

Rebuttal to the CACEO's letter to Gov. Schwarzenegger opposing S.B. 370

by Robert Kibrick, Legislative Analyst, VerifiedVoting.org, October 3, 2005

On September 1, 2005, the California Association of Clerks and Election Officials (CACEO) sent a letter to Governor Schwarzenegger expressing their opposition to S. B. 370. That bill was passed overwhelmingly by the legislature and awaits action by the Governor. S. B. 370 would require that the accessible voter-verified paper audit trail (AVVPAT) records would be used to conduct the mandatory manual audits that the California Election Code requires in every election in 1% of precincts, selected at random. In the case of recounts, S. B. 370 would also give those requesting the recount the option of using the AVVPAT records to conduct that recount.

In their letter, the CACEO gives 5 reasons why they believe that using the AVVPAT records for a manual audit, or a full recount, is extremely problematic. VerifiedVoting.org does not find these reasons compelling, as indicated by the following point-by-point rebuttal.

Each of the five reasons specified in the CACEO letter is copied below in italic font, and our response follows in plain text.

1. In early voting sites and election day voting sites with multiple precincts, voters are not restricted to using a Direct Recording Electronic (DRE) unit specific to the voter's precinct. As a result, determining which ballot images on the AVVPAT represents votes from a specific precinct would be onerous and time consuming, if not impossible, depending on the information available on the AVVPAT.

The task of counting the AVVPAT is not significantly more time-consuming than other manual audit or recount tasks. Further, time spent counting the appropriate audit trail is time well-spent. The same cannot be said for auditing a document unseen by the voter.

As to the assertion that it might be impossible to separate the AVVPAT records according to the precinct with which they are associated, this claim appears completely spurious since existing AVVPAT systems already provide the needed information and can clearly be required to do so by any jurisdictions contemplating the purchase of such a system. Please see the attached photo of a VVPAT record printed by the Sequoia VeriVote VVPAT printer, which clearly shows that each VVPAT record identifies both the polling site and precinct associated with that record. Examples of other sample VVPAT records can be found on the respective vendor's websites, and these also contain the needed information required to sort VVPAT records according to the precinct with which they are associated.

2. Provisional ballot images appear on the AVVPAT without an identification number, and prior to the determination of eligibility by the election official in the official canvass. Some provisional ballots should not be included in the tally, due to the ineligibility of the voter to cast a ballot. The AVVPAT tally will not match the final electronic tally of the vote. Therefore, the AVVPAT is of questionable use in the 1% manual tally, and creates a serious problem in the full recount scenario since eligible ballots are indistinguishable from the ineligible ballots due to the inability to identify which records represent the eligible and/or ineligible images.

There is nothing in the Election Code that requires that provisional ballots be cast on a DRE voting machine, and there are a significant number of reasons why they should not. In non-DRE voting systems, provisional ballots are kept distinct from non-provisional ballots, and

never co-mingled until after the validity of the provisional ballot has been ascertained. For this very reason, many jurisdictions currently employing DREs do not permit provisional ballots to be cast on those DREs. Rather, provisional ballots are cast using a paper ballot and signature-verification envelope similar to that used by absentee voters. If this approach is used, then only non-provisional AVVPAT records will be printed, so that the AVVPAT tally should continue to match the tally of the non-provisional electronic ballot images.

Furthermore, according to standard “2.3.3.3 Provisional Ballot”, as specified in California’s AVVPAT Standards Document (adopted January 21, 2005), the AVVPAT record “shall be clearly identifiable in the case of a provisional ballot.” Thus, for each DRE, any of its AVVPAT records that correspond to provisional ballots must be clearly marked as such, as will the corresponding electronic ballot images. Even though the provisional ballot identification number is not printed on the AVVPAT, it is contained in the corresponding electronic ballot image for that provisional ballot. Since there already exist clearly-defined procedures by which AVVPATs can be matched against the corresponding electronic ballot images, it is thus possible to identify which provisional AVVPAT records should be included in the final AVVPAT tally (and which should not) without compromising the secrecy of those provisional ballots. Details regarding those procedures can be provided on request but are too lengthy for inclusion in this letter.

