and received by the Elections Division
21 as a group of three or more from a single
22 election district, and others were presented
23 singularly.

24 Then Paragraph 13 says: When the 305
25 documents were presented and received by the

1 Elections Division, the same duplicate copy of
2 the November 25, 2016 sworn affidavit of J.
3 Alex Halderman, beginning to be called the
4 Halderman Affidavit, was submitted with them.

5 In Paragraph 14, it should now read: The
6 305 documents were a formed document, which a
7 long with the Halderman Affidavit, were made
8 available on line and by a third parties at the
9 Allegheny County Elections Division Office on
10 the Sixth Floor of the County Office Building,
11 542 Forbes Avenue, Pittsburgh, PA, and then were
12 completed by the voters before presentment and
13 received by the Elections Division.

14 Paragraph 15 should now read: On November
15 29, 2016, the Elections Division examined the
16 305 documents received on November 28, 2016 and
17 determined which collectively involved an
18 elections district where at least three voter
19 affidavits were presented to and received by the
20 Elections Division.

21 Paragraph 16 should now read: On November
22 29th, the Elections Division announced that of
23 the 305 documents received on November 28, 2016,
24 only those attached collectively hereto as
25 Exhibit 1A and 1B contained the required three

1 voters per affidavit Election Districts, and on
2 December 5th, 2016, the Elections Division would
3 conduct a machine recanvass of the 52 election
4 districts covered by those documents.

5 You will see, Your Honor, we've attached
6 Exhibit 1A are all of the petitions pages that
7 were filled in by the voters and pertain to
8 those 52 election districts.

9 1B is just a single copy of the Halderman
10 affidavit.

11 Paragraphs 18 and 19 are just particular
12 paragraphs out of the Exhibit 1A, the forms
13 petitions, and in particular, they indicate that
14 they are being brought pursuant to Section 3154
15 of the Election Code, and they're asking for the
16 recanvass of the machines.

17 The last change that we have made from
18 Paragraphs 20 and 21, we've agreed that the
19 documents were not filed with the Allegheny
20 County Clerk of Courts.

21 In Paragraph 21, we've agreed --

22 THE COURT: Office of Court Records.

23 MR. HICKS: Office of Court Records. We
24 agree in Paragraph 21 no cash deposit or surety
25 were provided, including a \$50 cash deposit or a

1 \$100 surety bond for voting machines to be
2 canvassed in each election district.

3 If I haven't highlighted any of the other
4 ones we didn't agree on, or that we did agree
5 on, they are set forth in the pleadings as typed
6 and we would offer those as a stipulation of the
7 facts and exhibits for purposes of this hearing.

8 THE COURT: Okay. Let's go in order. Mr.
9 Gaul, you were first in.

10 MR. GAUL: Let me defer to Mr. Lieb, Your
11 Honor.

12 THE COURT: Certainly. Mr. Lieb?

13 MR. LIEB: Just a cleanup matter, Your
14 Honor, I think in paragraph 17 Election Board
15 should be changed to Election Division.

16 THE COURT: It was.

17 MR. LIEB: Okay. And then Paragraph 21, I
18 believe it should read including and without
19 limitation, a \$50 cash deposit or \$100 surety
20 bond per voting machine can be canvassed at each
21 election district.

22 THE COURT: That's how it reads.

23 MR. LIEB: Thank you, Your Honor.

24 THE COURT: Mr. Opsitnick?

25 MR. OPSITNICK: By the time it gets to me,

1 everything is fine.

2 THE COURT: So we have a stipulation as to
3 the timeline and what happened and what went on.
4 We have a dispute as to paragraph -- Mr.
5 Opsitnick, you object to standing; is that
6 correct?

7 MR. OPSITNICK: I do, Your Honor.

8 THE COURT: That's in Paragraph 2 and 3?

9 MR. OPSITNICK: Well, Paragraph 2, I don't
10 think that the County can agree that the
11 Republican State Committee of Pennsylvania
12 represents, for purposes of this litigation, the
13 interest of all republican voters and
14 candidates.

15 My real thrust is, Judge, I don't think
16 that the appellants here, the entity, the
17 Republican State Committee of Pennsylvania, has
18 standing.

19 As the Court knows, we are operating under
20 Section 3157 of the Elections Code that starts
21 at any person agreed by anyone or one and on and
22 on and on.

23 The Elections Code has no definition of
24 persons in Section 2602. So Mr. Hicks, I think,
25 acknowledges this standing issue in his appeal,

1 because he uses to support his standing the
2 Commonwealth cases, and I have copies and I will
3 pass them out, a 2003 case, canvass of absentee
4 ballots, where I think Mr. Hicks was wearing my
5 brogue at the time where he was opposing
6 standing.

7 In that case, there was standing in 3157,
8 an appeal, but it's a requirement, Judge. The
9 basis for standing in this case was under 2650.
10 There were watchers, and this was a case -- the
11 Court probably recalls this situation.

12 THE COURT: It was my case.

13 MR. OPSITNICK: But there was
14 disenfranchisement, potential disenfranchisement
15 for absentee ballots that we, the Board of
16 Elections, did not count because of how they
17 were delivered.

18 Again, I submit to the Court, that this
19 case is a carve out, because without the party
20 having standing in this type of case, the power
21 that emanates from the watchers certificate in
22 that section of the code would be nullity.

23 That's not the case here. The case here
24 is no voters are going to be disenfranchised.
25 Everything has been tabulated. This is a

1 canvass looking at aggregates. Looking at
2 total. I think for that, you need an actual
3 person and this entity, the State Republican
4 Committee of Pennsylvania, or however it's
5 phrased, is not a person.

6 I think you have to read 3157 two ways.
7 One, literally, considering there is no
8 definition of a person or elsewhere in the
9 election code; and two, distinguishing the
10 canvas of the absentee ballots case from 2003,
11 given that the circumstances are very different.

12 Then I think the Commonwealth Court's
13 opinion, again, treats it as a carve out, and
14 exception to the rule. That's not the facts we
15 have here.

16 Nobody is claiming that the votes aren't
17 going be counted individually. There might be
18 contention that the votes weren't added right,
19 but we are talking about, as the Court knows,
20 post return board totals.

21 So I think the matter should be dismissed,
22 because the appellant from the board's decision
23 has no standing. Thank you.

24 THE COURT: Thank you. Mr. Hicks?

25 MR. HICKS: Well, Your Honor, you and I

1 have argued this back in 2003.

2 THE COURT: This was a long time ago, Mr.
3 Hicks.

4 MR. HICKS: That was a long time ago, and
5 I have gotten wiser and I have come around to
6 your points of view.

7 THE COURT: Unfortunately, not the same
8 point of view as the Supreme Court had, but
9 that's okay.

10 MR. HICKS: As you know, Your Honor, I had
11 argued that, in fact, the parties did not have
12 standing. You had indicated that because
13 political parties have the ability to appoint
14 watchers not only to participate not only
15 pre-election, but most importantly
16 post-election, and in a --

17 THE COURT: At the time of canvass?

18 MR. HICKS: And also not only during the
19 initial canvasses, but also the recount and
20 recanvass that may be ordered that without the
21 ability for the political parties to, in fact,
22 appeal, because watchers themselves have no
23 power to, in fact, file an appeal other than
24 being a normal voter.

25 So there is no question that as a

1 political party, the Republican State Committee,
2 as well as the Republican Committee of Allegheny
3 County appoint watchers. More importantly, we
4 represent all the candidates on the ballot.
5 That's, in fact, our function as political
6 parties.

7 More importantly, I would point out this
8 is an appeal with regard to an attempt under
9 3154(e) to do a recount or recanvass, and under
10 that, before any such recount or recanvass can
11 be done, notice has to be given to various
12 persons. Not only to candidates, but most
13 importantly, the county chairman of the
14 political party or body.

15 So if we weren't intended to have some
16 interest in it, why is notice being provided to
17 us under 3154(e), which, in fact, was provided
18 to us and that's what prompted this appeal.

19 So I believe that not only do we have
20 standing because we are a political body, we
21 have the ability to appoint watchers. We are,
22 in fact, entitled to notice of this particular
23 recount.

24 So, therefore, when we believe that the
25 board has made a decision effecting outside of

1 its authority, nobody but us had the ability to
2 be a party.

3 Obviously, candidates could file and also
4 join in us, but that doesn't deprive us of the
5 ability. We are a party in accordance not only
6 the lower Court's decision, but also the
7 Commonwealth Court's decision, which affirms
8 that decision, and the Supreme Court did not
9 address that because nobody indicated beyond
10 that point.

11 THE COURT: The Supreme Court reversed on
12 other grounds. I believe Chief Justice Castille
13 wrote that.

14 MR. HICKS: That is correct. We took an
15 appeal on that issue, but we did not take an
16 appeal at the standing issue.

17 THE COURT: Anyone else wish to speak to
18 the issue of standing in terms of the parties?

19 MR. LIEB: No, Your Honor.

20 THE COURT: So your position that you have
21 standing is that, one, you're given notice of
22 any petition for recanvass or recount; and, two,
23 you have the power to appoint watchers if such a
24 recount or recanvass takes place?

25 MR. HICKS: That is correct, Your Honor.

1 In fact, we have appointed watchers before the
2 election and as part of the election.

3 As you recall, Your Honor, that I was here
4 during our pre-election meeting on behalf of the
5 Republican Party and all candidates, including
6 Donald Trump.

7 I still serve in that capacity, and more
8 importantly, I still the solicitor for the
9 Republican Party of Allegheny County.

10 So I believe that we have acted
11 consistently throughout this election both pre,
12 during and now post and we have standing.

13 THE COURT: Mr. Opsitnick, why does the
14 legislature require you to give notice of any
15 petition for recanvass to the political parties,
16 if the political parties can't participate in
17 this some way? Don't tell me it's a swapping of
18 because of the legislative act.

19 We have to give some meaning to these
20 words. Why are they put on notice when a
21 petition for recount takes place?

22 MR. OPSITNICK: Well, Judge, I think there
23 is an overall transparency thrust here. But you
24 say give meaning to the legislative language and
25 why is 3157 limited to any person that reads

1 unlike the watchers section 2650, which says:
2 Any party or political body or citizen or
3 candidate can get watchers.

4 I think you will agree, Judge, that the
5 Election Code, having a couple of decades plus
6 of dealing with the Election Board, is not
7 always consistent.

8 THE COURT: I think we can agree just the
9 opposite after a patchwork of amended Supreme
10 Court decisions it's become inconsistent.

11 MR. OPSITNICK: Judge, just to circle
12 back, the statute that permits the appeal to be
13 filed to get us here is limited to persons and
14 not political parties. It doesn't say persons
15 agreed or parties or political bodies. Limited
16 to persons agreed, I must assume that's for a
17 particular purpose, and that is to limit
18 entities that can bring an appeal to this Court.

19 THE COURT: I am satisfied that there is
20 standing based, number one, on the language,
21 which gives them notice; number two, the ability
22 to appoint watchers for any canvass or
23 recount.

24 So that I have this straight, this is a
25 petition by the Stein group, the people that

1 have filed for a recanvass? Because you
2 scratched out recount in the various sections of
3 the stipulations.

4 MR. OPSITNICK: It is limited to
5 recanvass.

6 MR. LIEB: I am not sure we would
7 technically agree with that, Your Honor, to the
8 extent that --

9 THE COURT: Well, that's what your
10 stipulation says, Mr. Lieb.

11 MR. LIEB: Well, I think the stipulation
12 says, if I am not mistaken, that the Board
13 announced they are going to conduct a recanvass,
14 not necessarily that's what the petition were
15 for that or that is exactly what it has required
16 by law.

17 It's just at question to the extent there
18 are any absentee ballots that are not conducted
19 by electronic voting machines that I think would
20 qualify as a recount, rather than a recanvass,
21 if you're not seeking the recanvass of the
22 machine, but the petition is for recount and for
23 recanvass.

24 THE COURT: I am satisfied that you have
25 standing, based not only on those two sections

1 of the second language of the poll watchers
2 information, and also by the decision written by
3 the then President Judge Pellegrini, which
4 confirmed standing and was not appealed to the
5 Supreme Court.

6 So we're going to grant them standing in
7 the case, Mr. Opsitnick, over your objection.

8 All right. You may proceed at this point,
9 Mr. Hicks.

10 MR. HICKS: Your Honor, at this point, as
11 I said, with regard to the stipulations, there
12 was only two particular sections of the
13 stipulations that are controverted, and perhaps
14 with Counsels' permission, maybe I could overlay
15 what the issue is.

16 There's no dispute between the parties
17 that post-election, the Elections Division, as
18 the administrative arm of the Election Board,
19 conducted a computation and canvas of all the
20 returns of Allegheny County.

21 As you know, there are 1,322 election
22 precincts in Allegheny County, and all of those
23 returns were reviewed, canvassed, tabulated and
24 the results were posted on line.

25 The issue that is being raised by both Dr.

1 Stein and her candidacy is whether or not that
2 unofficial result was ever signed by all three
3 members of the Elections Board.

4 THE COURT: That would be the County
5 Executive and two at-large council members?

6 MR. HICKS: Correct. So we thought it be
7 pertinent to have Mr. Wolosik, who I have under
8 subpoena, to come to the stand to testify as to
9 what the Elections Division is, their
10 administrative authority, what they have been
11 designated to do on behalf of the board, and the
12 process that they engage in when they do the
13 canvassing and compilation that occurred from
14 post election up to November 23, 2016. Unless
15 you want to take judicial notice of it.

16 THE COURT: Well, I have been supervising
17 the elections in the county since 2000. I kind
18 of know what they do. I suppose we need to make
19 a record, because no one is going abide by my
20 ruling.

21 MR. HICKS: So I was going to ask Mr.
22 Wolosik to come to the stand. Mr. Opsitnick has
23 agreed to take the first whack at the testimony,
24 and then Dr. Stein's Counsel would fill in any
25 information that might be needed after that.

1 THE COURT: All right. Mr. Wołosik. Good
2 morning.

3 The Court would note for anybody who has
4 not been here before, Mr. Wołosik has testified
5 in my Courtroom probably a hundred times. He's
6 not a stranger to this room.

