



2024 Establishing Trust in Our Elections

Rick Weible

[www.midwestswampwatch.com](http://www.midwestswampwatch.com)



Donate and send tips to

[www.midwestswampwatch.com](http://www.midwestswampwatch.com)

[tips@midwestswampwatch.com](mailto:tips@midwestswampwatch.com)

# About Rick Weible



- Born and Raised in Minnesota
- B.A. Political Science – University of Minnesota
- 14 Years Elected Office 4 Years City Council, 10 Years Mayor St. Bonifacius
- 8 Years MN GOP CD3 Co-Chair and State Exec.
- Certified Network Engineer
- Worked at Help/Systems, the first ISO 9000 Software Company in USA.
- 28 Years of Cyber Security Consulting Experience
- CEO for D3Defense
- Moved to South Dakota 2018
- Manage clients DOD CMMC 2.0 Level 3 Certifications and Audits

# Election Integrity – The Gold Standard



**Transparency**  
is the inoculation to all conspiracy theories

# 2022 Case – Test Deck Fail?

## Rhode Island reaches settlement with voting machine vendor over primary election errors

*Secretary Gorbea Announces Settlement with Election Systems and Software Over Errors in the 2022 Election*

by **Ryan Belmore**  
December 29, 2022



The Rhode Island Department of State has reached a settlement with voting machine vendor Election Systems and Software (ES&S) following programming errors that were discovered during the 2022 primary election.

As part of the settlement, ES&S will provide a credit of \$47,644 for all project management services provided during the election. In addition, the company has agreed to post a public statement (included below) on its website outlining best practices for collaborative Logic & Accuracy testing.

After the discovery of the programming errors in August, the Rhode Island Department of State's Elections Division worked with ES&S and the Rhode Island Board of Elections to develop new collaborative testing protocols to verify the accuracy of voting screens in both English and Spanish, as well as the accuracy of printed ballot cards.

Secretary of State Nellie Gorbea stated, "We have held our vendor accountable for their mistake, and working together we have succeeded in making systemic improvements to pre-election testing across my office, the Board of Elections and ES&S."

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*Pre-election testing includes logic and accuracy (L&A) testing. It's the process by which the machines and ballots are publicly tested by jurisdictions before Election Day to confirm that the ballot content is accurate and those ballots will tabulate a voter's selections correctly. L&A testing increases confidence in elections.*

*ES&S wants to reiterate its recommendation for best practices which are contained on our online customer portal. "L&A testing starts with proofing all of your ballot styles, both paper and touch screen, for accuracy in layout and contests." This will ensure that all touch screens match exactly paper ballots, in every language used for voting.*

*Furthermore, we have also expressed: "To test your tabulation equipment, use a test deck of ballots and or ExpressVote vote summary cards containing votes for each candidate and questions in all contests, and where the expected results are known." This means that on touch screens, testing should include votes for all candidates and questions in all races. As we have said: "You can create your own test deck independently by manually filling out ballots for all ballot styles in sufficient quantity to vote all candidates/questions in all contests."*

# Voting rights groups call for investigation of Election Day problems in Northampton County

BY: PETER HALL - NOVEMBER 14, 2023 5:02 PM

“The county’s conflicting messages to the public on Election Day led to confusion, concern, and doubt in the security and accuracy of votes. These mistakes grow into misinformation,” said Philip Hensley-Robin, executive director of Common Cause PA.

The [voting machine malfunction](#) forced voters in Northampton County to vote via emergency ballots. County election officials said the issue was a “clerical error.”

The malfunction occurred in the Superior Court retention race where the voter had to select ‘Yes’ or ‘No’ to vote for Judges Jack Panella and Victor Stabile to retain their seats.

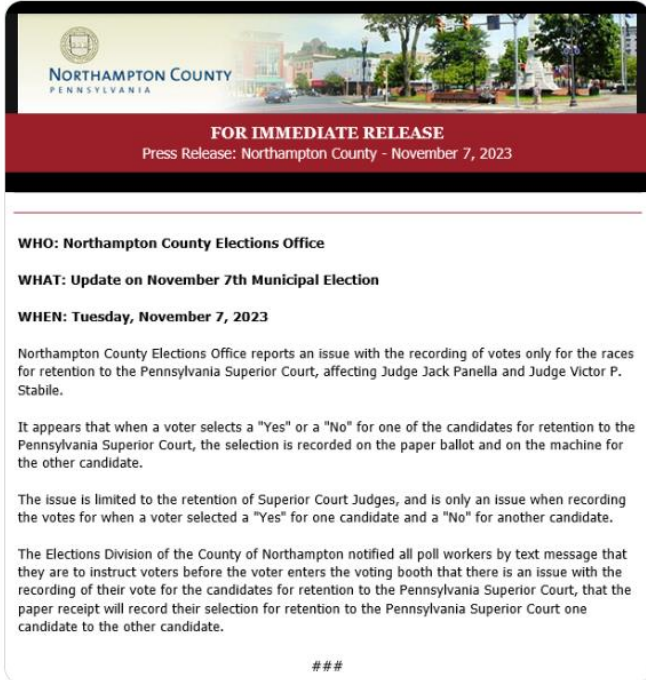
“The programming error that occurred in Northampton County should be a lesson for every Pennsylvania county that uses hybrid touch screen voting machines,” Marian Schneider, senior policy counsel for voting rights at the ACLU of Pennsylvania, said.

In addition to the investigation and report, the groups called on the county to evaluate voting machine logic and accuracy testing procedures and make adjustments to catch errors; issue public notices to allow observers during the testing, as required by the Election Code; and supply polling places with adequate emergency paper ballots, equal to 50% of the poll’s registered voters.

Counties are required to perform logic and accuracy testing of all voting machines. According to the [Pennsylvania Department of State](#), the testing is designed to detect issues with screen calibration, mislabeling and other potential problems to ensure the machines work properly.

“While the county completed some of this testing, it was not completed to adequacy or full compliance; otherwise the issue would have been caught and corrected before Election Day,” the voting rights groups said in a statement.

# 2023 – ES&S – NICE TEST DECK



A voting machine coding error in an eastern Pennsylvania county caused votes to be flipped on a ballot question that asked whether a pair of incumbent state appeals judges should be retained, officials said Tuesday.

Voters were asked to decide whether Pennsylvania Superior Court Judges Jack Panella and Victor Stabile should be retained for additional 10-year terms. The "yes" or "no" votes for each judge were being switched because of the error, said Lamont McClure, the Northampton County executive. If a voter marked "yes" to retain Mr. Panella and "no" on Mr. Stabile, for example, it was reflected as "no" on Mr. Panella and "yes" on Mr. Stabile.

Mr. McClure said voters first noticed the error on the printed voting records produced by the touchscreen machines.

The issue affected all the county's voting machines in use Tuesday, which Mr. McClure estimated at more than 300. The Pennsylvania Department of State said the problem was isolated to the two retention votes in Northampton County and that no other races statewide were affected.

Mr. McClure blamed a coding error by voting machine company Election Systems & Software, which he said the county's elections staff failed to pick up during testing.

Omaha, Nebraska-based ES&S acknowledged fault. A company spokesperson, Katina Granger, said the problem was caused by human error, was limited to Northampton County and only affected the judicial retention question.

It's not the first time Northampton County has had problems with the company's ExpressVoteXL touchscreen system. In 2019, an incorrectly formatted ballot in a judicial race forced election workers to count the vote on paper ballots.

<https://www.post-gazette.com/news/politics-state/2023/11/07/pennsylvania-voting-machine-error-judge/stories/202311070112>



# ES&S Issues

- 1.2022 Rhode Island settlement with ES&S, programming errors - <https://whatsupnewp.com/2022/12/rhode-island-reaches-settlement-with-voting-machine-vendor-over-primary-election-errors/>
- 2.2023 Northampton County - Errors not caught earlier - <https://www.penncapital-star.com/blog/voting-rights-groups-call-for-investigation-of-election-day-problems-in-northampton-county/>
- 3.2019 article ES&S Systems found on-line by Motherboard - <https://www.vice.com/en/article/3kxzk9/exclusive-critical-us-election-systems-have-been-left-exposed-online-despite-official-denials>
- 4.2022 Monmouth County Election double count of votes, the fact they tried installing software like this is a violation - [https://www.nj.gov/oag/newsreleases23/2023-0906-Monmouth-County-Investigation-Investigative-Facts-Report-\(8-31-2023\)-\(With%20Exhibits\).pdf](https://www.nj.gov/oag/newsreleases23/2023-0906-Monmouth-County-Investigation-Investigative-Facts-Report-(8-31-2023)-(With%20Exhibits).pdf)
- 5.2023 Hinds County (published Aug 31st) - Missing tapes from machines, starting at video 20:00 minutes... 26 precincts, DS200, 3 components to verify the vote...1) paper ballot 26/26 of precincts have ballots, machine tapes 26/26 did not include the tapes, media stick (thumb drive) 26/26 precincts did not include the media sticks in the ballot box....DS200 also has another measure, digital imaging, a picture of the ballot, not one digital image...ES&S turned it off....  
<https://www.wlbt.com/2023/08/31/archie-calls-hinds-co-democratic-chair-step-down-alleging-fraud-party-primary/>
- 6.2023 Hinds County - Ransomware Attack did happen, \$300,000 paid <https://www.wlbt.com/2023/10/03/against-advice-board-attorney-feds-david-archie-reveals-how-much-hinds-county-paid-hackers-after-cyberattack/>
- 7.2023 Hinds County start of Ransomware est - (early Sept, story is Sept 11<sup>th</sup>) <https://www.wapt.com/article/hinds-county-computer-system-remains-under-ransomware-attack/45053213>
- 8.2023 ES&S Vote flips and poor test decks - <https://www.post-gazette.com/news/politics-state/2023/11/07/pennsylvania-voting-machine-error-judge/stories/202311070112>
- 9.Remote Access software illegally installed on systems (2018)- (oldie but goodie) - <https://www.vice.com/en/article/mb4ezy/top-voting-machine-vendor-admits-it-installed-remote-access-software-on-systems-sold-to-states>
- 10.Modems in 33,000 machines but didn't disclose where they are - (2020) <https://www.politico.com/news/2020/08/13/election-voting-machine-misleading-claims-394891>

