

**SUBMITTAL TO THE BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

426



FROM: Registrar of Voters

SUBMITTAL DATE:
August 7, 2006

SUBJECT: June 6, 2006 Election Recap Follow-up Information

RECOMMENDED MOTION: That the Board of Supervisors receive and file the attached responses to information requested on July 11, 2006 related to the conduct of the June 6, 2006 Direct Consolidated Primary Election.

BACKGROUND: On July 11, 2006, the Registrar of Voters presented a recap of the June 6, 2006 Direct Consolidated Primary Election to your Honorable Board. The Board also heard public comment from ten Democracy for America – Temecula Valley (DFA-TV) members (and received a report authored by five members) regarding their observations while participating in the group's "Save R Vote" project. The Save R Vote project reports to have trained 50-70 volunteers and monitored 8 polling places on Election Day.

The Board of Supervisors received and filed the Election Recap and directed the Registrar of Voters to report back in 30 days. The attached report provides additional information and responses to questions raised by the Board during the July 11 presentation(s) and point-by-point responses to the findings contained in Save R Vote's report.

Barbara Dunmore

Barbara Dunmore
Registrar of Voters

FINANCIAL DATA	Current F.Y. Total Cost:	\$ N/A	In Current Year Budget:	N/A
	Current F.Y. Net County Cost:	\$ N/A	Budget Adjustment:	N/A
	Annual Net County Cost:	\$ N/A	For Fiscal Year:	N/A

SOURCE OF FUNDS:	Positions To Be Deleted Per A-30	<input type="checkbox"/>
	Requires 4/5 Vote	<input type="checkbox"/>

C.E.O. RECOMMENDATION: **APPROVE**

County Executive Office Signature

James D. ...

- Dep't Recomm.: Consent Policy
- Per Exec. Ofc.: Consent Policy

OVERVIEW

The Board of Supervisors received and filed the Registrar of Voters June 6, 2006 Direct Consolidated Primary Election Recap on July 11, 2006. The Board directed the Registrar to report back with additional information regarding specific aspects of the election. The Board also heard from Democracy for America – Temecula Valley (DFA-TV) "Save R Vote" project. The Save R Vote project coordinator made an oral presentation and submitted a report authored by five DFA-TV members.

Despite Save R Vote's reported displeasure with the conduct of the election and the unsubstantiated allegations leveled at the process, **the recordation accuracy of the voting units and the accuracy of the election results tallied by the voting system remain unchallenged.**

The attached report reiterates much of the information that has previously been presented to the Board with the exception of long-term savings using DREs. A coarse analysis projects that **over \$21 million dollars will be saved in printing costs** over the 20-year life of DRE units.

Regarding security, the recently released Brennan Center Task Force on Voting System Integrity Report titled "The Machinery of Democracy: Protecting Elections in an Electronic World," recommends six steps that jurisdictions can take to make their voting systems significantly more secure. **Riverside County performs all six steps in the conduct of elections recommended by the Brennan Center to significantly enhance security of voting systems** (see Attachment 1). The Brennan Report does not discuss or prescribe independent audits "as a safeguard against corruption" as reported by Save R Vote. The point-by-point responses to Save R Vote's findings reveal the unsubstantiated nature of allegations presented by the group. Moreover, responses to complaints filed with the Secretary of State validate the Registrar's procedures.

The attached report is divided into two sections: Additional Information Requested by the Board; and Point-by-Point Responses to the Findings in the Save R Vote Report.

ADDITIONAL INFORMATION REQUESTED

Long-term Saving Projections

Barring any further legislative changes requiring expensive modifications, the newly-purchased Edge II units can serve the County indefinitely assuming repair and replacement parts are available. The County can reasonably expect a 20 year service life from the Edge II units.

Using the past five years (2000-2005) as a comparison, the County can expect to conduct 136 elections, 36 of which will be countywide, over the next 20 years. Table 1 shows the amortized cost over 20 years and based on the June 1998 State Primary election, a projected savings of \$589,050 per countywide election—projecting savings of over \$21 million dollars over 20 years.

Table 1: 20-Year Amortized Cost Projection on Edge II Voting Units and Saving in Paper Ballot Printing Costs

Time Frame	Elections	Total	20 year Projection
2000-2005	All	34	136
	Countywide	9	36
	\$13 million Purchase Amortized (per)	20 Year Amortization	20 Year Amortization County Cost (less HAVA)
2006-2026	Year	\$650,000	\$377,500
	Election	\$95,588	\$55,515
	Countywide	\$361,111	\$209,722
	Elections	Paper Ballot Cost	Projected Savings*
June 1998 (All Paper Ballots)	State Primary	\$935,000	
2006-2026 (Absentee Only)	Countywide	\$12,454,200	\$21,205,800

*Assumes 37% absentee

Precinct Posting of Results

The Registrar is continuing to explore options for complying with existing precinct posting requirements without the loss of schools and residences as polling places. Recent discussions with the Secretary of State's staff have revealed that without modifications to current Adopted Use Procedures compliance may be procedurally impossible.