3. The AVVPAT is printed in the language selected by the voter when casting his or her ballot. Translation of the AVVPAT for the purpose of performing the 1% manual tally will be difficult and time consuming.

Ballots printed in languages other than English are already used in non-DRE (i.e., paper-based) voting systems throughout California and have been for years. Jurisdictions using such systems have managed to comply with the 1% manual tally despite the complications posed by counting such ballots. While such tallies may be difficult and time consuming, if jurisdictions using non-DRE voting systems are able to comply with this requirement, why should not the same be expected of jurisdictions using DRE voting systems with AVVPAT printers?

4. The AVVPAT printers will undoubtedly have mechanical problems (jamming, illegible print, etc.) at some point, compromising the ability to perform either a 1% manual tally or a full recount.

Later on in their letter the CACEO notes that voters have the opportunity to verify the AVVPAT; if the AVVPAT jams or the print is illegible, the voter has the opportunity to spoil that AVVPAT and to try again once the printer problem has been corrected. Such spoiled AVVPATs are not counted, and thus don’t skew the AVVPAT tally.

Furthermore, in the case of an illegible AVVPAT that a voter fails to notice or report, in a properly-designed AVVPAT system (i.e., one which scans the printed content of the AVVPAT so that it can be read back via the audio interface to a voter who has a visual or reading disability), the system should be able to check itself and detect if the AVVPAT is spoiled, and to not allow the voter to cast the ballot until the problem is corrected.

Finally, during tests of the Diebold AccuVote-TSx system that were conducted by the staff of the Secretary of State’s office this summer, a significant number of printer jams did in fact occur, and that was part of the reason why California state certification for that system was denied. However, despite these printer jams, published reports indicate that no electronic ballot images and no AVVPAT records were irretrievably damaged as a result of those printer jams. Thus, even in a system with such a high rate of printer jams that it was denied

certification, if there were no other types of malfunctions, then the electronic tallies and the tallies of the AVVPAT records (even from those printers that jammed) should match.

5. The AVVPAT units have not yet been tested in an actual election in California. Without this real time experience, no one yet knows what the issues will be, and therefore attempting to address the issues in advance is unwise.

VVPAT units have been tested in two statewide elections in Nevada (including the Nov. 2004 election), and based on the operational experience from that State, the issues are reasonably well known. Nevada also has a manual audit requirement, and was able to successfully use the VVPAT records from its DREs to satisfy its audit requirement.

After asserting the five reasons listed above, the CACEO letter goes on to assert:

The 1% manual tally was specifically designed to verify the accuracy of electronic ballot counting. This form of verification could be easily applied to early electronic ballot counting and has been reliable in determining the accuracy of the tabulation of the votes. However, the procedure applied to previous technology is neither easy nor accurate when applied to verification of DRE ballot tabulation using the AVVPAT.

Their assertion that the 1% manual tally is not as easy to apply to DREs as it is to apply to non-DRE voting technologies is probably true, but just because a manual audit procedure is not as easy as it used to be is not in itself an excuse for not doing it. The CACEO further asserts that the 1% manual tally will also not be accurate “when applied to verification of DRE ballot tabulation using the AVVPAT”, but that assertion is based on the five points in their letter, which we have already refuted. Absent additional arguments, the CACEO has thus failed to conclusively demonstrate that the 1% manual tally cannot be conducted in a manner that is equally accurate when applied to DRE-VVPAT systems as it is when applied to non-DRE systems.

