

Sequoia in the News – A Partial List of Documented Failures

"A common practice for local election officials is to let election companies run their election – make up their ballot, set up their machines, and even count their tallies. This is a dangerous practice." ~ *Ted Selker, Cal Tech/MIT Voting Technology Project.* ¹

Date	Machine	Place/Description
July 1996	AVC Edge	<p>Clark County, Nevada. Malfunctions during the state certification test don't prevent officials from approving the system.²</p> <p>In July, 1996 a public test to certify Clark County's Sequoia Pacific machine for early voting was conducted. During the test, a cartridge malfunctioned: also the examiner (selected by the state) had difficulty casting his vote. He had to vote 51 times rather than the designated 50, an option not afforded the voter should the machine malfunction in an actual election. In spite of these malfunctions, the machine was given certification – the equivalent of declaring it accurate, reliable and secure.</p> <p>Seventy-five people witnessed this test from a cordoned-off position approximately 20 feet away. Election officials removed cartridges from the SP machine for future verification but shortly thereafter the cartridges disappeared. Registrar Kathryn Ferguson, immediately notified the FBI. To date, neither the FBI nor Ms. Ferguson will comment on the disappearance.</p>
1996	AVC Edge	<p>New Orleans, Louisiana. Evidence of fraudulent programming was filmed by one of the candidates. ²</p> <p>According to Voting Integrity Project (VIP) based in Arlington, Virginia, there have been instances, especially in 1996's hotly contested U.S. Senate race in Louisiana, where the program governing the operation of the Sequoia Pacific machine was altered before the election. Tests performed and videotaped by candidate Susan Barnecker in New Orleans in 1994 demonstrated that votes she cast for herself were electronically recorded for her opponent. This test was repeated multiple times with the same result thus confirming that the machine had been fraudulently altered to influence the outcome of the election.</p>
November 2000	AVC Edge	<p>Riverside County, California.</p> <p>...during the 2000 presidential election, a computer from Sequoia began dropping touch-screen ballots from the vote tally. A Sequoia salesman who was on hand intervened and fixed the problem.³</p>

¹ **Touch to Vote: More Americans to Vote on Electronic, Touch-Screen Systems in November.** ABC News. July 18, 2004.

http://www.abcnews.com/sections/WNT/Politics/e-voting_040718-2.html

² **Clark County's Vote: How Secure Is It?** Nevada Journal. August, 1998. By Lois Gross. <http://nj.npri.org/nj98/08/democracy.htm>

³ **Electronic voting's hidden perils.** Mercury News. February 1, 2004. By Elise Ackerman.

http://www.mercurynews.com/mld/mercurynews/news/special_packages/election2004/7849090.htm

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Date	Machine	Place/Description
January 2001	Sequoia executive	<p>Phil Foster, regional sales vice president of Sequoia, was indicted for an elections kickback scheme in Louisiana. He was allegedly involved in a conspiracy and money-laundering scheme that involved the sale of machine parts at inflated prices and kickbacks of nearly \$600,000. Sequoia was not involved, nor was the company charged. ⁴</p> <p>In April 2002, a Louisiana state judge dismissed the charges against Foster, ruling that the prosecutors' case depended upon Foster's grand jury testimony against others involved. Foster was granted immunity for his testimony. ⁵</p>
March 2002	AVC Edge (DRE)	<p>Palm Beach County, Florida. Touch screens froze up, registered incorrect vote.</p> <p>Touch screen machines sometimes froze up when voters selected which language to use. Phil Foster from Sequoia Voting Systems said that was a software programming error. Elections Supervisor Theresa LePore also said she heard that some people touched one candidate's circle on the screen, only to see an X appear by another candidate's name.⁶</p>

⁴ **Out of Touch: You press the screen. The machine tells you that your vote has been counted. But how can you be sure?**

New Times; April 24, 2003; By Wyatt Olson. <http://www.newtimesbpb.com/issues/2003-04-24/feature.html/2/index.html>

⁵ **Out of Touch.** <http://www.newtimesbpb.com/issues/2003-04-24/feature.html/3/index.html>, and

Exec's indictment hits Oakland vote firm. Ballotpaper.org. July 12, 2004. <http://www.ballotpaper.org/archives/000525.html>

⁶ **Human goofs, not machines, drag vote tally into next day**

The Palm Beach Post, 14 March 2002; reported in "Black Box Voting" Chapter 2 by Bev Harris

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March 2002	AVC Edge	<p>Palm Beach County, Florida. Former Boca Raton Emil Danciu was ahead by 17 points in a poll conducted by the opposition. Exit polling indicated an overwhelming win for Danciu, but he received only 19% of the votes, even losing in his home precinct. Voters report that their votes appeared to be registered for his opponent.</p> <p>"What really alarmed us was the next day when we started getting phone calls from voters who had gone into the voting places -- people we didn't even know -- and pushed Emil Danciu's name only to end up with a check mark by Susan Haynie's name. They repeatedly tried to vote for him, but another name, particularly Haynie's, came up. They couldn't get their vote registered. They were telling wild stories about poll workers unplugging and kicking the machines. They didn't know whether their votes ever counted. Some were told to vote again."⁷</p> <p>In addition, the results were delayed because, according to the election supervisor's office, 15 cartridges had been lost, and the system won't give a final tally until it has read all the cartridges. The office said that a poll worker had taken them home, and then they found them.</p> <p>With no paper ballots to check the accuracy of the machine, Danciu sued for the right to look at Sequoia source code. The county attorney argued that it would be a felony to disclose the source because it is a trade secret. The judge denied Danciu's request for the software code.⁸</p>
March 2002	AVC Edge	<p>Palm Beach County, Florida. Councilman Al Paglia lost by 4 votes on a one-race ballot, but 78 ballots registered as blank. Voters also reported erratic behavior of the touch screens.</p> <p>Councilman Al Paglia lost his seat by four votes to Lizbeth Benacquisto during a runoff contest held March 26 in Wellington, a town of 42,000 in central Palm Beach County. Although Paglia and Benacquisto were the sole candidates on the ballot, 78 so-called undervotes were registered, meaning 78 voters used the machine but did not cast a ballot. That struck Paglia as odd because he'd garnered 45 percent of the votes during the primary run against three challengers. And then, he too began hearing stories from voters that the Sequoia touch screens had acted erratically.⁹</p>

⁷ **Out of Touch: You press the screen. The machine tells you that your vote has been counted. But how can you be sure?**

New Times; April 24, 2003; By Wyatt Olson. <http://www.newtimesbpb.com/issues/2003-04-24/feature.html/1/index.html>

⁸ **Electronic voting's hidden perils.** Mercury News. February 1, 2004. By Elise Ackerman.