California Voting System Use Procedures for the AVC Edge DRE state that the seal protecting the paper inside the printer shall not be broken by the poll worker. This contradicts Elections Code §19384 that requires the precinct board to post outside a copy of the votes cast at the polling place before adjourning. The

Registrar has been appointed to an unofficial committee to develop alternate procedures for consideration by the State.

The Registrar of Voters will keep the Board apprized of progress toward meeting the posting requirement for the General Election.

Duplication of Paper Ballots onto DREs

Attachment 2 is a letter from the Secretary of State in response to a complaint regarding the duplication of paper ballots onto DREs. As stated, the Elections Code provides for duplication of ballots and no provision of law prohibits duplication onto a DRE. The procedures that the Registrar used were found consistent with the Elections Code.

Video Technology to Enhance Observation

The Registrar will work with appropriate County departments (e.g., IT, CISO, Purchasing, Public Information, etc.) to enhance observation of the elections process through video technology. Live streaming video over the internet will also be considered.

The Registrar of Voters will report back to the Board with a video technology plan to enhance observation of election processes and budget adjustments, if necessary.

Retrofit of Edge I Units Time-Prohibitive for June Primary

The County owned the earliest Edge I voting units manufactured by Sequoia Voting Systems. Those units required substantial upgrades to meet the 2002 Voting System Standards (estimated at 40-60 minutes per unit). Manufacturing of the parts was quoted at 16 weeks—too late in the election process to accomplish the upgrade in time for the June election.

The use of VeriVote (the voter verified paper audit trail) was not certified for use with the Edge I units until March 2006. The retrofit of Edge I units to accommodate the VeriVote was estimated to take 10-20 minutes per unit. However, other Edge I counties that did perform the retrofit report that it took between 45 and 90 minutes per unit to accomplish.

Table 2: Actual Time Requirements for Retrofitting Edge I units to Accommodate a VeriVote

County	Number Units	Minutes required (per unit)
Napa	350	60
Tehama	150	60-90
Shasta	438	45

Are Absentee Ballots Increasing?

A *Field Poll* conducted in November 2005 showed a steady increase in absentee voting in California over the past 30 years. Absentee voting was first opened up to any voter in the late 1970's when the law did away with requirements that voters have a declared physical handicap or show they were going to be out of state on Election Day. Another change in 2002 permits voters to fill out a form to permanently receive an absentee ballot for every election (i.e., permanent absentee voter). Absentee voting has become more appealing to voters to cope with the growing length and complexity of ballots, it extends the "voting window" from a 13-hour period on Election Day to a 3-4 week period, and Election Day inconveniences such as bad weather and long lines can be avoided. In addition, voting by absentee ballot is encouraged by the state's political parties.

Absentee Ballot Deadline Reminder

Absentee ballot envelopes and Sample Ballot Information Pamphlets have been modified to remind voters that absentee ballots must be received by the Registrar of Voters no later than the close of polls (8 p.m.) on Election Day to be counted. Postmarks are not accepted.

Notice of Paper Ballot Availability

Signs have been designed and are currently in production to post at every polling site informing voters of the availability of paper ballots.

Poll Worker Selection

The Registrar uses established procedures for selecting poll workers. Poll workers are required to be a registered voter of the state (unless they are participating in the student poll worker program) and read and write English. Poll workers with satisfactory performance in past elections are given priority, followed by volunteers believed dependable, good communication with election staff (e.g., return phone calls), ability to attend training, and motivation for wanting to serve at the polls.

There are instances when interests present a potential conflict. For example, poll watchers are typically volunteers of a group or political party stationed at polling places to observe Election Day procedures. Conversations between watchers and voters are not permitted in the polling place and watchers are not allowed to sit at the sign in table. Any notes by poll workers are recorded in the comment section of the precinct roster to be reviewed by election staff. A volunteer cannot be both a poll watcher and poll worker, concurrently.

Chain of Custody

During every election the Registrar of Voters keeps a perpetual chain of custody record for all the memory cartridges used with the voting system. The chain of

custody record is documented by a compilation of data from the voting system and paper receipts.

Upon concluding the semi-final tally of results of the Primary Election at 12:30 a.m. (June 7), the Registrar issued a list of 17 cartridges that were not immediately present for tallying and the assigned precincts of the cartridges to observers present. A review of the custody records later that morning revealed five of the cartridges were in-house and the twelve remaining cartridges were determined to be residing in their respective voting units. Voting system data revealed that eight of the units were placed in the "poll closed" mode (disabling any further voting on the unit) by 8:10 p.m. on Election Night. The remaining four units had not been used and the "polls open" mode was never activated.

The Registrar is currently in negotiations to acquire a bar coding system to automate the chain of custody and ultimately eliminate dependency on paper receipts.

Certified Equipment

Edge II with VeriVote

The Sequoia AVC Edge II with VeriVote was certified for use in California elections on January 21, 2005 and was the only DRE voting unit with a voter verified paper audit trail (VVPAT) certified for use in California (see Attachment 3) when your Board authorized a Letter of Intent (1/1/06, A.I. 3.43) and subsequent approval of an Agreement to purchase the Edge II units (2/7/06, A.I. 3.36). Seven (7) California counties (Mono, Inyo, Imperial, San Bernardino, Kings, Mariposa, and Monterey) had used the Edge II with VeriVote for the Special Statewide Election on November 8, 2005. The use of Edge II units with certified firmware to report crossover voting by independent voters in primaries was approved March 20, 2006.

