



# New Yorkers for Verified Voting

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## Is Electionline's 2006 Report Biased toward DREs?

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New Yorkers for Verified Voting

In February 2006, *Electionline* ([electionline.org](http://electionline.org)), a primary source of information for America's election officials, issued a major study: *Election Reform: What's Changed, What Hasn't and Why*. Sponsored by the Election Reform Information Project, *Electionline* claims to be the "only non-partisan, nonadvocacy website" providing information about election reform. Close analysis of this recent report, however, calls into question the claim that its orientation does not advocate a particular voting system.<sup>1</sup> With regard to voting machines, the 2006 *electionline* Report subtly advocates direct recording electronic voting machines (DREs).<sup>2</sup>

Let us be very clear at the outset that the current director of *Electionline*, Doug Chapin, has compiled a report that provides valuable information about HAVA implementation across the USA. Many people will find that the document's history of election reform gives valuable perspective on local efforts. The report's effective presentation and helpful format, however, ought not to lead us to ignore its muted biases.

### What are the indications of a bias toward DREs in the *Electionline* 2006 Report?

- **"Security Concerns Stymied Widespread Change"** (page 9). This is the bold, red headline that introduces the Report's section on voting systems. However, the state-by-state summaries that constitute much of the report (pages 39-72) show that, in 2006, fifteen states use optical scan machines (with no DREs), twenty-seven jurisdictions (including the District of Columbia) authorize optical scanners as well as DREs, and eight states use all DREs.<sup>3</sup> This count of the states indicates that only from a point of view of advocacy for DREs would one say "change" has been "stymied."

A hand-marked Paper Ballot, supplemented with a Ballot Marker for accessibility, together with a "mark sense"/optical scan Ballot Counter (**the PBOS system**) *provides a modern voting system*. *Electionline*'s own count of the states should lead an objective observer to recognize that ALL states have already or will soon adopt modern voting technology. Change has NOT been stymied. Since some states (e.g., Oklahoma) had already implemented a PBOS system, they did not need to change those machines, but only to adopt an assistive device for the disabled.

In general, *Election Reform* (2006) emphasizes the value of "upgrading older voting systems" and implies that change/modernization is important in and of itself. The tone of the report disparages "aging voting machines" and "clunky lever systems" (5). One catches no hint that lever machines in 2004 had a much lower failure rate in New York City than that allowed for the

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<sup>1</sup> Susan Pynchon, Florida Fair Elections Coalition, first called my attention to this orientation in the 2006 *Electionline* Report. Teresa Hommel, *wheresthepaper.org* and New Yorkers for Verified Voting, contributed helpful advice and editing.

<sup>2</sup> The following analysis focuses upon the Report's treatment of voting systems and does not assess its treatment of issues about voter identification, voter registration databases, and provisional ballots.

<sup>3</sup> Two states (New York and Connecticut) are reported with lever machines in 2006., but these are scheduled for replacement by either optical scanners or DREs by 2007.

new DREs.<sup>4</sup> The Caltech study that showed lever machines and optical scan systems with a lower residual vote rate than DREs is never mentioned.<sup>5</sup> Neither is the 2004 comparative study of the number of under-votes reported by DRE and optical scan system in elections where there was only a single race or question on the ballot; DRE voting systems showed roughly eight times as many under-votes as were registered by optical scan systems.<sup>6</sup>

- ***Electionline* ignores important studies that are critical of electronic voting machines**, such as the nonpartisan Government Accountability Office Report issued in Fall 2005 ([www.gao.gov/cgi-bin/getrpt?GAO-05-956](http://www.gao.gov/cgi-bin/getrpt?GAO-05-956)), titled “Federal Efforts to Improve Security and Reliability of Electronic Voting Systems Are Under Way, but Key Activities Need to Be Completed.” The GAO report identifies thirteen kinds of problems with electronic voting machines and concludes “...*there is evidence that some of these concerns—including weak controls and inadequate testing—have caused problems with recent elections, resulting in the loss and miscount of votes* (38).”
- ***Electionline* de-emphasizes the record of problems with DREs**. The Report minimizes the hundreds of problems with DREs in recent elections that have been widely reported in newspapers and listed on several websites.<sup>7</sup> The *electionline* report specifically discusses only two such problems and immediately offers the vendor’s interpretation that they were caused by mis-programming and poll worker errors rather than the design of the machine (9). An unbiased report might have noted that the machines clearly are not designed to serve the people who must use them, since so many malfunctions have been blamed on election workers and voters.
- ***Electionline* trivializes the motivation of the computer scientists who have mobilized the verified voting movement by identifying them with what it calls “the paper trail chase.”** After a brief acknowledgement of “concerns over the security of electronic voting,” it goes on to identify the verified voting movement and Dr. David Dill, Professor of Computer Science at Stanford University, primarily with the efforts toward the voter verified paper audit trail (VVPAT). The Report never explains that computer scientists like Dr. Dill call for a VVPAT to be added to paperless touch screens as a remedial strategy, rather than as providing an ideal voting system. Dill has said:

Computer systems are so complex that no one really knows what goes on inside them. We don't know how to find all the errors in a computer system; we don't know how to make sure that a system is secure or that it hasn't been corrupted (possibly even by its designers); and we don't know how to ensure that the systems in use are running the software they are supposed to be running....There is strong agreement among computer technologists that what I just said is true. For example, the Association for Computing Machinery, the largest professional organization of computer technologists, adopted a position against paperless electronic voting after an internal poll showed that 95 percent of their membership agreed with the position.<sup>8</sup>

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<sup>4</sup> Howard Stanislevic, “DRE Reliability: Failure by Design?” [http://www.VoteTrustUSA.org/pdfs/DRE\\_Reliability.pdf](http://www.VoteTrustUSA.org/pdfs/DRE_Reliability.pdf), 4-5, VoteTrustUSA E-Vote Education Project.

<sup>5</sup> “Residual Votes Attributable to Technology: An Assessment of the Reliability of Existing Voting Equipment,” <http://www.vote.caltech.edu/Reports/2001report.htm>.

<sup>6</sup> Milarsky & Nevins, “Analysis reveals flaws in voting by touch-screen,” *Sun Sentinel* (Florida), 5/11/04. Archived at [www.verifiedvoting.org/article.asp?id=2473](http://www.verifiedvoting.org/article.asp?id=2473).

<sup>7</sup> E.g., [www.Verifiedvotingfoundation.org/downloads/resources/documents/ElectronicRecentElections.pdf](http://www.Verifiedvotingfoundation.org/downloads/resources/documents/ElectronicRecentElections.pdf) and [www.VotersUnite.org](http://www.VotersUnite.org), *Mythbreakers*, pages 4-16.

<sup>8</sup> David L. Dill, “Testimony before the Senate Committee on Rules and Administration,” June 21, 2005. Available at [www.verifiedvotingfoundation.org](http://www.verifiedvotingfoundation.org).

Such computer security experts consider electronic voting a wrong use of technology, because the electronic record can never be transparently observed and the software is inherently vulnerable to mistakes, whether accidental or deliberate. They advocate laws requiring paper trails in order to add a minimal check on the paperless touch-screens that vendors rushed onto the market. Virtually all computer security experts, at this stage in the development of technology, recommend voting systems based on voter-marked paper ballots rather than on electronic voting that generates a paper trail.

*Electionline* reports that some organizations and investigative journalists “challenge the integrity and political neutrality” (10) of voting machine manufacturers and their policies of defining source codes as proprietary, but it never acknowledges that such criticisms also come from computer security experts.<sup>9</sup>

- ***Electionline* downplays the value of paper ballots and paper records.** Instead of recognizing with David Dill that paper itself is a technology with special value for democracy because it allows transparent, public, comprehensible counting of votes,<sup>10</sup> the Report speciously says, “What to do with the paper records once an election is over...is a ...source of controversy” (10). At this point an unbiased report would have discussed current efforts to clarify procedures for audits and recounts. Instead the Report offers colorful quotations from politicians, twice reporting that election officials urged Governor Arnold Schwarzenegger to oppose paper records because counting them in manual audits and recounts would be “onerous and time consuming” (10, 42 ). In addition, the Report takes pains to point out how long it would take to count a paper record voters have verified (11). An unbiased report would have challenged the design of a DRE that would make such counting so difficult. It also would have noted that increasing voter confidence through audits is of higher value to a democracy than the ease of election workers.
- ***Electionline* mistakenly characterizes and repeatedly devalues accessible devices for marking paper ballots such as the AutoMARK.** *Electionline* derogates them as “hybrid systems...that use an electronic interface to produce a paper ballot” (11). It misrepresents the purpose of such devices, saying that they were intended to answer “the concerns about the accuracy and integrity of paperless electronic voting systems” as well as the concerns of “election officials who are loathe to hand count paper audit trails.” In fact, however, ballot-marking devices were invented for use by voters with disabilities as well as those who use minority languages; they allow such voters to use the same paper ballot as all other voters. Ballot markers enable paper ballot jurisdictions to comply with HAVA accessibility requirements. Of course, this also provides reliability and security for the votes of the disabled.

*Electionline* quotes at length (11) from the criticism of the AutoMARK by one particular group (the American Association of People with Disabilities- AAPD) without acknowledging their apparent financial ties to vendors of paperless DREs.<sup>11</sup> Moreover, *Electionline* fails to acknowledge that other advocates for the disabled point out that the AutoMARK ensures accessibility for those with a wider range of disabilities than any DRE.<sup>12</sup> It emphasizes problems that many disabled persons say are easily solved, such as managing paper ballots with dexterity

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<sup>9</sup> e.g., Ellen Theisen, Testimony to the U.S. Election Assistance commission, May 25, 2004, <http://www.votersunite.org/info/LettertoEAC2.htm>

<sup>10</sup> Dill, *op cit*, 4-5.