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April 2002	AVC Edge (DRE)	<p>Hillsborough County, Florida. ¹⁰ Vote data could not be transferred from 24 of the 26 data cartridges to the readers that would transmit the totals to the central office to be tallied. Precinct totals were faxed over and entered by hand.</p> <p>"As of today, we still have not pinpointed the problem," Elections Supervisor Pam Iorio said Friday. "We have had three Sequoia employees looking at it, but they have not gotten to the bottom of it."</p>
November 2002	AVC Edge (DRE)	<p>Bernalillo County, New Mexico. ¹¹</p> <p>Although about 48,000 people had voted early on 212 Sequoia-supplied touch-screen computers at six sites in the county, the initial figures given to the commissioners indicated that no race - not even for governor - showed a total of more than about 36,000 votes.</p> <p>The error went undetected for 10 days, when it was noticed by an attorney who had been monitoring the election for one of the candidates. Sequoia admitted that the same error had been encountered in Clark County, Nevada, several weeks earlier, but Sequoia had not informed the election officials in Bernalillo County.</p> <p>Commissioner Tom Rutherford accused Cramer [Howard Cramer, vice president and Western regional manager of Sequoia Voting Systems] of a "cover-up," and said Cramer had never intended to tell officials here about the problem.</p> <p>... "We did not anticipate it would occur anywhere but in the Nevada election," he [Howard Cramer, vice president and Western regional manager of Sequoia Voting Systems] said. Sequoia's people here were not aware of the Nevada glitch, had not been alerted to watch for it, and had not been told how to fix it, he said.</p> <p>... Upon learning Friday of the 12,000-vote gap, he said, Sequoia employees worked through the weekend in Denver to re-run the data - using the software patch this time - and make a new report that included the "missing" ballots.</p>

¹⁰ **Officials still searching for election glitch: The new system could not send the tabulations to the elections office.**

St. Petersburg Times; April 6, 2002; By Jeff Testerman, Times Staff Writer
http://www.sptimes.com/2002/04/06/Hillsborough/Officials_still_searc.shtml

¹¹ **Election results certified after software blamed.** Albuquerque Tribune; November 19, 2002; By Frank Zoretich, Tribune Reporter

http://www.abqtrib.com/archives/news02/111902_news_vote.shtml

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November 2002	Optech optical scanner	<p>Taos, New Mexico. A ballot programming error caused the Sequoia Optech optical scanner to assign votes to the wrong candidates. Just 25 votes separated the candidates in one race; another race had a 79-vote margin. After noticing that the computer was counting votes under the wrong names, Taos County Clerk Jeannette Rael contacted the programmer of the optical machine and was told it was a programming error. ¹²</p>
March 2003	AVC Edge (DRE)	<p>Hillsborough County, Florida. Vote data could not be transferred from 2 of the 678 data cartridges to the computers that would tally the votes. Precinct totals were faxed over and entered by hand.</p> <p>The only glitch occurred when two of the 678 cartridges containing voting results registered as non-formatted when they were downloaded at the elections service center. Those results were faxed from the downtown library and put into the database by hand. ¹³</p>
October 2003	AVC Edge	<p>Riverside County, California. Source code for the Sequoia tabulation system was found on an unprotected Internet site.</p> <p>Software used by an electronic voting system manufactured by Sequoia Voting Systems has been left unprotected on a publicly available server, raising concerns about the possibility of vote tampering in future elections. The software, made available at ftp.jaguar.net, is stored on an FTP server owned by Jaguar Computer Systems, a firm that provides election support to a California county. The software is used for placing ballots on voting kiosks and for storing and tabulating results for the Sequoia AVC Edge touch-screen system. ¹⁴</p>

¹² 06/03/04. Conversation with a woman at the Elections Division of New Mexico. She told me Taos used the Sequoia Optech and confirmed that it was a programming error by the local programmer. New Mexico does not have their ballot programming done by the vendor. Original reference from *Black Box Voting*, Chapter 2. Albuquerque Journal, 7 November 2002; "Taos To Recount Absentee Ballots"

¹³ **Elections Chief Sees Nearly Flawless Vote.** St. Petersburg Times. March 5, 2003. By Kathryn Wexler, Staff Writer. <http://www.sequoiavote.com/article.php?id=43>

¹⁴ **E-Vote Software Leaked Online.** Wired News; October 29, 2003; By Kim Zetter. <http://www.wired.com/news/privacy/0,1848,61014,00.html>