Mark-A-Vote Optical Scan Ballot/Card Readers

The County's DFM Mark-A-Vote optical scanners are currently certified for use in California (see Attachment 3), but are not federally qualified. This is a result of the system being developed and certified before the federal qualification of voting systems existed. Such systems are referred to as "grandfathered" voting systems. Five counties (Lake, Madera, Riverside, Santa Cruz, and Sonoma) used DFM Mark-A-Vote in the June Primary.

As presented in the FY 2006-07 Proposed Budget, the Registrar will seek the Board's approval after the November General Election to release a request for proposals (RFP) to replace the Mark-A-Vote system.

POINT-BY-POINT RESPONSES TO SAVE R VOTE FINDINGS

I. LEGAL AND REGULATORY COMPLIANCE

A. Precinct Posting of Results Not Accomplished During Primary Election

(Save R Vote Report: Refusal to Post Precinct Results Required by State Law)

In response to a request for a waiver from Elections Code §19384 the Assistant Secretary of State for Elections replied that the Secretary does not have the authority to waive state law. However, it is recognized that the "...statute is antiquated, as it refers to old lever technology that is no longer in use in California and ...may be procedurally impossible for many modern voting systems." The Registrar was encouraged to, and did, involve all interested parties in designing a mutually agreeable solution that served the intent of the law for the June 6, 2006 election.

The Agreement with interested parties provided for summary results from every precinct and voting unit to be posted on the ROV website at the conclusion of processing results cartridges on Election Night. In addition, the Election Observer Panel was provided the summary results directly from memory of 55 voting units in their presence to assist in their analysis of election data.

In recent discussions with Secretary of State staff members, it appears that contradictions in State law and Adopted Use Procedures make precinct posting procedurally impossible. State of California Voting System Use Procedures for the AVC Edge DRE state that the seal protecting the paper inside the printer shall not be broken by the poll worker. The Registrar has been appointed to an unofficial committee to develop alternate procedures for consideration by the State.

B. NASED Addendum Requirements Met

(Save R Vote Report: Violation of Two Federal Requirements Re Security, Chain of Custody, and Printing of Results)

Chain of Custody Record Maintained

During every election the Registrar of Voters keeps a perpetual chain of custody record for all the memory cartridges used with the voting system. The chain of custody record is documented by a compilation of data from the voting system and paper receipts.

During the June 6 Election, 17 cartridges were not immediately present for the final tally at 12:30 a.m. However, a review of the custody records later that morning revealed five of the cartridges were in-house and the twelve remaining cartridges were determined to be residing in their respective voting

units. Voting system data revealed that eight of the units were placed in the "poll closed" mode (disabling any further voting on the unit) by 8:10 p.m. on Election Night. The remaining four units had not been used and the "polls open" mode was never activated.

The Registrar is currently in negotiations to acquire a bar coding system to automate the chain of custody and ultimately eliminate dependency on paper receipts.

Printing of Results Report Not Required

The NASED addendum requiring the printing of a results report prior to removal of the memory card is specific to optical scanners. Riverside County uses DREs at polling places.

C. Help America Vote Act (HAVA) Requirements

(Save R Vote Report: Potential Violation of HAVA Law Regarding Competitive Bids)

First Generation of Edge I Units Require Substantial Modification

As the first in the nation to deploy DRE voting technology countywide, Riverside County owned the earliest Edge I units manufactured by Sequoia. Riverside's Edge I units would require substantial modification to meet the 2002 Voting System Standards (40-60 minutes per unit) in addition to retrofitting the units to accommodate the VeriVote (10-20 minutes per unit). Counties with later model Edge I units report that the 2002 upgrades took less than 20 minutes complete (see Table 1).

Table 1: Time Requirements for Upgrading Edge I units to
2002 Voting System Standards

County	Number Units	Minutes required (per unit)
Mono	30	12.5
Tehama	150	18
Napa	350	20
Shasta	438	10-15
Riverside	4,250	40-60*

*estimate

Voting System Components Upgraded

A sole source procurement for 3,700 Sequoia AVC Edge II voting units with VeriVote was approved by the County's Purchasing Agent. The purchase allowed the County to upgrade components (i.e., voting units) of its voting system as provided for in HAVA. Any other voting units would not have been compatible with the existing voting system.

Edge II with VeriVote State Certified

The Sequoia AVC Edge II with VeriVote was certified for use in California elections on January 21, 2005 and was the only DRE voting unit with a voter verified paper audit trail (VVPAT) certified for use in California (see Attachment 3) when your Board authorized a Letter of Intent (1/1/06, A.I. 3.43) and subsequent approval of an Agreement to purchase the Edge II units (2/7/06, A.I. 3.36). Seven (7) California counties (Mono, Inyo, Imperial, San Bernardino, Kings, Mariposa, and Monterey) had used the Edge II with VeriVote for the Special Statewide Election on November 8, 2005. The use of Edge II units with certified firmware to report crossover voting by independent voters in primaries was approved March 20, 2006.