7 Mr. Opsitnick, you're going to conduct a
8 direct examination of the proceedings?

9 MR. OPSITNICK: I am.

10 THE COURT: Would you, please.

11 MARK WOŁOSIK, called as a witness herein,
12 having been first duly sworn, was examined and
13 testified as follows:

14 DIRECT EXAMINATION

15 BY MR. OPSITNICK:

16 Q. Mark, would you briefly indicate your job title,
17 your length of time in the Elections Division and
18 what your current duties involve?

19 A. I am the Elections Division Manager for the County
20 of Allegheny. I started there as a temporary
21 employee in the fall of 1970.

22 I was appointed Elections Director July
23 1st of 1991, and when my department became a
24 division, I became a division manager.

25 Q. One of the things stipulated to, Mark, is that a

1 report and percentage calculations were completed
2 and made public on the internet on November 23,
3 2016.

4 Are you familiar with that document?

5 A. Yes.

6 Q. Would you describe for the Court how that document
7 was generated?

8 A. I suppose you want me to go through the return board
9 procedure?

10 Q. Maybe you should quickly.

11 A. On the third day following the election, under the
12 election code, we're required to canvass the results
13 of the election.

14 We have compared the records returned by
15 the Election Board to how many people presented
16 themselves to vote. We compare that against the
17 voting machine totals of how many people were
18 admitted to vote and resolve any discrepancies.

19 We compare the number of absentee ballots
20 to each polling place and county at each polling
21 place compared to the number of absentee ballots
22 that were scanned on election night and resolve any
23 discrepancies.

24 We research any provisional ballot that
25 was cast and make a determination of whether the

1 ballots should be fully counted, partially counted
2 or not counted.

3 All of those operations result in any
4 necessary changes in the election tabulation data
5 base, which are made.

6 Then the conclusions of any changes that
7 need to be made, we produce a set of elections
8 results that we term unofficial or preliminary
9 election results.

10 Q. In your job, is that what is traditionally called a
11 preliminary certification?

12 A. Yes.

13 Q. It's under the Election Code that there has to be a
14 five day period between that and when the Board of
15 Election would certify the result, the final result?

16 A. Yes, that is correct.

17 Q. Traditionally, does the Board of Elections sign off
18 on any fashion, the individual members of the board
19 sign off on the preliminary certification?

20 A. They do not.

21 Q. What type, if any, signing off on and notation is
22 made by your employees of the return board prior to
23 the preliminary certification being complete?

24 A. Each clerk, who performs an operation that I
25 described as part of the return board, he initials

1 whatever document they have duties on.

2 Q. So there's no cumulative -- there's no cover sheet
3 with everybody's signatures?

4 A. There is not.

5 Q. Everybody that participated initials the small part
6 of the growing certification that they did?

7 A. Well, it's the actual documents that they reviewed
8 as part of the return board.

9 MR. OPSITNICK: That's all I have, Your
10 Honor.

11 CROSS EXAMINATION

12 BY MR. HICKS:

13 Q. Mr. Wolosik, good morning.

14 A. Good morning.

15 Q. With regard to the computation and canvassing that
16 you're about, when did the return board complete
17 that operation?

18 A. It was the day before Thanksgiving, Wednesday
19 morning. That was the 23rd.

20 Q. November 23rd. Once that computation and canvassing
21 was completed, the results were then posted?

22 A. That is correct.

23 Q. If you take a look in terms of the stipulation, I
24 will show you Exhibit 2.

25 The parties have stipulated that the first

1 page of this exhibit is a copy of the Allegheny
2 County Election Division Website, and on the this
3 particular page, there is information regarding the
4 summary and two detailed reports; do you see that?

5 A. Yes.

6 Q. Above that, there is the first block. There is a
7 block there that says these results will be become
8 official?

9 A. Yes.

10 Q. That is information that the Election Division posts
11 to the public, correct?

12 A. Yes.

13 Q. With respect to that notice, where do you indicate
14 that any petition for recanvass or recount has to be
15 filed?

16 A. It's the first line of the notice.

17 Q. Where do you inform the public where these petitions
18 for recount or recanvass are to be filed?

19 A. The wording says: These results will become
20 official on Monday, November 28th unless a petition
21 for recanvass or recount has been filed with the
22 appropriate Court awaiting disposition.

23 Q. The page that follows that are three pages of a
24 document that is referred to as a summary report.
25 Is that the summary report that would pop up if you

1 clicked on the first page of the website?

2 A. Yes.

3 Q. According to the summary report, it has a run date
4 of November 23, 2016 and a run time of 10:32 a.m?

5 A. Correct.

6 Q. What does the summary report reflect?

7 A. The final compilation of all the votes casted for
8 all the candidates that were on the ballot.

9 Q. Would this be the adding up of all the returns that
10 had been initialed by the return board when they
11 went through each one of the election districts?

12 MR. LIEB: Objection. That
13 mischaracterize the testimony.

14 MR. HICKS: I'll re-ask the question.

15 BY MR. HICKS:

16 Q. Does the summary report that's prepared here, how is
17 it prepared? On what data does it rely upon?

18 A. The actions of the return board.

19 Q. When you say the actions of the return board, is
20 that what you were describing to Mr. Opsitnick as
21 the sheets of paper that have been initialed by each
22 of the employees who examined each of the returns
23 from those election districts?

24 A. Yes.

25 Q. So let's just talk about what is on those initial

1 pages.

2 What information appears on those that is
3 then transferred over to the summary report?

4 A. I don't quite understand the question.

5 Q. What information is on the page that is initialed by
6 each of return board when they are doing a
7 computation and the recanvassing? What information
8 shows up there and how does it get to the summary
9 report in terms of a tabulation?

10 A. It's the votes cast for each candidate in every
11 election district in which their name is on the
12 ballot, and then that information is checked for any
13 necessary corrections that are made to the election
14 database and then a tabulation report gets run and
15 it's posted to the internet.

16 Q. I assume this summary report is generated by
17 computers that are used by the Elections Division?

18 A. Yes.

19 Q. The report that's presented here, is that a report
20 that the elections Division has been using during
21 your entire tenure as the division manager?

22 A. Yes, since 2006 when we purchased the voting system.

23 Q. Now, you mentioned that your department switched
24 between a division to a department?

25 A. The other way.

1 Q. What do you mean by that?

2 A. The county did a type of reorganization that I think
3 prior to the Homewood Charter, there were 32 or 33
4 individual departments that reported directly to the
5 county commissioners.

6 Then there was a reorganization that the
7 county was placed into five departments, and the
8 previous departments were called divisions, and it
9 was just a grouping of people.

10 Q. You're under the administrative service portion of
11 the county?

12 A. That is correct.

13 Q. As an administrative portion, what does the
14 Elections Division, what is its relationship to the
15 Election Board, the three county commissioners that
16 determine that board? What is the relationship
17 between those two?

18 A. They delegate the overall supervision of the
19 elections process to me.

20 Q. So you've talked about the summary report. Let's
21 talk about the last two pages of Exhibit 2.

22 It would be the fourth page of the
23 exhibit. It's called a precinct report, and it
24 still has same date November 23, 2016. Run time of
25 10:32 a.m. What is a precinct report?

1 A. It denotes the tabulation of votes cast for every
2 candidate by the district.

3 Q. If we look at the first page of Exhibit 2, going
4 back to the website, would that be the detailed
5 district report portion of the website?

6 A. Yes.

7 Q. This report is several hundred pages, correct, Mr.
8 Wołosik?

9 A. I think so, yes.

10 Q. This represents the first page of that multi-page
11 report, correct?

12 A. Yes.

13 Q. Would it be accurate to say that the information
14 from the detailed report eventually is part of the
15 tabulation that shows up on the summary report that
16 we just identified?

17 A. Yes.

18 Q. Let's talk about the last page of Exhibit 2 then.
19 That report is called a number key canvas. What is
20 that report?

21 A. This is a report that sorts the tabulation turn out
22 and votes cast by a particular office on the ballot.

23 Q. If we look at the first page of the website where it
24 underneath it says: The detailed reports available
25 and the detailed canvass report hyperlink, would

1 this be the first page that would show up when you
2 would click on that particular report?

3 A. Yes.

4 Q. Again, is this particular report a multipage report?

5 A. Yes.

6 Q. Several hundred pages?

7 A. Yes.

8 Q. Is the information from that number key canvass
9 report carried over into the summary report?

10 A. Yes.

11 Q. Like the summary report, are the precinct report and
12 the number key canvas report generated through the
13 computer program that the Elections Division
14 maintains?

15 A. Yes.

16 Q. These reports, are they tied to the recanvassing
17 that was concluded by November 23rd?

18 MR. LIEB: Objection, form.

19 THE COURT: Overruled. We'll allow it.

20 BY MR. HICKS:

21 A. Yes.

22 Q. After November 23, 2016, did the return board do any
23 other activities with regard to the November 8, 2016
24 election in terms tallying results or tabulating
25 results?

1 A. No.

2 Q. Now, you mentioned during the computation and
3 canvassing that occurred post election, the third
4 day following the election on November 23rd, that
5 there were adjustments made, correct?

6 A. Yes.

7 Q. Those adjustments were done by whom?

8 A. By the members of the clerks that serve on the
9 return board.

10 Q. Did any voter ever file a recount or recanvass
11 petition during the third day following the election
12 up until November 23, 2016 before these unofficial
13 results were announced?

14 A. None.

15 Q. Why do you announce the unofficial results? Why do
16 you post them on the website?

17 A. The Election Code requires it.

18 Q. So the Election Code requires the Election Division
19 to announce those results; is that correct?

20 A. That is correct.

21 Q. Now, according to your website, you say there's a
22 five day period to file a recount or recanvass with
23 the Court. What does that refer to?

24 A. That would be filing a petition with the Court of
25 Common Pleas to either recount paper ballots or

1 recanvass the voting machine or voting machines.

2 Q. Under that procedure, is it required to not only
3 file with Court, but also pay cash deposit or post a
4 surety bond?

5 MR. LIEB: Objection. Calls for a legal
6 conclusion.

7 THE COURT: I think it required a reading
8 of the statute probably. I will overrule that
9 objection, Mr. Lieb. It's in the statute. I
10 don't think you need to be a lawyer to read it.

11 BY MR. HICKS:

12 Q. From your experience, with regard to recount
13 petitions and recanvass petitions that are filed
14 after your unofficial results are announced, is it
15 typical that a cash deposit or surety bond be
16 posted?

17 A. Yes.

18 THE COURT: Excuse me. What would be the
19 authorities for that is that? Is that your
20 rule or is that the election --

21 THE WITNESS: It's in the Election Code.

22 THE COURT: Thank you.

23 BY MR. HICKS:

24 Q. With respect to the documents that were filed on
25 November 28, 2016, we have stipulated that there

1 were no cash bonds or surety deposits that were
2 posted with regard to that, correct?

3 A. Correct.

4 Q. During your tenure, has the Elections Division ever
5 asked the Election Board, each member of the
6 Election Board to sign the unofficial results before
7 they are posted on the website?

8 A. No.

9 Q. Why is that?

10 A. Well, we present a document at -- when the board
11 meets to certify that the results are official, and
12 we present a single sheet that we call the
13 preliminary certification, and they sign that.

14 Q. That's when the certification is presented when?

15 A. At the meeting of the Board of Elections to certify
16 the official results.

17 Q. That meeting of the board occurs how many days after
18 the unofficial results are published on the website
19 to the public?

20 A. Five days.

21 MR. HICKS: No further questions.

22 CROSS EXAMINATION

23 BY MR. LIEB:

24 Q. So the Board of Elections members do sign a
25 preliminary certification, as a matter of course,

1 correct?

2 A. They do.

3 Q. They just do it at the same meeting where they
4 certify the final results?

5 A. Correct.

6 Q. That meeting happens as a matter of course five days
7 after the unofficial results are compiled, correct?

8 A. Correct.

9 Q. So the members of the Board of Elections would
10 essentially sign the results that are reflected in
11 this thing you discussed with Mr. Hicks, correct?

12 A. Correct.

13 Q. They just haven't done it yet?

14 A. That is correct.

15 Q. Why do the members of the Board of Election sign
16 those results?

17 A. Why?

18 Q. Yeah.

19 A. The statute requires it.

20 Q. So there is a statutory requirement that the members
21 of Board of Election sign the preliminary
22 certification, correct?

23 A. Correct.

24 Q. The return board that you referred to in earlier
25 testimony consists of employees of the Election

1 Division?

2 A. Correct.

3 Q. Who, in general terms, are the employees and what is
4 their function?

5 A. We have employees that work in the voter
6 registration section, the voter absentee section,
7 ballot return section and the administrative arm of
8 it as well.

9 Q. It is fair so say these are civil servants from
10 throughout the Election Division?

11 A. Yes.

12 Q. When there are district by district returns, a
13 member of that return board initials that, correct?

14 A. Correct.

15 Q. And that happens with respect to every election
16 district from the county?

17 A. Correct.

18 Q. After that happens, those initial district by
19 district returns are compiled into the preliminary
20 results that are in the exhibit you were discussing
21 with Mr. Hicks; is that correct?

22 A. Yes.

23 Q. So is it fair to say that it's a two-step process?
24 First district by district initial returns by
25 members of the Election Board, then an announcement

1 and compilation into these results?

2 A. Right.

3 Q. And it is mandatory under the statute that those
4 results be signed by the members of the Board of
5 Elections, correct?

6 MR. HICKS: Objection. Calls for a legal
7 conclusion.

8 THE COURT: Overruled.

9 BY MR. LIEB:

10 A. Yes.

11 MR. LIEB: If I may have one second to
12 confer with Co-Counsel.

13 Nothing further, Your Honor.

14 MR. OPSITNICK: I have no questions.
15 Nothing further, Judge.

16 THE COURT: Thank you very much, Mr.
17 Wołosik. You may stand down.

18 MR. HICKS: Your Honor, at this time, the
19 only other evidence that we would offer are the
20 exhibits that are set forth in the stipulation,
21 and we would move them into evidence at this
22 time.

23 There is Exhibit 1A, which are the total
24 of 195 petitions that were double-sided copies
25 so I tried to keep the size down.