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November 2003	AVC (DRE)	<p>Santa Clara County, California. After a battery problem occurred during the election, anonymous Sequoia technicians worked on the machines without any oversight from county officials.</p> <p>Following November's election in Santa Clara County, Sequoia sent over a group of blue-coated technicians to make adjustments to voting machines that experienced battery problems. For three weeks, the workers, employed by a Sequoia subcontractor, took apart the machines, removing their circuit boards and making adjustments.</p> <p>Nevertheless, Santa Clara County officials didn't know the name of the subcontractor and hadn't verified the identities of the workers it hired when the Mercury News made an inquiry. They also hadn't documented the changes being made to the machines.</p> <p>To find out such information, "you'd have to contact Sequoia," said Assistant Registrar of Voters Elaine Larson.¹⁵</p>
November 2003	Optech 4C-400	<p>Snohomish County, Washington. Optical scanners failed to read 21,000 votes on absentee ballots because two lights that read the ballots were worn out. ¹⁶</p> <p>When the lights wear out, Sequoia determined, they stop reading some types of ink.</p> <p>... Snohomish County was the first jurisdiction to catch the problem, said Sheree Noell, a sales executive for Sequoia.</p> <p>The problem came to light this winter when the Snohomish County Republican Party pointed out that up to 25 percent fewer votes than voters were counted in some county legislative races. Two recounts showed more than 21,000 votes were missed in the county's legislative races alone, although none of the corrected counts changed the election results.</p> <p>The Snohomish County Auditor's Office called Sequoia to analyze the machines.</p> <p>How long have they been failing to detect votes?</p> <p>"It's just something that we've been observing, and we've been thinking for a while that the undercounts were getting too high," said Frauna Hoglund, chairwoman of the Snohomish County GOP.</p>

¹⁵ **Electronic voting's hidden perils.** Mercury News. February 1, 2004. By Elise Ackerman.
http://www.mercurynews.com/mld/mercurynews/news/special_packages/election2004/7849090.htm

¹⁶ **County's voting troubles spur changes nationwide.** Seattle Times. January 29, 2003 by Emily Heffter, Times Snohomish County bureau. Archived at
<http://www.votersunite.org/article.asp?id=5276>

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Date	Machine	Place/Description
November 2002	AVC Edge	<p>Santa Clara County, California. County selected Sequoia Voting Systems as the most qualified company to provide electronic voting equipment to Silicon Valley.</p> <p>The county incorporated extensive technical reviews and considerable input from the public in their 100-page report detailing their recommendation. In addition to the technical review, the county summarized user surveys completed by more than 5,000 voters who tested the systems, including more than 300 voters with disabilities.</p> <p>... In addition to the county's technical review, the report included a summary of responses from surveys completed by voters. According to the surveys, voters were extremely pleased with Sequoia's ability to accommodate voters with special needs. Sequoia was the first choice of voters with disabilities as well as non-English-speaking voters. ¹⁷</p> <p>Follow-up article next.</p>

¹⁷ <http://www.sequoiavote.com/article.php?id=44>

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Date	Machine	Place/Description
March 2004	AVC Edge	<p>Santa Clara County, California.¹⁸ Blind voters find the machines unacceptable and complain that Sequoia didn't listen to their suggestions.</p> <p>Disabled-rights groups have been some of the strongest supporters of electronic voting, but blind voters in Santa Clara County said the machines performed poorly and were anything but user-friendly in the March election.</p> <p>"Very few of our members were able to vote privately, independently, despite Santa Clara County's supposed 'accessible' touch screens," Dawn Wilcox, president of the Silicon Valley Council of the Blind, wrote in a letter to the registrar of voters after the March primary. "I feel this is an unacceptable state of affairs."</p> <p>... Wilcox said in an interview that she surveyed more than 50 members of her group after hearing anecdotal accounts of Election Day snafus. Only two members said the machines had functioned smoothly. About a dozen provided detailed descriptions of the problems they experienced using the audio technology that was supposed to guide them through the ballot and help them cast a vote in secret.</p> <p>Four voters said the audio function did not appear to work at all. Others waited up to half an hour for poll workers to trouble-shoot the devices. Sam Chen, a retired college professor, said he was happy to finally hear an initial message, but then the machine balked. After struggling for an hour, Chen asked a poll worker to cast a ballot on his behalf. "I wish I had voted on my own," he said.</p> <p>... Noel Runyan, a blind voter and computer scientist who is an expert in designing accessible systems, said touch screens are a good idea in theory, but they need a thorough redesign to work in practice. He said the voting companies appeared to have ignored feedback they solicited from groups of blind voters as they were developing their systems.</p> <p>Among the criticism provided by voters was poor sound quality, delayed response time and braille that was positioned so awkwardly it could only be read upside down. Chen, the college professor, also said the audio message required blind voters to press a yellow button. "Yellow means nothing to me," Chen said.</p> <p>"I personally want them to be decertified for this election," Runyan said. "We need to make a strong statement that all these machines need to be redesigned on the user interface side. We've got a mistake here."</p>

¹⁸ **Blind voters rip e-machines: They say defects thwart goal of enfranchising sight-impaired**

Mercury News; May 15, 2004; By Elise Ackerman. Archived at <http://www.verifiedvotingfoundation.org/article.php?id=2102>

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March 2004	Optech optical scan	<p>Napa County, California. The machines failed to record votes marked with dye-based ink. The error was found during a manual recount used to verify accuracy. After counting 60 ballots, officials discovered that the number of votes didn't match the votes recorded by the machines.</p> <p>Prior to the election, a Sequoia technician ran test ballots through the machine to calibrate its reading sensitivity, but failed to test for gel ink.¹⁹</p> <p>[Napa Registrar of Voters John] Tuteur said the machine dropped 6,692 votes out of a total of 468,001 votes cast on the more than 13,000 absentee ballots. He added that there was no pattern to the dropped votes: They spanned federal, state and county races and affected various candidates and ballot measures.²⁰</p>
June 2004	AVC Edge	<p>Sequoia Software Source Code. Evidence of serious security problems shows up in source code left on an unsecured site by Sequoia.</p> <p>A team of university computer security scientists is currently studying the "WinEds" central tabulator produced by Sequoia Voting Systems. Preliminary work indicates that Spanish language ballots can be tampered with using this software, and that an unauthorized, uncertified program called "reverse.exe" resides on a very unusual location for a voting system (and one that most certifiers would never think to examine) -- the results cartridge itself. The "reverse.exe" program is used for ballots for the visually impaired, but researchers are concerned that it could open up back doors into manipulating the vote process for all voters. This program is referenced in Sequoia user manuals, but has never received a NASED number and has never been certified at all.²¹</p>