# SD ES&S Security

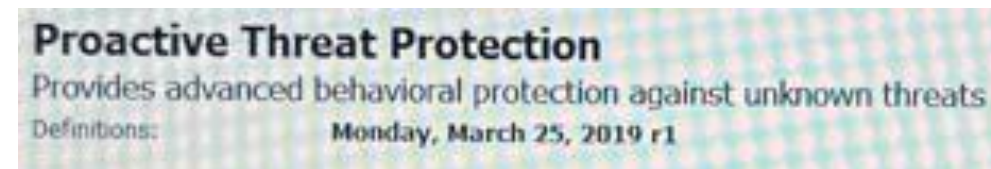
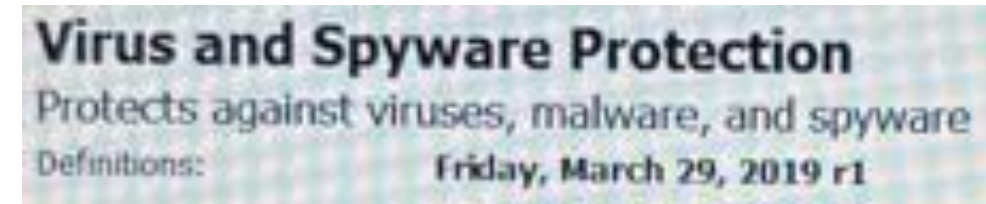
**EVS 6.1.1.0**

Electionware 6.0.1.0

# ES&S Electionware – We Are At **HIGH** Risk

## COTS Software

Manufacturer	Application	Version
Microsoft Corporation	Windows Server 2016	(64-bit)
Microsoft Corporation	Windows 10 Enterprise LTSC	SP1 (64-bit)
Microsoft Corporation	WSUS Microsoft Windows Offline Update Utility	11.6.1
Microsoft Corporation	January 2020 Security Rollup for Windows 10	windows10.0-kb4534273-x64_74bf76bc5a941bbbd0052caf5c3f956867e1de38.msu
Symantec	Endpoint Protection	14.2.0_MP1 (64-bit)
Symantec	Endpoint Protection Intelligent Updater (File-based protection)	20190329-001-core15sds5i64.exe
Symantec	Endpoint Protection Intelligent Updater (Network-based protection)	20190328-061-IPS_IU_SEP_14RUI.exe
Symantec	Endpoint Protection Intelligent Updater (Behavior-based protection)	20190325-001-SONAR_IU_SEP.exe



# ES&S Risks & EAC Response

2) With the VVSG 1.0 7.4.2 Protection Against Malicious Software, where it specifically states "Voting systems shall deploy protection against the many forms of threats to which they may be exposed such as file and macro viruses, worms, Trojan horses, and logic bombs. Vendors shall develop and document the procedures to be followed to ensure that such protection is maintained in a current status." Should counties/states ask for Engineering Change Orders to be able to update the Antivirus definition files of the system before an election, to ensure the security of their systems? I see that many jurisdictions are using ES&S 6.1.1.0, and the antivirus of the laptop and desktops are stuck at March 29th, 2019....



Paul Aumayr <paumayr@eac.gov>

To: Rick Weible



Wed 3/27/2024 10:42 AM

Good morning

In response to your questions submitted yesterday:

1. If the laptop is being used as part of an EAC certified voting system, then yes, the county should look to have the vendor submit an engineering change order. Adding new models of laptop to an already certified system with an ECO is very common, and is one of the most frequently used reasons for ECO submissions.
2. The ECO process can be used to update antivirus definition files and other security updates to voting systems. This was the subject of a Notification of Clarification (NOC) issued in 2019, which can be found on our website: <https://www.eac.gov/noc-19-01>

Sincerely,

**Paul Aumayr** | Sr. Election Technology Specialist  
Election Assistance Commission  
633 3<sup>rd</sup> Street NW, Suite 200 | Washington, DC 20001  
[www.eac.gov](http://www.eac.gov)  
| [PAumayr@EAC.gov](mailto:PAumayr@EAC.gov)

# ES&S Engineering Change Orders

Change ID	Date	Component	Description	Inclusion
ECO 1029	9/24/19	ExpressVote	Upgrade to 8GB Innodisk on EV 1.0	DeMinimis Optional
ECO 1034	10/28/19	ExpressVote Voting Booth	Enhanced Voting Booth	DeMinimis Optional
ECO 1035	2/13/20	DS200	Improve thermal stability and higher resolution calibration characteristics.	DeMinimis Optional
ECO 1041	10/28/19	ExpressVote XL	Add brace to Wheel Struts	DeMinimis Optional
ECO 1043	10/30/19	ExpressVote	Add 16G Innodisk to EV 1.0	DeMinimis Optional
ECO 1044	9/13/19	DS200 Ballot Tote	Add ballot Tote Bag	DeMinimis Optional
ECO 1047	2/28/20	ExpressVote XL	Aesthetic changes, modifications to cart and curtain hardware.	DeMinimis Optional
ECO 1054	02/14/20	ExpressVote/ExpressVote XL	Update Ballot Bin	DeMinimis Optional
ECO 1055	12/19/19	DS200 Ballot Bin tote	Add Ballot Tote Bag	DeMinimis Optional

# ES&S Change Orders Jan 1<sup>st</sup> 2022-Dec 31<sup>st</sup> 2022

ECO	Manufacturer	Testing Lab	Impacted Device/System	Date Approved
<a href="#">ECO-1125</a>	<a href="#">Election Systems &amp; Software, Inc (ES&amp;S)</a>	<a href="#">Pro V&amp;V</a>	ExpressVote 1.0	09-13-2021
<a href="#">ES&amp;S-1110</a>	<a href="#">Election Systems &amp; Software, Inc (ES&amp;S)</a>	<a href="#">Pro V&amp;V</a>	<p>DS850 on the following systems:</p> <p>Federal: EVS 5000, EVS 5010, EVS 5200, EVS 5203, EVS 5204, EVS 5210, EVS 5211, EVS 5220, EVS 5230, EVS 5240, EVS 5400, EVS 5410, EVS 6000, EVS 6020, EVS 6021, EVS 6030, EVS 6040, EVS 6043, EVS 6100, EVS 6110, Unity 3400, EVS 4310, EVS 3414</p> <p>State: EVS 6100, EVS 5110, EVS 5241, EVS 5300, EVS 5303, EVS 5310, EVS 5320, EVS 5321, EVS 5330, EVS 5340, EVS 5341, EVS 5501, EVS 5502, EVS 5602, EVS 6010, EVS 6041, EVS 6042, EVS 6050, EVS 6051, Unity 3301, Unity 3401, Unity 3411, FL EVS EVS 4530 Ver 2, FL EVS 4520 Ver 1, FL EVS 6101</p>	08-04-2021
<a href="#">ES&amp;S-1115</a>	<a href="#">Election Systems &amp; Software, Inc (ES&amp;S)</a>	<a href="#">Pro V&amp;V</a>	Federal: EVS 5.2.0.0, EVS 5.2.1.0, EVS 5.2.2.0, EVS 5.2.4.0, Unity 3.0.1.0, Unity 3.0.1.1, Unity 3.4.1.0	11-16-2021
<a href="#">ES&amp;S-1143</a>	<a href="#">Election Systems &amp; Software, Inc (ES&amp;S)</a>	<a href="#">Pro V&amp;V</a>	EVS 6.2.0.0	11-21-2022
<a href="#">ES&amp;S ECO 1141</a>	<a href="#">Election Systems &amp; Software, Inc (ES&amp;S)</a>	<a href="#">Pro V&amp;V</a>	EVS 6.2.0.0, EVS 6.0.6.0 Windows 10, Windows Server 2016	06-08-2022
<a href="#">ESS-1106</a>	<a href="#">Election Systems &amp; Software, Inc (ES&amp;S)</a>	<a href="#">Pro V&amp;V</a>	ExpressVote Tabulator with EVS 5400, EVS 5410, EVS 6000, EVS 6020, EVS 6021, EVS 6030, EVS 6040, EVS 6043	02-19-2021
<a href="#">ESS-1111</a>	<a href="#">Election Systems &amp; Software, Inc (ES&amp;S)</a>	<a href="#">Pro V&amp;V</a>	Federal: EVS 6100, EVS 6110	04-05-2021