D. County Voting System is Federally Qualified and State Certified

(Save R Vote Report: Question of Loss of Federal Qualification and State Certification Due to Above Acts)

The Sequoia voting system in Riverside County is federally qualified and state certified and is not at risk for losing either. The County did not violate any of the NASED addendum requirements or the requirements of the Help America Vote Act (HAVA). The Secretary of State is aware of the County's non-compliance with precinct posting of results. In accordance with the Secretary's suggestion, interested parties designed a mutually agreeable solution that served the intent of the law for the June 6, 2006 election.

E. Handling of Paper Ballots Respected

(Save R Vote Report: Privacy of Vote Violations)

Privacy of Paper Ballots Respected

Paper ballots cast at the polls were treated with the same respect and privacy afforded to absentee ballots. Voter identification on the outer envelope was required to assist with the roster audit that reconciles the number of voter signatures on the roster with votes cast at each precinct. The paper ballots were not unfolded until the outer envelopes were removed from public view.

Secrecy sleeves on absentee or paper envelopes are not required by law. Riverside County continues to provide a secrecy sleeve with absentee envelopes for the sole purpose of holding the pencil in place during the mailing process. Without a secrecy sleeve the pencil moves around and has a tendency to make random marks on the ballot. About 25% of absentee ballots are returned without secrecy sleeves. It is advantageous to the Registrar to have the secrecy sleeves returned so they can be reused in other elections.

Duplication of Ballots Permitted by Elections Code

The Secretary of State responded to complaints by two county voters (Marcia Amino and Art Cassel) that the California Elections Code provides for

duplication of ballots in certain circumstances and no other provision of law prohibits this practice. The procedures used by the Registrar were found consistent with the Elections Code (see Attachment 1).

II. SECURITY AND EQUIPMENT

A. Chain of Custody Maintained

(Save R Vote Report: Chain of Custody)

Please see I.B. above "Chain of Custody Maintained".

B. Remote Transmission of Election Data Permitted

(Save R Vote Report: Transmission of election data over Internet/Intranet (CORONET))

On Election Night, Riverside County transmits encrypted vote data (not official results) over the County's protected wide area network (CORNET) from the Indio Remote Transmission Site to the central tally server in Riverside. Neither Federal nor State law prohibit such transmissions, including Elections Code §19250(g) that states "A direct recording electronic voting system shall not be permitted to receive or transmit official election results through an exterior communication network, including the public telephone system."

C. Custody of Results Cartridges/VeriVotes Maintained At Collection Sites

(Save R Vote Report: Loss of Control of Printer Tapes and Memory Cards at collection site)

Sixty-nine (69) precincts were assigned to return their results cartridges, VeriVotes, and other election materials to the Sam's Club Parking Lot in Murrieta. Every precinct was issued a receipt and all results cartridges from the assigned precincts were turned in and tallied on Election Night. This is evidenced by the absence of any of the precincts listed among the 17 cartridges processed post-Election Night. In addition, all VeriVotes were returned with the paper audit trail inside and seals intact.

The Murrieta collection site receives the second-highest number of precinct returns (Sam's Club Riverside receives 93 precincts). Permanent staff assigned to the site lacked the necessary leadership skills to effectively manage the operation. A review of all collection site personnel will be undertaken and revised, where needed, to ensure the sites operate smoothly.

D. Mark-A-Vote Optical Scan Ballot/Card Readers are Certified

(Save R Vote Report: Scanning Equipment is NOT Federally Qualified)

The County's DFM Mark-A-Vote optical scanners are currently certified for use in California (see Attachment 3), but are not federally qualified. This is a result of the system being developed and certified before the federal qualification of voting systems existed. Such systems are referred to as

“grandfathered” voting systems. Five counties (Lake, Madera, Riverside, Santa Cruz, and Sonoma) used DFM Mark-A-Vote in the June Primary.

It is interesting to note that the authors of the Save R Vote report refer to the DFM Scanners as “slow” and admonishes the County for not replacing them, while contradicting earlier statements that the County should not be concerned with a “need for speed.”

As presented in the FY 2006-07 Proposed Budget, the Registrar will seek the Board’s approval after the November General Election to release a request for proposals (RFP) to replace the Mark-A-Vote system.

III. AUDITS AND TRANSPARENCY

A. Voting System Audits Performed

(Save R Vote Report: No audits of election system since inception of electronic voting)

Outside Audits

Riverside County participated in the State’s Parallel Monitoring Program during the November 2004 and November 2005 elections. Members of the Secretary of State Elections Division staff, along with independent consultants from the consulting firm of R&G Associates, LLC (R&G), randomly selected DRE voting equipment (after it was programmed) to be set aside for use by experts voting on Election Day. Actual voting conditions were then simulated on Election Day to determine the accuracy of the machines to record, tabulate, and report votes. Reports on the outcome Parallel Monitoring are posted on the Secretary of State’s website for each county. In both instances, the County’s voting system performed with 100% accuracy.

Lacking legislative support (funding), parallel monitoring was not conducted during the June 6, 2006 Primary Election. Instead, the State sent Election Day observers to observe the opening and closing of polls and monitor procedures at polling sites throughout the day. A report on Election Day monitoring has not yet been released by the Secretary’s Office.