¹⁹ **Lost E-Votes Could Flip Napa Race.** Wired News; March 15, 2004; By Kim Zetter. <http://www.wired.com/news/evote/0,2645,62655,00.html>

²⁰ **E-Vote Snafu in California County.** Wired News; March 18, 2004; By Kim Zetter. <http://www.wired.com/news/evote/0,2645,62721,00.html>

²¹ <http://www.blackboxvoting.org/>

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Date	Machine	Place/Description
June 2004	Insight (optical scan)	<p>Dona Ana County, New Mexico. Machines failed the pre-election testing and were used in early voting. In pre-election testing, counters that track the total number of ballots passed through the machine showed incorrect numbers. The counters in four out of five machines were incorrect, showing as many as 20 or 30 votes more than the actual number of ballots tested. Yet the machines were used in early-voting anyway.</p> <p style="padding-left: 40px;">State Bureau of Elections computer specialist Steve Fresquez said Wednesday his director, Denise Lamb, briefed him on a problem with Insight machines before she went home for the day. "The machines have a protective counter that records all the votes cast on them. That counter was reading transactions incorrectly and advancing extra numbers," he said.</p> <p>The super-precinct feature, which totals the votes by Legislative district, gave incorrect totals, as they did in Curry County.</p> <p style="padding-left: 40px;">Chief Deputy Clerk Coni Jo Lyman said officials at Ink Impressions, the Rio Rancho-based company that provided the Insight machines, told her the machines were capable of counting both ways [by precinct and canvassed]. But when county personnel attempted to get the super-precinct totals from the machines, the numbers were wrong. Election workers wound up counting the vote by precinct, which took extra time and labor.</p> <p style="padding-left: 40px;">Ink Impressions president Terry Rainey denied Wednesday there is any problem with the machines or the "super-precincting" process.²²</p>
June 2004	AVC Edge (DRE)	<p>Morris County, New Jersey. The tabulation system was unable to read the data from the touch screen machines.</p> <p style="padding-left: 40px;">Morris County's computerized voting tabulation system malfunctioned last night, forcing elections officials and computer experts to work feverishly late into the night to correct the problems. "Nothing has ever happened like this," said County Clerk Joan Bramhall. "There's data on the (computer) cartridge, but it's just not reading it. It shows zeroes."²³</p> <p>VotersUnite! followed up with Ms. Bramhall. The problems was that the C drive was full. The vice-president of Sequoia, who led her technicians through a process that deleted unnecessary information on the drive and "refreshed" the computer. Then they were able to read the cartridges.</p>

²² **Company denies problem with voting program.** Clovis News Journal. June 3, 2004. By Jack King: CNJ Staff Writer <http://cnjonline.com/engine.pl?station=clovis&template=storyfull.html&id=6358>

²³ **Montville and Chatham mayors ousted.** Star-Ledger. June 9, 2004. By Lawrence Ragonese and Kristen Alloway. <http://www.nj.com/elections/ledger/index.ssf?/base/news-3/108676553355551.xml> (paid archives)

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August 2004	Sequoia Veri-Vote	<p>Sacramento, California. In a demonstration of its Direct Recording Electronic voting machine with a paper trail, Sequoia demonstrated that its machine failed to report four votes in Spanish.²⁴</p> <p>Last week, Sequoia vice president and former California assistant secretary of state Alfie Charles was showing off the new Veri-Vote printer that his firm is supplying to Nevada when an astute legislative aide in Johnson's office noticed two votes were missing.</p> <p>Charles tried again to vote in Spanish with the same result: He cast votes on two mock ballot initiatives, but they were absent from the electronic summary screen and the paper trail.</p> <p>"The paper trail itself seemed to work fine but what it revealed was when he demonstrated voting in Spanish, the machine itself did not record his vote," Chesin said. "Programming errors can occur and the paper trail was the way we caught it."</p> <p>Charles said his company's touch-screen actually did record the electronic votes in its memory but through an oversight failed to reflect the votes on its electronic display and printout.</p> <p>"There's no problem with the way the equipment worked. It was a problem in the ballot setup," Charles said. "People do make mistakes and that's why you have ballot proofing. Because it was for demonstration purposes, we didn't put all the attention into it that we should have. That would never have occurred in a regular election."</p> <p>Another journalist reports: ²⁵</p> <p>Charles said the machine did record the votes accurately in its memory, but failed to record them on the paper trail and on the review screen that voters examine before casting their ballot. Swatt and Chesin could not confirm this, however, because the company did not show them evidence of the digital votes stored on the machine's internal memory.</p>

²⁴ **Lawmakers cut e-voting's paper trail: Manufacturers demonstrating new printers in Nevada were embarrassed when machine failed to recognize votes.** Tri-Valley Herald. August 13, 2004. By Ian Hoffman, Staff Writer. Reproduced at: <http://www.votersunite.org/article.asp?id=2512>

²⁵ **Wrong Time for an E-Vote Glitch.** Wired News. August 12, 2004. By Kim Zetter. http://www.wired.com/news/evote/0,2645,64569,00.html?tw=wn_tophead_2

