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.

5

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.

16

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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2 4) In the years since I have testified in numerous court cases, the most

3 recent in a mandamus and injunction action in Pima County AZ on Nov. 1st 2012.

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

5

6 5) I currently sit on the Pima County Election Integrity Commission, an

7 official advisory body to the Pima County Board of Supervisors. In this

8 unpaid position I meet in accordance with AZ's open meetings laws. I also

9 hold a position of member of the board of directors, Southern Arizona chapter,

10 ACLU, and I am a founding and current board member at

11 http://blackboxvoting.org – a nationally known 501(c)3 organization which

12 investigates and comments on electronic voting issues. I do not write this

13 declaration on behalf of any of these named organizations.

14 I am in possession of an electronic copy of a document titled "AGREEMENT

15 BETWEEN THE OHIO SECRETARY OF STATE AND ELECTION SYSTEMS AND SOFTWARE LLC".

16 There is a contract number of "2013-004". It is 28 pages long, in PDF format

17 from what appears to be original scanned paper documents. There is no obvious

18 evidence of tampering with the document – the resolution, fonts and other

19 formatting/stylistic issues are consistent throughout. For the purposes of

20 this declaration I will assume this document to be accurate and I will comment

21 on it on that basis.

22

23 6) This document purports to describe a custom software application created by

24 Election Systems and Software ("ES&S") that will have the following

25 characteristics:

26   a) It will run on the primary central tabulator computers that add up the

27   vote totals for each county that is already an ES&S customer.

28   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, live vote

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3   totals organized most likely by precinct, original voting method (precinct,

   mail-in, early voting, provisional voting, etc.) and vote totals for

   candidates, issues, etc.

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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 legally and/or

9   constitutionally correct. My analysis follows.

10

11 8) First, I have examined the election results created by the "normal" (or

12 "built in") election reporting tools included with the standard, certified

13 ES&S central tabulator application. The results reports so created are

14 entirely adequate to figure out who won and lost, on a precinct or

15 jurisdiction-wide level. The standard, certified ES&S system can also produce

16 electronic data file results that can be written from the central tabulator to

17 a CD-ROM or other such media for uploading to the Internet. Transcribing the

18 results for use by some other system might take a little bit of time but is a

19 simple enough matter.

20

21 9) Like any modern election management system the vote totals (along with

22 candidate/race names, precinct numbers and the like) are stored in a database.

23 ES&S uses a variant of SQL – Structured Query Language – which can be read to

24 and written from a number of different programs. The situation is the same

25 with world processing files – a Microsoft Word .DOC document file can also be

26 read by and worked with in WordPerfect, AbiWord, OpenOffice, LibreOffice and

27 others.

28

   10) 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.

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Their custom application written in a variant of the COBOL programming language would have full contact with the central tabulator database on both a read and **write** basis, while running on the same computer as where the "master vote records" (the central tabulator database – the "crown jewels" of the whole process) are stored.

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

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

13) What they have done instead is criminally negligent just from a standpoint of data security. To double-check the results after this new system is implemented you'd have to go back to the original paper and/or any remaining "poll tapes" from the precincts ("cash register" type paper strips containing that precinct's vote totals). "Poll tapes" from the mail-in vote process may not even exist – most systems feed mail-in votes from scanners straight into the central tabulator with no independent record of the vote. In either case there would need to be public records access to either the poll tapes (if they 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 lack of access to either sort of public records in Ohio (esp. the 2004 election) and elsewhere. Common public records delays in access to those records would allow alteration or replacement of those documents.

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

Pursuant to 28 U.S.C. §1746, I declare under penalty of perjury that the foregoing is true and correct.

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

Jim March