In addition, the Elections Code requires periodic review of voting systems by the State to determine that they record and tabulate votes accurately. The Secretary may withdraw approval of all or part of a voting system if it is determined defective, obsolete, or otherwise unacceptable.

Internal Audits

Logic and Accuracy Testing - Every voting unit used in a Riverside County election is subjected to, and must successfully pass, logic and accuracy (L&A) testing prior to deployment to a polling site. L & A testing ensures the voting unit is recording, tabulating, and reporting the votes correctly.

Public L & A tests are conducted on early voting units prior to the placement of the units in the Registrar's lobby for use during the absentee voting period. L & A tests on early voting units cast votes in every contest and for every candidate in English and Spanish. Public observers participate by filling out facsimile paper ballots that are manually entered into the units and a subset which is entered using the audio unit.

One-percent Manual Tally – Elections Code § 15360 requires a public manual tally of ballots cast in one percent of the precincts (chosen at random) for every election. If the randomly chosen precincts do not cover all contests included in the election, additional precincts are chosen until all contests are included in the tally.

Roster Audit (Reconciliation) – After every election, a publicly-viewable reconciliation of the number of signatures on the roster with the number of ballots received from the polling place is performed.

B. Full Transparency

(Save R Vote Report: Meaningful Access denied to Election Observer Panel (EOP))

Election Observer Panel (EOP)

In accordance with Secretary of State's conditions for the approval of the use of DRE and optical scan voting systems, the Registrar files with the Secretary a copy of its Election Observer Panel Plan and additionally posts a copy on the ROV website. The Plan, which is modeled on the Secretary of State's template, provides for the Registrar to invite the Grand Jury, Central Party Committee Members, and the Media no later than 30 days prior to an election to serve on the EOP.

The role of the EOP is to observe that adopted procedures provided to the EOP along with an overview of the processes are followed. Observers are permitted access to designated observation areas that are sufficiently close to enable them to observe and challenge whether individuals are following procedures. The EOP cannot assist in operations, touch or handle ballots or other election-related materials. In addition, the number of observers may be limited so as not to interfere with the process.

All election processes were observable and transparent. They may not have been conducive to videotaping (which in some instances is prohibited by law) or able to accommodate tripods or long extension cords when camera batteries failed, but they were completely observable and transparent.

IV. FISCAL

A. Edge II Upgrade Ensured Election Readiness

(Save R Vote Report: Costly delays)

Use of the VeriVote with Edge I units was not certified until March 20, 2006. As discussed in I. C. above, the County could not accomplish the upgrade to the 2002 VSS and retrofit of the Edge I units in time to conduct the June 6, 2006 election.

Smaller Edge I counties with later model Edge I units were able to retrofit their units in time for the June 6, 2006 Election. Sequoia estimated retrofitting each unit would take between 10-20 minutes per unit. Table 2 presents the actual time reported by some Edge I counties to perform the retrofit.

Table 2: Actual Time Requirements for Retrofitting Edge I units to Accommodate a VeriVote

County	Number Units	Minutes required (per unit)
Napa	350	60
Tehama	150	60-90
Shasta	438	45

As depicted, actual experience far exceeded the estimate provided. Smaller counties were able to accomplish the retrofit based on the limited number of Edge I units required to conduct elections in those counties.

B. Edge II with VeriVote State Certified when Purchased

(Save R Vote Report: Purchase of uncertified equipment may be very costly)

Please see II.C. above "Edge II with VeriVote State Certified."

C. Electronic Voting--Beyond Monetary Savings

(Save R Vote Report: Over \$5 Million per year to save \$600,000)

Savings and the Environment

The use of electronic voting equipment saves hundreds of thousands of dollars each election by reducing the purchase of paper ballots. Paper ballot orders are based on predicted voter turnout months before the election. Typically, an additional 20-25% of paper ballots must be ordered to ensure sufficient paper ballots at each polling place if voter turnout predictions are wrong or a hotly-contested contest or measure draws more voters to the polls. Ballots that are not used must be stored in for the statutorily required time (6 months for local and state contests and 22 months for federal contests) and then destroyed by a certified destruction company. Purchasing fewer paper ballots contributes to the environment by preserving trees and omitting the waste from landfills.

More Votes Are Counted on DREs

DRE voting units:

- ✓ Do not permit voters to make more selections than are permitted in a contest or overvote (which effectively negates the vote);
- ✓ Notifies the voter of contests where no selection has been made (or undervote) and provides the opportunity for correction by the voter, if desired, before casting the ballot;
- ✓ Provides a summary screen for review screen by the voter to detect any errors in selections and the opportunity for correction before casting the ballot.

Independent Voting

The implementation of electronic voting offers blind and disabled voters the same confidentiality when casting their ballots that other voters enjoy. The touch screen, audio unit, and sip-and-puff device have allowed some voters to cast their ballot independently for the very first time.

Proprietary Software

The Sequoia voting system, not unlike all other electronic voting systems, runs on proprietary software. But so do optical scan paper ballot printers—in Riverside County's case a system that has been used in elections for over 20 years. As demonstrated in parallel monitoring discussed above in III.A. "Outside Audits," the County's voting system has proved 100% accurate in recording, tabulating, and reporting votes cast.

