

January 2, 2022

Dear Members of the San Francisco Elections Commission,

I am writing to let you know about a recent report of security vulnerabilities in Dominion's ImageCast X voting system and to encourage you to obtain a copy of that report. The vulnerabilities are potentially very serious. I understand that San Francisco uses the Dominion ImageCast X, primarily for voters with disabilities, and thus, I think it is important for you to obtain this information so you can know whether and how you may be affected.

I hasten to add that my alerting you to these issues with the ImageCast X equipment has nothing to do with the widespread conspiracy theories circulating in the right-wing press about Dominion voting systems, and I am not suggesting that there is any evidence of actual fraud or error in any past elections traceable to the Dominion machines.

Let me also note that I am a computer scientist, a former professor at UCLA, and now retired from Lawrence Livermore National Laboratory. I have been studying, writing, and testifying about voting system security for well over 20 years, serving as an advisor of one kind or another on election security matters to six Secretaries and Acting Secretaries of State of California. I am also a long-time former Board member of both Verified Voting and the California Voter Foundation. I have been a nonpartisan activist for election security in many states and at the federal level for all that time.

The state of Georgia uses the same Dominion machines for all its voters that San Francisco uses for voters with disabilities. You may be aware that there is a long-running federal court case in the Northern District of Georgia, *Curling v. Raffensperger*, in which the plaintiffs argue that these machines should be declared removed from service. Many distinguished voting system experts have testified or submitted declarations to the Court on the side of the plaintiffs, including University of Michigan Prof. Alex Halderman, U.C. Berkeley Prof. Philip Stark, famed security expert and white hat hacker Harri Hursti, Princeton Prof. Andrew Appel, and Georgia Tech Prof. Rich DeMillo.

I am attaching two of Prof. Halderman's public declarations (redacted under the rules of the Court), but I want to call your attention especially to a third declaration of his that is currently sealed by the Court. The Court allowed Prof. Halderman to examine and test the ImageCast X machines used in Georgia, and he found profoundly dangerous security flaws and vulnerabilities in them. He submitted it as sealed under Court rules. Apparently the concerns he expressed in his report are so serious that the Court is concerned that making it public might aid potential attackers and perhaps undermine the confidence of the electorate in Georgia elections.

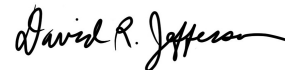
Only a handful of people have been allowed to read Halderman's sealed report to the Court, and I am not among them. However, having led prior studies of voting system vulnerabilities I am familiar with the *kinds* of flaws that Halderman may have found in the ImageCast X, and they are extraordinarily serious. In a prior public declaration that is heavily redacted, Halderman wrote that the ImageCast X machines are "even easier to compromise than the DRE equipment it

replaced”. (See attachment, dated 2021-02-12, p. 9). The prior DRE machines used in Georgia were the notorious Diebold AccuVote TS systems, famous for being exploitable with access only to a removable memory card. Through that card it is possible, among other things, to inject a malicious virus that can spread to all the machines in a jurisdiction, including the central server. In the first stage of the Curling litigation the Court declared those Diebold DREs to be unconstitutional.

I believe it is important for San Francisco election officials to obtain a copy of Halderman’s sealed report and evaluate it for yourselves in the context of elections here. Recently, in November 2021, the Court has indicated it will consider access to the report for officials with a *bona fide* need for it, provided they offer assurances that they will protect the report from being made public and will limit its circulation to the minimal number of people needed for proper evaluation. Officials in the State of Louisiana have already submitted such a motion (attached), and the Court has yet to rule on it. I suggest that you might model your request on their motion. Alternatively, you might ask for a redacted version of Halderman’s report, which might be easier to get and require fewer restrictions.

I really hope that you will take the initiative to see for yourselves what the vulnerabilities are in the ImageCast X that Prof. Halderman is warning about in such strong terms. I have a little more information about this and would be glad to answer any questions you have (or get the answers) at a future meeting or otherwise if that would be helpful. Feel free to contact me at any time.

Sincerely,



David R. Jefferson

drjefferson@gmail.com

925-989-3701