The CACEO letter next tries to make several points that are completely bogus, when it asserts (boldface emphasis added):

*The AVVPAT is a form of verification that is useful only when the voter is present. If the AVVPAT does not match how the voter voted using the DRE, the voter has the opportunity to reject the ballot and begin anew. If it is discovered that the DRE is faulty, the DRE can be removed from service. **Using the AVVPAT for this purpose, the purpose for which it was created, is a logical method of verifying the accuracy of the electronic equipment.***

The AVVPAT was most certainly NOT created for the purpose the CACEO describes, but rather to guard against the possibility that what the DRE displays to the voter on the summary screen might not match what the DRE records as the electronic ballot image. From its conception, the VVPAT was intended for use as an auditing mechanism, which is why it is referred to as a voter-verified paper AUDIT TRAIL. For example, see the “Resolution on Electronic Voting” that has been posted on the VerifiedVoting.org website since 2003 (<http://www.verifiedvotingfoundation.org/article.php?id=5028>). Anyone who has followed the evolution of California’s AVVPAT requirement knows that that is the case, and for the CACEO to assert otherwise is completely ludicrous and disingenuous.

The CACEO letter continues:

Using the AVVPAT to perform a 1% manual tally or full recount is neither practical nor accurate for the reasons outlined above. **Printing the internal audit trail for these purposes does nothing to verify the accuracy of the electronically captured vote, because the possibility exists that the internal audit trail and AVVPAT could be programmed to print different results. Therefore, a new method of random verification must be applied.**

As the CACEO finally admits, **printing the “internal audit trail for these purposes [the 1% manual audit] does nothing to verify the accuracy of the electronically captured vote.”** It is precisely that problem that the AVVPAT was designed to solve and that is its intended purpose.

As to their assertion that the it is neither practical nor accurate to use the AVVPAT to perform the 1% manual audit “for the reasons outlined above”, those five reasons have already been refuted in the earlier part of this rebuttal.

The CACEO then goes on to suggest that Parallel Monitoring provides an effective substitute to the 1% manual audit:

*The Parallel Monitoring Program implemented by the Secretary of State provided a method of randomly verifying the accuracy of voting equipment in DRE counties. This program was implemented using no county staff, and verified that the DREs performed with 100% accuracy. Continuing and perhaps even expanding **this program for DRE counties, in lieu of performing the 1% manual tally, would provide a higher level of accuracy verification than would be possible by attempting to verify the results by comparing the votes on the AVVPAT.***

The CACEO provides no factual basis whatsoever for this conclusion. While the Parallel Monitoring Program is certainly a more rigorous form of testing than the traditional “Logic and Accuracy” tests, the parallel monitoring that has been done to date has involved only a tiny number of machines per county, and in large counties, provides tremendously less statistical sampling than the existing 1% manual audit. For example, in a large county like San Diego, which purchased approximately 10,000 DRE voting machines, if 1% of those machines were used for parallel monitoring, about 100 machine would need to be monitored rather than the handful that have typically been tested in each county.

Furthermore, while Parallel Monitoring will detect a wider range of voting system malfunctions than can be detected via Logic and Accuracy tests, it will not detect various types of malfunctions or tampering, and thus it is not an adequate substitute for the 1% manual audit. This point is made very clearly in the first report on the Parallel Monitoring Program that was issued by the Secretary of State’s Office, see http://www.ss.ca.gov/elections/ks_dre_papers/Parallel_Monitoring_Summary_Report.pdf, which states in the Executive Summary on page 4:

“The March Parallel Monitoring Program was developed as a supplement to the current accuracy testing processes. The goal was to determine the presence of malicious code by testing the accuracy of the machines to record, tabulate, and report votes using a sample of DRE equipment in selected counties under actual voting conditions on Election Day.

Notwithstanding this additional level of testing, there are forms of malicious code that could affect the accuracy of a voting system that would not be detected by federal, state, local or parallel testing. Other detection methods, such as the Accessible Voter Verified Paper Audit Trail (AVVPAT), are necessary to expose these types of election tampering.”

Thus, by suggesting that the Parallel Monitoring Program, by itself, is an adequate substitute for the 1% manual audit, the CACEO is effectively ignoring the very clear warning given in this report and is relying on parallel monitoring to accomplish more than it can reasonably be expected to do.

Furthermore, the CACEO fails to point out that while Parallel Monitoring may be able to detect certain types of malfunctions or tampering, by itself, it fails to provide an effective remedy if a problem is detected. If parallel monitoring does detect a serious problem, then what? Are the AVVPAT records from all of the machines of that type recounted? There are currently no clearly defined procedures as to what happens in such a situation.