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August 2004	WinEDS election management system	<p>Hillsborough County, Florida. The computer indexing system malfunctioned. ²⁶</p> <p>After the polls closed Aug. 31, [County Registrar Buddy] Johnson's computer servers mysteriously slowed to a snail's pace, and the vote was not totally counted until 5:10 a.m. the day after the election.</p> <p>After a diagnosis by Sequoia Voting Systems, the vendor that sold Hillsborough its \$12-million package of touch screen voting machines, Johnson announced that a computer indexing system had malfunctioned, causing the server to repeatedly search through its entire data base before recording any single vote.</p> <p>A few days later, Johnson said he wasn't sure why the computer indexing hadn't worked properly but declared it "now fixed."</p>
September 2004	AVC Edge	<p>Hillsborough County, Florida. One early-voting touch-screen machine was left in test mode during the early voting period. It reported zero votes, since all the votes cast were recorded as test votes. Seventeen days after the primary, the error was caught and the 245 "test" votes were added into the results. ²⁷</p> <p>They brought the machine's results cartridge in for its results to be counted. And the machine reported zero votes. I talked to [County Registrar] Buddy Johnson on Monday. He was frank about what happened. The machine was left in test mode; his procedures had not contemplated such a possibility.</p> <p>"It would not leap out at you," he said, "that this was in test mode." The printout the machine produces indicated a test, Johnson said. But the poll workers had not been trained to look for it.</p> <p>From another article:²⁸</p> <p>Early voting began Aug. 16, and on the three machines at Westgate, a total of 1,050 votes were recorded even though about 1,300 people had signed in during the two weeks.</p> <p>The match between sign-ins and ballots cast is rarely 100 percent. Some people bail out without voting, and others don't complete the ballots. Those are called undervotes. "It didn't make a lot of sense that there was that many undervotes," Johnson said of the library situation. So officials began looking for other explanations.</p> <p>They found the answer Friday. On the machine mistakenly left in test mode, the votes were collected in a way that wouldn't be read later when the machine's data cartridge was fed into a tabulating computer.</p>

²⁶ **245 Hillsborough primary votes go uncounted.** St. Petersburg Times. September 18, 2004. By Jeff Testerman, Times Staff Writer. http://www.sptimes.com/2004/09/18/Hillsborough/245_Hillsborough_prim.shtml

²⁷ **Reminder on Election Day - this is not a test.** St Petersburg Times. September 21, 2004. By Howard Troxler, Times Columnist. http://www.sptimes.com/2004/09/21/Columns/Reminder_on_Election_.shtml

²⁸ **245 Votes In Primary Originally Uncounted.** Tampa Tribune. September 18, 2004. By Ted Byrd. <http://www.tampatrib.com/FloridaMetro/MGBVTP089ZD.html>

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September 2004	Veri-Vote	<p>Clark County, Nevada. Las Vegas voters used the new electronic voting machines that produce a voter-verifiable paper ballot. A malfunction in the new software delayed tabulation of the votes. ²⁹</p> <p>Larry Lomax said, "I wasn't happy. I am always surprised when something doesn't work" Lomax, the Registrar of Voters, is talking about the software glitch that delayed the release of results Tuesday night.</p> <p>"They had to create new software that would support this printer and both voting machines we have. My guess -- in the process of getting it developed and federally certified, a bug that was there in 2002 must have crept back in. This has nothing to do with tabulating the results. It's the ability to tell the number of precincts reporting."</p>
September 2004	AVC Edge	<p>Snohomish County, Washington. As yet unexplained problems caused sixty-five touch screen voting machines to crash and smart cards to jam in the primary election. ³⁰</p> <p>The biggest problem the county encountered was the disabling of 65 of 860 e-voting machines because of a software crash and jamming of the smart cards. Although affected voters managed to use alternate machines and no previously tallied votes were lost, "we can't afford to have a repeat" of the breakdown during the November election, Terwilliger said.</p> <p>He has asked Sequoia Voting Systems, the machine vendor, to investigate the problem.</p> <p>McLain's confidence is further undermined by the absence of federal certification of software devised for the new primary voting system (King, Pierce and three other counties also lacked certification due to the change). Because of the relatively late primary-ballot change, Terwilliger said, only provisional certification through the Secretary of State's Office could be obtained. Federal certification will be done, but not till next year, Terwilliger added.</p>

²⁹ **Software Glitch Delayed Release of Results.** Eyewitness News. KLASTV. September 8. Colleen May, Anchor.
<http://www.klas-tv.com/Global/story.asp?S=2276229&nav=168XQi9D>

³⁰ **E-voting vent: You can't tell if it worked.** Seattle Times. September 20, 2004. By Paul Andrews.
http://seattletimes.nwsources.com/html/business/technology/2002040563_paul20.html

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September 2004	AVC Edge	<p>Hillsborough County, Florida. High percentages of undervotes in the primary election present the county with an unanswerable question since the paperless machines provide no method of doing an audit.³¹</p> <p>Hillsborough's undervote on countywide contests ranged from 9 percent in the race that re-elected State Attorney Mark Ober, to a whopping 17.5 percent in the race in which Charles "Ed" Bergmann was elected circuit judge.</p> <p>In Pinellas County, which uses Sequoia machines, the undervote on countywide contests ranged from 9.1 percent in a School Board race to 13 percent in a judicial contest.</p> <p>The question is: Why?</p> <p>Are voters refusing to vote? Or are votes not registering on electronic machines?</p> <p>... People just undervote," [Hillsborough Supervisor of Elections Buddy] Johnson said.</p> <p>Rob MacKenna, an Eckerd Corp. computer programmer who is the Democratic challenger to Johnson, strongly disagrees. ... MacKenna's skepticism about the cause of the undervote stems from the presidential preference primary last March, where a single question was listed on the ballot but where 255 Hillsborough voters, or 0.76 percent of the turnout, had no vote tabulated. Had 255 residents driven to the polls, signed in, walked to the touch screen machine, then decided to abandon the whole idea?</p> <p>MacKenna refuses to believe it.</p>

³¹ **Voting mystery stirs call for paper trail.** St. Petersburg Times. October 4, 2004. By Jeff Testerman, Times Staff Writer.
http://www.sptimes.com/2004/10/04/Tampabay/Voting_mystery_stirs_.shtml

Sequoia in the News – A Partial List of Documented Failures

Date	Machine	Place/Description
October 2004	AVC Edge	<p>Snohomish County, Washington. County officials admit that 20 machines broke down during the primary. The machines have malfunctioned before, and they have no idea what the cause of the problem was ... but no votes were lost. ³²</p> <p>Twenty touch-screen voting machines broke down on Sept. 14 in Snohomish County, but officials said Tuesday that no votes were lost and no voter was prevented from casting a ballot.</p> <p>County elections manager Carolyn Diepenbrock said mechanical failures rendered the machines inoperable for the primary election. Some simply froze, while the viewing screens on others went blank.</p> <p>"We're still trying to figure out what triggered the mechanical failures," she said. "We don't have that answer yet."</p> <p>... On the day of the primary, 20 of the 886 machines deployed in polling places had to be shut down after activation cards got stuck. While the problem has occurred in previous elections, it has never occurred on that many machines, Diepenbrock said.</p> <p>Sequoia technicians spent last week in Everett testing the machines that broke down, as well as and the ones that did not. They did not uncover the cause of the problem.</p>