The Brennan Report lends credibility to the use of proprietary software by stating:

Just because there are opportunities to insert a software attack program does not mean that an attacker would have the knowledge to create a program that works. It is not difficult to understand how hackers could gain enough knowledge to create attack programs that can infiltrate common operating systems on personal computers: the operating systems of personal computers are publicly available commercial products. A hacker could buy these products and spend months or years learning about them before creating an effective attack program...voting systems... are not systems that general members of the public can buy.

Physical security measures keep voting units out of the hands of potential hackers.

**SECURITY RECOMMENDATIONS OF
THE BRENNAN CENTER TASK FORCE**

- ✓ **Automatic Routine Audit Using Paper Audit Trail Follow Every Election**
The Registrar performs a random audit on at least one-percent of all precincts used in an election. Since the implementation of the VeriVote, the County has used the paper audit trail to conduct the routine audits.
- ✓ **Parallel Testing of Randomly Selected Voting Units on Election Day**
The County participated in Parallel Testing (or Monitoring) conducted by the Secretary of State during the November 2004 and November 2005 elections.
- ✓ **Ban the Use of Voting Units with Wireless Components**
California Elections Code §19250(h) prohibits an electronic voting system from receiving or transmitting wireless communications or data transfer.
- ✓ **Transparent, Random Selection Procedures for Routine Audit**
Random precinct selection is observable by the public.
- ✓ **Decentralized Programming and Voting System Administration**
California counties (and some cities) have selected and implemented voting systems from the State's certified list. The myriad of voting systems and configurations in the state make attacks against statewide elections more difficult.
- ✓ **Implement Clear Procedures for Addressing Evidence of Fraud**
The Registrar of Voters has in place clear procedures for addressing fraud that prohibit a voting unit from being used in an election if there is evidence of tampering. Moreover, attempts to vote more than once or manipulate voting equipment are turned over to the District Attorney.



BRUCE McPHERSON | SECRETARY OF STATE | STATE OF CALIFORNIA
EXECUTIVE OFFICE | 1500 11th Street, Sacramento, CA, 95814 tel 916.653.7244 fax 916.653.4620 www.ss.ca.gov

July 27, 2006

Marcia Amino

[REDACTED]
Moreno Valley, CA 92557

Dear Ms. Amino:

Thank you for your email dated July 12, 2006, which questions the County of Riverside for entering paper ballots onto a touch screen voting machine.

My office contacted Ms. Dunmore, the Riverside County Registrar of Voters, and Mr. Doug Kinzle directly, to discuss your concerns and to discuss their procedures.

Regarding your complaint, we acknowledge the sensitivity of county representatives keying vote choices from paper ballots onto a DRE voting machine, when the voter may have voted on paper ballots out of concern for the accuracy of the DRE device. California Elections Code sections 15208 through 15211 permit local election officials to duplicate a ballot in certain circumstances to ensure that the voter's intent is accurately recorded, and counted. No other provision of law prohibits that practice. Riverside County provided you with the procedures that they followed for this duplication and tabulation of paper ballots voted in the polling place on Election Day. These procedures are titled "Duplicating Facsimile Ballots," and another copy is attached for you. We find that these procedures are consistent with the Elections Code sections listed above. Riverside County staff reports that their purpose for transferring the paper ballots onto a DRE device was to create a paper audit trail for the vote tally, which is now required on all such devices, and that they took the additional measures of reviewing each ballot three times to verify that the information was accurately transferred.

Again, I thank you for voicing your concerns. Ensuring the security and reliability of our voting systems will always be one of my top priorities as Secretary of State. My staff and I, together with the dedicated elections staff of each county, will continue to explore measures and technologies that can make our election systems even more secure.

Sincerely,

A handwritten signature in cursive script, appearing to read "Bruce McPherson".

BRUCE McPHERSON
Secretary of State

cc: Barbara Dunmore, Riverside County Registrar of Voters



BRUCE McPHERSON | SECRETARY OF STATE | STATE OF CALIFORNIA
EXECUTIVE OFFICE | 1500 11th Street, Sacramento, CA, 95814 tel 916.653.7244 fax 916.653.4620 www.ss.ca.gov

August 8, 2006

Art Cassel
[REDACTED]

Dear Mr. Cassel:

Thank you for your email dated June 21, 2006, indicating you want to file a complaint on behalf of Riverside County voters, regarding their preference to vote on paper ballots.

My staff contacted the Riverside County Registrar of Voters office and found that you have not filed your complaint with them. We suggest that your complaint and concerns should be conveyed to your local Registrar of Voters office for review and response.

Although no provision of law requires a voter to be given access to any particular type of voting system, my office requests that all precincts using DRE's have on hand an adequate supply of paper ballots to accommodate voters who prefer to vote on paper, and for use in case of an emergency, such as a power failure. In speaking with Barbara Dunmore, the Riverside County Registrar, she assured us that every polling place had sufficient paper ballots available, and that no polling place reported an insufficient number. Additionally, I would like to clarify that absentee ballots are valid ballots, and can be used by voters to cast their votes, whether they are voting absentee or in person.