# ES&S Change Orders Jan 1<sup>st</sup> 2023-March 31<sup>st</sup> 2024

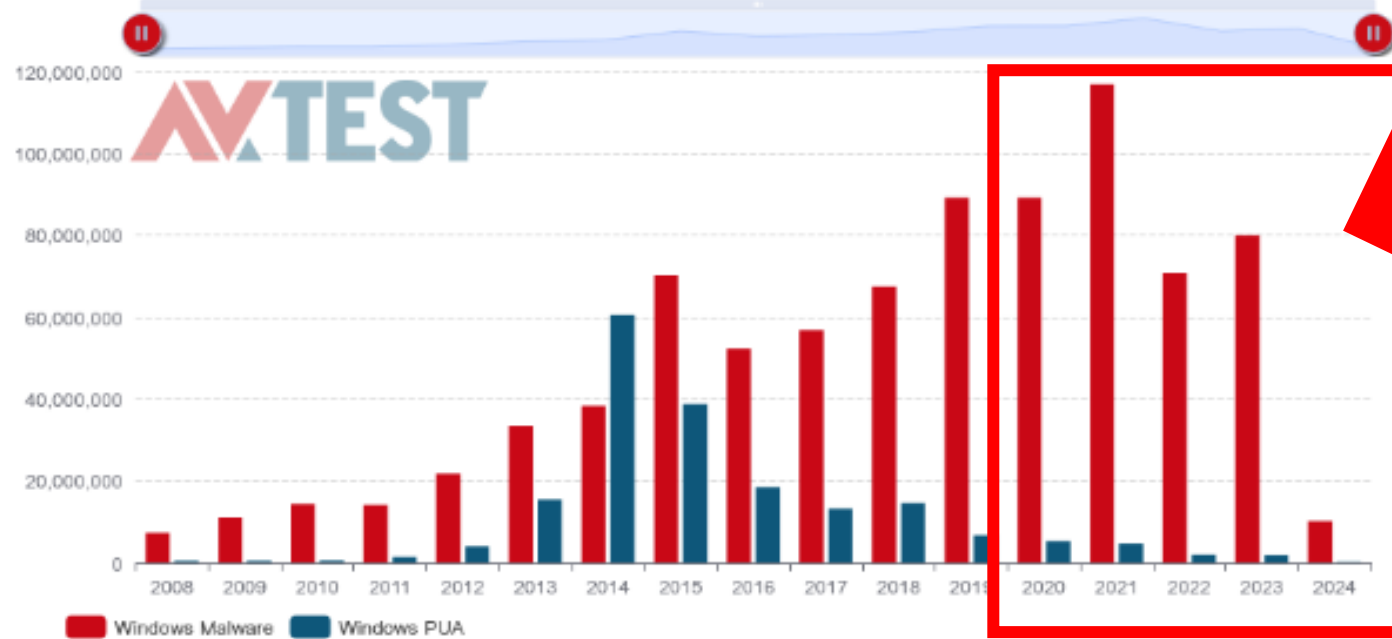
ECO	Manufacturer	Testing Lab	Impacted Device/System	Date Approved
<a href="#">ES&amp;S-1148</a>	<a href="#">Election Systems &amp; Software, Inc (ES&amp;S)</a>	<a href="#">Pro V&amp;V</a>	EVS 6.0.6.0	01-11-2023
<a href="#">ESS-1151</a>	<a href="#">Election Systems &amp; Software, Inc (ES&amp;S)</a>	<a href="#">Pro V&amp;V</a>	DS950 EVS 6.0.6.0, EVS 6.2.0.0, EVS 6.3.0.0	03-07-2023
<a href="#">ESS 1153</a>	<a href="#">Election Systems &amp; Software, Inc (ES&amp;S)</a>	<a href="#">Pro V&amp;V</a>	ExpressTouch and ExpressVote XL using EVS 6.3.0.0	05-30-2023
<a href="#">ESS-1154</a>	<a href="#">Election Systems &amp; Software, Inc (ES&amp;S)</a>	<a href="#">Pro V&amp;V</a>	DS300 Ballot Box Scanner for EVS 6.3.0.0.	03-08-2024
<a href="#">ESS-1156</a>	<a href="#">Election Systems &amp; Software, Inc (ES&amp;S)</a>	<a href="#">Pro V&amp;V</a>	DS950 Scanner for EVS 6.0.6.0, EVS 6.2.0.0 and EVS 6.3.0.0.	02-14-2024
<a href="#">ESS-1162</a>	<a href="#">Election Systems &amp; Software, Inc (ES&amp;S)</a>	<a href="#">Pro V&amp;V</a>	DS300 Ballot Bin Units; EVS 6.3.0.0, EVS 6.4.0.0.	12-05-2023
<a href="#">ESS-1167</a>	<a href="#">Election Systems &amp; Software, Inc (ES&amp;S)</a>	<a href="#">Pro V&amp;V</a>	EVS 6.3.0.0.	01-23-2024
<a href="#">ESS ECO-1160</a>	<a href="#">Election Systems &amp; Software, Inc (ES&amp;S)</a>	<a href="#">Pro V&amp;V</a>	Delkin 3.0 USB Flash Drive (4GB, 8GB) models 6206 and 6207; EVS 5.2.0.3.	12-07-2023

# ES&S Electionware 6.1.1.0

## We Are At **HIGH** Risk

### Development of Windows malware and PUA

#### TOTAL AMOUNT OF MALWARE AND PUA UNDER WINDOWS



Source: [av-atlas.org](http://av-atlas.org)

**What's  
not  
detected  
or  
covered**



# See the Difference

## INSTANT TRUST

Public Counting – Voter Intent Decided,  
Can ascertain how they counted ballots



Public Counting – Can observe with our  
own eyes and ears.

## INSTANT DOUBT

Machine Counting – Voter Intent Lost,  
Unable to ascertain how it counted ballots



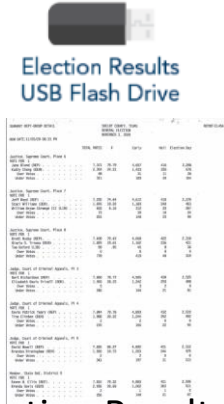
Machine Counting – Supposed to audit  
programming by reviewing test decks, ballot  
images and Cast Vote Records (CVRs)



Voters Vote on Paper



Ballots Inserted into Tabulators



Election Results, Reports, Cast Vote Records, Ballot Images



County Election Office



Election Management System

Expanded Election Results & Reporting Export & Review Cast Vote Records, Ballot Images



Ballot Style	Gov/US Gov (245)	Attorney Gen (250)	Sec State (255)
22241 C Beaver Dam W1,2,4,16	REP Michels / Roth (CND)REP Eric Toney (CND0005 REP Amy Lynn Loudenbei		
22242 C Beaver Dam W1,2,4,16	REP Michels / Roth (CND)REP Eric Toney (CND0005 REP Amy Lynn Loudenbei		
22243 C Beaver Dam W1,2,4,16	DEM Evers / Rodriguez (CDEM Josh Kaul (CND0004 DEM Doug La Follette (CH		
22244 C Beaver Dam W1,2,4,16	REP Michels / Roth (CND)REP Eric Toney (CND0005 REP Amy Lynn Loudenbei		
22245 C Beaver Dam W1,2,4,16	DEM Evers / Rodriguez (CDEM Josh Kaul (CND0004 DEM Doug La Follette (CH		
22246 C Beaver Dam W1,2,4,16	DEM Evers / Rodriguez (CDEM Josh Kaul (CND0004 DEM Doug La Follette (CH		
22247 C Beaver Dam W1,2,4,16	REP Michels / Roth (CND)REP Eric Toney (CND0005 REP Amy Lynn Loudenbei		
22248 C Beaver Dam W1,2,4,16	DEM Evers / Rodriguez (CDEM Josh Kaul (CND0004 DEM Doug La Follette (CH		
22249 C Beaver Dam W1,2,4,16	DEM Evers / Rodriguez (CDEM Josh Kaul (CND0004 REP Amy Lynn Loudenbei		

Cast Vote Record	Precinct	Ballot Style	Gov/US Gov (245)	Attorney Gen (250)	Sec State (255)
	22241	C Beaver Dam W1,2,4,16	REP Michels / Roth (CND)REP Eric Toney (CND0005 REP Amy Lynn Loudenbei		
	22242	C Beaver Dam W1,2,4,16	REP Michels / Roth (CND)REP Eric Toney (CND0005 REP Amy Lynn Loudenbei		
	22243	C Beaver Dam W1,2,4,16	DEM Evers / Rodriguez (CDEM Josh Kaul (CND0004 DEM Doug La Follette (CH		
	22244	C Beaver Dam W1,2,4,16	REP Michels / Roth (CND)REP Eric Toney (CND0005 REP Amy Lynn Loudenbei		
	22245	C Beaver Dam W1,2,4,16	DEM Evers / Rodriguez (CDEM Josh Kaul (CND0004 DEM Doug La Follette (CH		
	22246	C Beaver Dam W1,2,4,16	DEM Evers / Rodriguez (CDEM Josh Kaul (CND0004 DEM Doug La Follette (CH		
	22247	C Beaver Dam W1,2,4,16	REP Michels / Roth (CND)REP Eric Toney (CND0005 REP Amy Lynn Loudenbei		
	22248	C Beaver Dam W1,2,4,16	DEM Evers / Rodriguez (CDEM Josh Kaul (CND0004 DEM Doug La Follette (CH		
	22249	C Beaver Dam W1,2,4,16	DEM Evers / Rodriguez (CDEM Josh Kaul (CND0004 REP Amy Lynn Loudenbei		

Expanded Election Reporting Exports & Cast Vote Records, Ballot Images

From the moment a voter marks their ballot to the moment they cast their vote, **patented mark-recognition technology built into every ES&S scanner and tabulator helps ensure voter intent is accurately captured.**

**DS200®** is a polling place paper-based voting system, specifically a digital scanner and tabulator that simultaneously scans the front and back of a paper ballot and/or vote summary card in any of four orientations for conversion of voter selection marks to electronic cast vote records (CVR).

**DS450®** is a central scanner and tabulator that simultaneously scans the front and back of a paper ballot and/or vote summary card in any of four orientations for conversion of voter selection marks to electronic CVRs.

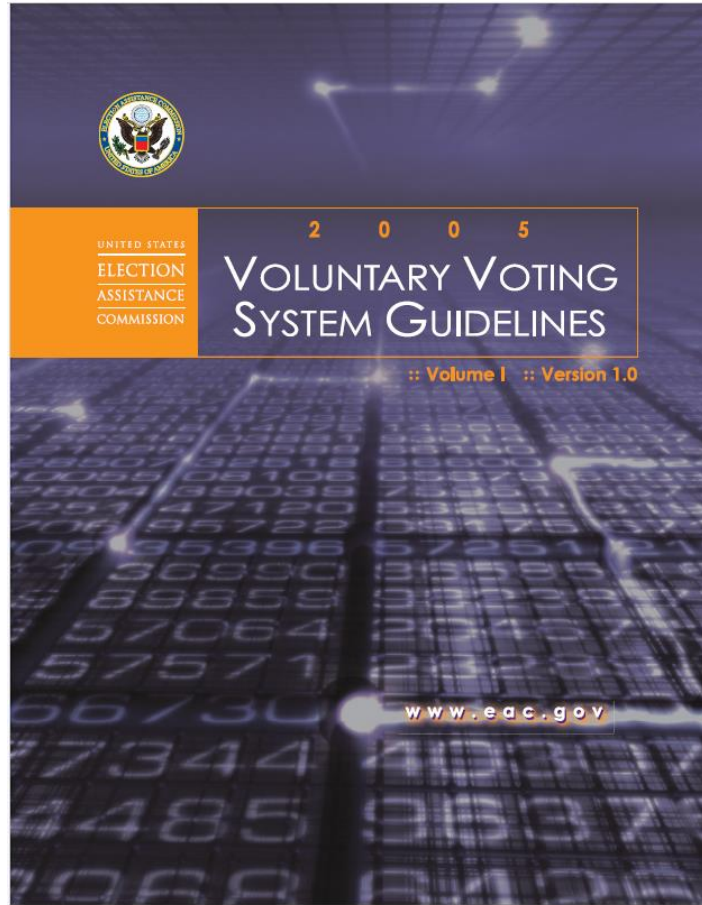
**DS850®** is a central scanner and tabulator that simultaneously scans the front and back of a paper ballot and/or vote summary card in any of four orientations for conversion of voter selection marks to electronic CVRs.

United States Election Assistance Commission  
**Certificate of Conformance**  
**ES&S EVS 6.1.1.0**

The voting system identified on this certificate has been evaluated at an accredited voting system testing laboratory for conformance to the *Voluntary Voting System Guidelines Version 1.0 (VVSG 1.0)*. Components evaluated for this certification are detailed in the attached *Scope of Certification* document. This certificate applies only to the specific version and release of the product in its evaluated configuration. The evaluation has been verified by the EAC in accordance with the provisions of the *EAC Voting System Testing and Certification Program Manual* and the conclusions of the testing laboratory in the test report are consistent with the evidence adduced. This certificate is not an endorsement of the product by any agency of the U.S. Government and no warranty of the product is either expressed or implied.