³² **20 voting machines broke down.** Everett Herald. October 6, 2004. By Jerry Cornfield, Herald Writer. http://www.heraldnet.com/stories/04/10/06/loc_voting001.cfm

Sequoia in the News – A Partial List of Documented Failures

Date	Machine	Place/Description
October 2004	AVC Edge	<p>Palm Beach County, Florida. In the second day of early voting, touch screen machines failed and had to be replaced. Voters quickly lost confidence in the election process. ³³</p> <p>At Palm Beach County's West Boca branch library, voters were turned away Tuesday morning after touch-screen voting machines failed to work properly. Voting finally got underway at midday, after five new units were delivered.</p> <p>Lines snaked out from the library's small windowless conference room, which doubled as a makeshift precinct. Waits of two or three hours were not uncommon at many of the county's eight early voting sites.</p> <p>... Seeing all this, Jane Weidman of Boca Raton said she had lost confidence in the system. "We are all here because we're afraid our vote is not going to count on Nov. 2," she said. "We can't vote. It's like Afghanistan. We're all in a long line. What's going on here?"</p> <p>... Democratic poll watcher Rhoda Stern-Moss cleared up the mystery. "They tried to boot up the machines this morning and they wouldn't go, so they ordered new ones," she said. "No big deal."</p> <p>It was a big deal if you had waited a total of five hours in line Monday and left without voting, then spent three more hours in line Tuesday – Boca Raton resident Ann Dean's complaint.</p> <p>And the failure to boot up wasn't the only problem.</p> <p>Morris Jay of Boca Raton came Monday but left without voting. He was one of the first in line Tuesday and was not inspired by his voting experience.</p> <p>"I voted, but my machine froze," he said. "They fiddled around with it, then they closed it up. They gave me another card and I went to another machine."</p>

³³ **Glitches, lines hamper early voting.** Palm Beach Post. October 19, 2004. By John Murawski, Palm Beach Post Staff Writer.
<http://www.palmbeachpost.com/business/content/news/feeds/1019vote.html>

Sequoia in the News – A Partial List of Documented Failures

Date	Machine	Place/Description
October 2004	AVC Edge	<p>Palm Beach County, Florida. User-unfriendly design of e-voting machines caused poll workers to err. The first day of early voting, poll workers in one location closed the election on early voting touch-screen machines, rather than just shutting down for the night. Now, the machines can't be used again in the election.³⁴</p> <p>Voting scheduled to start at 9 a.m. Tuesday at the county library branch west of Boca Raton didn't begin until about noon.</p> <p>Describing the poll workers as embarrassed by the mistake, LePore said they were so frazzled by the onslaught of voters and criticism on Monday that that they made a mistake.</p> <p>For regular elections, workers turn two knobs, one to turn off the power and the other to close the polls. For early voting, they're only supposed to turn off the power. They did both Monday night, which meant the machines couldn't be activated Tuesday.</p> <p>So all the machines at that location had to be taken back to the elections office to be counted on elections night, then replacements sent to be started for Tuesday's voting.</p>
October 2004	Printery	<p>Adams County, Colorado. Sequoia Voting Systems failed to print 13,000 absentee ballots ordered for Denver voters.³⁵</p> <p>Residents wanted to know where their absentee ballots were. Election officials explained the delay with the Nader lawsuit and Columbus Day.</p> <p>But the phones kept ringing.</p> <p>Officials got suspicious, investigated, and discovered Monday that the California printer never printed the first batch of ballots, election commissioner Susan Rogers said.</p> <p>They are being printed now, though, and will be on their way to voters soon.</p> <p>"If people are leaving town or need one right away, they need to contact us," Rogers said.</p> <p>A phone call to Sequoia Voting Systems, the Oakland-based contractor that handles the printing, was not returned Tuesday afternoon.</p>

³⁴ **Early balloting continues in Palm Beach County, and so do voters' gripes.** South Florida Sun-Sentinel. October 20, 2004. By Anthony Man.
<http://www.votersunite.org/article.asp?id=3298>; <http://www.sun-sentinel.com/news/local/palmbeach/sfl-pvoter20oct20,0,7789937.story?coll=sfla-news-palm>

³⁵ **Absentee ballots 'lost' at printer.** Rocky Mountain News. October 20, 2004. By Gabrielle Crist.
http://rockymountainnews.com/drmn/election/article/0,1299,DRMN_36_3267080,00.html

Sequoia in the News – A Partial List of Documented Failures

Date	Machine	Place/Description
October 2004	AVC Edge	<p>Bernalillo and Sandoval Counties, New Mexico. Votes change on the screen and are resistant to voter's attempt to vote for their choice.³⁶</p> <p>Kim Griffith voted on Thursday – over and over and over. She's among the people in Bernalillo and Sandoval counties who say they have had trouble with early voting equipment. When they have tried to vote for a particular candidate, the touch-screen system has said they voted for somebody else.</p> <p>It's a problem that can be fixed by the voters themselves – people can alter the selections on their ballots, up to the point when they indicate they are finished and officially cast the ballot.</p> <p>For Griffith, it took a lot of altering.</p> <p>She went to Valle Del Norte Community Center in Albuquerque, planning to vote for John Kerry. "I pushed his name, but a green check mark appeared before President Bush's name," she said.</p> <p>Griffith erased the vote by touching the check mark at Bush's name. That's how a voter can alter a touch-screen ballot. She again tried to vote for Kerry, but the screen again said she had voted for Bush. The third time, the screen agreed that her vote should go to Kerry.</p> <p>... In Sandoval County, three Rio Rancho residents said they had a similar problem, with opposite results. They said a touch-screen machine switched their presidential votes from Bush to Kerry.</p> <p>... [Bernalillo County Clerk Mary] Herrera said she's heard stories from Democrats and Republicans. In some cases, when people have tried to vote a straight ticket, the screen has given their votes to every candidate in the opposite political party, she said.</p>

