

*Declaration of James "Jim" March*

1 I, JAMES "JIM" MARCH, hereby declare:

2 I make the following declaration regarding Ohio's election processes. I have  
3 personal knowledge of the matters set forth below, and, if called upon to do  
4 so, would testify competently thereto.

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6 1) I have extensive professional experience working with computer technology  
7 since 1984. My experience in the computer industry (completely separate from  
8 personal and professional work on election systems) totals approximately 17  
9 years and includes computer technical support, systems administration,  
10 technical writing, training and security analysis. I hold authorized install  
11 and support certifications for Novell and IBM networking components, and have  
12 received a broad range of ongoing industry training through my career in high-  
13 tech computer industry. In recent years, I have used my experience to provide  
14 technical assistance to persons and organizations active in the analysis of  
15 computer-based voting systems.

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17 2) Beginning in June of 2003 I was given access to a variety of materials  
18 related to Diebold Election Systems Incorporated ("Diebold") and their  
19 corporate ancestors Global Election Systems Inc. and Spectrum Print and Mail.  
20 These materials were provided to me primarily by writer/activist Bev Harris,  
21 who obtained them from a public, unsecured Internet site run by Diebold. The  
22 first batch of materials obtained by Ms. Harris in January 2003 included  
23 running program files, a variety of election data files, system manuals,  
24 source code for some components, internal corporate memos (some marked "not  
25 for customer review"), industry-specific documents and the like. This  
26 material included functional copies of the Diebold "central tabulator"  
27 software known as GEMS - Global Election Management Software.

28 3) After I assisted Ms. Harris in sorting through the material she had  
obtained from the public, unsecured Diebold website, she posted much of this  
material, including the GEMS tabulator software code, on a public website.

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4) In the years since I have testified in numerous court cases, the most recent in a mandamus and injunction action in Pima County AZ on Nov. 1<sup>st</sup> 2012.

My testimony is available and online at: <http://youtu.be/IFY1iwE2qzI>

5) I currently sit on the Pima County Election Integrity Commission, an official advisory body to the Pima County Board of Supervisors. In this unpaid position I meet in accordance with AZ's open meetings laws. I also hold a position of member of the board of directors, Southern Arizona chapter, ACLU, and I am a founding and current board member at <http://blackboxvoting.org> - a nationally known 501(c)3 organization which investigates and comments on electronic voting issues. I do not write this declaration on behalf of any of these named organizations.

I am in possession of an electronic copy of a document titled "AGREEMENT BETWEEN THE OHIO SECRETARY OF STATE AND ELECTION SYSTEMS AND SOFTWARE LLC". There is a contract number of "2013-004". It is 28 pages long, in PDF format from what appears to be original scanned paper documents. There is no obvious evidence of tampering with the document - the resolution, fonts and other formatting stylistic issues are consistent throughout. For the purposes of this declaration I will assume this document to be accurate and I will comment on it on that basis.

6) This document purports to describe a custom software application created by Election Systems and Software ("ES&S") that will have the following characteristics:

- a) It will run on the primary central tabulator computers that add up the vote totals for each county that is already an ES&S customer.
- b) It will have access to the central tabulator database, extracting information into a very simple, standard data format known as "comma separated values" or .CSV. These .CSV files will contain actual,

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1           live vote totals organized most likely by precinct, original voting  
2           method (precinct, mail-in, early voting, provisional voting, etc.)  
3           and vote totals for candidates, issues, etc.

4  
5 7) For a number of reasons, I believe that this custom software is not  
6 necessary for the conduct of elections and is in fact highly dangerous - the  
7 presence of this software significantly reduces the odds that the election  
8 results (on a county or statewide level) will be illegally and/or  
9 unconstitutionally incorrect. My analysis follows.

10 First, I have examined the election results created by the "normal" (or "built  
11 in" election reporting tools included with the standard, certified ES&S  
12 central tabulator application. The results reports so created are entirely  
13 adequate to figure out who won and lost, on a precinct or jurisdiction-wide  
14 level. The standard, certified ES&S system can also produce electronic data  
15 file results that can be written from the central tabulator to a CD-ROM or  
16 other such media for uploading to the Internet. Transcribing the results for  
17 use by some other system might take a little bit of time but is a simple  
18 enough affair.

19  
20 8) Like any modern election management system the vote totals (along with  
21 candidate/race names, precinct numbers and the like) are stored in a database.  
22 ES&S uses a variant of SQL - Structured Query Language - which can be read to  
23 and written from a number of different programs. The situation is the same  
24 with word processing files - a Microsoft Word .DOC document file can also be  
25 read by and worked with in WordPerfect, AbiWord, OpenOffice, LibreOffice and  
26 others.

27  
28 9) What ES&S has chosen to do here is extremely dangerous and exactly what  
you'd want to do if you wanted to plant a "cheat" onto the central tabulator.  
Their custom application written in a variant of the COBOL programming

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1 language would have full contact with the central tabulator database on both a  
2 read and **write** basis, while running on the same computer as where the "master  
3 vote records" (the central tabulator database - the "crown jewels" of the  
4 whole process) are stored.

5  
6 10) Under this structure a case of accidental damage to the "crown jewels" of  
7 the election data is possible. A case of deliberate tampering of that data  
8 using uncertified, untested software would be child's play.

9  
10 11) What they should have done is perform the normal export of the election  
11 results by way of the standard process built into the central tabulator, print  
12 that out to paper, then write a program that runs on some other computer,  
13 takes the electronic output from the standard central tabulator software as an  
14 "input" and then spits out industry-standard .CSV data as an "output". In  
15 this scenario the new custom software to create .CSV files could not possibly  
16 effect the "crown jewels" data because it doesn't have access to the original  
17 source records - only a copy. And if that new custom application messed up  
18 and mis-reported results, a quick eyeball check against the standard central  
19 tabulator results would reveal the issue in a matter of minutes.

20 12) What they have done instead is criminally negligent just from a standpoint  
21 of data security. To double-check the results after this new system is  
22 implemented you'd have to go back to the original paper and/or any remaining  
23 "poll tapes" from the precincts ("cash register" type paper strips containing  
24 that precinct's vote totals). "Poll tapes" from the mail-in vote process may  
25 not even exist - most systems feed mail-in votes from scanners straight into  
26 the central tabulator with no independent record of the vote. In either case  
27 there would need to be public records access to either the poll tapes (if they  
28 exist or new ones haven't been faked up on a small PC printer meant for cash  
registers) or the original paper ballots. There has been widespread media  
complaints about the access to either sort of public records in Ohio (esp. the

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1 2004 election) and elsewhere. Common public records delays in access to those  
2 records would allow alteration or replacement of those documents.

3

4 13) In conclusion, the idea of producing industry-standard .CSV data files of  
5 election results is not inherently bad. The method of execution chosen  
6 however is unspeakably stupid, excessively complex and insanely risky. In  
7 medical terms it is the equivalent of doing open heart surgery as part of a  
8 method of removing somebody's hemorrhoids. Whoever came up with this idea is  
9 either the dumbest Information Technology "professional" in the US or has  
10 criminal intent against the Ohio election process and if I were to guess it  
11 would be the latter.

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13 Executed this 3rd day of November, 2012 at Tucson, Arizona.

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Jim

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March

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