

## **Essential Points on the Troy City School District Use of Uncertified DRE Voting Machines**

The City School Board of Education of Troy, NY has [approved the use of uncertified electronic voting machines](#) for the May 15 School Board Elections. Given that not only are several positions on the Board at stake but also an 88.3 million dollar budget, the decision to use LibertyVote electronic voting machines (DREs), which have not yet completed New York State testing and are not approved for use by the State Board of Elections is a serious mistake.

The School Board, which announced the move in a [press release on April 11, 2007](#), made a hasty decision without being provided with all the facts about the LibertyVote electronic voting machine (DRE). Below are some essential points which the Board must consider before using untested computer voting machines in this important election.

The use of unapproved DREs will open the election results to legal challenges from candidates and citizens, potentially throwing the outcome of the election and the school budget into question for many months, and will undermine citizen confidence that election results are correct and accurate.

The Troy City School Board must reconsider this decision before it is too late.

The following essential points are discussed below:

- [LibertyVote DREs Are Not Certified For Use In New York State](#)
- [Unsupported Claims That LibertyVote DREs Are Rigorously Tested](#)
- [Liberty Elections Systems and the Dutch Company Nedap](#)
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### **LibertyVote DREs Are Not Certified For Use In New York State!**

In a [brochure available on the Troy City School District website](#), LibertyVote/Nedap claims their DRE is “certified”. The brochure specifically addresses an election in New York State, where the claim that the LibertyVote/Nedap DRE is certified is patently false. The LibertyVote/Nedap DRE has not completed New York State testing and is *not certified for use in the State by the New York State Board of Elections*.

New York State standards require compliance with 2005 Federal guidelines, a standard which the LibertyVote/Nedap DRE has not met. To date, only preliminary New York State certification testing has been performed, with the majority of testing still remaining to be completed. Claims or implications that the LibertyVote/Nedap DRE is certified in New York State are false.

The LibertyVote/Nedap DRE claims compliance with Federal 2002 standards, but this standard is outdated and weak. The Federal 2002 standards are far from comprehensive, primarily testing a voting machine’s ability to withstand temperature and power fluctuations and containing few meaningful security tests. *New York State requires compliance with much higher State and Federal standards which the LibertyVote/Nedap DRE has not met.*

## Unsupported Claims That LibertyVote DREs Are Rigorously Tested

In a [brochure available on the Troy City School District website](#), LibertyVote/Nedap claims:

*"The LibertyVote™ software and firmware has gone through extensive quality and security checks before it leaves the manufacturer's premises. The machine then goes through rigorous testing by federally accredited independent test labs. After these steps occur, state and local election officials conduct their own tests to ensure the accuracy of the systems."*

Each of the three sentences contains inaccuracies and misstatements:

- *"The LibertyVote™ software and firmware has gone through extensive quality and security checks before it leaves the manufacturer's premises."*

[The Dutch Company Nedap](#), which developed, manufactures, and supports the LibertyVote/Nedap DRE, has not made its quality and security testing procedures public and available for review by independent experts. Independent review is the only way that the public can determine whether the Dutch company's procedures are comprehensive and effective. Without independent review, we are being asked by a foreign company overseeing American voting machines to "just trust us".

- *"The machine then goes through rigorous testing by federally accredited independent test labs."*

The [New York State certification process has demonstrated](#) that the testing done by federally accredited labs is far from rigorous. Indeed, the New York State Board of Elections halted certification testing in January 2007 when the New York Times revealed that Ciber, the agency conducting New York's tests, had lost federal accreditation six months earlier and not informed the State. A [report issued by the EAC](#) revealed in damning detail the poor quality of testing and close, secretive relationships between voting machine vendors and testing labs.

- *"After these steps occur, state and local election officials conduct their own tests to ensure the accuracy of the systems."*

New York State has not yet defined legal procedures for acceptance and accuracy testing by local officials. Local officials are not able to perform any testing independent of Nedap technical staff, and certainly have no way to determine the security and accuracy of the LibertyVote/Nedap DRE. The only testing which will be performed is by the LibertyVote/Nedap technicians who will administer the DREs during the School Board election. In other words, private companies will test their own machines with *no independent oversight* prior to their use in a public election.

## Liberty Elections Systems and the Dutch Company Nedap

[Liberty Election Systems](#) is a privately held New York State corporation. Liberty Election Systems [hopes to sell](#) and distribute DRES made by the [Dutch company "Nederlandsche Apparatenfabriek"](#) also known as "Nedap". Liberty Election Systems does not itself design, manufacture, or provide technical expertise for the DREs to be used in the Troy elections. The Dutch company Nedap provides all technical expertise, designs and writes the software and hardware, and provides onsite technical oversight of the DREs to be used in Troy.

In New York State, Dutch technical advisors from Nedap have provided all technical oversight and support of the LibertyVote/Nedap DRE at tests and demonstrations, and at official State

Board of Elections meetings. Liberty Election Systems has no technical staff of its own, so the technical advisors running the LibertyVote/Nedap DREs on Election Day will be foreign citizens. Do we really want foreign nationals administering American elections?