³⁶ **Some Voters Say Machines Failed, Incorrect Choices Appear on Screens.** Albuquerque Journal. October 22, 2004. By Jim Ludwick, Journal Staff Writer.
<http://www.abqjournal.com/elex/246845elex10-22-04.htm>

Sequoia in the News – A Partial List of Documented Failures

Date	Machine	Place/Description
October 2004	Tally software	<p>Bernalillo County. Tally software has added false votes to several elections in the last two years. ³⁷</p> <p>The unresolved issue of phantom votes in Bernalillo County apparently dates back several elections over two years. County Clerk Mary Herrera acknowledged Monday that bogus votes have appeared in at least three elections.</p> <p>She says the problem began when the county purchased new election software for the vote tally machines it uses on election night. In one case, nearly four thousand phantom votes were added to just one race.</p> <p>However, the clerk says her vote-counting experts have always found the phantom votes before they were added to the final tally.</p> <p>In June 2004, Herrera sent an emergency request for help to Secretary of State Rebecca Vigil-Giron. Her office says it will help Bernalillo county fix the problem after this year's election.</p> <p>Vendors have been blaming it on communications, but in spite of efforts to fix the problem, Herrera still does not know what's causing it. ³⁸</p>
November 2004	AVC Edge	<p>Snohomish County, Washington. County Auditor Bob Terwilliger believes they have corrected the problems that caused 65 of the 860 paperless voting machines to be removed from service during the September primary. Some were "operational errors." Twenty were machine malfunctions. ³⁹</p> <p>Sequoia's Charles said the equipment-failure rate of around 2.5 percent is unusually high for an election. Moreover, Sequoia does not know why that many machines would fail for random and apparently unrelated reasons. The machines underwent rigorous testing and trials.</p> <p>But Terwilliger said the 20 breakdowns all involved circuit boards manufactured by a third-party vendor. Terwilliger also said Sequoia has not supplied a full machine-by-machine accounting of the breakdowns.</p> <p>... If a similar number of machines fail tomorrow, it would suggest Sequoia "has some real problems on its hands," he said.</p> <p>Rare among election officials, Terwilliger has demanded an investigation into the cause, has released the results of the investigation, and is holding the manufacturer accountable.</p>

³⁷ **County clerk say phantom votes won't be a problem.** KRQE Albuquerque. October 26, 2004.
http://www.krqe.com/expanded3.asp?RECORD_KEY%5BLargeHeadline%5D=ID&ID%5BLargeHeadline%5D=7425

³⁸ Video is here: [http://www.krqe.com/video/expanded3.asp?RECORD_KEY\[Video3\]=ID&ID%5BVideo3%5D=1054](http://www.krqe.com/video/expanded3.asp?RECORD_KEY[Video3]=ID&ID%5BVideo3%5D=1054)

³⁹ **Questions remain about touchscreen voting machines.** Seattle Times. November 1, 2004. By Paul Andrews.
http://seattletimes.nwsourc.com/html/businesstechnology/2002078349_paul01.html

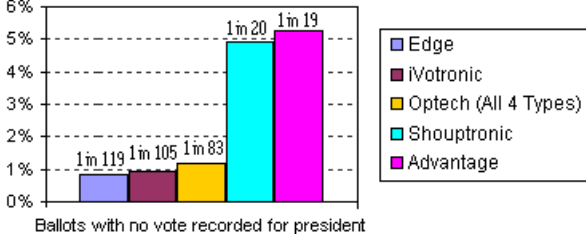
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Date	Machine	Place/Description
October 2004	Paperless e-voting machines	Cibola, New Mexico. Early voters complain about the electronic voting machines supplied by Ink Impressions. Checked by a police officer, it's clear that voters must touch the screen exactly right for the vote to register correctly. ⁴⁰
October 2004	Touch screen	<p>Sandoval County, New Mexico. Problems plagued early voting. Both major political parties said that machine errors may have caused votes intended for one side to actually be cast for the other. In addition four machines had electrical problems and had to be taken out of service. ⁴¹</p> <p>The complaints were widespread:</p> <ul style="list-style-type: none"> ◆ Three Republican voters spoke at a news conference, saying they were not sure if their votes were cast as they intended. ◆ Stan Read, the Republican candidate for judge in the 13th Judicial District, said he was not initially allowed to vote for himself or House candidate Glenn Walters and that he had to vote for an unopposed Democratic candidate in another judicial race to make the machine accept his ballot. ◆ At least one other voter had a similar experience, having to vote for a Democrat he didn't favor to make sure the machine would cast his entire ballot. ◆ A Rio Rancho woman who attempted to vote a straight Republican ticket said the machine switched all of her votes to Democrat. She said her daughter attempted to vote straight Republican, but her votes were all switched to the Green Party. <p>Pat Rogers, attorney for the Republican Party, expressed grave concerns about electronic voting.</p> <p>"These are machines that supposedly were certified and verified before the election," Rogers said. "These machines that are turning Republican votes into Democrat votes ought to be of concern to everyone who wants an honest count in this election."</p>

⁴⁰ **Voting machines check out perfectly.** Cibola County Beacon Online. <http://www.cibolabeacon.com/articles/2004/10/30/news/news3.txt>

⁴¹ **Concerns rise on early voting.** The Rio Rancho Observer. October 26, 2004. By Eric Maddy, Observer staff writer. <http://www.observer-online.com/articles/2004/10/26/news/story2.txt>