1 Exhibit 1B is the affidavit of Mr.
2 Halderman that were attached together in some
3 fashion to those 195 petitions.

4 Exhibit 2 are the copies of the Allegheny
5 County website page, which pertains to the 2016
6 general election results, and then a full
7 page or a full three page of the summary report
8 and the first pages of the detailed district
9 report and the detail canvass report.

10 Then Exhibit 3, is the notice that was
11 sent out about the Election's Division
12 decision to recanvass the machine in the 52
13 election districts that were subject of Exhibit
14 1A, as well as the notice that was sent on
15 November 29th to the candidates and political
16 parties on each chair giving them notice of
17 that December 5th 2016 canvassing.

18 We would move those into evidence, and we
19 have already premarked those Exhibits 1A, 1B
20 and 2 and 3.

21 THE COURT: They are part of the
22 stipulation and there is no objection to them?

23 MR. OPSITNICK: Correct.

24 THE COURT: With that, you rest, Mr.
25 Hicks?

1 MR. HICKS: With that, we would rest.

2 THE COURT: Mr. Lieb? Mr. Gaul? Do you
3 wish to offer any evidence?

4 MR. LIEB: Your Honor, we had offered with
5 our petition -- and we didn't have a chance to
6 confer with it about opposing counsel, we had
7 offered along with our petition an affidavit of
8 Duncan Buhl, who was a computer scientist and
9 expert in the use and operation of electronic
10 voting systems.

11 We would wish to offer that affidavit into
12 evidence at this time. As I said, we didn't
13 have a chance to confer with opposing counsel in
14 our stipulation this morning.

15 We would move to offer it into evidence

16 THE COURT: Well, I have a question. I
17 have actually looked at it, because you made it
18 part of your petition. So while you were out
19 here making your stipulation, I read it.

20 So first off, is there any objection to
21 this affidavit?

22 MR. HICKS: Yes, Your Honor.

23 THE COURT: I can see by the look on your
24 face, Mr. Hicks, you almost came out of your
25 shoes on that one.

1 MR. HICKS: We have stipulated as to Mr.
2 Halderman's affidavit, not to the truth of the
3 matter, just because that was one of the
4 documents that was submitted. This affidavit is
5 being offered clearly is hearsay. The witness
6 is not here and I don't see any more relevance
7 to the issue in this proceeding.

8 MR. OPSITNICK: Judge, just a high tech
9 look, if you recall, a fellow, Mr. Nowelt, a
10 fellow from New Jersey said you can fix or hack
11 the lever machines with a ballot.

12 I don't believe that affidavit is
13 relevant to what we are doing here. It's either
14 we are going to recanvass Monday or we're not.

15 THE COURT: One of the things that
16 they have asked for, which you haven't agreed to
17 by way of stipulation, is to run some type of
18 forensic tests on the machines again.

19 MR. OPSITNICK: We submit that was done
20 twice. Can I recall Mr. Wolosik and have him --

21 THE COURT: I think we can agree to it. I
22 read about it in the newspapers and they are
23 trying to reassure everybody on what they do.

24 MR. OPSITNICK: If I could briefly just
25 have Mark testify as to what happened of the

1 forensic analysis both before and after the
2 election.

3 THE COURT: There's no evidence, because
4 you haven't produce any evidence, that there was
5 any evidence of tampering or any type of hacking
6 on these machines, which are not connected to
7 the internet.

8 I have read Mr. Buhl's affidavit, but you
9 don't even allege this in your pleading that you
10 have some reason to believe that what happened
11 was some mathematical quirk or anything else
12 that would lead one to believe that the
13 integrity of the electronic machines as being
14 challenged.

15 So, now this affidavit comes out of the
16 blue and is not supported by anything else. You
17 aren't making that claim in your plea.

18 MR. LIEB: Your Honor, we understand the
19 purposes of these proceedings would not be to
20 sort of litigate the underlying question of were
21 the returns accurate or not. That's the purpose
22 of the recanvass.

23 THE COURT: Well, not if Mr. Buhl's
24 affidavit become magically irrelevant if that's
25 not the purpose of this proceeding.

1 MR. LIEB: I think we were offering the
2 affidavit to support our argument that under
3 section 2650, which entitles a candidate to
4 examine machines that were used as part of a
5 recanvass that takes place, to explain to the
6 Court what it would mean to examine the
7 machines.

8 THE COURT: Well, let's hear what Mr.
9 Wolosik has already done to these machines, both
10 prior to the election and after the election.

11 THE WITNESS: About two months prior to
12 the election -- and we have done this prior to
13 the November 2008 election -- we engage a
14 company by the name of GRB Consulting.

15 We give notice that's required under the
16 Election Code to political parties and bodies
17 and/or groups, organizations that register with
18 the Elections Divisions at least 50 days prior
19 to a primary election.

20 We permit any of those participates to
21 select up to 20 voting machines at random or
22 however they would like to do it. We pull the
23 firmware chip that is on each voting machine.
24 It's a computer chip and that is actually the
25 machine instructions and that is compared --

1 we're getting a little bit over what I do for a
2 living here. It's hash code and it compares the
3 firmware instructions that were certified
4 federally and by the Department of State to
5 firmware instructions that are resonant on each
6 machine.

7 We have done that prior to the November
8 2008 election, and have never seen an instance
9 where any of firmware that is on the random
10 selected machines differs from the firmware that
11 was certified by these various --

12 THE COURT: Did you do that before the
13 primary and general?

14 THE WITNESS: Yes, we do. On election
15 day, we engage a certified public accounting
16 firm. In the past, it's been ParenteBeard.
17 Now, it's Baker-Tilly.

18 Prior to the election, they randomly
19 select a precinct. They select voting machines,
20 and on election day, they vote these machines to
21 a script and verify that the machines record the
22 votes correctly as entered on the devices from
23 the script that is videotaped, and I think we
24 have done that since the November 2006 election.

25 There has never been an instance where

1 there was any deviation from the script that was
2 voted on election day. The results have
3 matched.

4 THE COURT: Those are from the machines
5 from the precincts that are randomly picked?

6 THE WITNESS: Yes. I think at least the
7 last two what we call parallel testing on
8 election day, we have given notice of that
9 parallel testing to the same groups or
10 organizations that we give notice of the
11 firmware verification.

12 Finally, we engage a company to verify
13 that our election tabulation network that's
14 housed at the warehouse in the North Side is not
15 connected to the internet.

16 That is done, I think, two or three days
17 prior to the election and the day or two after
18 election day.

19 So those are the three types of testings
20 that we have done.

21 THE COURT: If this Court permits the
22 canvass to go forward, what would you do so far
23 as any forensic testing of any other machine?
24 Is there a protocol for that?

25 THE WITNESS: What we would do is use the

1 same protocol that's been approved by the
2 Department of State for the two statewide
3 recount/re canvass that occurred.

4 It was a primary and an election where the
5 statewide results were a half a percent or less,
6 which triggers an automatic recount.

7 The procedure that we followed was we get
8 the results that were gathered on each voting
9 machine has its own flash memory card, and it
10 records the votes cast separately on that
11 machine.

12 We read those into a tabulation database
13 and compare those results to the results that
14 were generated on election night at each polling
15 place that were signed.

16 THE COURT: That's an internal flash, and
17 that is different than what is registered by the
18 machine itself? You took a count from another
19 source?

20 THE WITNESS: Yes, that's correct.

21 THE COURT: And this flash drive is what?
22 A memory card?

23 THE WITNESS: It's a memory card. It's a
24 removable memory card. Then we compare those
25 results to the results that were generated on

1 election night.

2 THE COURT: How many machines did you do
3 that with?

4 THE WITNESS: That would have been done
5 for all the machines that were used in those
6 requested districts.

7 THE COURT: Okay. Any questions for Mr.
8 Wołosik?

9 MR. OPSITNICK: One question for him.

10 REDIRECT EXAMINATION

11 BY MR. OPSITNICK:

12 Q. Mark, you mentioned the pre-election and the
13 election day procedures.

14 Is there anything post election where an
15 analysis was done?

16 A. Well, the statute requires that an audit be done of
17 two percent of the votes cast or 2,000 votes,
18 whichever is lesser.

19 What we do is we use the same protocol
20 that we used in the recount procedure for two close
21 elections where we get the vote totals from the
22 members of card blanche totals. Tabulate them and
23 them compare them to the results that were posted
24 and gathered on election night, and also hand count
25 any paper ballots that were cast, because those were

1 ultimately tabulated electronically as well.

2 THE COURT: Anything else?

3 MR. LIEB: May I very briefly inquire.

4 RECROSS EXAMINATION

5 BY MR. LIEB:

6 Q. The procedure that you referred to prior to the
7 primary and general election when you examined the
8 firmware, can you approximate how far in advance
9 prior to the election that takes place?

10 A. 60 days.

11 Q. Approximately, how many voting machines is that
12 process conducted on?

13 A. 20.

14 Q. Approximately how many voting machines are used in
15 Allegheny County in any given election?

16 A. Anywhere from 4,200 to 4,500.

17 Q. The process of examining the firmware is something
18 that the Elections Division does of its own accord?
19 It's not required?

20 A. That's right. I think we are the only jurisdiction
21 in the country that does that.

22 Q. The reason you do, I presume, is because you think
23 it's important to ensure that the firmware running
24 the machines on election day is, in fact, the same
25 as it was initially manufactured and verified and

1 not compromised in any way, correct?

2 A. That's right.

3 Q. About how long does the process of examining
4 firmware in this manner take?

5 A. Two hours.

6 Q. Approximately, how much does it cost?

7 A. \$6,500 each time it's done.

8 Q. All tolled for the 20 odd machines?

9 A. Yes.

10 Q. So this is something that your Election Division
11 does as a matter of course to examine the voting
12 machines and make sure they are actually tabulating
13 votes, correct?

14 A. Correct.

15 Q. Not particularly difficult to avert, is it?

16 A. No.

17 MR. LIEB: Nothing further. Thank you.

18 MR. HICKS: Just a couple of questions.

19 RECROSS EXAMINATION

20 BY MR. HICKS:

21 Q. Do we know many machines are potentially impacted by
22 this requested recount for the recanvass that is
23 scheduled for Monday?

24 A. I do not.

25 Q. So as you sit here today, you don't know how many

1 actual machines are going to be impacted?

2 A. I do not.

3 Q. You said it was \$6,500 for 20 machines to do a
4 software analysis?

5 A. Yes.

6 Q. Would it be accurate to say that we are at least
7 dealing with a minimum of 52 machines on Monday if
8 you were to do this software analysis?

9 A. Yes.

10 Q. Do many of these districts have more than one
11 machine?

12 A. Yes.

13 Q. So it's possible that we would be dealing with 104
14 or ever greater?

15 A. Probably more.

16 Q. In your estimation, based on the 52 election
17 districts that you saw, would it be accurate to say
18 that there are at least two to three voting machines
19 per district?

20 A. Yes.

21 Q. So we are potentially dealing with 150 machines?

22 A. That's right.

23 Q. At a cost of \$6,500 for just 20, correct?

24 A. Correct.

25 Q. We would have to multiple that out and figure out

1 the total cost to the county to be able to do that,
2 correct?

3 A. Correct.

4 Q. As part of your budget, have you budgeted to do
5 those types of analysis at a cost of potentially
6 thousands and thousands and thousands of dollars?

7 A. We have not.

8 Q. Had the districts that filed their petitions on
9 November 28th posted any cash deposit to pay for any
10 of this type of firmware analysis?

11 A. They have not.

12 MR. HICKS: That's all.

13 MR. OPSITNICK: Judge, I have one
14 follow-up.

15 REDIRECT EXAMINATION

16 BY MR. OPSITNICK:

17 Q. Mark, the recanvass is scheduled on Monday morning.
18 Is that recanvass intended to include any type of
19 forensic analysis?

20 A. It is not.

21 Q. So the cost that Mr. Hicks inquired about would not
22 be incurred come Monday, correct?

23 A. That is correct.

24 Q. Rough length of time to recanvass machines in 52
25 districts, how long do you think that will take?

1 A. Two hours.

2 Q. Scheduled to start at 10:00, correct?

3 A. Correct.

4 Q. So by no later than this time on Monday, they would
5 complete everything?

6 A. I would think so.

7 RECROSS EXAMINATION

8 BY MR. HICKS:

9 Q. Mr. Wolosik, but for the petition or the documents
10 that were filed on November 28th, would the board
11 have certified results on November 28th?

12 A. Yes.

13 THE COURT: Thank you very much, Mr.
14 Wolosik.

15 I have to make a ruling of what I was
16 doing was discussing the admissibility of Mr.
17 Buhl's sort of contact there that the whole
18 purpose of the exercise was to determine whether
19 or not the affidavit is admissible, and I find
20 that, one, it is hearsay, and it is not
21 admissible for that purpose, and, also, at this
22 time, it is really not relevant and is not part
23 of the record.

24 That was your offer of evidence, I
25 believe. That was the exhibit that you filed.

1 Anything else that you wish to offer, as
2 far as evidence, Mr. Lieb?

3 MR. LIEB: No, Your Honor.

4 MR. OPSITNICK: I have nothing further,
5 Judge.

6 THE COURT: Mr. Hicks, you are finished
7 with your evidence?

8 MR. HICKS: My associate here, Mr. Bell,
9 reminded me that I didn't formally enter the
10 stipulations of facts into the record. So I
11 would offer them into the record. I thought I
12 had done that.

13 THE COURT: You read them into the record.

14 MR. HICKS: There were some that I didn't
15 read as well, but to the extent that I didn't
16 read them, I wanted to make sure certainly those
17 are.

18 THE COURT: All right. With that you
19 rest.

20 All right. You may argue.

21 MR. HICKS: Your Honor, the Election Code
22 -- the particular section that we are dealing
23 with here is under 1404, and the particular
24 section 1404(e), which deals with provisions for
25 recount or recanvass.

1 THE COURT: Have you attached that?

2 MR. HICKS: It's actually attached in the
3 appeal.

4 THE COURT: Let me get to that before you
5 start reading.

6 MR. HICKS: It's paragraph 13. For the
7 record, it's 25PS section 3154E. We've copied
8 it in particular the first paragraph, but the
9 remaining paragraphs are only to deal with
10 actual recount or recanvass procedure.

