

**Eisner Written-only Testimony,
as Interested Party
SB52 -
Part I: Re: Election Observers & Post-Election Audits**

Chairman Coley, Vice Chair Huffman, Ranking Member Craig, and members of the Senate Government Oversight and Reform Committee:

Brief Introduction:

My name is Adele Eisner. I have been an active election integrity advocate in Cuyahoga County since 2005, with active membership in non-partisan, statewide and national election integrity groups. Also for those 14 years, I've monitored local Board meetings; been a legally authorized election and audit Observer during the majority of Primary and General elections; served on the Ohio Secretary's Voting Rights Institute from 2007-2011, in part helping to establish Ohio's first Election Audit policies; and have observed Cuyahoga's election audits since they began in Ohio with a pilot program around 2007. Also relevant here, I have completed 1+ years of cybersecurity and cyber-privacy trainings at Cleveland Marshall Law School.

I will present my testimony suggesting necessary amendments to SB52 in two parts, because SB52 itself deals with two widely different subjects and issues (divided at approximately mid-page 10 in the online version of SB52,) though both parts seemingly might be loosely connected in readers' minds by the concepts of election security and verity. These testimony parts are: this, **Part I, regarding Election Observers & Election Audits; and the next, Part II, deals with proposed Cyber Reserves.**

ELECTION OBSERVERS FOR IN-PERSON ABSENTEE VOTING (better known as "Early Voting") **AND FOR THE PROCESSING OF ABSENTEE BALLOTS** before their counting:

Currently: The current requirement for Observer Appointing Authorities, (eg. parties, issues committees, etc.) for these two classifications of observers, is to submit authorizing documents to their board approximately 41 days before the election in question. This is too long in advance to be practicable for most appointing authorities to think about, gather and train the multiple observers necessary to cover all days and hours of early voting and the processing of absentee ballots. Most election observers are unpaid volunteers, and multiple people are needed over the multiple days involved and in shifts any one day.

Further there seems little compelling reason for the board to need all such observer names and information so early in the election process, especially since election day observers at the polls names don't have to be submitted for another half month. The pool of early voting/ballot "processing" observers is a relatively limited one; and once those early voting/ballot "processing" observers' information is submitted, it should take only minutes to confirm that all such authorized observers are registered voters/ and can be "cleared" for observer duty. And because all such early voting observers are to come to the same early voting and/or ballot processing location, any information or credentials the board wants to convey to them can be left at that location and/or through the appointing authorities.

And now that per HB41, most early voters' ballots are to be cast (but not yet counted) on voting machines, it is most important to have observers at the boards to confirm public confidence in vote totals. It's important to confirm that no one is "peeking" at early voting numbers to give

some a leg up in valuable data information, until those ballots are actually allowed to be counted on election day evening,

Suggested change: Require that Early Voting Observers' and/or Absentee Ballot Processing Observers' appointment information is to be submitted on the proper forms, to the appropriate board, a minimum of six (6) days before each observer is scheduled is to show up for the first time. Such change would give both Appointing Authorities (parties, issues committees, etc.) and Boards of Elections adequate time to complete each one's duties to make sure that Observer programs can run smoothly and without incident.

ELECTION AUDITS -

I appreciate the proposed expanded frequency of conducting election audits!

Currently - SOS Directives have indicated that the "units to be audited" (the specific precincts/ specific machines, etc. that are to be publicly hand counted and compared with the original count) are to be randomly selected at the county's Election Certification Board Meeting, with "the audit" to start not more than 6 days later.

However, the random selection of the exact units to be publicly hand counted is a vital part of, not separate from "the audit."

To make *any* "audit" valid, there cannot be any days intervening between finding out which exact units will be the only ones "publicly" hand counted and the totals publicly compared.

Also, audit observers provide *the only element of independence from those who did the original work, which is necessary to the validity of any "audit"*.

SB52 itself, indicates that audit observers (both appointed and the general public) must not be prevented from observing, (other than legitimate issues of space, etc.). But with those (minimum of) 6 days between that random unit selection, and the later date announced for "the audit" as is currently prescribed, observers (usually volunteers) cannot know when/where to show up, possibly during or after the board's regular office hours in order to watch the handling of the then-already-known, selected units that will be later publicly observed/ no "practice audits" allowed.