Product Name: EVS  
 Model or Version: 6.1.1.0  
 Name of VSTL: Pro V&V  
 EAC Certification Number: ESSEVS6110  
 Date Issued: July 27, 2020

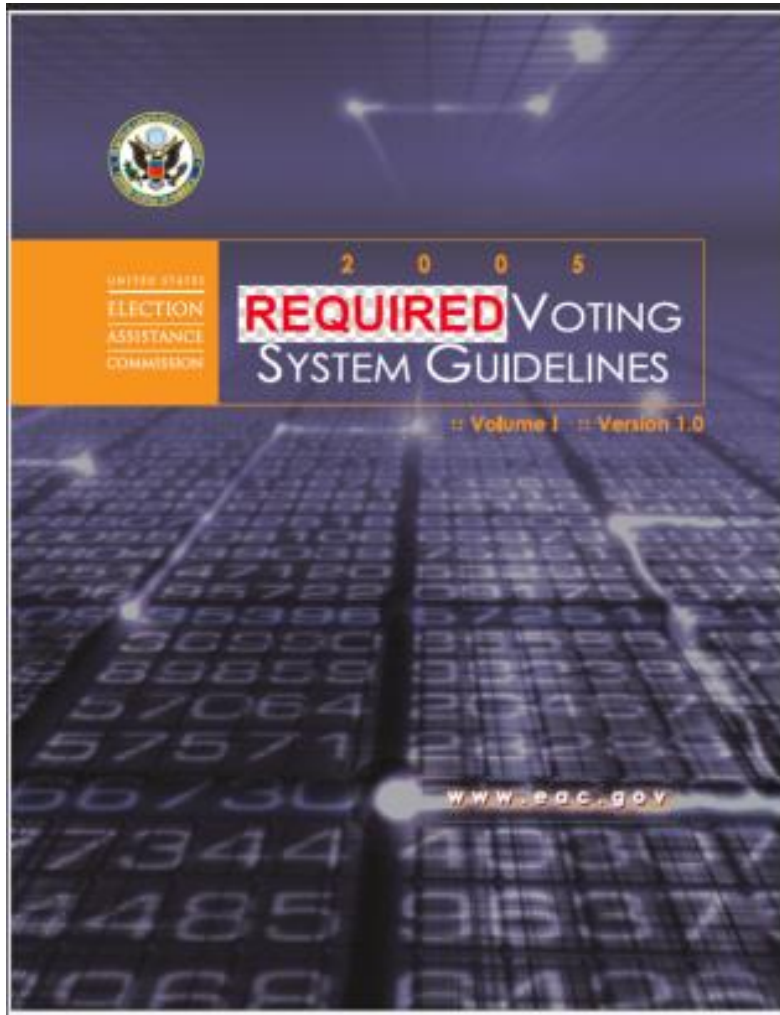
*Mona Harrington*  
 Executive Director  
 Scope of Certification Attached



### **12-17B-2. Requirements for automatic tabulating, electronic ballot marking, and election voting equipment systems--Approval of changes or modifications.**

Any automatic tabulating or electronic ballot marking system used in an election shall enable the voter to cast a vote for all offices and on all measures on which the voter is entitled to vote. No automatic tabulating, electronic ballot marking, or election voting equipment system may be connected to the internet. No ballot marking device may save or tabulate votes marked on any system. **Each system shall fulfill the requirements for election assistance commission standards certification and be approved by the State Board of Elections prior to distribution and use in this state.** No system may be approved unless the system fulfills the requirements as established by the State Board of Elections. Any changes or modifications to an approved system shall be approved by the State Board of Elections prior to distribution and use.

**Source:** SL 1994, ch 110, § 6; SL 2005, ch 92, § 3; SL 2018, ch 81, § 2, eff. Feb. 5, 2018.



United States Election Assistance Commission

Certificate of Conformance

ES&S EVS 6.1.1.0



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Product Name: EVS

Model or Version: 6.1.1.0

Name of VSTL: Pro V&V

EAC Certification Number: ESSEVS6110

Date Issued: July 27, 2020

*Mona Harrington*

Executive Director

Scope of Certification Attached



United States Election Assistance Commission

Certificate of Conformance

**ES&S EVS 6.1.1.0**



The voting system identified on this certificate has been evaluated at an accredited voting system testing laboratory for conformance to the **Voluntary Voting System Guidelines Version 1.0 (VMSG 1.0)**. Components evaluated for this certification are detailed in the attached Scope of Certification document. This certificate applies only to the specific version and release of the product in its evaluated configuration. The evaluation has been verified by the EAC in accordance with the provisions of the EAC *Voting System Testing and Certification Program Manual* and the conclusions of the testing laboratory in the test report are consistent with the evidence adduced. This certificate is not an endorsement of the product by any agency of the U.S. Government and no warranty of the product is either expressed or implied.

Product Name: EVS

Model or Version: 6.1.1.0

Name of VSTL: Pro V&V

EAC Certification Number: ESSEVS6110

Date Issued: July 27, 2020

*Mona Harrington*

Executive Director

Scope of Certification Attached

application that provides election definition creation, ballot formation, equipment configuration, result consolidation, adjudication, and report creation. Electionware is composed of five software groups: Define, Design, Deliver, Results, and Manage.

**ExpressVote XL™** is a hybrid paper-based polling place voting device that provides a full-faced touch screen vote capture interface that incorporates the printing of the voter's selections as a cast vote record and tabulation scanning in a single unit.

**ExpressTouch®** is a DRE voting system which supports electronic vote capture for curbside voting at the polling place.

**ExpressVote® Hardware 1.0** is a hybrid paper-based polling place voting device that provides touch screen vote capture that incorporates the printing of the voter's selections as a cast vote record to be scanned for tabulation in any one of the ES&S precinct or central scanners.

**ExpressVote® Hardware 2.1** is a hybrid paper-based polling place voting device that provides touch screen vote capture that incorporates the printing of the voter's selections as a cast vote record to be scanned for tabulation in any one of the ES&S precinct or central scanners.

**DS200®** is a polling place paper-based voting system, specifically a digital scanner and tabulator that simultaneously scans the front and back of a paper ballot and/or vote summary card in any of four orientations **for conversion of voter selection marks to electronic cast vote records (CVR)**.

**DS450®** is a central scanner and tabulator that simultaneously scans the front and back of a paper ballot and/or vote summary card in any of four orientations for conversion of voter selection marks to electronic CVRs.

**DS850®** is a central scanner and tabulator that simultaneously scans the front and back of a paper ballot and/or vote summary card in any of four orientations for conversion of voter selection marks to electronic CVRs.

**Event Log Service (ELS)** monitors and logs users' interactions with the election management system. Events that happen when a connection to the database is not available are logged to the Windows operating system log through the ELS.

**Removable Media Service (RMS)** is a utility that runs in the background of the Windows operating system. RMS reads specific information from any attached USB devices so that an ES&S application such as Electionware can use that information for media validation purposes.

# They Do Exist....

**DS200**<sup>®</sup> is a polling place paper-based voting system, specifically a digital scanner and tabulator that simultaneously scans the front and back of a paper ballot and/or vote summary card in any of four orientations for conversion of voter selection marks to electronic **cast vote records (CVR)**.

**DS450**<sup>®</sup> is a central scanner and tabulator that simultaneously scans the front and back of a paper ballot and/or vote summary card in any of four orientations for conversion of voter selection marks to electronic CVRs.

**DS850**<sup>®</sup> is a central scanner and tabulator that simultaneously scans the front and back of a paper ballot and/or vote summary card in any of four orientations for conversion of voter selection marks to electronic CVRs.

[https://www.eac.gov/sites/default/files/voting\\_system/files/ES%26S%20EVS6110%20Certificate%20and%20S%20cope%20of%20Conformance%2007-27-2020.pdf.pdf](https://www.eac.gov/sites/default/files/voting_system/files/ES%26S%20EVS6110%20Certificate%20and%20S%20cope%20of%20Conformance%2007-27-2020.pdf.pdf)



NIST Special Publication 1500-103

## Cast Vote Records Common Data Format Specification

Version 1.0

John Wack  
Software and Systems Division  
Information Technology Laboratory, NIST

Sam Dana  
Prometheus Computing

Herb Deutsch  
Election System Software

John Dziurlaj  
Democracy Fund

Ian Piper  
Dominion Voting

This publication is available free of charge from:  
<https://doi.org/10.6028/NIST.SP.1500-103>

November 2019  
INCLUDES UPDATES AS OF 03-31-2020; SEE APPENDIX E



U. S. Department of Commerce  
Wilbur Ross, Secretary

National Institute of Standards and Technology  
Walter G. Copan, Under Secretary of Commerce for Standards and Technology and Director



Join now

Sign in

## Herb Deutsch's Post



**Herb Deutsch**

Retired - Previously Manager Software Products at Election Systems & Software  
1y

This is an announcement of my retirement from ES&S. My last day will be July 1, 2022. I've been with ES&S or one of its predecessor companies for over 46 years, having been designing or being involved in the design of voting machines and the voting systems that they are part of. Elections is in my blood. However technology, security and design methods that are being used in new systems have changed as has technology in general. It's time for me to move on and let the upcoming generation carry the elections torch going forward.

   74 · 47 Comments

[https://csrc.nist.gov/csrc/media/events/future-of-voting-systems-symposium-2013/documents/presentations/piper\\_fov2013.pdf](https://csrc.nist.gov/csrc/media/events/future-of-voting-systems-symposium-2013/documents/presentations/piper_fov2013.pdf)



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U. S. Department of Commerce  
Wilbur Ross, Secretary

National Institute of Standards and Technology  
Walter G. Copan, Under Secretary of Commerce for Standards and Technology and Director



FEBRUARY 26, 2013

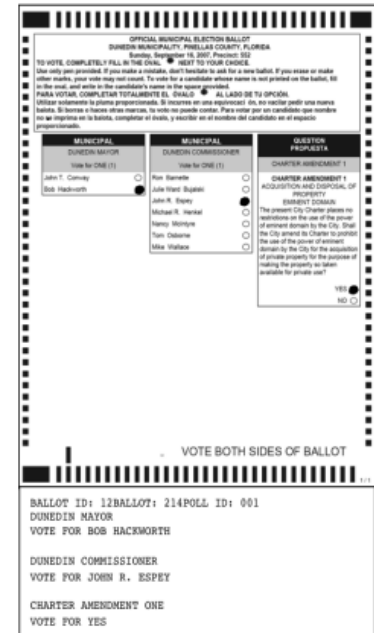
FUTURE OF VOTING SYSTEMS

IAN S. PIPER

DIRECTOR, CERTIFICATION

## AUDITABILITY

- Full ballot image scans
- Machine interpretations appended to ballot images
- Risk-limited auditing
- Software verifications



FUTURE OF VOTING SYSTEMS



## NIST Special Publication 1500-103

# Cast Vote Records Common Data Format Specification

### Version 1.0

John Wack  
*Software and Systems Division  
Information Technology Laboratory, NIST*

Sam Dana  
*Prometheus Computing*

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U. S. Department of Commerce  
*Wilbur Ross, Secretary*

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*Walter G. Copan, Under Secretary of Commerce for Standards and Technology and Director*

SP 1500-103, Version 1.0  
NIST Cast Vote Records CDF Specification

## 2 Background: Cast Vote Record Creation, Contents, and Handling

This section contains a general overview of how CVRs are created, their contents, and how they are subsequently handled in the election process.