11 Our argument here is two-fold. One the
12 statute has been misconstrued as to what the
13 Supreme Court has said about the election
14 results with regard to recount and recanvass and
15 who is entitled to do them, as well as how they
16 are being conducted.

17 When you take a look 1404(e) you see that
18 there are two requirements that have to be done.
19 One, there has to be a petition of three voters
20 of any district verified by affidavit. But,
21 more importantly, is really the timing that is
22 at issue in this particular case.

23 It says right there in the middle that if
24 that petition is filed by the voter, the county
25 board shall at any time prior to the completion

1 of the computation of all the returns of the
2 county then summon back the return of the board
3 and give notice to the county parties and
4 candidates and conduct a recount or recanvass.

5 But the operative words are upon at any
6 time prior the completion of the computation of
7 all the returns for the county.

8 Mr. Wołosik testified that that act of
9 completing the computation of all the returns
10 from the county was was November 23, 2016.

11 At that point, the board no longer has any
12 power to come back as a return board. Their job
13 as a return board was finished.

14 At that point, if there was any recount or
15 recanvass that would have to be filed, then a
16 voter or anyone else who is interested would
17 then fall under the section of the Election Code
18 that deals with recounts or recanvass, which is
19 under section 1701 through 1703, which are the
20 recount and recanvass of either opening up the
21 ballot boxes in the district to count the paper
22 ballots and the provisional ballots, or under
23 Section 1702, which is actually the re
24 canvassing of the voting machine.

25 Those provision require that those types

1 of petitions get filed in the court where the
2 Court fees are paid, cash deposits, whether it
3 be a \$50 per box or per voting machine gets paid
4 or \$100 per machine or voting box get filed.

5 So that the cost for that type of recount,
6 regardless of how long it may take, there is
7 still time and effort being incurred by the
8 county to do those types of things.

9 The Election Code sets forth those
10 procedures. Now, these voters could have
11 participated during the actual re canvassing
12 portion that took place three days after the
13 election and went up all the way to November 23,
14 2016. They chose not to do that.

15 So, at this point, the Election Code is
16 clear that once the board is done with its
17 computation, any effort to try to recount or
18 recanvass has to go under section 1701 to 1703,
19 which requires a petition to be filed in this
20 Court and the deposits to be filed.

21 According to Dr. Stein and her campaign,
22 they are relying on sections 1404(a) and section
23 1404(f) of the Elections Code, which refers to
24 the signing and announcement, but I would argue
25 that the computation and canvassing is separate

1 and apart from whatever the board is required to
2 do.

3 When the legislature tied it to just the
4 completion of the computation and the
5 canvassing, it meant something.

6 I have been doing this now for at least
7 15, 20 years, and we have always look for when
8 does the return board complete its computation,
9 because we know we have five days to then file
10 any other types of recanvass.

11 If they were really concerned about what
12 is going on in particular election, then their
13 candidates and those parties are watching the
14 entire recanvass process and we file a petition
15 with the board at that time so they can be
16 addressed at the board level before that
17 computation is completed.

18 Once the board finishes it duties, it does
19 not have the power to bring itself back into
20 existence to continue to incur recounts or re
21 canvassing without a valid recount petition
22 being filed or an order of this Court being
23 issued authorizing. That's what is missing in
24 this particular case here.

25 The other thing I wanted to emphasize, and

1 it's not in the appeal, but I think it's because
2 I guess it's something that should not go
3 unnoticed is the fact that we are dealing with a
4 federal election, and we're dealing with the
5 presidential election and the senatorial
6 election, which of coincidentally, each
7 particular appeal, that is the only thing
8 they're focused on.

9 And because we're dealing with the federal
10 election, we also have particular concerns there
11 with regard to both people protection, as well
12 as the Safe Harbor Law that you place under
13 3USC5, which requires that the county and the
14 Commonwealth report the results within a certain
15 periods of time so that the electors for
16 president can go to the electoral college on
17 December 19th.

18 So I appreciate that -- what I am trying
19 to stress is that if Allegheny County and the
20 Stein Campaign feels that Allegheny County
21 should reconvene as the return board, even
22 though it has already completed its computation
23 post the five day period, then Allegheny County
24 will be the only county that will be doing that
25 and create a protection problems with respect to

1 this federal election.

2 THE COURT: Well, if they file with the
3 Court, as you said, and it posts Monday, it will
4 still be delayed, you know. We would still be
5 running up against the electoral college
6 deadline of December whatever it is.

7 MR. HICKS: We might be.

8 THE COURT: If they had followed of what
9 you described as proper procedure, we still have
10 a delay in the certification of the election,
11 correct?

12 MR. HICKS: That is correct. Then the
13 only thing I want to stress --

14 THE COURT: You did not put that in your
15 plead, and it's probably for good reason. It's
16 not a winner, Mr. Hicks.

17 MR. HICKS: I just needed to note that. I
18 am certain that the Court recognizes the
19 particular differences of this election versus
20 the other one, but I think from the statutory
21 ground, they missed the period of time.

22 They filed it in wrong place. They didn't
23 post the bond.

24 THE COURT: And you believe that the
25 Election Board doesn't have jurisdiction to do

1 this again?

2 MR. HICKS: They don't have the authority,
3 correct. I cited in our appeal cases that go
4 back the 1900's.

5 THE COURT: The deadline to file was when?

6 MR. HICKS: November 23rd, before they
7 announced it at 10:30 a.m.

8 THE COURT: And when were they filed?

9 MR HICKS: November 28, 2016 starting
10 sometime in the morning and continuing
11 throughout the five days.

12 THE COURT: So it was five days after
13 that?

14 MR. HICKS: Correct.

15 THE COURT: Had they filed, under your
16 theory, with the Court of Common Pleas and
17 followed that section of the Election Code, the
18 recanvass would have been valid and taken place
19 on Monday morning?

20 MR. HICKS: If they met all the
21 requirements of the Election Code, then, yes.

22 THE COURT: We still would be recounting
23 on Monday morning.

24 MR. HICKS: We might have.

25 THE COURT: Well, had they met all the

1 requirements. Who would like to go next?

2 MR. OPSITNICK: Counsel from out of town
3 deferred to me for some reason.

4 Judge, a little bit of context can be made
5 from this. The Board of Elections was set to
6 meet 10:00 Monday morning to finally certify.
7 None of us at county law Elections Division is
8 aware that this petition filing and affidavit
9 was going to occur until Monday morning when the
10 doors open at 8:30 and the petitions come in.

11 A meeting that convened with Mr.
12 Teskevich, who was there to observe, Mark and
13 myself, I opine whether it's right or wrong,
14 that given the circumstances, let those
15 petitions come in at the Board of Elections or
16 Election Division. Let's advise the Board of
17 Elections to not certify anything pending a
18 shake down, and as a result that happens, as a
19 result the Board of Elections would meet on
20 Monday the 12th to certify and as long as those
21 results get to Harrisburg that day, because the
22 13th is the first of two key dates that Mr.
23 Hicks mentioned, because the state has to
24 certify or report who these electors will be,
25 and would need get it to the electoral college

1 on the 19th.

2 So perhaps in retrospect, I probably
3 misadvised my client. I am not happy with that,
4 but that's probably what happened.

5 With that being said, Judge, I am going to
6 try to work my way out of this a little bit
7 because I am somewhat embarrassed.

8 It was timely filed. The substance of
9 these three affidavit filings for these 52
10 districts were timely filed. The right
11 allegations were made, and as the Court pointed
12 out, simply not in the right place with the
13 filing requirement and the bond requirement.

14 I think the Court has the power under
15 Section 3157(b) that says the Court shall have
16 full power and authority to hear and determine
17 all matters pertaining to fraud and make such
18 decree as right as justice may require. I
19 think, Judge, you have some equitable --

20 THE COURT: Well, that's quite a bit of
21 power.

22 MR. OPSITNICK: On election night, for the
23 second presidential election in a row, Mr. Hicks
24 went and obtained an order from the elections
25 judge, Judge O'Toole, this time to extend the

1 deadline to file emergency absentee ballots that
2 under the statute have to be in the Elections
3 Division by 8:00 until 9:00, and to the extent
4 the time to challenge those absentee ballots to
5 Thursday afternoon.

6 So if there are provisions of the Election
7 Code that can and have been waived and were
8 waived as recently as November 8th, which was a
9 federal election.

10 I submit to the Court that you permit this
11 recanvass to go on so that nobody will consider
12 appeal. Nobody will gum up the work.

13 What the Election Division is going to do will
14 be conclude between 10:00 and midday on Monday
15 so the Board of Elections can meet formally and
16 finally certify on the following Monday, the
17 12th, and we'll proceed from there. Thank you.

18 THE COURT: Mr. Lieb?

19 MR. LIEB: So I actually think that Mr.
20 Opsitnick gave his client entirely the correct
21 advice, and the reason he gave his client
22 correct advice is because they are still sitting
23 as the Election Board.

24 As Mr. Hicks pointed out in his
25 presentation, there are a whole host of

1 technical requirements here that contributed to
2 this, and he is aware of the technical
3 requirements.

4 I don't know if Your Honor has the notice
5 of appeal before, but if you look at Paragraph 6
6 and you look at the presentation the appellants
7 are making as to why the voter's petitions were
8 untimely, what the appellants is saying is that
9 the returns from each election district were
10 read and found to be correct and then were added
11 together and they were tabulated and they were
12 unofficially resolved at 10:32.

13 It's their position that once the document
14 that's in Exhibit 2 came out at 10:32, that was
15 the deadline. That is their position. That is
16 what was alleged in Paragraph 6 of the notice of
17 appeal.

18 Your Honor, that language directs section
19 3154 (f). I don't know if Your Honor has 3154
20 (f) before you.

21 THE COURT: I don't, but you can read it
22 to me.

23 Mr. LIEB: So it says: As per the returns
24 from each election district are read, computed
25 and found to be correct or corrected as

1 aforesaid, they shall be recorded on the
2 lengths. They shall be added together,
3 announced and attested by the clerk who may have
4 computed the entry and signed by the members of
5 the county board.

6 That's the one thing that Mr. Hicks left
7 out of Paragraph 6 because it didn't happen. We
8 heard the testimony, Your Honor, that for
9 whatever reason is the practice of the Allegheny
10 County Board of Elections to have that signature
11 occur at the same meeting where final results
12 are certified.

13 They certify the preliminary and then they
14 certify the final results of the election in
15 succession, but until that signature happens,
16 the return board is still duty computation.

17 These are official results which, as Mr.
18 Hicks would claim, triggers the deadline are
19 nullity, and the reason they are nullity is
20 because of the legally required action that the
21 county board of elections itself acknowledges it
22 is required to take.

23 The three signatures of the members of the
24 county board of elections hasn't happened yet.
25 Until that happens, we are still -- the board is

1 sit sitting as the return board. The unofficial
2 results do not exist as a legal matter, and the
3 petitions are still timely.

4 I can walk into the Board of Elections and
5 file petitions right now and they would still be
6 timely, because the requirements that are
7 necessary to shift from being a return board and
8 actually coming up with the unofficial results
9 aren't there.

10 I think, frankly, it's sort of telling
11 that that little thing was omitted from
12 Paragraph 6 of the appeal because I think the
13 appellant knows that all technical requirements
14 have to be satisfied. That's why we are
15 claiming at 10:32 when the exhibit is generated
16 and the deadline occurred, not when the
17 individual district results come in and the
18 members of the Election Board initialed them.

19 It's a two-step process and until step two
20 step is complete, the return board is still the
21 return board. There are no returns and they
22 were timely.

23 I think that's the easiest way to resolve
24 this issue. I think that means they don't have
25 to get into the whole question of what the

1 deadline is under 3154(f) in reference to any
2 admission or recount under 3154(f) precludes the
3 Board of Elections from receiving these
4 petitions.

5 I think there's, to me, no question. Just
6 read 3154 (f). The requirements that are
7 necessary haven't been complied with, and we all
8 agree that the requirements need to be complied
9 with which is why they have members of the
10 county election board to see the final return.

11 So the petitions are timely because the
12 return board is still the return board.

13 THE COURT: Thank you.

14 MR. HICKS: Your Honor, if I could reply.
15 First of all, as to Mr. Opsitnick's argument,
16 this Court doesn't have the power to extend the
17 deadlines or direct the recount or the
18 recanvass.

19 There are numerous cases from the Supreme
20 Court and Commonwealth Court which says that
21 this Court does not have the equitable power
22 when a person doesn't comply with the Election
23 Code with regard to the place where the recount
24 petition is to be filed.

25 This isn't the first time somebody has

1 filed a recount petition in the Election
2 Division when it's supposed to be filed in the
3 Court.

4 This isn't the first time that there
5 wasn't paid a cash deposit or surety bond, all
6 of which are fatal defects for a recount
7 petition that has not been properly filed. So I
8 disagree that the Court has equitable power to
9 do that.

10 As to the instance that Mr. Opsitnick
11 mentioned on election day, first off, I didn't
12 agree --

13 THE COURT: You don't have to speak to it.
14 It's irrelevant. Judge O'Toole is sitting as
15 the Judge of Elections. I met with him that
16 day.

17 In fact, as you know, I have was here
18 until around 6:00 that night. So a long day for
19 all of us.

20 That's Judge O'Toole's ruling. I have no
21 idea the underlying -- nor do I care what the
22 underlying reason was that Judge O'Toole
23 extended that period of time. Whatever the
24 facts that were presented, I am sure the
25 Administrative Judge or Orphan's Court of

1 Allegheny County made a fair and equitable
2 decision. He always does.

3 MR. HICKS: I just want to put on the
4 record that I actually opposed that.

5 The argument raised by Mr. Lieb actually
6 highlights the issue of these court actions. If
7 you agree with Mr. Lieb, under his scenario,
8 then because the election results have not been
9 signed and Mr. Opsitnick has now said they are
10 not going to be signed until December 12th, that
11 means throughout this entire period of time,
12 more recount and more recanvass petitions can be
13 filed, and that afterwards and, more
14 importantly, the five day period under section
15 701 through 703 can now being extended until
16 after or up to basically the day before.

17 Because if the certification occurred, as
18 Mr. Opsitnick proposed December 12th, that gives
19 another five days, which means that the recount
20 and recanvass can be filed up to two days before
21 the electors are supposed to be at the electoral
22 college.