In fact, Dr. Philip Stark, Associate Dean, Division of Mathematics and Physical Sciences, University of California, Berkeley and *the creator of Risk Limiting Election Audits* which SB52 prescribes, last year in a one-to-one conversation, compared such a flawed process to what would most likely occur if the IRS would tell a taxpayer *exactly what*, and *only what*, they would be looking at a later audit date. The taxpayer would obviously "spiff up" just those items to make sure all looks great.

Suggested Change:

Codify that:

- the random selection of the “units to be audited” (the only units - precincts, machines, etc.- that will be hand counted in front of observers) **will occur in an announced and publicly notified public meeting that is held for the purpose of starting the audit.** (Observers can then wait and observe how, when, etc. the board personnel retrieves, organizes, handles those already-selected audit units.)
- all audit preparations and activities are done within publicly announced audit hours; and
- should a recount/recounts of the election be necessary, rather than the audit start “immediately” after the recount(s) as is currently in required in SB52, **require that the board announce, notify, and hold a dual purpose “recount certification” and an “audit start” meeting where the random selection of units occurs, the retrieval of those ballots for selected units’ hand counting can begin, and all hours for audit tasks are also announced.**

Last, regarding election audits, it must be noted here that 24 of the nation’s top election computer experts, (including Dr. Stark) show that Ballot Marking Devices (BMDs), though “certified” in Ohio, and though adequate for handicapped accessibility, cannot be universally used for voting to create a valid, trustworthy election audit - only hand marked paper ballots can do that.

Some of their reasoning includes:

- the inability for voters to verify their own “summary selection sheets”, that are sometimes mis-labeled as “ballots” and that are yielded by most BMDs, which contain humanly unreadable bar codes;
- the inability of voters to remember all the contests they made selections in, but are often represented with abbreviated names/descriptions on their summary sheet;
- the potential for bad coding and/or hacking where computers mark the voters’ “ballots”, rather than the voters themselves;
- without humanly verifiable source documents, a valid audit that can confirm the will of the voters is impossible;
- and more.

I attach to the end of this testimony a letter recently written and directed to the state of Georgia regarding BMDs and audits by these 24 who gathered for this letter writing purpose.

Thank you. Feel free to contact me with any questions you may have.

Adele Eisner

January 7, 2019

The Honorable Robyn Crittenden
Secretary of State Elect Brad Raffensperger
Rep. Barry Fleming
Members of the SAFE Commission
214 State Capitol
Atlanta, Georgia 30334 (via e-mail)

Dear Secretary Crittenden, Secretary Elect Raffensperger, and SAFE Commission Members:

We write to urge you to follow the advice of election security experts nationwide, including the National Academies of Sciences, the Verified Voting Foundation, Freedomworks, the National Election Defense Coalition, cyber security expert and Commission member Professor Wenke Lee, and the many states that are abandoning vulnerable touchscreen electronic voting machines in favor of hand-marked paper ballots as the best method for recording votes in public elections.

Our strong recommendation is to reject computerized ballot marking devices (BMDs) as an option for Georgia's voting system, except when needed to accommodate voters with disabilities that prevent them from hand-marking paper ballots. Hand-marked paper ballots, scanned by modern optical scanners and used in conjunction with risk-limiting post-election audits of election results, should be the standard balloting method statewide.

Although they are expensive and complex devices, computerized ballot markers perform a relatively simple function: recording voter intent on a paper ballot. Since there are no objective, quantitative studies of their benefits, acquiring BMDs for widespread use risks burdening Georgia taxpayers with unnecessary costs. Furthermore, BMDs share the pervasive security vulnerabilities found in all electronic voting systems, including the insecure, paperless DREs in current use statewide. These reasons alone should disqualify BMDs from widespread use in Georgia's elections, especially since there is a better alternative.

Hand-marked paper ballots constitute a safer and less expensive method of casting votes. Hand-marked paper ballots offer better voter verification than can be achieved with a computerized interface. A paper ballot that is indelibly marked by hand and physically secured from the moment of casting is the most reliable record of voter intent. A hand-marked paper ballot is the only kind of record not vulnerable to software errors, configuration errors, or hacking.

The SAFE Commission has heard testimony about voter errors in marking paper ballots and the susceptibility of paper ballots to tampering or theft. No method of balloting is perfect, but vulnerabilities in computerized marking devices, if exploited by hackers or unchecked by bad system designs, raise the specter of large-scale, jurisdiction-wide failures that change election outcomes. For example, with hand-marked paper ballots, voters are responsible only for their own mistakes. On the other hand, voters who use BMDs are responsible not only for

their own mistakes but also for catching and correcting errors or alterations made by a BMD which marks ballots for hundreds of voters. For this reason, well-designed hand-marked paper ballots combined with risk-limiting post-election tabulation audits is the gold standard for ensuring that reported election results accurately reflect the will of the people.