In addition, the mechanism that the CACEO proposes (using the 1% mandatory audit procedure in non-DRE counties and replacing it with parallel monitoring in DRE counties) raises potential legal challenges on equal protection grounds of the sort raised in *Bush v. Gore* (2000). While voters in non-DRE counties would have the legal protections afforded by the 1% manual audit and recounts of tangible, voter-verified paper records (i.e., paper ballots), voters in DRE counties would have no comparable protections.

For all these reasons, parallel monitoring does not constitute an adequate substitute for the protections afforded by the 1% manual audit. Even the CACEO admits that for the last 40 years, that 1% manual audit “has been reliable in determining the accuracy of the tabulation of the votes.”

The CACEO letter concludes with a paragraph raising concerns about a possible discrepancy in the language of S.B. 370:

Senator Bowen’s SB 370 becomes somewhat confusing in regard to a full recount of the votes. E.C. Section 15627 is proposed to be amended to state that “either the paper record copies or the voter verified paper audit trail of the electronically recorded vote are counted manually, as selected by the voter who requests the recount.” This clearly sets out a differentiation between the paper record copies and the voter verified paper audit trail. However, in the proposed amendments to E.C. 19253, the bill strikes “paper record copy” and inserts “voter verified paper audit trail” as the paper audit record used for both the 1% manual tally and a full recount. We have stated our issues with performing both the 1% manual tally and a recount using the AVVPAT, but this discrepancy within the bill would further complicate matters.

While the CACEO believes there is a discrepancy in the language of S.B. 370, that is not the case. The first E.C. section they reference (§15627) deals specifically with a recount that is initiated at the behest of a “voter who files the declaration requesting the recount”. That voter is given the choice of a machine or manual recount. In the case of a jurisdiction using DRE voting systems, that voter is given the additional choice of conducting the manual recount using the (non-voter-verified) paper record copies of the electronic ballot images, or

the voter verified paper audit trail.

The second referenced section (19253) deals primarily with the 1% manual audit, and makes it explicit that the voter-verified paper audit trail must be used to conduct that audit. This section also makes reference to “any full recount”, but does so in the context of the 1% manual audit. A reasonable interpretation is that the “full recount” being described in this section is “any full recount” that is triggered by a serious discrepancy detected by the 1% manual audit. That is a distinctly different type of recount than the one described in section 15627, which is initiated by a voter rather than triggered by an audit.

Thus, these are two different types of recounts and hence there is no discrepancy.

Accordingly, it is the conclusion of VerifiedVoting.org that the CACEO’s arguments for vetoing S.B. 370 are either incorrect or unsubstantiated, and provide no logical basis for such a veto. Given that this bill was passed unanimously in the State Senate and with the support of more than 70% of the members of the Assembly, it should not be vetoed absent an extremely compelling case.

Since the CACEO has clearly failed to make that case, and because S.B. 370 provides essential safeguards for California’s elections, S.B. 370 should be signed into law.

Attachments:

- (1) Photo of sample AVVPAT printout from Sequoia VeriVote printer
- (2) Photo of sample AVVPAT printout from Hart eSlate AVVPAT printer



Please review your paper ballot.

Precinct Name: Precinct 1002
Party: Non-Partisan
Ballot Verification Page 1 of 2
USO ID: 65761815-1

Contest	Selection
U.S. President	Wendy Mills
U.S. Senator	Carl Carlson
2nd Congressional Dist: US Rep	Patricia Patterson
3th Congressional Dist: US Rep	Hollis Harkins
CU Regent At Large	Tom Travis
State Board of Education	Howard Henderson
State Board of Education	Yolanda Young
State Senate - District 4	Chuck Carrigan
State Senate - District 8	Lisa Love
State Senate - District 12	Keith King
State Rep - District 4	Donner Decker
State Rep - District 8	Charlie Cadman
State Rep - District 12	Chris Crane
State Treasurer	Frances Feeney
State Attorney General	ME
District Attorney - District 2	Randy Rose
District Attorney - District 3	Clark Carroll