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Black Box Voting

BlackBoxVoting.org finds voting scan machines hackable

By Matthew Cardinale

Online Journal Guest Writer

June 7, 2005—Two new and startling discoveries announced by Bev Harris and BlackBoxVoting.org indicate that Diebold Optical Scan Machines are vulnerable to, and designed for, hacking that would modify the results of an election.

Whereas touch screen voting machines have received the most attention, she asserts, optical scanning machines pose as much cause for concern based on recent findings.

In an interview for the progressive news community, Bev Harris, 53, explains in detail the recent developments.

Harris asserts that her technical experts found, in research conducted publicly on Leon County, Florida, elections machines, that both the individual machines (which produce the poll tapes) as well as the central tabulator were hackable.

"This is really the most important thing," Harris said. "Yes we can hack the poll tapes [and the central tabulator]. But what we've learned is there is a 'built-in' [on the individual machines] that provides the mechanism to hack any election on the poll tapes in the Diebold Optical Scan System."

"It is something that should be looked at in a congressional investigation," Harris said.

"It's probably not an accident," Harris said, "because you can look back through the source code to see that [Diebold] went through some programming contortions to keep this thing there. It had to have been expensive for them, frankly."

"When we saw the way they designed it [the 'built-in']," Harris explained, "Harri [Hursti, computer expert] said, 'We have the Holy Grail.' The elections people are very concerned."

Hursti is said to have confirmed that the built-in hacking program 'lived' in the memory card of the "ballot box" on individual election machines, according to Harris. "What this means is that the program operates on the votes. You can change what's on there; it's just a disk," Harris said.

"So when the optical scan machine asks it to count the votes, instead of using its own program to count the vote, it asks the ballot box how it should count, and that is what's so bizarre," Harris explained.

Ion Sancho, the Leon County Supervisor of Elections, reportedly allowed Harris and her experts to conduct a number of testing and auditing operations on their Diebold Scanning Equipment in recent months.

"Mr. Sancho is famous for his integrity and openness," Harris said. "We wanted to get a county with an optical scan system so we could prove once and for all if they're vulnerable."

A series of demonstrations were held on February 14, May 2, and May 26, in the Leon County Elections Offices, she said.

With U.S. Representatives Corinne Brown (D-FL) and Cynthia McKinney (D-GA) on hand, Dr. Herbert Thompson, a professor of Computer Science, took less than five minutes to "hack" a central tabulator in the second public audit on May 2, Harris said.

"[Election officials] loaded up an actual election. Elections are saved as a file. And [Dr. Thompson] went in and had his way with it," Harris said.

"The second time they'd put in additional security measures, unbeknownst to us, and he got in even faster," Harris said. "And [Rep.] Corrine Brown said, can you make it so it changes, say one in every five votes? And [Dr. Thompson] was like, no problem! And she said, it is a problem!"

It was after discovering problems with the central tabulator, that the BlackBoxVoting Team turned their attention to the individual scanning machines.

Calls to the offices of Rep. McKinney and Rep. Brown were not immediately returned Friday afternoon.

The canvassing procedure with optical scan machines has three elements, Harris explains. First, there are the Scantron-like ballots which are locked in a box. Second, there are the polling tapes, or receipts, that come out of each voting machine, which give results for each machine. And third, there is the central tabulator, or one machine that compiles the all results and prints.

"And they check the [latter] two and call it good," Harris said.

"Now how hard is it to make false results by 'taking out' the two so that they'd match? If you can manipulate the poll tape and the central tabulation system, that will be all she wrote for most elections," Harris said.

"My question was, can you [hack the machines] in a way that wouldn't be detected. And the answer we found is yes, absolutely."

"We proved it by going down there," she said. On May 26, "we made bogus memory cards. We put them on the machines. And the cards told the voting machines how to come out. It proved the memory card was controlling the machine and not the other way around," Harris said.

"We used real election results from Leon County. We simply re-wrote the program on the card, and we manipulated the recording of the voting. It would flip 'em, it would do different things, and the results came out wrong," she said.

"Everybody is like, oh, paper ballots, we can check them if we need to, but that's not a true statement. That's the big distraction." Harris cites a number of cases where recounts of the actual ballots were not allowed by state officials.

"I've been interested a long time in Diebold Optical Scanning Systems. Because a lot of times you go where the silence is, the thing that everybody isn't talking about. There was an orchestrated rush towards anti-touch-screen, but what's going on with optical scans, which have been in use for a decade?"

"There have been changes in the law, erosions state after state, that it's becoming difficult to check paper ballots against the optical scan total," Harris said.

Diebold's computer program is written in ABO basic, a new language written by Diebold. "They made up their own computer language!" Harris said. "Which is a flat-out violation of all FEC standards. It's completely against federal law not to use standard language."

What's more, Harris said, "These machines have been tested and certified at least a decade, each time a new version comes out. What is their excuse for passing this? There's no way they could've missed it, and there's no way they could say it's legal."

What Next?

"There is a team that does field work that is doing a documentary," Harris said.

"They got footage of when we found poll tapes in a downtown elections office garbage," she said, referring to a somewhat unrelated public records request incident last fall. "There were actually two times when we found poll tapes in a garbage, and we got the other one [at a warehouse] on tape ourselves," she clarified.

The documentary (see www.votergate.tv) is being edited in England by Russell Michael and Robert Parillo Cohen, Harris said. "They've [covered] tremendous stuff that's been happening all over, including some elections in California."

"It's the use of machines in the counting process I object to. What is needed is hand counting," she said.

"We've moved to a very important point," Harris said. "We need to now get the complete set of memory cards used in 2004 and have them looked at by the right experts. We need cooperative counties with some anomalies and Diebold scanners. Someone needs to examine those memory cards to see if they were misused in 2004," she said.

"I'd like to see cards from King County, Washington; Volusia County and Duval Counties, Florida; Du Page County, Illinois; and San Joaquin County, California. They're required to keep them for 22 months."

BlackBoxVoting.org is said to be creating a technical report for release in mid to late June.

BlackBoxVoting.org is still pursuing litigation with Riverside County, California, and King County, Washington, Harris said. Harris recently won \$70,000 from Diebold-related litigation in California and also won a recent case in Palm Beach County, Florida.

Public records from requests made after the November 2004 election are planned to be made available on Blackboxvoting.org in coming weeks.

"We'll also be announcing a Diebold related action next week that should spread through the Internet like wildfire," she said.

Matthew Cardinale is a graduate student, advocate, and freelance writer at UC Irvine. He may be reached at mcardina@uci.edu.