23 To me, that signifies the problem with
24 this whole approach. This county has always
25 gone by the computation when that computation is

1 completed.

2 THE COURT: Why is it unofficial though?
3 If it says unofficial and it isn't signed, then
4 what is it then?

5 MR. HICKS: That is the terminology
6 provided under the code. It becomes official
7 only to see if there are any recount or
8 recanvass petitions filed with the Court, at
9 which point, then the Court takes over and
10 reviews it and determines whether or not there
11 are any issues such as should there be a
12 forensic examination, should the return board be
13 reconvened.

14 We're dealing with, you know, there were
15 basically two ways to do the recount. One prior
16 to November 23rd of the Election Board and one
17 is with this Court.

18 Basically, they want to not impose or
19 involve this Court until now sometime around
20 December 12th, which is just unworkable.

21 THE COURT: Anything else?

22 MR. LIEB: May I be heard, Your Honor?

23 THE COURT: One last time. We keep
24 going back and forth and back and forth. It has
25 to end somehow.

1 MR. LIEB: He has no argument as to why
2 the reading of the statute that we offered, Your
3 Honor, is in any way incorrect. The remedy for
4 the problem we are talking about is to move
5 forward the certification date.

6 It's not to read the requirements out of
7 the statute that in order for the return board
8 to stop sitting as the return board, the three
9 members of the county board of elections need to
10 sign.

11 It didn't happen. It continued to not
12 happen. We concede it has to happen. He said
13 that it is going to, you know, cause some
14 constitutional problem if the county board of
15 elections held the certification meeting too
16 close to December 14th.

17 A, this is not the proper forum to take up
18 that challenge. That, if anything, that should
19 be appealed from a notice saying when they are
20 going to hold a certification meeting.

21 B, surrender or deal with that, not
22 preventing these voters from getting the recount
23 that they timely filed.

24 THE COURT: The recount is scheduled for
25 10:00 Monday morning?

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MR. OPSITNICK: Yes, sir.

THE COURT: Anything else? I think we're done here. I will enter an order probably within the next the half hour. I will draw it up. Thank you.

This Court stand in recess.

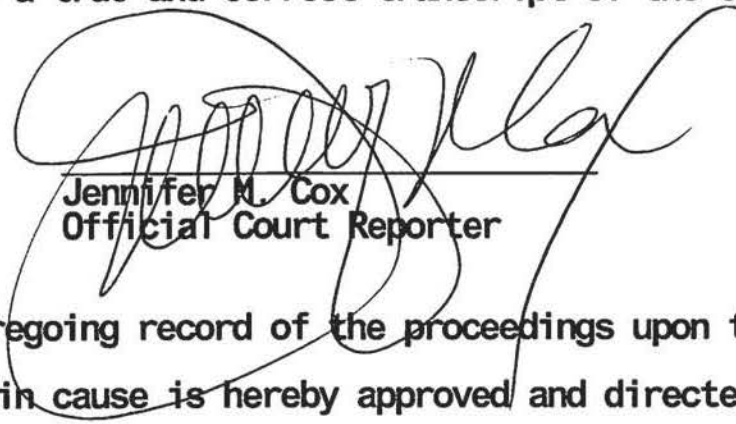
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(Whereupon, this matter adjourned.)

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C E R T I F I C A T E

I hereby certify that the proceedings are contained fully and accurately in the notes taken by me on the hearing of the herein cause and that this is a true and correct transcript of the same.



Jennifer M. Cox
Official Court Reporter

The foregoing record of the proceedings upon the hearing of the herein cause is hereby approved and directed to be filed.

Exhibit 51

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IN THE COURT OF COMMON PLEAS OF DELAWARE COUNTY
PENNSYLVANIA

CIVIL DIVISION

* * * * * No. 2016-010508

IN RE:

RECOUNT AND/OR RECANVASS
OF THE VOTE FOR PRESIDENT
OF THE UNITED STATES AND
FOR UNITED STATES SENATE
IN THE NOVEMBER 8, 2016
GENERAL ELECTION

* * * * *

Media, PA, December 7, 2016

Courtroom 12

TRANSCRIPT OF PROCEEDINGS

BEFORE: THE HONORABLE JUDGE CHAD F. KENNEY, SR.

LAWRENCE M. OTTO, ESQUIRE
DOUGLAS E. LIEB, ESQUIRE
For the Plaintiff

FRANCIS J. CATANIA, ESQUIRE
For the Defendant

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DIRECT CROSS REDIRECT RECROSS THE COURT

ON BEHALF OF THE PLAINTIFF:

[None]

ON BEHALF OF THE DEFENDANT:

[None]

EXHIBITS

MARKED ADMITTED

ON BEHALF OF THE PLAINTIFF:

[None]

ON BEHALF OF THE DEFENDANT:

Board of Elections 1 - Letter	6	7
Board of Elections 2 - Certification	7	7

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P R O C E E D I N G S

December 7, 2016

THE CLERK: -- the Commonwealth of Pennsylvania in the Common Pleas Courts of Delaware County, I now declare this Court is in session. The Honorable President Judge Chad F. Kenney is presiding. Good morning, Your Honor.

THE COURT: Good morning.

ALL: Good morning, Your Honor.

THE CLERK: You may be seated.

THE COURT: All right. This is Stein vs. Delco Board of Electors, 10580-16 [sic]. Counsel for the record?

MR. OTTER: Lawrence M. Otter for Ms. Stein.

MR. CATANIA: Your Honor, Francis Catania, ID #41733, counsel for the Bureau and Board of Elections.

THE COURT: All right.

MR. OTTER: Your Honor, as a preliminary matter, I have a Pro Hac Vice Motion for my colleague from New York. May I present that to the Court? I --

THE COURT: All right. And Counsel, you know the rules for filing pro hac vice. Correct?

MR. OTTER: Yes, it's all --

THE COURT: And they've all been followed?

MR. OTTER: Well --

1 THE COURT: Including payment of fees?

2 MR. OTTER: Yes. Payment of fees has been
3 done.

4 THE COURT: All right. Hand it up. All
5 right. And did you have a chance to look at this, Mr.
6 Catania?

7 MR. CATANIA: Your Honor, I've received this
8 this morning. I took a cursory look at the Pennsylvania
9 Rule of Civil Procedure 10.12-1. It appears that Mr.
10 Otter has averred what the rule requires, but I have not
11 given it any in depth review. I was just curious as to
12 whether any other member of Mr. Lieb's law firm is
13 licensed in Pennsylvania because they're quoted in many
14 national papers making public comments about the
15 Pennsylvania election system. Just I wanted to know if
16 anyone else there is licensed in Pennsylvania because
17 when I checked, I couldn't find any evidence of it.

18 THE COURT: And what significance does that
19 have to --

20 MR. CATANIA: I'm just curious as to how they
21 can opine about Pennsylvania Law without being licensed
22 here. It goes to --

23 THE COURT: Well, everybody opines anymore.
24 We're in a nation of opiners, so but in terms of this
25 particular issues, the Pro Hac Vice Motion seems to be

1 in order, so I will allow his admission for this
2 particular hearing.

3 MR. OTTER: Thank you, Your Honor.

4 THE COURT: Um-hum. All right. And then you
5 want to proceed, Mr. Catania? I guess we're agreeing to
6 the facts on this --

7 MR. CATANIA: Your Honor, as --

8 THE COURT: -- in terms of the --

9 MR. CATANIA: That's a --

10 THE COURT: -- filing of the petition and the
11 Election Board --

12 MR. CATANIA: Your Honor, as --

13 THE COURT: -- deciding it did not have
14 jurisdiction?

15 MR. CATANIA: As a preliminary matter, Ms.
16 Hagan received a Notice of Attend and a Notice to
17 Produce today. She is here. She was asked to bring
18 with her the unofficial returns of the 2016 General
19 Election for President of the United States and the
20 United States Senate.

21 THE COURT: Well, we're not there yet. We're
22 not there yet.

23 MR. CATANIA: Oh, I'm just telling you --

24 THE COURT: I know that, but what -- is she --
25 she's here.

1 MR. CATANIA: Right.

2 THE COURT: And whatever she brought she
3 brought and we'll discuss that when we get to it. Right
4 now, we're discussing the Board's decision to not accept
5 the petitions.

6 MR. CATANIA: Your Honor, the Election Board
7 did not make any decision on the matter that brings us
8 here today. What happened was there were some things
9 filed with Ms. Nethane's [ph] office, which included a
10 petition by Sharon Pennock, one of the Petitioners today
11 that was returned to her because as Ms. Hagan will
12 testify, she believes that there was nothing that she
13 was able to do since she received the application on the
14 28th of November and the election had been certified on
15 the 23rd of November. We believe the application itself
16 or the petition itself, Your Honor, on the 28th was
17 filed by an attorney and not any of the three
18 Petitioners.

19 THE COURT: All right. So what's your
20 position, Mr. Catania?

21 MR. CATANIA: If we want to mark this, we're
22 happy to hand it in. This is what was returned to the
23 Petitioners after it was dropped off at the Bureau of
24 Elections on Monday, November 28. It was sent back to
25 them with the cover letter which indicated that --

1 MR. OTTER: We'll stipulate to that, Your
2 Honor.

3 THE COURT: All right. So we can admit that.

4 THE CLERK: What do you want this marked as?

5 MR. CATANIA: Board of Elections 1.

6 THE COURT: That's fine.

7 MR. CATANIA: And the only other document that
8 I offered to stipulate to was our official certification
9 of the election which is a 30 page document. I have
10 shown to Mr. Lieb and Mr. Otter. It's evidence of the
11 action taken by the three board members at the Board of
12 Elections meeting on November 23. We would offer that
13 as Board of Elections 2.

14 THE COURT: Okay.

15 MR. OTTER: No objection.

16 MR. CATANIA: And our position, Your Honor, is
17 that any relief requested under Section 3154 was unable
18 to be offered by the Bureau of Elections when they
19 received that petition on Monday, November 28, because
20 their jurisdiction no longer existed after they
21 certified on the 23rd of November.

22 THE COURT: All right. Go ahead, Mr. Otter.

23 MR. OTTER: Your Honor, I defer to my
24 colleague for [inaudible].

25 THE COURT: For the record?

1 MR. LIEB: Yes, Your Honor. Douglas Lieb,
2 Emery, Celli, Brinckerhoff & Abady for the Appellants,
3 Jill Stein and Sharon Pennock. Under the Supreme Court
4 of Pennsylvania's Decision in In Re: Contest of the 2003
5 General Election for the Office Prothonotary --

6 THE COURT: Will you keep your voice up,
7 please?

8 MR. LIEB: Yes, Your Honor. Under that
9 Pennsylvania Supreme Court Decision, the procedural
10 validity of the Board's Certification of the election
11 results is a prerequisite to the denial of a petition as
12 untimely. So if the Board properly certified the
13 election results on the day that they were certified, we
14 would acknowledge that the petitions were untimely. The
15 question that we wish to explore through the testimony
16 of Ms. Hagan and through other evidence adduced to this
17 hearing is whether, in fact, all of the necessary
18 procedural requirements for that certification were
19 complied with, making it a valid certification of the
20 results and thus resolving the question of whether the
21 petitions were or were not timely.

22 THE COURT: Um-hum. All right. So do you
23 have any basis to challenge the procedures that were
24 taken? Do you have any witnesses? Do you have any
25 evidence? Do you have anything to indicate that the

1 procedures taken to come to the certification were
2 improper?

3 MR. LIEB: Well, so the reason we served a
4 Notice to Appeal on Ms. Hagan was so that she could
5 provide the testimony, Your Honor. It has been our
6 understanding that for instance in Allegheny County, the
7 Board of Elections does not sign the computation of the
8 results prior to certification and then wait five days
9 as required by the Election Code before certifying.
10 Now, obviously, that is not of itself evidence that the
11 Delaware County Board of Elections would not do the same
12 thing. But, you know, we had served a Notice to Produce
13 for the signed computation of the returns. It's our
14 understanding that there is no such document. And in
15 our view, the Election Code is clear that the way this
16 is supposed to work is there's the computation. The
17 computation gets completed, it gets signed by the
18 members of the Board of Elections, then there's a five
19 day waiting period, and then and only then can
20 certification occur. So in the absence of a signed
21 computation and on the basis of the evidence that some
22 other Boards of Elections at least have a practice of
23 not completing that signed computation, we think it's
24 proper to explore whether there was a signed computation
25 of the results and whether there was a five -- whether

1 there was a wait of five days between that signed
2 computation and the certification as required by Section
3 1404(f) of the Election Code.

4 THE COURT: So you're saying, okay, Judge,
5 it's untimely, but the only reason it's untimely is
6 because the foundation is certification and you're
7 saying it's an improper certification?

8 MR. LIEB: Yes, in essence. I think what
9 we're saying is that it is -- it would -- a petition is,
10 in fact, timely, if there is not a proper certification.

11 THE COURT: All right. Not a proper
12 certification, Mr. Catania.

13 MR. CATANIA: Your Honor, procedurally, their
14 ability to challenge the certification evaporated on the
15 second day after the certification happened. The
16 Election Code in 3157 sets forth that any decision of
17 the Election Board has to be appealed from that second
18 day. That wasn't done here. They didn't do that.
19 They're trying to bootstrap this into something it
20 isn't. There's a Supreme Court case that I cited, In
21 Re: Recount of Single Certain Voting Machines in a 1984
22 case where the Supreme Court reconciles the two
23 conflicting deadlines that are set forth in Section 3154
24 which allows a Petition for Recount up to the time that
25 the computation and the certification is complete and

1 then allows people five days after the certification and
2 computation is complete to appeal to Court.