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November 2004	Advantage	<p>New Mexico. Presidential undervote rates (ballots without a vote for president) were greater for ballots cast on the Advantage than those cast on any other type of system used on Election Day. One in every 19 ballots cast on Advantage machines did not register a vote for president.⁴²</p> <div data-bbox="527 350 1142 708" style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p style="text-align: center;">Presidential Undervote Rate by Machine Type</p>  <table border="1" style="margin-left: auto; margin-right: auto;"> <caption>Presidential Undervote Rate by Machine Type</caption> <thead> <tr> <th>Machine Type</th> <th>Undervote Rate</th> </tr> </thead> <tbody> <tr> <td>Edge</td> <td>1 in 119</td> </tr> <tr> <td>iVotronic</td> <td>1 in 105</td> </tr> <tr> <td>Optech (All 4 Types)</td> <td>1 in 83</td> </tr> <tr> <td>Shouptronic</td> <td>1 in 20</td> </tr> <tr> <td>Advantage</td> <td>1 in 19</td> </tr> </tbody> </table> </div>	Machine Type	Undervote Rate	Edge	1 in 119	iVotronic	1 in 105	Optech (All 4 Types)	1 in 83	Shouptronic	1 in 20	Advantage	1 in 19
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November 2004	AVC Edge	<p>Snohomish County, Washington. Voters in at least four polling precincts in Snohomish County said they have encountered problems with the Sequoia electronic voting machines. When they touched the screen to vote for a candidate, an indicator showed they had selected the opposing candidate. It took at least four attempts before the indicator showed the correct candidate.⁴³</p> <p>Those voters told KING5 News it took at least four attempts before the indicator showed the correct candidate. When they finished their selection, a review list generated by the machine did show a correct voting ballot.</p> <p>KING5 News North Sound Bureau Chief Jane McCarthy said a precinct worker told her that if there is a problem with a voting machine, it would be taken out of service if the problem cannot be fixed.</p> <p>Snohomish County Auditor Bob Terwilliger told McCarthy he didn't feel this was troubling. He said the problem only occurred in 15 out of 950 electronic voting machines being used throughout the county.</p>												

⁴² **Summary Report on New Mexico State Election Data.** December 12, 2004. by Ellen Theisen and Warren Stewart.
<http://www.votersunite.org/info/NewMexico2004ElectionDataReport-v2.pdf>

⁴³ **Scattered reports of voters being blocked and machine malfunctions.** November 2, 2004. KING5 News.
http://www.king5.com/topstories/stories/NW_110204ELBelectronicvotingproblemsLJ.1aac5fda.html

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Date	Machine	Place/Description
November 2004	AVC Advantage	<p>New Orleans Parish, Louisiana. In Louisiana, state election officials received about 200 complaints of problems with machines, including two confirmed reports of Sequoia AVC Advantage voting machines in New Orleans Parish that were not working, according to Scott Madere, press secretary for the Louisiana Secretary of State. ⁴⁴</p>
November 2004	AVC Edge	<p>Palm Beach County, Florida. In addition to seeing voters who had been told to go to the wrong precinct, others who found their polling place closed with no sign telling them where it had been moved, and poll workers giving incorrect instructions, one observer in Palm Beach saw touch screens repeatedly registering incorrect votes and resisting correction.⁴⁵</p> <p style="padding-left: 40px;">Tina [Knight] worked nine hours election day. She talked to a woman who said the voting machine had repeatedly registered the wrong presidential candidate. After 8 or 9 tries, it finally showed the candidate she had selected.</p> <p style="padding-left: 40px;">"Another lady said when she got to her review screen," at the end of the voting process, "the opposing presidential candidate was listed. . . . She called the poll worker and demanded it be fixed. The poll worker went back through the screens" and agreed the woman had voted for a different candidate than the review screen showed. "The poll worker said, 'The review screen is wrong, but just go ahead and punch the confirmation button.' The woman refused. She made the poll worker cancel out the transaction, and she voted again. But how many people would do that -- go against what the poll worker advised?"</p>

⁴⁴ **E-voting problems reported as election gets under way.** IDG News Service. November 2, 2004. By Paul Roberts, IDG News Service, Boston Bureau. <http://www.itworld.com/Tech/2987/041102evoteprobs/>

⁴⁵ **'Lowdown tricks' sap poll-watcher's faith in fair U.S. voting.** The Oregonian. November 23, 2004. By Margie Boulé. http://www.oregonlive.com/news/oregonian/margie_boule/index.ssf?/base/living/1101215142230890.xml

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Date	Machine	Place/Description
December 2004	AVC Edge	<p>Elko County, Nevada. A month after the election, it was discovered that 271 uncounted votes had not been retrieved from the memory cartridges. ⁴⁶</p> <p>[Elko County Clerk Win Smith] said the missing votes were discovered late Thursday when county employees inputting voter history into the system discovered that the number of voters and the number of votes did not match.</p> <p>"We found out all the votes were not counted," she said.</p> <p>Smith said she contacted Sequoia Voting Systems Inc., the Oakland, Calif.-based hardware and software firm that provided the touch-screen system, and the company provided assistance in finding and correcting the problem.</p> <p>"We walked it through," she said. "We easily got the votes out of those cartridges."</p> <p>VotersUnite spoke with Ms. Smith and discovered that the voting machines had been left in test mode on election day, so the upload process had disregarded the votes. Problems had occurred with those machines and cartridges on election day, but Ms. Smith and her staff didn't understand their significance, since they had received no training on using the machines before the election.</p> <ol style="list-style-type: none"> 1) Those three machines had not printed out the end of day report. 2) When they attempted to upload the three cartridges, the screen on the central computer went "blue" and they thought the card reader had failed. The Sequoia technician took the cartridges into his nearby office to use his card reader. Ms. Smith thought they had been successfully read, but only found out later that they had not.

⁴⁶ **Missing votes found in machines.** Elko Daily Free Press. December 8, 2004. By Dave Woodson, Staff Writer. <http://www.votersunite.org/article.asp?id=4147>