### 2.1 Overview of Cast Vote Records and their Generation

Simply put, a cast vote record (CVR) is an electronic record of a voter's ballot selections, and its primary purpose is to provide a record of voter selections that can be counted in an efficient manner to produce election results. A CVR is created by equipment such as a voter facing scanner in a polling place into which a voter inserts a paper ballot. CVRs also get created by batch fed scanners used to scan absentee or other types of ballots that are collected before the election or that cannot be scanned by polling place scanners for various reasons. After the polls are closed, the CVRs are collected by election officials on memory devices and subsequently copied to an election management system that aggregates and tabulates the votes.

Three primary types of voting devices that create CVRs are:

- All-electronic voting devices that a voter uses to make ballot selections and that create and store a CVR for each ballot.
- Ballot marking devices (BMDs) that function like all-electronic devices but that produce a paper record of the voter's choices that must be subsequently scanned.
- Voter-facing optical scanners used in polling places and batch-fed optical scanners used in central offices to scan paper ballots.

The scanning devices above are sometimes referred to collectively as "tabulators" because they generally have a tabulation capability, but this is not always the case.

CVRs may include other information besides voter choices, including:

- Information on all contests and contest options on the ballot in addition to those marked
- The ballot style associated with the CVR
- The precinct or location associated with the CVR
- The equipment that produced the CVR
- The political party associated with the ballot for partisan primaries
- Images of the entire ballot and images of write-in areas on the ballot
- An identifier that is also printed on the ballot as it is scanned
- Indications of how the scanner has interpreted various marks.

This specification includes support for the above items.

## 2.2 Counting Cast Vote Records

To produce a CVR that is countable, the scanner must interpret the voter's selections according to the rules of each contest to determine which selections can be counted. This is true primarily of hand-marked paper ballot scanners in which voters may write in candidates whose names were not on the ballot or they may make mistakes that invalidate their choices such as overvoting in a contest. All-electronic devices and BMDs guide the voter how to make selections according to the contest rules, thus the CVRs they create require much less interpretation, except for write-ins.

When creating a cast vote record, ballot scanners must first interpret the ballot and detect where voters have made marks and whether those marks meet manufacturer-specific criteria for validity, that is, whether a mark is placed in the right location and is sufficiently formed so it constitutes an intentional ballot selection made by the voter. Each device in the jurisdiction must also be programmed with election specific information for the polling place that it will be used in, so the scanners can apply that polling place's election rules to the detected marks. Scanners may perform interpretation based on a number of different factors, including:

- A scanner may flag marks as being marginal, that is not meeting the criteria for validity, and therefore not counting those marks.
- Voters may vote for more than the allowable number of options (overvote) and the scanner must know not to count *any* of the selections made by the voter for that particular contest.
- Likewise, voters may undervote a contest, and the scanner must record that the contest was undervoted. The marked selections are still counted.
- The scanner must be programmed to tabulate the voter marks according to the voting method in place for a particular contest.
- A scanner may create indirect selections in the case of straight party voting where a voter can decide to vote for all candidates of a particular party by making a single straight-party selection at the top of the ballot.
- A scanner may invalidate voter marks in the case of straight party voting where a voter selects the straight party choice but votes for the other party in various contests. Depending on local election rules, the votes in those contests or the entire ballot could be invalidated.

Typically, CVR-generating equipment will export a collection of CVRs that may also include a tabulated report. This CVR collection may be copied to a memory device or otherwise transferred to a central location, where it can be combined with other CVR exports to produce election results.

## 2.3 Adjudication of Cast Vote Records

After a CVR collection has been exported, a number of the CVRs may require additional inspection and adjustment as part of a process known as adjudication, which may be done on an EMS by election officials. Write-ins are the most common reason:

1. On ballots produced by BMDs the write-in names could still be spelled differently or incorrectly, and
2. For scanned paper ballots, either the ballots themselves or the images of the write-in areas of the ballot that were made by the scanner must be inspected.

There are a number of other reasons why ballots may require adjudication, such as:

- The ballot was unreadable by the scanner.
- The voter may have marked the ballot in ways that are difficult to interpret, for example, the voter may have circled the ovals instead of filling them in.
- The scanner detected one or more overvotes.
- The scanner detected that the entire ballot was blank.

This specification provides the capability to update the CVR with multiple annotations made by adjudicators, recording the following items:

- The adjudicator name(s).
- Time stamp of when the adjudication(s) was made.
- The adjudication, i.e., the action taken by the adjudicator(s).

This is discussed in more detail in Section 4.1, Class Annotation.

## 2.4 Auditing Cast Vote Records

CVRs need to be audited against their paper counterparts so that election results can be verified to be accurate. This specification supports auditing by providing the following as options:

- Support for ballot-level comparison auditing, that is, there is an identifier in the CVR that can be linked to an ID printed on the corresponding paper ballot.
- Support to include adjustments to contest selections made by adjudicators.
- Different snapshots of the CVR can be created, one for the original scan, one for after election rules have been applied, and others as needed for adjudications.
- Indications of marginal marks, mark quality/density can be associated with contest selections.
- A CVR can include signed/hashed references to an associated image of the ballot or images of write-ins made by the voter.
- Capability to include batch information such as batch IDs and sequence within the batch.

# Cast Vote Records

be generated from a random number generator.

- c. The electronic ballot image and paper records shall be linked by including a unique identifier within each record that can be used to identify each record uniquely and each record's corresponding record.

Discussion: The identifier serves the purpose of uniquely identifying and linking the records for cross-checking.

- d. The voting machine should generate and store a digital signature for each electronic record.

- e. The electronic ballot image records shall be able to be exported for auditing or analysis on standards-based and /or COTS information technology computing platforms.

- i. The exported electronic ballot image records shall be in a publicly available, non-proprietary format.

Discussion: It is advantageous when all electronic records, regardless of manufacturer, use the same format or can easily be converted to a publicly available, non-proprietary format; for example, the OASIS Election Markup Language (EML) Standard.

- ii. The records should be exported with a digital signature, which shall be calculated on the entire set of electronic records and their associated digital signatures.

Discussion: This is necessary to determine if records are missing or substituted.

[https://www.eac.gov/sites/default/files/eac\\_assets/1/28/VVSG.1.0\\_Volume\\_1.PDF](https://www.eac.gov/sites/default/files/eac_assets/1/28/VVSG.1.0_Volume_1.PDF)

**Official Ballot  
Partisan Office and Referendum  
November 8, 2022**

Notice to voters: If you are voting on Election Day, your ballot must be initiated by two (2) election inspectors. If you are voting absentee, your ballot must be initiated by the municipal clerk or deputy clerk. Your ballot may not be counted without initials (see end of ballot for initials).

General Instructions	Statewide	Congressional	
<p>If you make a mistake on your ballot or have a question, ask an election inspector for help (absentee voters: contact your municipal clerk).</p> <p>To vote for a name on the ballot, fill in the oval next to the name like this: ●</p> <p>To vote for a name that is not on the ballot, write the name on the line marked "write-in" and fill in the oval next to the name like this: ●</p>	<p><b>Attorney General</b> Vote for 1</p> <p><input checked="" type="radio"/> Josh Kaul (Democratic)</p> <p><input type="radio"/> Eric Toney (Republican)</p> <p><input type="radio"/> write-in:</p>	<p><b>Representative to the Assembly</b> District 5 Vote for 1</p> <p><input checked="" type="radio"/> Mike Van Someren (Democratic)</p> <p><input type="radio"/> Scott Fitzgerald (Republican)</p> <p><input type="radio"/> write-in:</p>	
	<p><b>Secretary of State</b> Vote for 1</p> <p><input type="radio"/> Doug La Follette (Democratic)</p> <p><input type="radio"/> Amy Lynn Loudbeck (Republican)</p> <p><input checked="" type="radio"/> Neil Harmon (Libertarian)</p> <p><input type="radio"/> Sharyl R. McFarland (Wisconsin Green Party)</p> <p><input type="radio"/> write-in:</p>	<p><b>State Senator</b> District 13 Vote for 1</p> <p><input type="radio"/> John Jagler (Republican)</p> <p><input checked="" type="radio"/> write-in: FRANK ZAPPA</p>	<p><b>Representative to the Assembly</b> District 38 Vote for 1</p> <p><input type="radio"/> Mark L. Born (Republican)</p> <p><input checked="" type="radio"/> write-in: FRANK ZAPPA</p>
	<p><b>Governor / Lieutenant Governor</b> Vote for 1</p> <p><input checked="" type="radio"/> Tony Evers / Sara Rodriguez (Democratic)</p> <p><input type="radio"/> Tim Michels / Roger Roth (Republican)</p> <p><input type="radio"/> Joan Ellis Beglinger / No Candidate (Independent)</p> <p><input type="radio"/> write-in: (Governor)</p> <p><input type="radio"/> write-in: (Lieutenant Governor)</p>	<p><b>State Treasurer</b> Vote for 1</p> <p><input checked="" type="radio"/> Aaron Richardson (Democratic)</p> <p><input type="radio"/> John S. Leiber (Republican)</p> <p><input type="radio"/> Andrew Zuelke (Constitution)</p> <p><input type="radio"/> write-in:</p>	<p><b>County</b></p> <p><b>Sheriff</b> Vote for 1</p> <p><input checked="" type="radio"/> Dale J. Schmidt (Republican)</p> <p><input type="radio"/> write-in:</p>
	<p><b>Congressional</b></p> <p><b>United States Senator</b> Vote for 1</p> <p><input checked="" type="radio"/> Mandela Barnes (Democratic)</p> <p><input type="radio"/> Ron Johnson (Republican)</p> <p><input type="radio"/> write-in:</p>		