3 THE COURT: He's not arguing -- he's -- yeah,
4 but what he's saying is the certification is improper.

5 MR. CATANIA: It is the ability --

6 THE COURT: And you're saying he has two days
7 to appeal --

8 MR. CATANIA: Challenge that.

9 THE COURT: -- the procedural aspect of it?

10 MR. CATANIA: First, yes, if he didn't appeal
11 from it. And I don't agree with his underlying argument
12 because he's saying that you have to wait five days
13 after the Election Board acts. And the Supreme Court in
14 Pennsylvania hasn't said that. They've said that the
15 five day period merely gives people an opportunity to
16 file a Petition for Recount with the Court after the
17 Election Board acts --

18 THE COURT: All right.

19 MR. CATANIA: -- and that didn't happen here.

20 THE COURT: And what case are you relying on,
21 Mr. Lieb? What was that 2003 case?

22 MR. LIEB: Yes, Your Honor. It's In Re:
23 Contest of 2003 General Election for the Office of
24 Prothonotary. It's 849 A.2nd 230, decided in 2004. And
25 what that case holds is that among other things, and I

1 have a copy if Your Honor would like, that if a Petition
2 for Recount is filed and it's deemed untimely, but the
3 basis on which it's deemed untimely is a procedurally
4 improper certification that should never have happened,
5 the petition is, in fact, timely if the certification is
6 improper.

7 THE COURT: Um-hum. All right. So that -- so
8 you're challenging the certification. And what's your
9 response to that in terms of his wanting to call
10 witnesses and produce --

11 MR. CATANIA: It's an issue that should have
12 been brought up before the Board of Elections so that
13 they could have considered it. There were members of
14 the Stein campaign at the Board of Elections meeting.
15 That issue was not address to the Board at all.
16 Secondly, they should have filed an appeal on that
17 issue, the second day after election with the Court, the
18 Prothonotary's Office and the Office of Judicial
19 Support. They didn't do that. They could have had the
20 option of filing a Petition for a Re-canvass with the
21 Court that Monday. They didn't do that either. They're
22 trying to bootstrap their failure to comply with
23 Pennsylvania Law into an argument that is not supported
24 by Pennsylvania Law.

25 THE COURT: Um-hum, all right. Comment, Mr.

1 Lieb?

2 MR. LIEB: Your Honor --

3 THE COURT: Do you have anything else?

4 MR. LIEB: No. I would simply refer Your
5 Honor to that same Decision that I cited and I would
6 reiterate that we were entirely within our rights to
7 file a petition and if the grounds on which the petition
8 was denied was that it was untimely because of
9 certification, the question of the validity of the
10 certification is necessarily implicated in that
11 proceeding. And that's what this case makes very clear.

12 THE COURT: All right. And your petition
13 challenges the certification?

14 MR. LIEB: No, Your Honor.

15 THE COURT: No, your appeal, does it challenge
16 the certification?

17 MR. LIEB: No, Your Honor. The appeal asserts
18 that the petitions were timely.

19 THE COURT: Uh-huh, all right.

20 MR. CATANIA: Your Honor, the timeliness is
21 the timing in which they had to file with the Bureau of
22 Elections. He's confusing the issue. It was filed in
23 the wrong place. It was filed by a Pennsylvania
24 attorney in the wrong place.

25 THE COURT: Yeah. He said -- and I guess

1 that's another issue, right? Even if we were to assume
2 that the certification was improper, you're saying the
3 petition itself was faulty?

4 MR. CATANIA: Yes, Your Honor. It wasn't file
5 in the right place. Once the Election Board acts, their
6 ability to undo the certification is non-existent.
7 There's no law I'm aware of that allows them to revisit
8 the action that they've already taken, once they've
9 certified the election. The only remedy clearly
10 prescribed in the statute is to appeal to Court and then
11 the Court would have to Order that. Whether it's a
12 recount or an appeal from the Decision of the Board of
13 Elections.

14 THE COURT: Well, and they're saying they did
15 that, they appealed.

16 MR. CATANIA: They did not. They attempted to
17 file a Petition for Recount with the Bureau, even though
18 they had already certified. There's no support in the
19 law to allow that. And we're here today because they've
20 appealed from that Decision, alleging that the Board
21 acted. The Board didn't act. It simply said, we don't
22 have a legal ability to do what you're asking us to do,
23 we've already certified it.

24 MR. LIEB: A couple of points, Your Honor.
25 First of all, with respect to the propriety of filing

1 the petitions with the Board of Elections rather than
2 the Court of Common Pleas. I would refer Your Honor
3 again to a Decision of the Supreme Court of
4 Pennsylvania. This one is In Re: Reading School Board
5 Election. It's 634 A.2nd 170, decided in 1993. And
6 that case makes quite clear there, there was a
7 Petitioner who had filed a petition in the Board of
8 Elections five days after the completion of the
9 computation of returns and the Supreme Court held that
10 it was proper for him to do so. So our -- the
11 Petitioner in this case and all of the Petitioner's who
12 went to the Board of Elections or the office on November
13 28, had the ability to file those petitions with the
14 Board of Elections, if it was within five days of the
15 completion of the initial count. And that's the
16 underlying question that we're attempting to adduce
17 evidence of here is when was that initial count
18 completed? Were all of the requirements followed such
19 that it counted as a completion --

20 THE COURT: Well, we have a certification.
21 Isn't the key date that certification?

22 MR. LIEB: With respect, Your Honor, I don't
23 know that it is. I think the statute prescribed in
24 1404(e) of the election --

25 THE COURT: I thought that's what you came in

1 here and said. You came in and said but for the
2 certification that it's untimely, we would agree, but
3 the certification. We're challenging the certification.

4 MR. LIEB: Right. So, I mean, it's all part
5 of one procedure. So there's a five day waiting period
6 after which certification may occur and no --

7 THE COURT: But you're saying there's not a
8 certification yet.

9 MR. LIEB: We're saying that we have not seen
10 proof that there is a valid certification at this time,
11 correct.

12 THE COURT: Um-hum, all right. And you're
13 entitled to proof of the certification. What gives you
14 entitle to proof? There is a certification. What --
15 you don't have a certain period of time where you have
16 to challenge that the actual procedure is taken during
17 the certification?

18 MR. LIEB: Well, Your Honor, in this
19 proceeding, I think we're certainly permitted to adduce
20 evidence that bears on the question before the Court
21 which is the timeliness of the Recount Petitions that
22 were filed before the Board of Elections on November 28.

23 THE COURT: And what -- under what rule or
24 what -- where are you entitled to proceed that way?
25 Because I'm not here, you know, you're not here on a

1 fishing expedition. You're not here -- I'm not here
2 sitting as some legislative body sitting here reviewing
3 the processes that were taken towards a certification.
4 That's not the function here. And I'm not seeing
5 anything or you're not coming forth with anything, it
6 seems to me, that would take us down that road to
7 challenge the certification. But again, challenging the
8 certification itself, if that's what you're now saying
9 that you need to do, would require that you file
10 something within a certain period of time.

11 MR. LIEB: Your Honor, we served a Notice to
12 Produce for the signed computation of the election
13 returns. That document was not produced and I believe
14 Mr. Catania represented that the reason it was not
15 produced is that it does not exist. If that is so,
16 under Section 404(f) of the Election Code which is 25
17 Purdon's 3154(f), then the computation of the returns
18 has not been properly completed. That means that the
19 petition would still be timely even if someone filed --
20 walked in and filed it now which -- and it also follows
21 that the certification was not valid because you can't
22 certify until you've waited five days after computation.

23 MR. CATANIA: Your Honor, may I hand up a copy
24 of the Notice to Attend and Notice to Produce and ask
25 that it be marked? Because it does not say what Mr.

1 Lieb is arguing that it says. It asks for the
2 unofficial returns. The unofficial returns are the
3 machine only returns that are posted to the county
4 website on election night. It does include absentees.
5 It does not include provisional ballots. It does not
6 include all the overseas voters.

7 MR. LIEB: May --

8 MR. CATANIA: What they've asked for doesn't
9 exist.

10 MR. LIEB: May I respond, Your Honor?

11 THE COURT: Yeah, can I see that? Go ahead.

12 MR. LIEB: So I'm quoting now from Section
13 1404(f) of the Pennsylvania Election Code. "As the
14 returns from each election district are read, computed"
15 --

16 THE COURT: And 1404(f) is what? 25 --

17 MR. LIEB: It's 25 Purdon's 3154(f). "As the
18 returns from each Election District are read, computed,
19 and found to be correct or corrected as aforesaid, they
20 shall be recorded on the blanks prepared for the purpose
21 until all the returns from the various election
22 districts which are entitled to be counted, shall have
23 been duly recorded, when they shall be added together,
24 announced, and attested by the clerks who made and
25 computed the entries respectively, and signed by the

1 members of the county board. Returns under this
2 subsection shall be considered unofficial for five days.
3 The county board shall submit the unofficial returns to
4 the secretary of the Commonwealth by 5:00 p.m. on the
5 Tuesday following the election" and it goes on. I did
6 not, respectfully, invent the concept of unofficial
7 returns. It's right there in the Election Code. And it
8 makes clear that what that is is a signed computation of
9 all of the district-by-district returns signed by the
10 members of the Board of Elections.

11 THE COURT: All right. Anything else, Mr.
12 Catania?

13 MR. CATANIA: No, Your Honor.

14 THE COURT: All right. Anything else,
15 Counsel?

16 MR. LIEB: We'd like to call a witness with
17 your permission, Your Honor.

18 THE COURT: All right. And what's your offer
19 of proof?

20 MR. LIEB: Our offer of proof is --

21 THE COURT: You're calling a witness for what
22 purpose, for discovery deposition? What's your offer of
23 proof?

24 MR. LIEB: Sure. We're calling the witness to
25 testify as to whether -- when unofficial returns were

1 computed, whether they were signed, and how many days
2 passed between the completion of said unofficial
3 returns, and the certification not previously introduced
4 into evidence.

5 THE COURT: All right. Mr. Catania?

6 MR. CATANIA: Your Honor, she's not the only
7 person that's involved in that process. The computation
8 occurs at the voting machine warehouse in the City of
9 Chester. It's a bipartisan effort. It's presided over
10 by Mr. Kerns. He wasn't subpoenaed or asked to be here
11 today. Ms. Hagan's job is to assemble all of the
12 returns, the provisional ballots done by Ms. Headley's
13 group, the machine returns done by Mr. Kern's group, and
14 then the absentees done by Ms. Hagan's group and present
15 them to the Board of Elections. And that they, they as
16 the body with the legal power, can complete the
17 computation by taking the legal action to certify the
18 results.

19 THE COURT: Well, were the unofficial returns
20 sent or were they not sent?

21 MR. CATANIA: Well they were sent at different
22 times, Your Honor.

23 THE COURT: And you're saying they were sent?

24 MR. CATANIA: Well they are all sent to Ms.
25 Hagan's office.

1 THE COURT: Um-hum. And then Ms. Hagan's
2 office sends them out, right?

3 MR. CATANIA: Assembles them, then the board
4 takes action, they have a meeting, advertised public
5 meeting and they vote to accept them and it's at least
6 theoretically possible that they could make last minute
7 adjustments based upon presentations by people who
8 they've asked for recounts.

9 THE COURT: All right. So let's assume for
10 the purposes of argument, that unofficial returns
11 weren't sent according to this statute, right?

12 MR. CATANIA: For argument's --

13 THE COURT: For argument's sake.

14 MR. CATANIA: Sure, sure.

15 THE COURT: All right. Where does that leave
16 us?

17 MR. CATANIA: I don't think it changes
18 anything, frankly. If they're complaining about an
19 action of the Board of Elections, they had two days
20 after the action to appeal from them. They did not do
21 that.

22 THE COURT: And that's pursuant to what
23 section?

24 MR. CATANIA: 3150 -- 25 PF 3157, Your Honor.

25 THE COURT: Um-hum, all right. So it's even

1 assuming the unofficial returns were not sent, you had
2 two days to challenge the certification and that wasn't
3 done.

4 MR. LIEB: But respectfully, Your Honor, under
5 Section 1404(e) of the Election Code which is 25
6 Purdon's 3154(e), the ultimate question that brings us
7 here is whether the petitions filed by Ms. Pennock and
8 other Pennsylvania voters were timely. And under 25
9 Purdon's 3154(e), a petition for --

10 THE COURT: So this is a second argument
11 you're making. Because when you first came in you said,
12 Judge, we're challenging the date of the certification
13 because yeah, I would agree that if the certification
14 date were correct, right, we're untimely, but we're
15 challenging the certification itself. So now you're
16 arguing something different. Correct?

17 MR. LIEB: I think I probably changed my
18 emphasis a bit, but I think the overall point is that if
19 the unofficial returns were not compiled properly in
20 accordance with the statute, then it would follow both
21 that the certification was invalid and that our
22 petitions are --

23 THE COURT: Well then let's proceed now with
24 the assumption that the certification was proper and it
25 was certified what date was it?

1 MR. CATANIA: The 23rd of November, Your
2 Honor.

3 THE COURT: The 23rd of November, all right?
4 So let's take it from there. What's your argument?

5 MR. LIEB: So, Your Honor, if the
6 certification was proper and it happened five days after
7 the completion of the computation of the returns --

8 THE COURT: No, no, no, no. Oh, so you're
9 using completion of the returns. No, we're -- we --
10 this jumping off point under this is the certification
11 and you will have certain time to do something after the
12 certification. Correct?

13 MR. LIEB: Your Honor, if I could just turn
14 your attention to Section 1404(e) which is the --

15 THE COURT: All right. Which is what again?

16 MR. LIEB: 25 Purdon's 3154(e) which is the
17 provision under which these petitions were filed.

18 THE COURT: All right, go ahead.

19 MR. LIEB: What that provision says is that
20 voters can petition for a recanvass --

21 THE COURT: Where are you in the section?
22 Where are you reading from?

23 MR. LIEB: Well I was just paraphrasing, but I
24 was about to --

25 THE COURT: You can't paraphrase a statutory

1 section.

2 MR. LIEB: Okay. So I'll just --

3 THE COURT: There's no paraphrasing of a
4 statutory section. So point me exactly what you're
5 reading and then talk about it.