As for the information requested on the envelope, Ms. Dunmore assured my office that this information was used internally to assist in the canvass reconciliation of the rosters against the votes cast at the polls. The envelopes were separated from the actual ballots by election officials, to ensure privacy, before the ballot was counted. I view the privacy of voters as a fundamental right that deserves serious protection. My office was assured by Riverside County that this right was not compromised in this process.

Regarding the count of paper ballots, we acknowledge the sensitivity of county representatives keying vote choices from paper ballots onto a DRE voting machine, when the voter may have voted on a paper ballot out of concern for the accuracy of the DRE device. California Elections Code sections 15208 through 15211 permit local election officials to duplicate a ballot, in certain circumstances, to ensure that the voter's intent is accurately recorded and counted. No other provision of law prohibits that practice. Riverside County has provided you with the procedures they followed for this duplication and tabulation of paper ballots, voted in the polling place on Election Day. These procedures are titled "Duplicating Facsimile Ballots," a copy of which you included in your correspondence. Riverside County staff report that their purpose for transferring the paper ballots onto a DRE device, was to create a paper audit trail for the vote tally, which is now required on all such devices, and that they took the additional measures of reviewing each ballot three times to verify that the information was accurately transferred.

Again, I thank you for voicing your concerns. Voting is the foundation of our democracy, and that is why my staff and I, together with the dedicated election staff of each county, will continue to explore all measures and technologies that can make our election systems even more secure.

Sincerely,

BRUCE McPHERSON
Secretary of State

cc: Barbara Dunmore, Riverside County Registrar of Voters

COUNTY OF RIVERSIDE
REGISTRAR OF VOTERS

DEPARTMENTAL PROCEDURES

Section: Systems
Subject: Duplicating Facsimile Ballots
Applicable Code #s:

Effective Date: 5/5/06
Review Date:
Revision Date:

- PURPOSE:** To duplicate facsimile ballots voted at the polls on Election Day.
- POLICY:** All facsimile ballots shall be duplicated onto an assigned Edge unit with VeriVote. No less than two people can be present when duplicating ballots.
- CAUTION:**
- MATERIALS NEEDED:** Voted facsimile ballots
- PROCEDURE:**
- 1) Systems will assign an Edge unit specifically for duplicating facsimile ballots.
 - 2) Each facsimile ballot shall be numbered in the order they will be duplicated into the Edge unit.
 - 3) Next to the ordered number, write the number of the Edge voting unit the ballot will be recorded onto.
 - 4) After activating the unit and bringing up the appropriate ballot, one person shall read the vote selections of the voter.
 - 5) Both people shall compare the Review screen to the ballot for accuracy.
 - 6) The paper audit trail shall be compared to the ballot for accuracy.
 - 7) Once both duplicators agree that the ballot has been duplicated correctly, the ballot can be cast.
 - 8) Both duplicators shall initial and date the facsimile ballot.
 - 9) Repeat 4 through 8 until all ballots are cast.
 - 10) Systems staff will close the polls and remove the results cartridge and process it to include the votes cast into the election.

ATTACHMENTS:

VOTING SYSTEMS CERTIFIED FOR USE IN CALIFORNIA (As of April 25, 2006)

Voting Systems Certified After January 1, 2005

<i>Company</i>	<i>Certification Date</i>	<i>Software and Other Components</i>	<i>Optical Scan Hardware Components</i>	<i>DRE Hardware Components</i>
Diebold Election Systems 1253 Allen Station Parkway Allen, TX 78728	February 17, 2006	<ul style="list-style-type: none"> • GEMS, v. 1.18.24 • Key Card Tool, v. 4.6.1 • VC Programmer, v. 4.6.1 	<ul style="list-style-type: none"> • AccuVote-OS (Model D), firmware v. 1.96.6 • AccuVote-OS Central Count, firmware v. 2.0.12 • AccuFeed 	<ul style="list-style-type: none"> • AccuVote-TSX, firmware v. 1.18.24 • AccuView Printer Module • Vote Card Encoder, v. 1.3.2
Election Systems & Software 11208 John Galt Blvd Omaha, NE 68137	April 21, 2006	<ul style="list-style-type: none"> • Unisyn Election Management System, version 1.1, which includes: <ul style="list-style-type: none"> • Ballot Generation, version 1.1 • Election Converter, version 1.1 • Election Loader, version 1.1 • Vote Converter, version 1.1 • Vote Tabulation, version 1.1 	<ul style="list-style-type: none"> • InkaVote Plus Precinct Ballot Counter with ADA unit, firmware version 1.10 	
	August 3, 2005	<ul style="list-style-type: none"> • UNITY Election Management System, v. 2.4.3 • AutoMARK Information Management System, v. 1.0 	<ul style="list-style-type: none"> • Model 100 v. 5.0.0.0 • Model 550 v. 2.1.1.0 • Model 650 v. 1.2.0.0 • AutoMARK Voter Assist Terminal, v. 1.0 	
HART Intercivic 15500 Wells Port Dr Austin, TX 78728	March 10, 2006	<ul style="list-style-type: none"> • Ballot Now, v. 3.2.4 • BOSS, v. 4.2.13 • Rally, v. 2.2.4 • Tally, v. 4.2.8 • Servo, v. 4.1.6 • eCM Manager, v. 1.1.7 		<ul style="list-style-type: none"> • JBC, v. 4.1.3 • ESlate/DAU, v. 4.1.3 • VBO, v. 1.7.5