Voter verification of a BMD-market ballot is the principle means of guarding against software errors that alter ballot choices. Many BMDs present a ballot summary card to the voter for verification. The 2018 National Academies of Science, Engineering and Medicine Consensus Report *Securing the Votes: Protecting American Democracy*, which represents the nation's best scientific understanding of election security and integrity, states: "Unless a voter takes notes while voting, BMDs that print only selections with abbreviated names/descriptions of the contests are virtually unusable for verifying voter intent." Although advocates of touchscreen ballot marking devices claim that the human readable text ballot summary cards are "voter verifiable," the contrary is true: voter verified summary cards that contain errors (whether induced by hacking or by design flaws) are likely to be mistakenly cast, making a valid audit impossible. A post-election audit requires a valid source document, either marked directly by the voter or voter verified. Since voter verification of printed ballot summary cards (the source document) is sporadic and unreliable, elections conducted with most ballot marking devices are unauditabile.

While you may have been told that touchscreen systems are more "modern" devices, many of your peers and most election security experts have found this appeal to be based on a mistaken view that the voting public will naively accept new technology as a "step forward." We are intimately familiar with the hidden costs, risks, and complexity of these new technologies. We can assure you there is objective scientific and technical evidence supporting the accuracy of traditional, easily implemented scanned and audited hand-marked paper ballot systems. We urge you to recommend such a system as the safest, most cost-effective, and transparent way of conducting future elections.

If we can be of help in providing more information, we hope you will feel free to call upon us.

Sincerely,

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Georgia Institute of Technology

Dr. Andrew Appel
Eugene Higgins Professor of Computer
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Dr. David A. Bader, Professor
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Dr. Eugene H. Spafford
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**Eisner Written-only Testimony,
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SB52 -
Part II: Re: Cyber Reserves
April 1, 2019**

Chairman Coley, Vice Chair Huffman, Ranking Member Craig, and members of the Senate Government Oversight and Reform Committee:

This is Part 2 of my testimony on SB52, specifically on the latter part of this bill which proposes the Cyber Reserves force.

Recently the Brennan Center for Justice pointed to an article prepared for a newsletter from the Reiss Center on Law and Security at New York University School of Law, "*Just Security*" - about how we can implement security within the bounds of, and balancing security with the interests of justice and the Constitution as we know it.

That March 8 article, "Homeland Security's Overreach" (<https://www.justsecurity.org/63116/dhs-surveillance-reveals-oversight/>) points to increased surveillance and actions being taken against journalists, political activists and civil rights lawyers. It talks about the serious concerns raised, given the immense growth in DHS's cyber capabilities coupled with the lack of meaningful standards and safeguards,

SB52 as proposed law about a Cyber Reserves force currently lacks such vital statutory guardrails. It does not *yet* clearly state exactly what the Cyber Reserve forces will be permitted to do and not do; nor what qualifications the Governor must look for in choosing Reserve members, nor how this force shall be non-politically comprised. SB52 leads readers to assume these Reserves will provide training against foreign cyber-intrusions and influences into our election systems, but does not state that it shall not be used against Americans for organizing, for criticizing policies or people some are opposed to, nor even for questioning questionable election outcomes.

Further SB52 states that the Governor - *any* sitting Ohio Governor - can call up these Cyber Reserves into active duty, but without stated triggers for doing so, putting appointed members under the command of the National Guard, who are in turn, under the direct command of the Governor, a position which by default, is filled by a partisan. More chillingly, once the Governor so activates, it states that Military Law will take over - essentially a form of martial law - but so allows without stated legal guardrails to guide those gubernatorial choices about when s/he may do that or not. For example, there is not even one word suggesting that such activation of the Cyber Reserves might only happen, with limits, in the face of a serious cyber incident response.

SB52, as a proposed law in a democracy, currently is filled with many generalizations and far too few of the necessary legal details to protect our democracy and equally protect Americans' rights under the Constitution. Before passage SB52 needs much deeper and wider thought, expert input, and clearly stated details to provide these vital protections.

**Thank you,
Adele Eisner**