6 MR. LIEB: Okay. I am about 15 words in
7 beginning upon petition of three voters of any district,
8 3154(e).

9 THE COURT: Okay, go ahead.

10 MR. LIEB: Upon petition of three voters of
11 any district, verified by affidavit, that an error,
12 although not apparent on the face of the returns has
13 been committed therein or on its own motion, not
14 relevant, the county board shall at any time prior to
15 the completion of the computation of all returns, summon
16 the election officers of the district and shall conduct
17 a recount or recanvass of the ballots -- of all ballots
18 cast. So that was the statutory provision invoked by
19 the citizens who went in to the Elections Bureau on
20 Monday, November 28. There is -- so the initial
21 question with respect to timeliness is whether the
22 compilation -- sorry, the computation of all the returns
23 of the county was completed. And reading that along
24 with 3154(f) just below which we read a short while ago,
25 what it means for the -- all the returns for the county

1 to be compiled is that --

2 THE COURT: Well, let me ask you this. It
3 starts out and it says whenever it shall appear that
4 there is a discrepancy in the returns of any election
5 district, all right? So it has a premise that you
6 didn't read the first part of it. Your premise is
7 whenever it appears that there is a discrepancy in the
8 returns. So tell me where there appears to be a
9 discrepancy in the returns of any election district.

10 MR. LIEB: The next word, however, Your Honor
11 is or, or upon petition of three voters of any district
12 verified by affidavit then in error, although not
13 apparent on the face of the return.

14 THE COURT: Yeah, okay, right.

15 MR. LIEB: So it's --

16 THE COURT: So what is the error?

17 MR. LIEB: So the error is that the voting
18 machines that were used are fundamentally not secure,
19 are susceptible to both intentional in inadvertent error
20 and interference, and that there is a good faith basis
21 to believe based upon the views of leading computer
22 scientists and experts in the field that these machine
23 are not secure and that the result is inherently not
24 trustworthy absent further inquiry to make sure that the
25 machines were functioning as intended.

1 THE COURT: All right. So in other words,
2 you're not saying there was an error so to speak, you're
3 saying that potentially, there's a problem with the
4 system or the voting machines?

5 MR. LIEB: Well, I guess what I'm saying is
6 that the people who walked in to the Elections Bureau on
7 November 28 or the people who signed documents that were
8 walked in, swore in affidavits that they had a good
9 faith belief that there was an error committed on the
10 face of the returns and that belief was based at least
11 in part, on the fact that the machine results --

12 THE COURT: Well, I mean, you're reading a
13 statute. The statute says an affidavit as to an error.
14 What are the errors that these -- what are the errors
15 that this affidavit attests to? And where are those
16 three people to tell us where the error? Because that's
17 the premise. Because if you don't have a premises as to
18 an error, I mean these statutes are written specifically
19 for people to understand and the Election Boards to
20 understand what they need to do. And, therefore, if you
21 don't have a foundation, you don't have a basis, then
22 every single election could turn into this kind of a
23 discovery approach. So there has to be some foundation
24 with an error that you can point to to say yeah, there
25 could be a problem here. Somebody who voted in the, you

1 know, you have a machine here were 600 people voted and
2 I have 199 people voting for the democrat and three
3 voting for the republican, and I have two other machines
4 where it's 50/50 and very close. That affidavit would
5 indicate an error that we have to look at that machine.
6 That's the type of error that we have to see some
7 affidavit of. But this seems to be a general attack on
8 the system. And the system may be at fault, but that's
9 not the error that this statute is pointing to, it seems
10 to me, when I read this section.

11 MR. LIEB: A couple of responses, Your Honor.

12 MR. CATANIA: Your Honor, may I be heard or --

13 THE COURT: First of all, let him respond
14 while it's on his mind.

15 MR. CATANIA: Sure.

16 MR. LIEB: And then, of course, you can be
17 heard Mr. Catania. Go ahead, Counsel.

18 MR. CATANIA: I think first, the example that
19 Your Honor gave, I think is an excellent example of what
20 it would look like for there to be a discrepancy in the
21 returns that are sort of evident on the face of the
22 returns, right? You have 600 votes, 200 registered
23 voters. So I think that's sort of path one that's
24 contemplated by Section 1404(e). Path two is what the
25 voters who submitted affidavits did which is the other

1 path which is if it's not apparent on the race of the
2 returns. I think their belief that there was an error
3 is based on, you know, a sworn affidavit of leading
4 computer scientists who has studied these machines
5 extremely carefully, who has concluded that if someone
6 wanted to engage in any kind of malfeasance, it would be
7 extremely easy to do so.

8 THE COURT: And --

9 MR. LIEB: The -- well, I'm sorry.

10 THE COURT: Go ahead, go ahead.

11 MR. LIEB: The voters who signed these
12 affidavits and came in petitioning for a recanvass, you
13 know, didn't have -- some of them did have specific
14 knowledge of specific things that went wrong in their
15 polling places that were part of their basis for filing
16 these affidavits. They didn't necessarily detail those
17 in their affidavits, but I don't believe that the
18 statute requires them to do that. There's no language
19 in there that, you know, talks about specifying the
20 details or providing any prima facie evidence or
21 anything like that. So I think some people did have
22 specific errors that they saw in their polling place,
23 you know, a light here, an error there. I don't know
24 what was in the minds of all the citizens who brought
25 those petitions in. I do know that they provided sworn,

1 verified affidavits that they believed that an error had
2 been committed and that belief was based in part on
3 highly reputable experts serious legitimate concerns
4 about the integrity of the machines.

5 THE COURT: Right.

6 MR. LIEB: I don't think the error was
7 particularized in all cases, but I don't think the
8 statute requires that the error be particularized in all
9 cases.

10 THE COURT: All right. Mr. Catania, you
11 wanted to say something?

12 MR. CATANIA: Your Honor, there are two
13 appellants here, Jill Stein and Sharon Pennock. We
14 don't believe that Jill Stein has standing and we ask
15 that she be stricken. Under the section that the
16 Petitioners or the Appellants are relying on, Jill Stein
17 was not a resident of that precinct, so she should not
18 be a proper party to this matter. Even assuming if Mr.
19 Lieb's arguments are correct, once the Election Board
20 acted on the 23rd, the remedy was to file something with
21 the Court. Nothing was filed with the Court. We
22 shouldn't be here today. It's a simple procedural
23 issue. They didn't file correctly. An attorney didn't
24 file it correctly. They filed in the Bureau of
25 Elections that had no legal ability to address the

1 issues that they raised. They already acted.

2 THE COURT: Um-hum, um-hum. So you're saying
3 based on this last discussion regardless, they had a
4 foundation to file the affidavit forming --

5 MR. CATANIA: No, no --

6 THE COURT: -- a proper foundation?

7 MR. CATANIA: Evan assuming that he is
8 correct, it doesn't matter. We shouldn't be here today
9 because it was not properly brought before you in a
10 timely fashion. They filed in the wrong place, assuming
11 he is correct. I don't concede that issue.

12 THE COURT: And what should they have filed in
13 the right place? What should they have filed? Where
14 should they have filed it and when --

15 MR. CATANIA: They should --

16 THE COURT: -- and under what section?

17 MR. CATANIA: They could have filed under
18 Section I think it's 3261(a) of the Election Code asking
19 the Court of Common Pleas to order a recount. And at
20 that point, they would have to prove and introduce
21 evidence of their ability to demand a recount. That's
22 the remedial purpose of that statute. Any time a Court
23 is asked to overturn the action of what is the Executive
24 Branch of the Delaware County Government, they certified
25 the election --

1 THE COURT: Right. And so then the foundation
2 of that discussion is assuming a proper certification,
3 where are we with this? And this is the basis for the
4 argument that counsel was making and that is -- and
5 that's where we were discussing where we were and then
6 how he circles back and gets back to the section that
7 he's -- the discussion, 25-3154(e). So you're saying
8 25-3154(e) wouldn't apply at that point?

9 MR. CATANIA: It doesn't apply once the Board
10 acts. 35 -- 3154 is not relevant, once the Board votes
11 to certify the results.

12 THE COURT: All right. And anything else,
13 because I'm ready to take this under advisement.

14 MR. LIEB: I would just briefly say, Your
15 Honor, that the question number one, is under 3154(e)
16 has the completion of the computation of all of the
17 returns for the county been done in the manner that
18 complies with the statute. And the answer under 3154(f)
19 is no, not unless the unofficial returns were signed.
20 That means the 3154(e) period hasn't yet run, the
21 petitions were timely, and they should be heard.

22 THE COURT: All right.

23 MR. CATANIA: The unofficial returns were
24 signed which transform them legally into the official
25 returns. That's the conclusion.

1 THE COURT: Do you agree that the unofficial
2 returns were signed?

3 MR. LIEB: No, Your Honor. They're two
4 separate --

5 THE COURT: How do we know the unofficial
6 returns were signed, Mr. Catania?

7 MR. CATANIA: The returns can't be official
8 unless they're blessed by, accepted by, the Delaware
9 County Board of Elections. That makes them official.
10 The state returns is a process that occurs in
11 Harrisburg, but the Delaware County returns are made
12 official by the entity with the legal power to take that
13 action and that's the Delaware County Board of Elections
14 which they did at a duly advertised public meeting.

15 MR. LIEB: Mr. Catania is conflating two steps
16 in a two step process. The first step is the
17 computation. The computation means you add up all the
18 district-by-district results, they get compiled and
19 announced in one centralized form and then the Board of
20 Elections signs them. Computation is done. At that
21 point, the Board of Elections is no longer sitting as
22 the return board counting up the results of the
23 election. Then, there is a five day waiting period.
24 That five day waiting period can only be triggered once
25 the computation is done. At the end of the five day

1 waiting period, it's permissible to then certify the
2 results of the election which is the step that Mr.
3 Catania is talking about. There are two steps. There
4 are signatures of the Board of Elections required at
5 both steps. It's the return board finishes its duties,
6 it signs the computation. There's a waiting period
7 where anybody who wants to challenge the -- wants to
8 raise any issues can raise the issues and then there's
9 the certification. The only evidence that's been adduced
10 today and the reason that we had served a Notice to
11 Appear and the Notice to Produce is of the
12 certification. And, in fact, they admitted that the
13 unofficial returns which were described in 3154(f) were
14 never signed. So this is a two step process and based
15 upon everything we've heard today, it appears that they
16 jumped directly to Step 2. And in the absence of Step
17 1, the petitions are timely.

18 THE COURT: Um-hum, all right. So --

19 MR. CATANIA: Even if that's true, the remedy
20 was to appeal to Court and they didn't.

21 THE COURT: Um-hum. All right. I have it,
22 thank you.

23 MR. LIEB: Thank you, Your Honor.

24 THE COURT: I'll take it under advisement.

25 MR. CATANIA: Thank you, Your Honor.

1 THE COURT: You're welcome.

2 ***

3 [End of Proceeding]

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C E R T I F I C A T E

I, Michael Freeman, hereby certify that the proceedings and evidence are contained fully and accurately on multi-track recording; that the recording was reduced to typewriting by my direction; and that this is a correct transcript of the same.

Michael Freeman, Administrator
Court Reporters

DIAZ TRANSCRIPTION SERVICES, hereby certifies that the attached pages represent an accurate transcript of the electronic sound recording of the proceedings in the Court of Common Pleas of Delaware County, Pennsylvania, in the matter of:

IN RE:
RECOUNT AND/OR RECANVASS OF THE
VOTE FOR PRESIDENT OF THE UNITED STATES
AND FOR UNITED STATES SENATE IN THE
NOVEMBER 8, 2016 GENERAL ELECTION

#2016-010508

BY:

Traci Calaman Digitally signed by Traci Calaman
DN: cn=Traci Calaman, o=Diaz Data Services, LLC, ou,
email=info@diadata.com, c=US
Date: 2016.12.12 12:23:12 -0500
Traci L. Calaman
Transcriber for
Diaz Transcription Services

The foregoing record of the proceedings upon the hearing of the above cause is hereby approved and directed to be filed.

Judge

Exhibit 52



2016-28344-0014 12/12/2016 12:06 PM # 11077932

Opinion

Rept#Z2969975 Fee:\$0.00

Mark Levy - MontCo Prothonotary

Court of Common Pleas of Montg

Glen Gaddy, et al., Petitioners	:	No. 16-28344 (Pa. C.P. Montg. County Dec.
vs.	:	1, 2016), <i>appeal filed</i>, No. 1964 C.D. 2016
Montgomery Cty. Bd. of Elections, Resp't	:	(Pa. Commw. Ct. Dec. 7, 2016)
	:	In re: Consolidated Petitions to Recount
	:	and/or Re-Canvass Votes

OPINION

Moore, S.J.

December 12, 2016

On November 28, 2016, three voters from each of seventy-eight electoral districts in Montgomery County, Pennsylvania, filed petitions to recount and/or re-canvass votes cast in those districts in the November 8, 2016, general election, for the offices of President of the United States, Vice President of the United States, and United States Senator. The petitions cited as authority for the relief they requested provisions of the Pennsylvania Election Code, 25 P.S. §§ 3154, 3262.

The Court immediately scheduled a hearing on the petitions for November 30, 2016. At the scheduled proceeding the Court entertained argument on behalf of Petitioners from counsel for Jill Stein, Green Party candidate for President in the 2016 election; and contra the petitions, by attorneys for the Montgomery County Board of Elections, the Republican Party, President-Elect Donald J. Trump, Vice-President-Elect Michael R. Pence, and twenty electors.

On preliminary motion of the Board of Elections, with the agreement of all parties in attendance, the Court consolidated the seventy-eight petitions to one docket pursuant to Pa.R.C.P. 213(a). At the conclusion of the proceeding, after all parties had been given full opportunity to make their presentations, the Court denied the petitions, as so consolidated; the written order of the Court was entered on the docket December 1, 2016.

On December 7, 2016, Petitioners filed a notice of appeal of the Court's order to the Commonwealth Court of Pennsylvania. On December 8, the Commonwealth Court ordered that the record of proceedings, including the transcript and a brief opinion with reasons for the order, be certified to that Court by Tuesday, December 13, 2016; the transcript of the hearing was filed on an expedited basis the same day, December 8, and this Court now submits this opinion in compliance with the Commonwealth Court's order.

In Montgomery County, all votes are cast on electronic voting machines, "DREs" as the parties referred to them. The machines neither read nor produce paper ballots or records of individual votes cast; the machines tabulate the votes internally based on entries on screens or boards activated by the voter's digital touch or punch. *Cf. Banfield v. Cortes*, 631 Pa. 229, 110 A.3d 155 (2015) (reviewing history of voting machines in Pennsylvania and upholding Secretary of the Commonwealth's certification of DREs for use in Pennsylvania elections).