VOTING SYSTEMS CERTIFIED FOR USE IN CALIFORNIA (As of April 25, 2006)


Sequoia Voting Systems 7677 Oakport Street, Ste 800 Oakland, CA 94621	March 20, 2006	<ul style="list-style-type: none"> WinEDS, version 3.1.012 Card Activator, version 5.0.21 HAAT Model 50, version 1.0.69L Memory Pack Reader (MPR), firmware version 2.15 	<ul style="list-style-type: none"> Optech 400-C/WinETP firmware version 1.12.4 Optech Insight, APX K2.10, HPX K1.42 Optech Insight Plus, APX K2.10, HPX K1.42 	<ul style="list-style-type: none"> AVC Edge Model I, firmware version 5.0.24 AVC Edge Model II, firmware version 5.0.24 VeriVote Printer
	April 28, 2005	<ul style="list-style-type: none"> EMS/AERO, v. 3.54.1 Memory Pack Reader (MPR), v. 2.15 Smart Pack Reader (SPR), v. 1.04 	<ul style="list-style-type: none"> Optech 400-C, v. 1.10.5 Optech Eagle (HPS 1.30, APS 1.52) Optech Insight (HPX 1.40, APX 2.06, CPX 1.12) 	
	January 21, 2005	<ul style="list-style-type: none"> WinEDS, v. 3.0.134 Card Activator, v. 4.3.320 		<ul style="list-style-type: none"> AVC Edge II, v. 4.3.320 VeriVote

VOTING SYSTEMS CERTIFIED FOR USE IN CALIFORNIA

(As of April 25, 2006)

Voting Systems Certified Before January 1, 2005

OPTICAL SCAN

Company	System Name and Software
Advanced Voting Solutions 2401 Internet Blvd. #111 Frisco, TX 75034	WINScan WINScan V. 1.0 <i>(certified 8/22/02)</i>
 DFM Associates 10 Chrysler Irvine, CA 92618	Mark A Vote BCWin V. 2.0-3.0
Diebold Elections Systems, Inc. 4720 Brand Way Sacramento, CA 95819	AccuVote-OS (previously known as AccuVote 2000) GEMS V. 1.18.18 <i>(certified 11/20/03)</i> GEMS V. 1.18.19; Firmware 1.94w and 1.96.4 <i>(certified 8/18/04)</i> GEMS V. 1.18.19; Firmware 2.0.12 <i>(certified 9/28/04)</i> AccuVote-HS V. 1.0
ES&S 844 Sutro Ave. Novato, CA 94947	Optech III-P Eagle/ IV-C Model 100 Unity V. 2.4.3; Firmware 5.0.0.0 <i>(certified 9/17/04)</i> Model 550 Unity V. 2.4.3; Firmware 2.1.1.0 <i>(certified 9/17/04)</i> Model 650 Unity V. 2.4.3; Firmware 1.2.0.0 <i>(certified 9/17/04)</i>
Hart Intercivic 1650 Cold Creek Drive #E Lafayette, CO 80026	Ballot Now eSlate System 2.0 Ballot Now V. 1.3 <i>(certified 8/30/02)</i> eSlate System 2.1 Ballot Now V. 1.5.09 <i>(certified 5/13/03)</i> eSlate System 3.0 Ballot Now V. 2.0 <i>(certified 12/17/03)</i> eSlate System 3.1 Ballot Now V. 2.1 <i>(certified 2/11/04)</i> eSlate System 3.2 Ballot Now V. 2.2.6 <i>(certified 2/11/04)</i> eSlate System 3.4 Ballot Now V. 2.3 <i>(certified 9/17/04)</i>

VOTING SYSTEMS CERTIFIED FOR USE IN CALIFORNIA
(As of April 25, 2006)

<p>Los Angeles County 12400 Imperial Hwy. Norwalk, CA 90650</p>	<p>InkaVote <i>(certified 11/1/02)</i> MTS V. 1.2 <i>(certified 1/16/98)</i> MTS V. 1.3.1 <i>(certified 2/11/04)</i></p>
<p>Martin & Chapman 1951 Wright Circle Anaheim, CA 92806</p>	<p>Opto-Mark V. OV-OV-1</p>
<p>Sequoia Voting Systems 7677 Oakport St., Ste. 800 Oakland, CA 94621</p>	<p>Optech III-P Eagle Optech 400C AKA IV-C WinEDS V. 3.0.134; Firmware V. 1.02B <i>(certified 9/28/04)</i> Optech Insight EMS/AERO 3.54.1, HPX 1.40, APX 2.06, CPX 1.12 <i>(certified 4/28/05)</i></p>
<p>Unilect 7080 Donlon Way, Ste. 220 Dublin, CA 94568</p>	<p>Patriot Optical Intellect V. 2.0-2.52</p>