Cast Vote Record: 18,399

Poll Place: Iron Ridge Community Cent  
Precinct: V Iron Ridge  
Ballot Style: V Iron Ridge [ Sheet Number 1 ]  
Party: Nonpartisan  
Tabulator CVR: c4cd22611f6b4ab6  
Machine Serial: DS200 - 0317350401  
Blank Ballot: NO  
Reporting Group: Election Day

Contests:

Gov/Lt. Gov (245)

Vote For: 1  
Evers / Rodriguez (367) Counted

Attorney Gen (250)

Vote For: 1  
Josh Kaul (373) Counted

Sec State (255)

Vote For: 1  
Neil Harmon (381) Counted

State Treas. (260)

Vote For: 1  
Aaron Richardson (385) Counted

US State Sen (265)

Vote For: 1  
Mandela Barnes (391) Counted

Rep Congress Dist 5 (270)

Vote For: 1  
Mike Van Someren (395) Counted

State Sen Dist 13 (280)

Vote For: 1  
Write-in (282) Counted (Marked)

Rep Assem Dist 39 (290)

Vote For: 1  
Write-in (292) Counted (Marked)

Sheriff Dodge Co (310)

Vote For: 1  
Dale J. Schmidt (417) Overvoted  
Write-in (312) Overvoted (Marked)

Circuit Court Clerk Dodge Co (320)

Vote For: 1  
Kelly Enright (421) Counted

Ref Instructions with (330)

Vote For: 0

Referendum MPTC (333)

Vote For: 1  
Undervoted Undervoted

Ballot ID 18399i.pdf has a small mark in the oval for "write-in:" for the County Sheriff race causing the race to be an over vote, and the voter's vote to be lost.

**Official Ballot  
Partisan Office  
November 8, 2022**

Notice to voters: If you are voting on Election Day, your ballot must be initiated by two (2) election inspectors. If you are voting absentee, your ballot must be initiated by the municipal clerk or deputy clerk. Your ballot may not be counted without initials (see end of ballot for initials).

**General Instructions**

If you make a mistake on your ballot or have a question, ask an election inspector for help (absentee voters: contact your municipal clerk).

To vote for a name on the ballot, fill in the oval next to the name like this: ●

To vote for a name that is not on the ballot, write the name on the line marked "write-in" and fill in the oval next to the name like this: ●

**Statewide**

**Congressional**

<input type="radio"/> Josh Kaul (Democratic)	<input type="radio"/> Mike Van Someren (Democratic)
<input checked="" type="radio"/> Eric Toney (Republican)	<input checked="" type="radio"/> Scott Fitzgerald (Republican)
<input type="radio"/> write-in:	<input type="radio"/> write-in:

**Legislative**

<input type="radio"/> Doug La Follette (Democratic)	<input checked="" type="radio"/> John Jagler (Republican)
<input checked="" type="radio"/> Amy Lynn Loudenbeck (Republican)	<input type="radio"/> write-in:
<input type="radio"/> Neil Harmon (Libertarian)	<input type="radio"/> write-in:
<input type="radio"/> Sharyl R. McFarland (Wisconsin Green Party)	<input type="radio"/> Maureen McCarville (Democratic)
<input type="radio"/> write-in:	<input checked="" type="radio"/> William Penterman (Republican)
<input type="radio"/> write-in:	<input type="radio"/> write-in:

**State Treasurer**

Vote for 1

**Governor / Lieutenant Governor**

Vote for 1

<input type="radio"/> Tony Evers / Sara Rodriguez (Democratic)	<input checked="" type="radio"/> John S. Leiber (Republican)
<input checked="" type="radio"/> Tim Michels / Roger Roth (Republican)	<input type="radio"/> Dale J. Schmidt (Republican)
<input type="radio"/> Joan Ellis Beglinger / No Candidate (Independent)	<input type="radio"/> write-in:
<input type="radio"/> write-in: (Governor)	<input type="radio"/> write-in:
<input type="radio"/> write-in: (Lieutenant Governor)	<input type="radio"/> write-in:

**County**

Vote for 1

<input checked="" type="radio"/> John S. Leiber (Republican)	<input checked="" type="radio"/> Dale J. Schmidt (Republican)
<input type="radio"/> Andrew Zuelke (Constitution)	<input type="radio"/> write-in:

Clerk of Circuit Court

Vote for 1

<input checked="" type="radio"/> Kelly Enright (Republican)	<input type="radio"/> write-in:
<input type="radio"/> write-in:	<input type="radio"/> write-in:

Vote for 1

Vote for 1

Vote for 1

Vote for 1

Vote for 1

Vote for 1

Vote for 1

Vote for 1

Vote for 1

Vote for 1

Vote for 1

Vote for 1

Vote for 1

Vote for 1

Vote for 1

Vote for 1

Vote for 1

Vote for 1

Typ:01 Seq:0071 Spl:01

Continue voting at top of next column.

Continue voting at top of next column.

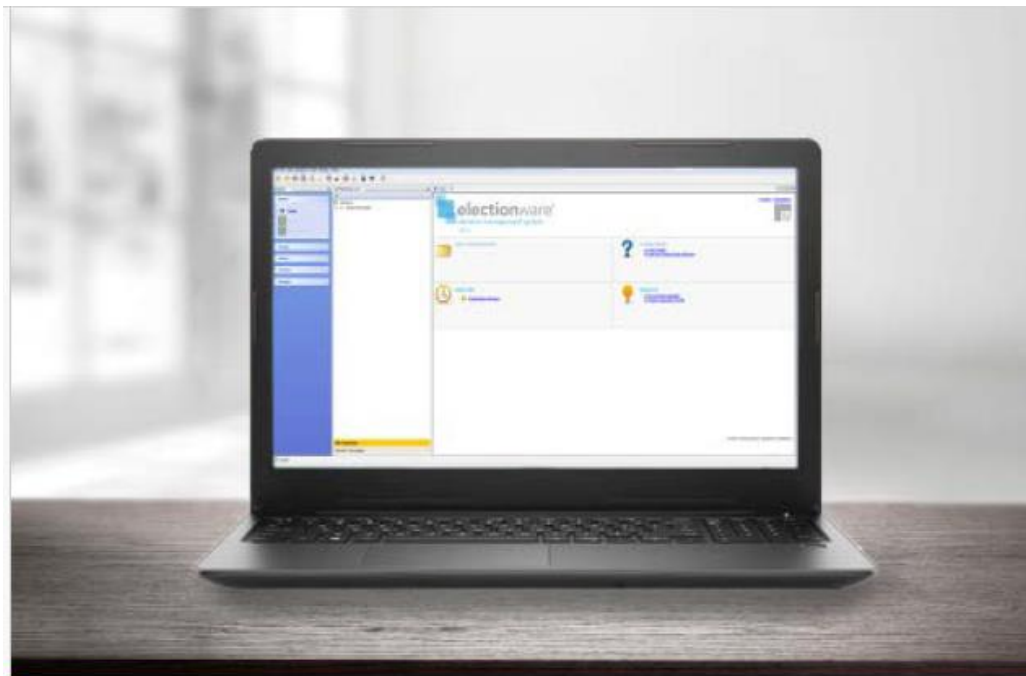
Cast Vote Record: 34,195

Poll Place: Watertown W1&2  
Precinct: C Watertown W1&2  
Ballot Style: C Watertown W1&2 [ Sheet Number 1 ]  
Party: Nonpartisan  
Tabulator CVR: 45e21200b3ab0caa  
Machine Serial: DS200 - 0317350792  
Blank Ballot: NO  
Reporting Group: Election Day

**Contests:**

Gov/Lt. Gov (245)	Vote For: 1	Michels / Roth (369)	Overvoted	
		Write-in (247)	Overvoted	(Marked)
Attorney Gen (250)	Vote For: 1	Eric Toney (375)	Counted	
Sec State (255)	Vote For: 1	Amy Lynn Loudenbeck (379)	Counted	
State Treas. (260)	Vote For: 1	John S. Leiber (387)	Counted	
US State Sen (265)	Vote For: 1	Ron Johnson (393)	Counted	
Rep Congress Dist 5 (270)	Vote For: 1	Scott Fitzgerald (397)	Counted	

Ballot image 34195i.pdf is a case of the worst possible outcome, to where a voter who voted absentee by mail, or strictly by mail, voted on a poorly designed ballot, that invalidated a voter's intent on a race in an election. Better design of the ballot could have prevented this from happening.



# Electionware® Election Management System

EVS 6.1.1.0  
Version 6.0.1.0

User Guide



v. 1.1

## Reporting Election Results

### Reporting Module Overview

The Reporting module is used to load election results, machine logs, cast vote records, and ballot images. This module is then used to create the results reports, review and adjudicate ballots, and review and manage write-ins.

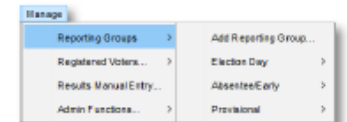
### Reporting Users

There are three types of Users that can be setup specifically for the Results module. When loading results, it is recommended that you log in as a Reporting User rather than Administrator.

Access Level	Description
ReportingAdministrator	Full administrator access to the Results module.
ReportingUser	Access only to the Results Reporting module.
BallotReviewer	Access only to Ballot Review portion of the Results Reporting module.

### Reporting Groups

Reporting groups are used to categorize different groups of ballot styles for statistical reporting purposes. They are ordinarily created in the Capture module while the election is being defined.

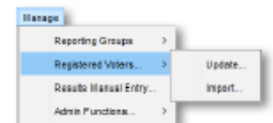


From the Results software group, click **Reporting**. Hover over **Reporting Groups** in the Manage menu and then click **Add Reporting Group**.

Complete the necessary information in the work pane for the new reporting group. Click **Save**. Click **Close**. Repeat as needed to create additional reporting groups.

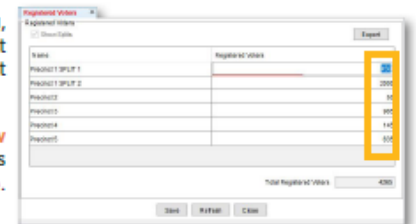
### Registered Voters

Although registered voter ("RV") numbers may have been entered in the Capture module while the election was being created for candidate rotation support, these totals may no longer be accurate on Election Day, and are not automatically transferred between Capture and Reporting. Final RV totals can be updated by precinct or split to calculate turnout.



