

Digital voting undermines democracy

Steven Newcomb

Newcomb lives in Blacksburg.

Tuesday was the first time I've voted using one of the new electronic voting machines. Things are worse than I had realized.

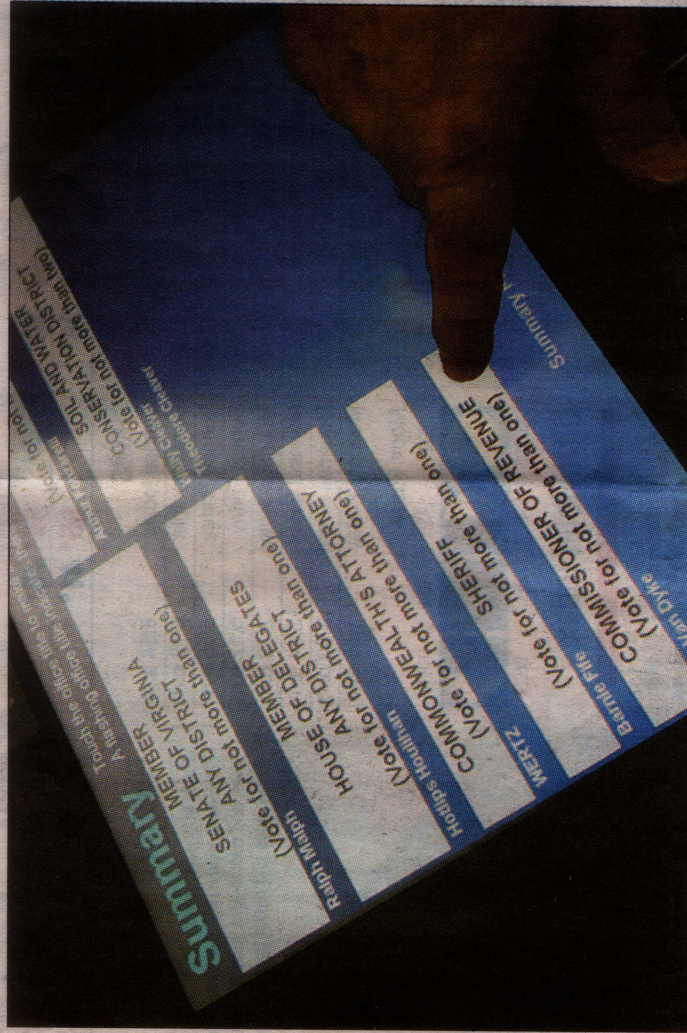
With Blacksburg's new machines, there was no way to check that the record of my vote was accurate. I asked the polling officials how I could check that my vote was recorded correctly, and I was told that the auditable record was being made on "tape" in a black box sitting on a table.

I said, "Well, OK, let me see so I can check."

They said, "Oh, no, we can't open that box. Nobody can open the box."

I complained that the lack of a voter-auditable record makes voting a pointless exercise. The polling officials (who said they felt the same way I did about the new machines) pointed out, in fairness, that the old mechanical voting machines didn't produce a voter-auditable record, either.

"True enough, I agreed, "but the voting machines were mechanical devices that could not secretly change how they worked in the middle of an election. If a mechanical voting machine passes all reliability tests before an election, and



Matt Gentry / The Roanoke Times

Officials demonstrate a sample ballot on an Advanced Voting Solutions "WINvote" touch screen at the Montgomery County Government Center on Roanoke Road in Christiansburg on Jan. 25.

then is sealed, it's extremely likely to keep working the same way throughout the election. That's not the case with computers. Computers are different. A computer program can do anything, including changing the way it works after testing has been completed. Sealing the box doesn't help.

After voting, I talked with a couple of strangers outside the polling place. One of them told me that,

yes, this lack of auditability is certainly a catastrophe for democracy, but, even worse, the software that's running in these particular boxes has never been inspected for errors, much less for "Trojan horses" by any third party.

We were standing only blocks away from the campus of Virginia Tech, where every professor, and nearly all students, know better. Who made the decision to

buy these boxes? Why? On whose advice?

These new voting machines certainly have the appearance of fraud, and wherever power can be gained by fraud, fraud will occur. These days, fraud that hides in the secret complexities of software is rampant, and it affects everyone — identity theft, e-mail phishing — the forms of it are endless. Computerized voting machines are

not immune.

What an elegant way to seize power. Simply approach naïve polling officials, and sell them voting machines that the voters can't reliably audit. If you can sell enough of them, you can skew the election results enough to take power, and then hold it indefinitely.

It's a good deal if you're in the voting machine business, too. Happily re-elected officials will specify that your machines must be bought at public expense, again and again. And when you need other favors at public expense, you'll always get them.

We need voting systems that allow records to be based on records that cannot be altered, and that have been individually verified by each voter. Printing each vote on paper tape is a good idea, but it's useless if the voter can't see that what's been printed is what the voter intended.

Putting the paper tape and its printer in a sealed black box, where the voter can't see it, is anti-democratic. It's a sure-fire recipe for fraud.

The purchase of these new machines was an inexcusable blunder. We need to get rid of them, and we need to do it right now. They are extremely dangerous to our republic.