<sup>11</sup> AAPD’s income more than doubled in 2002, when it received approximately \$1,000,000 more in direct public support than in previous years. (HAVA was adopted in 2002.). According to several reports, AAPD accepted at least \$26,000 from voting machines companies. See Kim Zetter, “Diebold and the Disabled,” *Wired News*, Oct. 12, 2004

[http://www.wired.com/news/evote/0,65292-1.html?tw=wn\\_story\\_page\\_next1](http://www.wired.com/news/evote/0,65292-1.html?tw=wn_story_page_next1).

<sup>12</sup> See, “Voting Machines and Dexterity Disability,” NAPAS-National Disability Rights Network, .pdf at [www.nyvv.org](http://www.nyvv.org).

disabilities or taking the ballot to the scanner if one is blind. *Electionline* also fails to acknowledge that the Election Assistance Commission says that HAVA compliance does not require completely independent voting for persons with all possible disabilities.<sup>13</sup>

- ***Electionline* raises no questions about the basic design of DREs and it presents specific DREs as if they were unproblematically compliant with state law and HAVA.** For example, it presented the Diebold AccuVote TSx as guaranteeing such compliance when that machine did not have a voter verified paper record and was judged to have a low level of accessibility as well as many security problems (39).
- ***Election Reform* offers no real explanation of the PBOS system.** This may be defended as unnecessary in this kind of report, but it is consistent with the election industry's pattern of neglect of an important, but less lucrative, option for HAVA compliance. It also is consistent with the election industry's pattern of encouraging citizens simply to trust whatever the manufacturers decide is best for us.

**In conclusion, the advocacy of DREs in *Election Reform: What's Changed, What Hasn't and Why, 2000-2006* consists of ignoring negative evidence about DREs, derogatory misinterpretation of elements in the PBOS system, a trivializing perspective on the verified voting movement, and a biased overall perspective on progress toward reform.**

Explanations for *Electionline's* biases are complex. *Electionline* has continuing connections with Election Center, which has had a long-standing affiliation with vendors of voting equipment. Vendors always have held memberships, made contributions, attended meetings, participated in training, and played prominent roles at Election Center conferences, usually hosting entertainments. The Election Center's cozy as well as financial relationship with vendors is mirrored in other organizations for election officials. For example, the by-laws of the Election Commissioners' Association of New York require that vendors be invited to all of their conferences. Doug Lewis, Executive Director of the Election Center is a member of the Advisory Board of *Electionline*. From the beginning, Lewis and his Election Center opposed any suggestion that a paper record was needed on electronic voting machines,<sup>14</sup> noting the expense of adding such paper records.

### **David and Goliath re-visited?**<sup>15</sup>

Nevertheless, *Election Reform* reports statistics that bear independent witness to an unacknowledged but substantial victory of the verified voting movement. In 2006, 41.20% of registered voters in 2006 will use paper ballot-optical scan systems (11).<sup>16</sup> In addition, "25 states nationwide have laws on the books requiring the use of paper trails or only use paper-based ballots" and "more are expected to adopt similar requirements in coming months" (10).

This promises a "David vs. Goliath" victory, although it is far from complete. The current level of verified voting in the USA has been achieved by volunteers with budgets based on donations, rather than corporate power. These "Davids" carry slingshots powered by knowledge as well as dedication

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<sup>13</sup> United States Election Assistance Commission Advisory 2005-004, July 20, 2005.

<sup>14</sup> In May 2003, Lewis distributed widely an Election Center Letter that encouraged complete dismissal of emerging concerns about security with DREs. He also disparaged the corrective value of adding a printer to an electronic voting machine.

David Dill, Stanford U. Professor of Computer Science, says this letter "demonstrates profound disturbing complacency and a serious lack of understanding of computer security." See <http://verify.stanford.edu/EVOTE/NEWSLETTERS/v1.html>.

<sup>15</sup> I am in debt to Susanne Lipari for the "David and Goliath" metaphor.

<sup>16</sup> This figure actually will be higher, now that New Mexico, and possibly Maryland, will have the paper ballot-optical scan system.

contributed by computer scientists who care deeply about our democracy. The “Goliath,” the election industry, is a coalition of election officials (often political appointees) and voting machine vendors that has been enriched by HAVA monies and now is entrenched in power through appointments to the boards, commissions, and committees crucial to the implementation of HAVA. In spite of its current funding by the reputable Pew Charitable Trust, *Electionline* continues to express the interests of this Goliath. No computer scientist or other representative of the verified voting movement serves on its Advisory Board.

The statistics in this year’s *Electionline* report suggest that America’s voters are learning from the verified voting movement that their interests are in verifiable, accurate, secure, accessible, and auditable voting systems. In spite of HAVA’s deadline this Fall, this movement will continue its work and, as DREs fail, more voters will continue to press for these values.