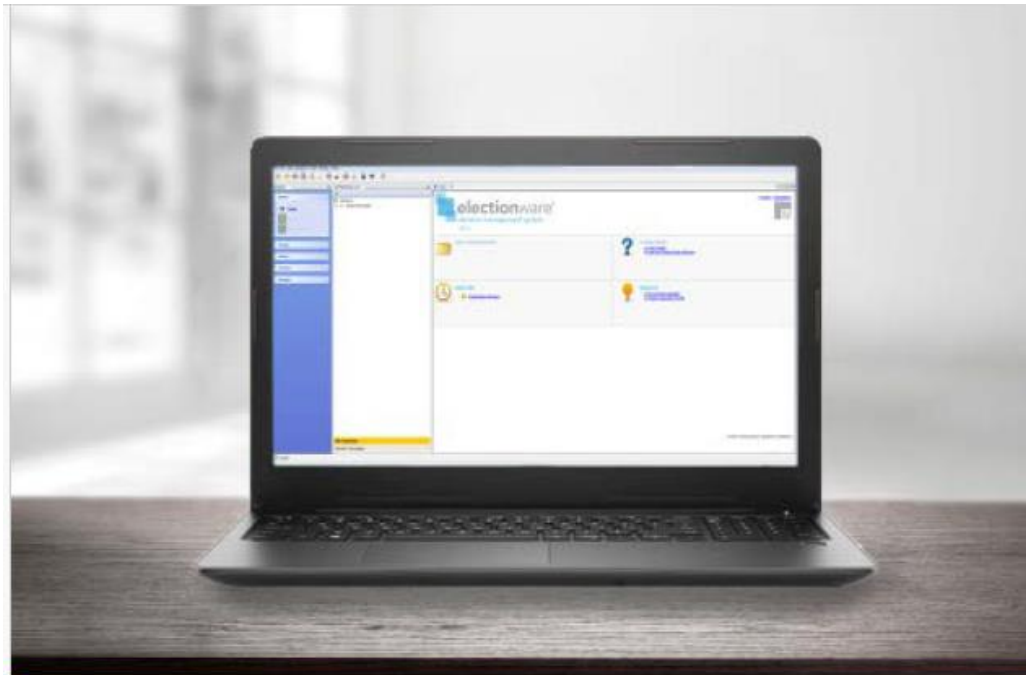
### Updating Registered Voters

Hover over **Registered Voters** in the Manage menu, then click **Update**. A two-column list of every precinct and split will appear with the number of RVs in the right column.



To view only precincts without splits, uncheck the **Show Splits** box. Double-click on the desired Registered Voters cell(s) to type the accurate number of voters. Click **Save**. Click **Close**.

More information: Electionware Vol. V: Results User Guide, p. 11



# Electionware® Election Management System

EVS 6.1.1.0  
Version 6.0.1.0

User Guide



v. 1.1

## Appendix A: Election Backups

### Creating a Backup

For a backup without ballot images, do not select **Include Ballot Images**. Ballot images are only available once there are election results processed in the Results module. The Election may only be restored with the correct Restore Code.

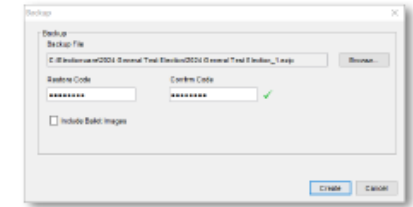
**IMPORTANT:** This code is not available on a report, so type with caution and archive codes for each election.

With the election open, click **Backup Election** from the File menu. Click **Browse** to select the backup location. Enter the Restore Code then confirm it in the Confirm Code field.

If there are ballot images you want to include from the Results module, check the box to **Include Ballot Images**. Click **Create**.

**IMPORTANT:** When creating or restoring an Electionware backup or Template, do not use special characters in the Election Name field. This can cause issues in Electionware. You may also not be able to restore the Electionware backup or Template if you use special characters (i.e. "&", "\*", "@", and "/").

Best practice when creating a backup is to always save it directly to your hard drive. If you must save it directly to a USB, ensure that it is NTFS-formatted media. If, for example, the USB is FAT32-formatted, the saving process could take 40 minutes as opposed to 20 seconds if it is NTFS-formatted.



### Restoring a Backup

The restore option is only available when no elections are currently open.

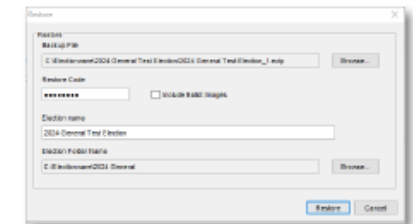
**IMPORTANT:** Do not use Restore Election to begin a new election.

Highlight the jurisdiction (County) for the election in the Navigator Pane. Click **Restore Election** from the File menu.

Click the top **Browse** button to locate the .zip election file.

Enter the **Restore Code** and check whether you want to **Include Ballot Images** with the restore. Type in the Election name; the election name must be unique.

Click the bottom **Browse** button and create a new folder under your Electionware folder to save the election. Select **Restore**.





## CHAPTER 207—FEDERAL ELECTION RECORDS

Sec.	
20701.	Retention and preservation of records and papers by officers of elections; deposit with custodian; penalty for violation.
20702.	Theft, destruction, concealment, mutilation, or alteration of records or papers; penalties.
20703.	Demand for records or papers by Attorney General or representative; statement of basis and purpose.
20704.	Disclosure of records or papers.
20705.	Jurisdiction to compel production of records or papers.
20706.	"Officer of election" defined.

### §20701. Retention and preservation of records and papers by officers of elections; deposit with custodian; penalty for violation

Every officer of election shall retain and preserve, for a period of twenty-two months from the date of any general, special, or primary election of which candidates for the office of President, Vice President, presidential elector, Member of the Senate, Member of the House of Representatives, or Resident Commissioner from the Commonwealth of Puerto Rico are voted for, all records and papers which come into his possession relating to any application, registration, payment of poll tax, or other act requisite to voting in such election except that, when required by law, such records and papers may be delivered to another officer of election and except that, if a State or the Commonwealth of Puerto Rico designates a custodian to retain and preserve these records and papers at a specified place, then such records and papers may be deposited with such custodian, and the duty to retain and preserve any record or paper so deposited shall devolve upon such custodian. Any officer of election or custodian who willfully fails to comply with this section shall be fined not more than \$1,000 or imprisoned not more than one year, or both.

(Pub. L. 86-449, title III, §301, May 6, 1960, 74 Stat. 88.)

#### EDITORIAL NOTES

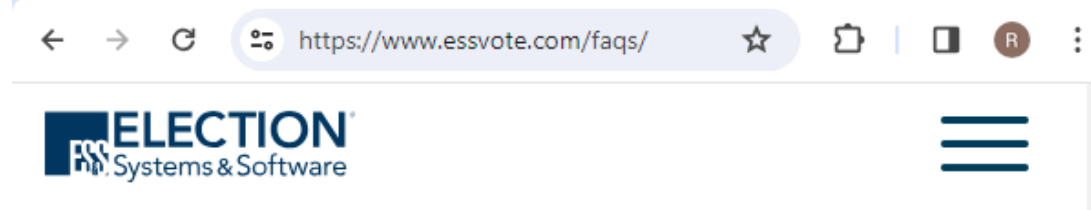
##### CODIFICATION

Section was formerly classified to section 1974 of Title 42, The Public Health and Welfare, prior to editorial reclassification and renumbering as this section.

### §20702. Theft, destruction, concealment, mutilation, or alteration of records or papers; penalties

Any person, whether or not an officer of election or custodian, who willfully steals, destroys, conceals, mutilates, or alters any record or paper required by section 20701 of this title to be retained and preserved shall be fined not more than \$1,000 or imprisoned not more than one year, or both.

(Pub. L. 86-449, title III, §302, May 6, 1960, 74 Stat. 88.)



### Does ES&S support post-election audits?

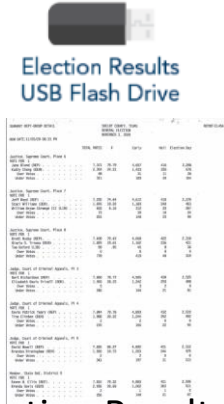
ES&S is a strong supporter of state and local administrations in their work to provide secure, accurate elections. Post-election audits are a legal process by which election officials verify that votes were counted accurately and is conducted by election officials according to state law. ES&S voting systems support these audits by providing election details (logs, **cast vote records**, reports, etc.) which election officials utilize for this purpose. ES&S supports the highest standards for security, including strict chain-of-custody protocols for equipment and all applicable laws, regulations and certification requirements.



Voters Vote on Paper



Ballots Inserted into Tabulators



Election Results, Reports, Cast Vote Records, Ballot Images



County Election Office



Election Management System

Expanded Election Results & Reporting Export & Review Cast Vote Records, Ballot Images



Ballot Style	Gov/US Gov (245)	Attorney Gen (250)	Sec State (255)
22241 C Beaver Dam W1,2,4,16	REP Michels / Roth (CND)REP Eric Toney (CND0005 REP Amy Lynn Loudenbei		
22242 C Beaver Dam W1,2,4,16	REP Michels / Roth (CND)REP Eric Toney (CND0005 REP Amy Lynn Loudenbei		
22243 C Beaver Dam W1,2,4,16	DEM Evers / Rodriguez (CDEM Josh Kaul (CND0004 DEM Doug La Follette (CH		
22244 C Beaver Dam W1,2,4,16	REP Michels / Roth (CND)REP Eric Toney (CND0005 REP Amy Lynn Loudenbei		
22245 C Beaver Dam W1,2,4,16	DEM Evers / Rodriguez (CDEM Josh Kaul (CND0004 DEM Doug La Follette (CH		
22246 C Beaver Dam W1,2,4,16	DEM Evers / Rodriguez (CDEM Josh Kaul (CND0004 DEM Doug La Follette (CH		
22247 C Beaver Dam W1,2,4,16	REP Michels / Roth (CND)REP Eric Toney (CND0005 REP Amy Lynn Loudenbei		
22248 C Beaver Dam W1,2,4,16	DEM Evers / Rodriguez (CDEM Josh Kaul (CND0004 DEM Doug La Follette (CH		
22249 C Beaver Dam W1,2,4,16	DEM Evers / Rodriguez (CDEM Josh Kaul (CND0004 REP Amy Lynn Loudenbei		

