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Diebold's Fraud And Wyle's Incompetence: Did NASED Help Cover It Up?

The fraud and incompetence mentioned in the title has been extensively chronicled in the following documents and articles:

- 1) <http://www.equalccw.com/wincefraudwalkthrough.pdf> – an overview of Diebold's CE-related fraud
- 2) <http://www.equalccw.com/rrlee-wincedeclaration.pdf> – the declaration of Dr. Richard Lee

And optionally:

- 3) <http://www.equalccw.com/dieboldsinsandsecrets.pdf> – a general overview of Diebold's misconduct.

How much did NASED know about this situation, and did they act to cover it up? The National Association of State Elections Directors until recently oversaw the test labs such as Wyle.

The first piece of evidence pointing in that direction is the fact that in 2004, NASED certification reports for the Diebold touchscreen product line began to include mentions of Windows CE. See also:

<http://nased.org/NASED%20Qualified%20Voting%20Systems%20031706.pdf> - starting on page five.

By mid-2004 by my recollection activists noticed this and assumed at the time that Diebold had gone back and done actual certification on CE. I recall speaking to that point before the California Secretary of State's certification panel about that time, possibly earlier in '04.

But simply listing CE as a "certified component" isn't enough.

Under the FEC rules as discussed in the first link of this document, "COTS" products can be "certified" without passing full code review.

Because of this NASED listing of CE, the Diebold/WinCE controversy mostly died down or at least was considered part of the "past chronicles of Diebold sins", rather than being "current events". Bev Harris stopped trying to find an expert (such as Dr. Lee recently) to do a declaration on how CE works.

It wasn't until 2006 that two new pieces of data proved together that the issue was still very much alive: obtaining the TSx certification report by Wyle showing that CE files weren't listed in the "files examined roster" and the testimony of Wyle representatives before the California legislature.

NASED had at a minimum the same Wyle certification reports that we now have, showing no CE-related files listed in the "files examined roster". And while the activist community didn't have the declaration of Dr. Lee or a similar qualified expert on hand, we did cite Microsoft published sources that said the same thing in late '03. If NASED put CE in the certification roster to squelch activist concerns, they would have been aware of activist claims in this area matching Dr. Lee's declaration.

So did they alter the certification listing text with the CE listing to "give the activists a pacifier"?

If you look at the list of Diebold-declared "COTS components" in Appendix A of <http://www.equalccw.com/wincefraudwalkthrough.pdf> you will see that if any COTS components are to be listed as certified by NASED, at least some of these others should have been as well, especially the two PCMCIA communication cards (WiFi and Ethernet). WiFi may or may not have ever gotten Federal cert but the Ethernet card certainly did – specimens were spotted and photographed in Emery County UT by Black Box Voting staff in 2006.

NASED only listed the "COTS" item (as declared by Diebold) that was involved in controversy, apparently to end the debate over Windows CE.

Section Two: The Accubasic Scandal

The case for NASED's involvement in a CE-based coverup is compelling but somewhat weak.

The case for same in the Accubasic scandal is stronger.

"Accubasic" is a programming language Diebold wrote. It's mainly used to control the output of small paper-tape "end of day tally" printers found on all Diebold precinct voting systems (optical scan and touchscreen). In testimony before the California Senate Elections Committee on 3/29/06, Wyle made the strange claim that Accubasic was treated by their lab as "COTS" for "commercial off the shelf"...strange because it was a Diebold-supplied product. Note the following exchange in the transcript:

Wyle (Joe Hazeltine): We test to the standard with the proviso that there are procedures and policies that are followed at the precinct.

Senator Debra Bowen: So why did NASED send back the memory card with a letter that said "It is clear the memory card and AB component of the Diebold voting system should have been tested *but were not.*"

Wyle (Joe Hazeltine): Okay, you're mixing up issues here. On that card, the issue was that the software was presented to us as COTS. What the software does, it's like Crystal Reports, it takes data and it prints out a report, and all through the certification process that we did the reports were accurate and correct. There was no issue with that. What happened in this case is that apparently this software had been modified yet it was presented to us as COTS.

Source: <http://blackboxvoting.org/itahearing.pdf> – page 73 line 10

From context it is clear that "AB" is another reference to "Accubasic/ABasic" – for one thing it is the only programming found on a Diebold precinct memory card (touchscreen and optical scan).

From an examination of their certification report for the latest Diebold touchscreen, a look at the listings of files examined show that they DID examine "Abasic". See also:

http://www.bbvforums.org/forums/messages/2197/Wyle_Lab_4_6_4__00001-32747.pdf

Note that it pre-dates the Wyle testimony in California by over four months.

