

December 15, 2006

Subject: Subject: Boulder Colorado election audit doesn't do the job

Below is the report attached by one of the Canvass board members to the official 2006 election canvass results in Boulder Colorado. These excerpts just about sum it up:

"...because the HART system does not report the data needed to audit an election, there was no way to determine if the results produced by the audit match the results produced by the election."

"Because of the inadequacies of the audit technique, the audit cannot be used to estimate the accuracy of the election."

I think that is true for most or all audits in Colorado, and in the nation. The result is that a single person can typically steal an election just by manipulating the final tally system, and the present audits cannot detect such changes. This violates the principle of "software independence" that NIST stresses for our voting systems:

<http://vote.nist.gov/DraftWhitePaperOnSIinVVSG2007-20061120.pdf>

A voting system is software-independent if an undetected change or error in its software cannot cause an undetectable change or error in an election outcome. Another excellent description of the problems, for Utah, is at

<http://utahcountvotes.org/ltagov/Response2LtGov-Audit-Recount.pdf>

I've collected recommendations for a good audit at

<http://www.coloradovoter.net/moin.cgi/ManualCountAudit>

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From: Al Kolwicz AlKolwicz@qwest.net

Subject: [CanvassBoard] Boulder County Republicans - Audit NOTES for 2006 General Election

TO: Colorado Secretary of State Gigi Dennis

FROM: Al Kolwicz, Boulder County Republican Party Canvass Board Representative

DATE: November 22, 2006

RE: Post Election Audit Boulder County General Election, November 7, 2006

The post election audit performed under the direction of the Secretary of State did not provide sufficient information to verify that the voting equipment used for the November General Election produced correct results. Also, the audit did not provide sufficient information to statistically estimate the accuracy of the election results.

Boulder County election staff authorized supplemental counting that made possible the detection of differences between the actual unofficial Election Day results and the results produced by re-runs of selected batches. Future audits should not be based on re-runs.

DISCUSSION

For eSlate/JBC devices, the Secretary of State selected eleven Election Day eSlate devices used in polling places. One of the selected devices had not been used in the election. A replacement device was selected. None of the polling places used more than one eSlate on a JBC.

None of the eSlate/JBC devices used at the three early voting locations was selected. This omission is cause for deep concern, since the early voting equipment configuration, election setup and operational procedures are significantly different than those used for Election Day voting.

For central count i840 optical scan devices, the Secretary of State selected one of the eight devices. For contests, the Secretary of State selected two contests for the electronic ballot audit and a different set of two contests for the paper ballot audit.

Among the batches scanned and interpreted by the selected optical scan device are seven batches that contain the Election Day paper ballots from three polling places where one of the eleven DRE devices was used. With the permission of staff, these seven batches were selected, although are more than 500 ballots. The batches selected did not include the provisional ballots that were voted at these polling places.

The statutory method for auditing the equipment is invalid.

(1) It fails to verify that the voter's intent on each ballot is honored by the computer. Compensating errors can hide incorrect interpretation of intent. Voter intent must be verified by visually interpreting and comparing each vote on each voter verified document (the VVPAT or the actual paper ballot) to the results of the computer's interpretation of the each voter's intent. It is understood that the computer makes a record of its interpretation of each ballot in a so called "Cast Vote Record".

(2) Further, the statutory method fails to use the actual results of the election as the basis for determining if the equipment correctly interpreted and counted votes. Instead, paper ballots are re-scanned and recounted using conditions that are unrelated to the actual election. These "synthesized" results are improperly used as the basis for comparison. It is our understanding that the equipment can interpret votes differently than the voter intended.

The audit team asked for and was not provided (1) a copy of the parameters used to control the machine's interpretation of votes, and (2) a copy of the cast vote records that show how the computer interpreted each vote. Because a different set of contests was selected for electronic ballots than for paper ballots, and because the HART system does not report the data needed to audit an election, there was no way to determine if the results produced by the audit match the results produced by the election.

To reduce the negative effect of this deficiency, local officials supplemented the audit by adding one of the two electronic ballot contests to the two paper ballot contests for the paper ballot audit. This enabled the audit team to compare, for 3 contests in 3 polling places, the manual count of Election Day votes to the corresponding official count of votes.

CONCLUSION

The manual counts of votes for the selected Election Day device-contest pairs did match the counts in the "synthesized" reports produced for the audit; however, the manual counts did not match the counts produced in the "actual" Election Results Report. None of the votes recorded on paper or electronic ballots that were cast at the three early voting locations was audited. This is significant because a different printing system is used to print the early voting paper ballots, and much more complex equipment is used to record votes on the electronic ballots. None of the votes recorded on absentee ballots was audited.

This is significant because a different printing system is used to create absentee ballots, and absentee ballots are folded. Also, there was no audit to ensure that only eligible absentee ballots were accepted and that ineligible absentee ballots were rejected. None of the votes recorded on provisional ballots was audited. In addition, no attempt was made to audit the accuracy of the provisional voter qualification process. No attempt was made to audit the Emergency and Certificate of Registration voter qualification process. Because of the inadequacies of the audit technique, the audit cannot be used to estimate the accuracy of the election.