In Holland, [questions have arisen about Nedap's actions](#) in response to the Dutch government's attempt to appoint a well-known voting integrity activist as a member of the independent commission investigating the future of the electoral process. Jan Groenendaal, CEO of the software company the exclusive software provider to Nedap, sent [email to the Dutch Election Ministry](#) threatening that his company would cease all activity if did not comply with it's demands. The Dutch government depends on Groenendaal's software and cannot hold elections without his company's cooperation.

Liberty Election Systems must provide the public a complete list of the names, companies, nationalities, and responsibilities of the personnel who will be testing and administering the LibertyVote/Nedap DREs during the Troy election.

## **Concerns about the Usability of the LibertyVote VVPAT**

The Voter Verifiable Paper Audit Trail, or VVPAT, is intended to allow voters to view a paper record printed by the DRE containing a summary of their votes. It is important that voters be able to easily see, read, and understand the contents of the VVPAT.

But many concerns have been raised about [the user friendliness of the LibertyVote/Nedap VVPAT](#):

- The [VVPAT display is extremely small and distant](#) from the voter, making it difficult for most voters to read.
- The [VVPAT displays only one selection at a time](#), making it impossible to review all voter selections at a single time.
- The [VVPAT displays cryptic codes which the voter must decipher](#) in order to review all selections.

A [usability study](#) by the American Institute of Research commissioned by the New York State Board of Elections noted potential problems with the LibertyVote/Nedap VVPAT:

*"When AIR reviewed the Liberty DRE before the study began, we noticed that the paper printout was difficult to read and presented the voter with a series of coordinates, e.g., A1, B6, rather than actual names. In our expert opinion, this printout is less understandable to voters..."*

## **False Claims of Security**

The [brochure on the Troy City School District website](#) makes the false claim that the LibertyVote/Nedap DRE cannot be hacked because:

*"The LibertyVote™ machine is a stand alone system that does not operate on the Internet and therefore cannot be accessed by hackers or anyone else on the Internet."*

This statement is incorrect and misleading, because there are many ways that computers can be 'hacked' and that bugs and programming errors can be introduced. Indeed, *the Nedap DRE has been successfully hacked!*

**1. The Nedap DRE has already been hacked.** In October 2006, a group of Dutch computer specialists [successfully hacked a Nedap DRE](#) without access through the Internet. The Nedap DRE was found to be vulnerable to non-Internet based attacks, and could be completely reprogrammed in secret.

**2. The LibertyVote/Nedap DRE is not a “stand alone system”.** The LibertyVote/Nedap DRE is part of a larger system that requires use of memory cards written and transferred to and from standard PCs in order to run an election. Ballot definition files and other election control information are programmed and then placed into the LibertyVote/Nedap DRE. Memory cards and ballot definition files are known to be a common source of bugs and election errors. [A Nedap diagram](#) provided to the Irish government clearly shows that the LibertyVote/Nedap DRE is [not independent of PCs and memory cards](#) and is only one part of a larger system, any of which might contain bugs or compromised files which can be transferred to the DRE.

**3. The LibertyVote/Nedap DRE is a computer.** In the brochure announcing the Troy Elections the false claim is made that the *“The LibertyVote is not a computer...”*

This statement is patently false – There is no question that the LibertyVote/Nedap DRE is a computer. It has a motherboard, a processor and a keyboard. Its operation depends completely on software, without which it can do nothing, not even start up. It transmits and receives data, [communicating with other computers via memory cards](#). Of course the LibertyVote/Nedap DRE is a computer.

Making false and misleading statements in the context of a public election is unacceptable, especially from a private company who will be running the Troy election.

## **Questions for the Rensselaer County Board of Elections**

From the Troy Record [article of March 7, 2007](#):

*“The LibertyVote machine was chosen by Troy’s Board of education at the recommendation of the Rensselaer County Board of Elections, in an effort to restore confidence in the voting process...”*

Why did Rensselaer County Election Commissioners Larry Bugbee and Edward McDonough recommend the use of an uncertified DRE for use in an important election when they know that the LibertyVote/Nedap DRE has not been tested or found to be in compliance with New York’s strict voting machine regulations? The commissioners are aware that New York State’s testing of the LibertyVote/Nedap DRE is not complete and that the DRE is *not approved for use in the state*.

New York State’s high regulatory requirements for voting systems are designed to protect voters, and are among the most comprehensive in the nation. Why do Commissioners Bugbee and McDonough feel that it is unnecessary to comply with strict State regulations which protect voters?

What studies or analyses have Commissioners Bugbee and McDonough done of the LibertyVote/Nedap DRE to determine that is suitable to recommend for use in an important election with millions of dollars at stake? If they have done such studies, in what ways are they more comprehensive than the approval testing currently being conducted by the New York State Board of Elections?

How does use of an untested, uncertified voting machine restore confidence in the voting process?