ABasic is mentioned prominently throughout. Note page 7 under section 4.2, where both ABasic and Windows CE are listed as components. Windows CE really WAS treated as COTS (no source code

review) because CE and CE-related files appear nowhere else in this document. However, ABasic files are discussed as fully certified and reviewed in the file listings beginning on page 17. One file that we know needs to be compiled custom for the CE build is the kernel, always called NK.exe (and might have a different extension in source form but will start with NK). See also the declaration of Dr. Lee: <http://www.equalccw.com/rrlee-wincedeclaration.pdf>

Why claim not to have reviewed ABasic when they did?

First, the functionality in ABasic is top-to-bottom illegal under the ban on interpreted code in the FEC 2002 Voting System Standards. The fact that this was a blooper of some sort was discussed by NASED just a week before the Bowen hearing in California:

<http://nased.org/ITA%20Information/NASED%20Memory%20Card%20Report.pdf>

NASED put a query to Wyle and Ciber (Diebold's labs) as follows:

It is clear the memory card and ABasic component of the Diebold voting system should have been tested, but were not. From Ciber and Wyle labs, NASED independent test authorities, I request a full, written explanation of how this happened and why. Please respond by January 3, 2006. I expect to make this report public and anticipate Diebold's cooperation.

NASED clearly phrased the question wrong, getting the wrong answer in return, the same answer that Wyle came up with when confronted with Bowen's grilling on 3/29/06: "we didn't look at it because it was COTS".

But it was all a lie. NASED phrased the question in such a way as to lie because they had the Wyle reports showing ABasic **was** fully reviewed same as all Diebold proprietary code. Wyle had missed the fact that ABasic was top-to-bottom banned as a function AND contained security flaws Harri Hursti later drove a truck through in Leon County FL – see also section one, item four, <http://www.equalccw.com/dieboldsinsandsecrets.pdf>

What really happened? That will be a matter for discovery. *I have a theory.* Wyle (and probably both other labs) used "automated code review tools" to check the overall programming structure. Acting as "robots", these programs probably did a good job of finding "loose ends" of various sorts. In the Wyle report page 21 we find one example of several of "programming glitches" detected in current or past versions of the product.

Line 641 – IsPaperLow() - uncommented declaration
Line 796 - ShowInsertcardBitmap() - uncommented declaration
Lines 950,959 - OnCardChanged() - uncommented declarations, variable names must differ by more than a single character
Line 1109 – AuthenticatedCard - uncommented declaration
Line 1266 – OnCardIn() - uncommented declaration
Line 1550- ShowBallot() - uncommented declaration

This is easier to understand than it looks. Line number, function involved in the error, type of glitch detected. ***But these are all errors of a sort that a robot could pick out easily***, much the way Microsoft Word or a similar word processor can detect spelling errors and minor grammatical glitches in English (and is often wrong on both).

What Microsoft Word cannot tell you is whether or not your writing is fundamentally any good, or even makes sense, or will be accepted for publication. It can't, it's way too stupid for that.

If I'm right, the "robot" Wyle used was able to look at basic "programming grammar" but was hopeless at detecting the fact that the program modules in question (related to ABasic) had the same degree of legality as a plate of maryjane brownies at a police league bake-off.

The robot would also be utterly worthless at finding "cheat codes" able to affect an election's results.

The frightening part isn't that ABasic was "reviewed" in such a useless fashion, or that Windows CE was customized yet completely evaded scrutiny. Or that NASED apparently aided and abetted all this.

The scary part is that ALL of the rest of the Diebold programming, across every component, was reviewed to this same incompetent standard.

As were all the other vendors.

People at Wyle, Ciber (who chickened out of the Bowen hearing), Diebold and NASED/EAC need to be grilled on this in front of a court reporter first, jury second. I have detailed notes on who knows what originally prepared for Bowen prior to the certification hearing, which are still valid. Not for public broadcast, Email me for details - jmarch@prodigy.net

The Final Insult

NASED has taken enough flak over these matters to have been removed from the certification oversight process as of late 2005, although the handover isn't quite complete. (It is likely the certification will still be called a "NASED number" because some state laws make having a "NASED number" a requirement.)

This is a welcome move as NASED was funded in large part by the major voting system vendors.

The new body taking over is the "Election Assistance Commission", created in 2002 by the Federal Help America Vote Act. The EAC has been very late in arrival and underfunded (some sources say "unfunded") by Congress.

As Systest representative Brian Phillips put it in his testimony in California on 3/29/2006:

I would like to think that we're going to see a more rapid movement on requirements improvements, process improvements or anything such as that, but I don't necessarily see that yet. I'd like to think that the EAC is just getting themselves up and going a little bit and once they really get going, but I've been saying that for the last couple of years and I've had this discussion with Donetta Davidson and others that you really move this along because to go two or three months between meetings and nothing seems to move between those meetings is not helping anybody within the industry, whether it's the states, the vendors, the ITAs.
<http://blackboxvoting.org/itahearing.pdf> – page 109 line 1.

The EAC has however taken one step. They've hired somebody to oversee the certification process and test labs (ITAs). That would be Thomas Wilkey – the guy who held that job at **NASED**.