With respect to judicial proceedings to recount or re-canvass votes cast on such machines based on allegations of fraud or error generally, the Pennsylvania Election Code provides, at 25 P.S. § 3262 (emphasis added):

(a) Judicial proceedings shall be as follows:

(1) Except as set forth in clause (2), the court of common pleas, or a judge thereof, of the county in which any election district is located, *shall make visible the registering counters of the voting machine or machines used in such election district at any primary or election, and without unlocking the machine against voting, shall recanvass the vote cast therein*, if three qualified electors of the election district shall file a petition, duly verified by them, alleging that, upon information which they consider reliable, they believe that fraud or error, although not manifest on the general return of votes made therefrom, was committed in the canvassing of the votes cast on such machine or machines. It shall not be necessary for the petitioners to specify in their petition the particular act of fraud or error they believe to have been committed, nor to offer evidence to substantiate the allegations of their petition.

(a.1) Every petition for the recanvassing of votes cast in the voting machine, or voting machines of an election district, under the provisions of this section, shall be filed in the office of the prothonotary of the proper county accompanied by a deposit of cash in the amount of fifty (\$50) dollars, or by a bond signed by the petitioners as principals and by a corporate surety to be approved by the court in the amount of one hundred (\$100) dollars, conditioned upon the payment to the county treasurer for the use of the county of the sum of fifty (\$50) dollars, in the event that upon the recanvassing of the votes cast in a voting machine or voting machines, it does not appear that fraud or substantial error was committed in the canvassing of the votes cast on such machine or otherwise in connection with such voting machines.

...

(b.1) If, upon the recanvassing of the votes in any voting machine, it shall appear that fraud or substantial error was committed in the computation of the votes cast on the voting machine or otherwise in connection with such voting machine, it shall be the duty of the court to certify such fact to the prothonotary, and thereupon the prothonotary shall return to the petitioners the said sum of fifty (\$50) dollars, or if the petitioners shall have filed a bond, in lieu of cash, to mark said bond cancelled and notify the petitioners that he has done so.

(b.2) If, upon the recanvassing of the votes in any voting machine under the provisions of this section, it shall not appear that fraud or substantial error was committed in the computation of the votes cast in the voting machine or otherwise in connection with such voting machine, the persons upon whose petition such voting machine was recanvassed shall forfeit to the county the sum of fifty (\$50) dollars. If said petitioners shall have deposited the said sum in cash with the prothonotary at the time of filing the petition, the prothonotary, upon certification of the court that fraud or substantial error or otherwise in connection with such machine was not discovered, shall pay said sum deposited with him to the county treasurer, and if the petitioners shall have filed with their petition a bond in the sum of one hundred (\$100) dollars, it shall be the duty of the county treasurer forthwith to collect from the principals or surety on said bond the sum of fifty (\$50) dollars and costs of suit, and for this purpose he is hereby authorized to institute any necessary legal proceedings. When so collected, the said sum of fifty (\$50) dollars shall be paid over to the county treasurer.

(c) Voting machines may be recanvassed under the provisions of this section at any time within twenty days after the date of the primary or election at which they were used.

Section 3154 of the Code, although not directly relevant to the proceedings now before the Court because it applies to petitions submitted to a county board of elections before the

computation of all returns for the county is completed rather than to subsequent judicial proceedings, contains many parallel provisions, some of which offer particular insight into the mechanical aspects of the “recount or recanvass,” 25 P.S. § 3154(e), that the Code authorizes to be performed on voting machines:

(1) In a county in which an election district uses voting machines, all of the following apply:

(i) The county board shall:

(A) make a record of the number of the seal upon the voting machine and the number on the protective counter or other device;

(B) make visible the registering counters of such machine; and

(C) without unlocking the machine against voting, recanvass the vote cast on the machine.

(ii) If, upon such recanvass, it shall be found that the original canvass of the returns has been correctly made from the machine, and that the discrepancy still remains unaccounted for, the said board, with the assistance of the custodian, in the presence of the election officers and the authorized candidates and representatives, shall unlock the voting and counting mechanism of the machine, and shall proceed thoroughly to examine and test the machine to determine and reveal the true cause or causes, if any, of the discrepancy in returns from such machine. Each counter shall be reset at zero (000) before it is tested, after which it shall be operated at least one hundred times. After the completion of such examination and test, the custodian shall then and there prepare a statement, in writing, giving in detail the result of the examination and test, and such statement shall be witnessed by the persons present, and shall be filed with the said board.

25 P.S. § 3154(e)(1)(i)-(ii) (emphasis added).

Thus, under the Pennsylvania Election Code, the authorized “recount or recanvass” of votes cast on voting machines, whether done under judicial order pursuant to section 3262 or under the purview of the county election board pursuant to section 3154, is simply the mechanical process of rerunning the count to determine whether it corresponds to the original “canvass” of the vote reported by the officers of the given electoral district. If the “recount”

done on the machine does correspond to the original “canvass” from that district, but there are still discrepancies, for example, between the number of votes counted and the number of electors who voted, the board of election takes the further steps of unlocking the voting and counting mechanism of the machine and examining and testing it, as described in 3154(e)(1)(ii).

But such a “recount or recanvass” is not what Petitioners requested this Court to authorize be done. Indeed, they maintained and admitted before the Court that such a mechanical “recount or recanvass” would be wholly inadequate to detect or reveal the fraud or error in the election that they alleged.

Rather, the petitioners claimed, using supporting affidavits from computer experts and studies from other states indicating that the County’s DRE voting machines could be easily “cyber-hacked,” as well as reports from the U.S. Department of Justice and other sources of attempted cyber-interference with the computer records of the Democratic Party and the electoral process of this country, that foreign powers, notably Russia, had fraudulently attempted to “fix” the election of November 8, 2016, using Internet-based forms of meddling with electronic voting systems and machines in the United States. The petitioners had no evidence, and offered none, that such electronic voting fraud had been perpetrated in any particular electoral district in Montgomery County, or indeed anywhere. Rather, they speculated, from the alleged vulnerability of Montgomery County’s voting machines, together with reports that Russia was trying to sway the election in the direction that it went combined with pre-election polls indicating it would go the other way, that such fraud and manipulation of the Montgomery County DREs had taken place. Based on this speculation, the petitioners sought from the Court an order authorizing their computer experts to perform a forensic analysis of the County’s voting

machines in the seventy-eight districts involved to determine whether the electronic fraud and manipulation that the petitioners suspected, or something like it, had occurred.

However, nothing in Pennsylvania's Election Code, under which Petitioners brought their petitions, authorized this Court to order that the forensic audit of the voting machines the petitioners requested be done. Indeed, in response to the Court's question at the hearing "[A]re there any cases in Pennsylvania which authorized forensic analysis of the voting equipment?" (Pet. Recount Recanvass Tr. 13:17-19, Nov. 30, 2016) Petitioners' counsel responded:

There is no case where it has been asked. There's no case where it has been denied. There is no case where it has been litigated to my knowledge.

I have not seen a case squarely on point. I think this Court would be the first to address this issue.

I would suggest to the Court that, you know, this Election Code largely from, I believe, the 1930's[,] this was written before the internet. It was written before people even knew about the possibility of interfering with the vote or such a thing as hacking.

(Pet. Recount Recanvass Tr. 13:20-14:8.)

In fact, this Court takes judicial notice that sections 3154 and 3262 of the Election Code, under which Petitioners proceeded, were both amended by the Pennsylvania General Assembly in 2004, when the Internet and computer "hacking" had already become well-ensconced in the general public lexicon. More importantly, "The jurisdiction of the courts in election contests is not of common law origin but is founded entirely upon statute, and therefore it cannot be extended beyond the limits defined by Acts of Assembly." *In re Granting Malt Beverage Licenses*, 331 Pa. 536, 538, 1 A.2d 670, 671 (1938) (unanimous opinion), *cited in Rinaldi v. Ferrett*, 941 A.2d 73, 78 (Pa. Commw. Ct. 2007) ("[T]he statutory provisions set forth at length above constitute the exclusive means for challenging the accuracy of election results. Moreover, well-established case law dictates strict adherence to the statutory requirements for pursuing any

of the avenues set forth above.”); *accord, e.g., In re Jones*, 505 Pa. 50, 62–63, 476 A.2d 1287, 1293 (1984) (per curiam) (“The courts have been granted limited (not plenary) authority by the legislature over the election process. . . . The authority to regulate the election process is vested in the Legislature. Because our jurisdiction in the area flows from statute rather than common law, it cannot be extended by implication beyond the prescription of the act from which it originates.” (citations omitted)). Therefore, this Court had no power to go beyond the remedies authorized by the Election Code to grant Petitioners’ request to order a forensic analysis of the County’s voting machines.

The Pennsylvania Election Code also erected another barrier to Petitioners’ contest of the election that they failed to surmount. Section 3263 of the Code provides, in part,

(a) (1) Any petition to open a ballot box or to recanvass the votes on a voting machine or an electronic voting system pursuant to sections 1701 and 1702 [25 P.S. §§ 3161-3162] shall be filed no later than five (5) days after the completion of the computational canvassing of all returns of the county by the county board. If any error or fraud is found the court shall grant the interested parties an additional five (5) days to file petitions requesting additional ballot boxes to be opened or voting machines or electronic voting systems to be recanvassed.

(i) *Except as set forth in subclause (ii):*

(A) *a recount or recanvass shall include all election districts in which ballots were cast for the office in question; and*

(B) *petitions, accompanied by the appropriate money or bond, must be filed in each election district in accordance with this act.*

(ii) *Subclause (i) shall not apply if a petitioner under section 1701 or 1702 pleads that a particular act of fraud or error occurred and offers prima facie evidence supporting the allegation.*

25 P.S. § 3263(a) (emphasis added).

Under this provision, voters challenging the results of an election without prima facie evidence “*that a particular act of fraud or error occurred*” may not cherry-pick the districts in

which they make their challenge. Rather, “*a recount or recanvass shall include all election districts in which ballots were cast for the office in question,*” *id.* § 3263(a)(1)(i)(A) (emphasis added), and “*petitions, accompanied by the appropriate money or bond, must be filed in each election district in accordance with this act,*” *id.* § 3263(a)(1)(i)(B) (emphasis added). Here, Petitioners failed to offer proof sufficient to make out a prima facie case that the cyber-hacking they suspected affected any of the County’s voting machines; all they offered was speculation, based on the theoretical possibility of such hacking and the circumstantial evidence of an alleged Russian interest in influencing the election and the failure of the election results to match pre-election polling. This is not prima facie evidence “that a particular act of fraud or error occurred,” as required under 25 P.S. § 3263(a)(1)(ii). Consequently, under the statute, Petitioners were obliged to bring their election contest in “*all election districts in which ballots were cast for the office in question,*” *id.* § 3263(a)(1)(i)(A) (emphasis added), and file a petition, accompanied by the appropriate money or bond, in each such election district, in accordance with the act, *id.* § 3263(a)(1)(i)(B). Since the elections Petitioners challenged were statewide races for President, Vice President, and United States Senator, Petitioners, without prima facie evidence of a particular act of fraud or error, had to bring petitions complying with the Code in each electoral district statewide to get the “recount or recanvass” they sought under the Code.

Section 3263 suggests yet another defect in the petitions: They were not “accompanied by the appropriate money or bond . . . in accordance with [the] act.” 25 P.S. § 3263(a)(1)(i)(B). As set forth above, the Code provides, in subsection 3262(a.1), that,

Every petition for the recanvassing of votes cast in the . . . voting machines of an election district . . . shall be filed in the office of the prothonotary of the proper county accompanied by a deposit of cash in the amount of fifty (\$50) dollars, or by a bond signed by the petitioners as principals and by a corporate surety to be approved by the court in the amount of one hundred (\$100) dollars, conditioned

upon the payment to the county treasurer for the use of the county of the sum of fifty (\$50) dollars

25 P.S. § 3263(a.1).

Here, Petitioners failed to deposit \$50 cash or file a \$100 bond for each of the seventy-eight petitions, representing seventy-eight electoral districts, filed. Petitioners argued that they substantially complied with this provision by paying a separate filing fee (\$270), as required by the Prothonotary, for each of the seventy-eight petitions, which they had tried to file as one. However, the Prothonotary's filing fees serve a different purpose than the cash or bond required by the Election Code. The filing fees support the Prothonotary's operations and allow that office to keep functioning as the Court's official filing office in civil matters. The cash or bond required by the Election Code to be filed with each "recount/re canvass" petition instead serves the distinct purpose of reimbursing the county treasurer for costs incurred in the election challenge (together with court costs, 25 P.S. § 3262(b.2)) should the contest fail to show fraud or substantial error in the election count. 25 P.S. § 3262(a.1), (b.2). Should such fraud or error be found, the Prothonotary returns the cash deposited to the petitioner or cancels the bond. Therefore, the Prothonotary's filing fee, which is kept by the Prothonotary, is no substitute for the cash or bond required by the Election Code, which the Prothonotary must pay out to the County or the petitioning voters depending on the results of the challenge.

Because the filing fee of \$270 Petitioners paid with each of the seventy-eight petitions were far more than the cash or bonds required by the Code, and because this Court consolidated the petitions under Pa.R.C.P. 213(a) immediately after they were filed, which suggests the possibility that they could have been filed originally to one docket with only one filing fee, *compare* Pa.R.C.P. 213(a) (providing for consolidation of actions involving a common question of law or fact or arising from the same transaction or occurrence) *with* Pa.R.C.P. 2229(a)


(allowing persons to join together as plaintiffs in one action where they assert any right to relief arising from same transaction or occurrence or series of transactions or occurrences if any common question of law or fact affecting the rights to relief of all such persons will arise in the action), Petitioners' failure to deposit cash or post bonds may have been a defect in procedure that could have been remedied rather than a jurisdictional flaw in the petitions. Nevertheless, the failure of the petitions to conform to the requirements of the Election Code in the relief they requested and the breadth of the voting districts covered was fatal to them.

Accordingly, the Court ruled properly in denying the petitions. We respectfully request that the Commonwealth Court affirm our order to that effect.

BY THE COURT:


Hon. Bernard A. Moore, S.J.

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