Cast Vote Record	Precinct	Ballot Style	Gov/US Gov (245)	Attorney Gen (250)	Sec State (255)
	22241	C Beaver Dam W1,2,4,16	REP Michels / Roth (CND)REP Eric Toney (CND0005 REP Amy Lynn Loudenbei		
	22242	C Beaver Dam W1,2,4,16	REP Michels / Roth (CND)REP Eric Toney (CND0005 REP Amy Lynn Loudenbei		
	22243	C Beaver Dam W1,2,4,16	DEM Evers / Rodriguez (CDEM Josh Kaul (CND0004 DEM Doug La Follette (CH		
	22244	C Beaver Dam W1,2,4,16	REP Michels / Roth (CND)REP Eric Toney (CND0005 REP Amy Lynn Loudenbei		
	22245	C Beaver Dam W1,2,4,16	DEM Evers / Rodriguez (CDEM Josh Kaul (CND0004 DEM Doug La Follette (CH		
	22246	C Beaver Dam W1,2,4,16	DEM Evers / Rodriguez (CDEM Josh Kaul (CND0004 DEM Doug La Follette (CH		
	22247	C Beaver Dam W1,2,4,16	REP Michels / Roth (CND)REP Eric Toney (CND0005 REP Amy Lynn Loudenbei		
	22248	C Beaver Dam W1,2,4,16	DEM Evers / Rodriguez (CDEM Josh Kaul (CND0004 DEM Doug La Follette (CH		
	22249	C Beaver Dam W1,2,4,16	DEM Evers / Rodriguez (CDEM Josh Kaul (CND0004 REP Amy Lynn Loudenbei		

Expanded Election Reporting Exports & Cast Vote Records, Ballot Images

From the moment a voter marks their ballot to the moment they cast their vote, **patented mark-recognition technology built into every ES&S scanner and tabulator helps ensure voter intent is accurately captured.**

**DS200®** is a polling place paper-based voting system, specifically a digital scanner and tabulator that simultaneously scans the front and back of a paper ballot and/or vote summary card in any of four orientations for conversion of voter selection marks to electronic cast vote records (CVR).

**DS450®** is a central scanner and tabulator that simultaneously scans the front and back of a paper ballot and/or vote summary card in any of four orientations for conversion of voter selection marks to electronic CVRs.

**DS850®** is a central scanner and tabulator that simultaneously scans the front and back of a paper ballot and/or vote summary card in any of four orientations for conversion of voter selection marks to electronic CVRs.

United States Election Assistance Commission  
**Certificate of Conformance**  
**ES&S EVS 6.1.1.0**

The voting system identified on this certificate has been evaluated at an accredited voting system testing laboratory for conformance to the *Voluntary Voting System Guidelines Version 1.0 (VVSG 1.0)*. Components evaluated for this certification are detailed in the attached *Scope of Certification* document. This certificate applies only to the specific version and release of the product in its evaluated configuration. The evaluation has been verified by the EAC in accordance with the provisions of the *EAC Voting System Testing and Certification Program Manual* and the conclusions of the testing laboratory in the test report are consistent with the evidence adduced. This certificate is not an endorsement of the product by any agency of the U.S. Government and no warranty of the product is either expressed or implied.

Product Name: EVS  
 Model or Version: 6.1.1.0  
 Name of VSTL: Pro V&V  
 EAC Certification Number: ESSEVS6110  
 Date Issued: July 27, 2020

*Mona Harrington*  
 Executive Director  
 Scope of Certification Attached

# See the Difference

## INSTANT TRUST

Public Counting – Voter Intent Decided,  
Can ascertain how they counted ballots



Public Counting – Can observe with eyes  
and ears.

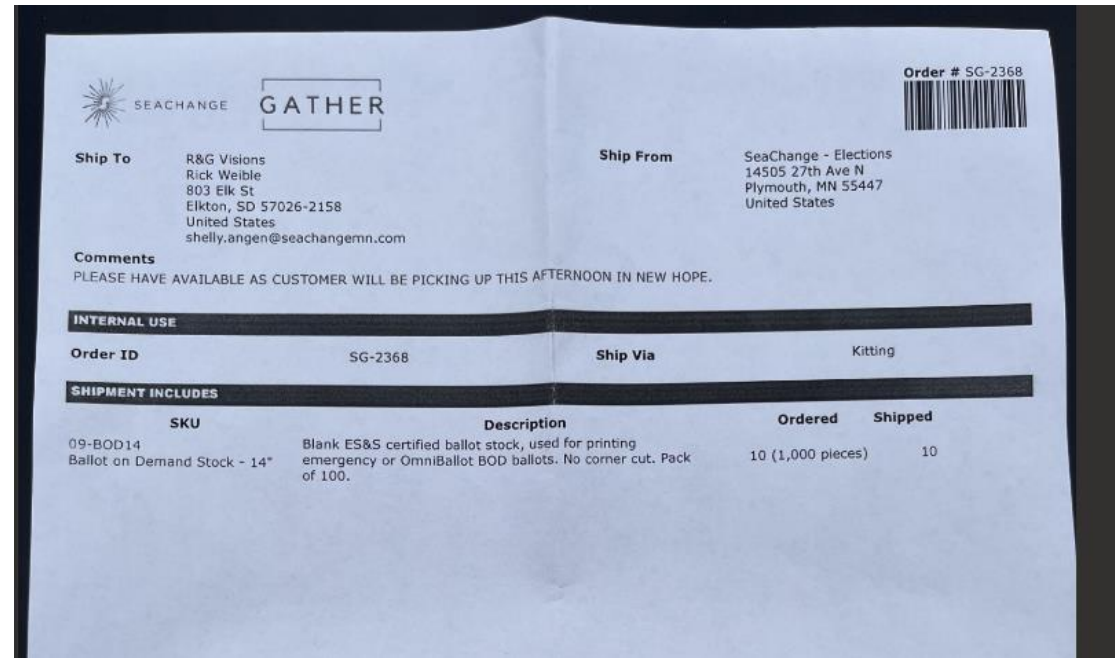
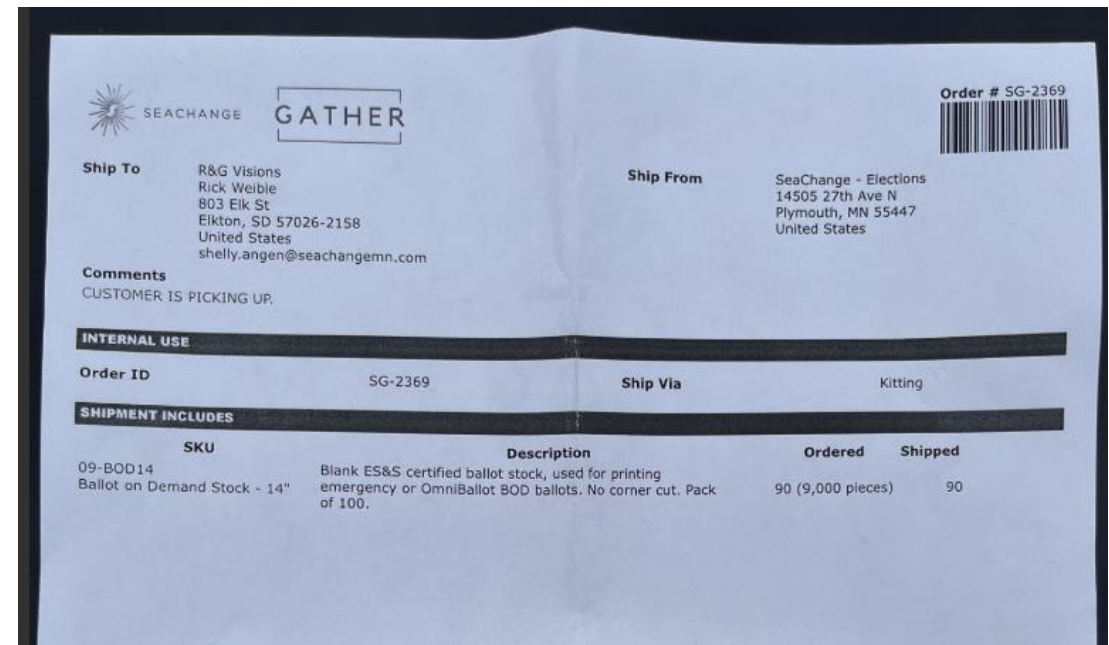
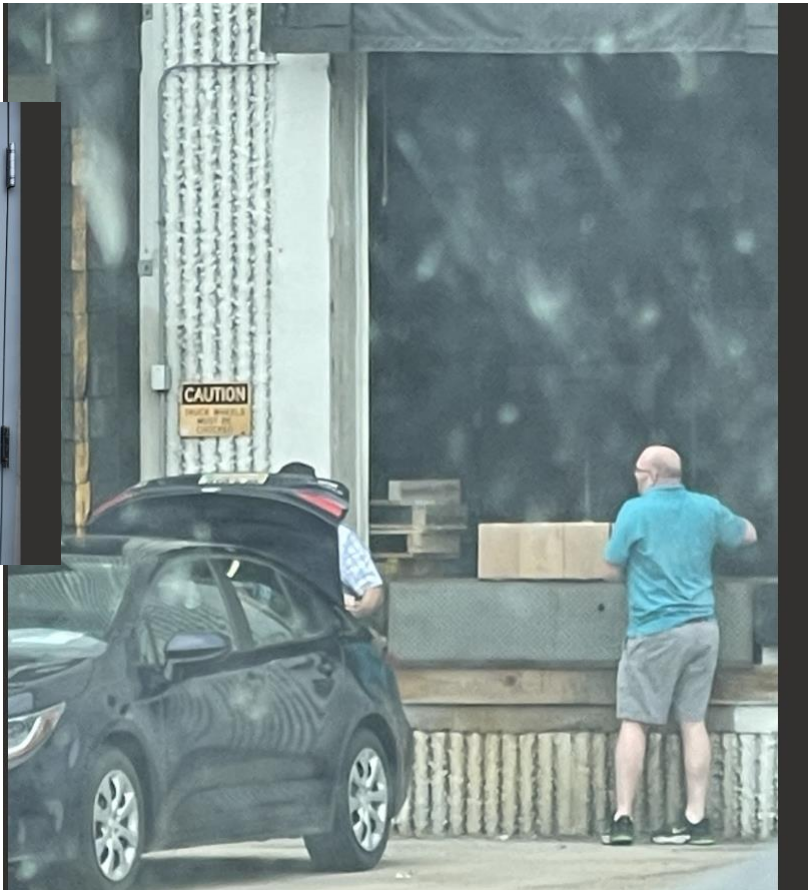
## INSTANT DOUBT

Machine Counting – Voter Intent Lost,  
Unable to ascertain how it counted ballots



Machine Counting – Supposed to audit  
programming by test decks and be able to  
review Cast Vote Records (CVRs)

# Ballots anyone



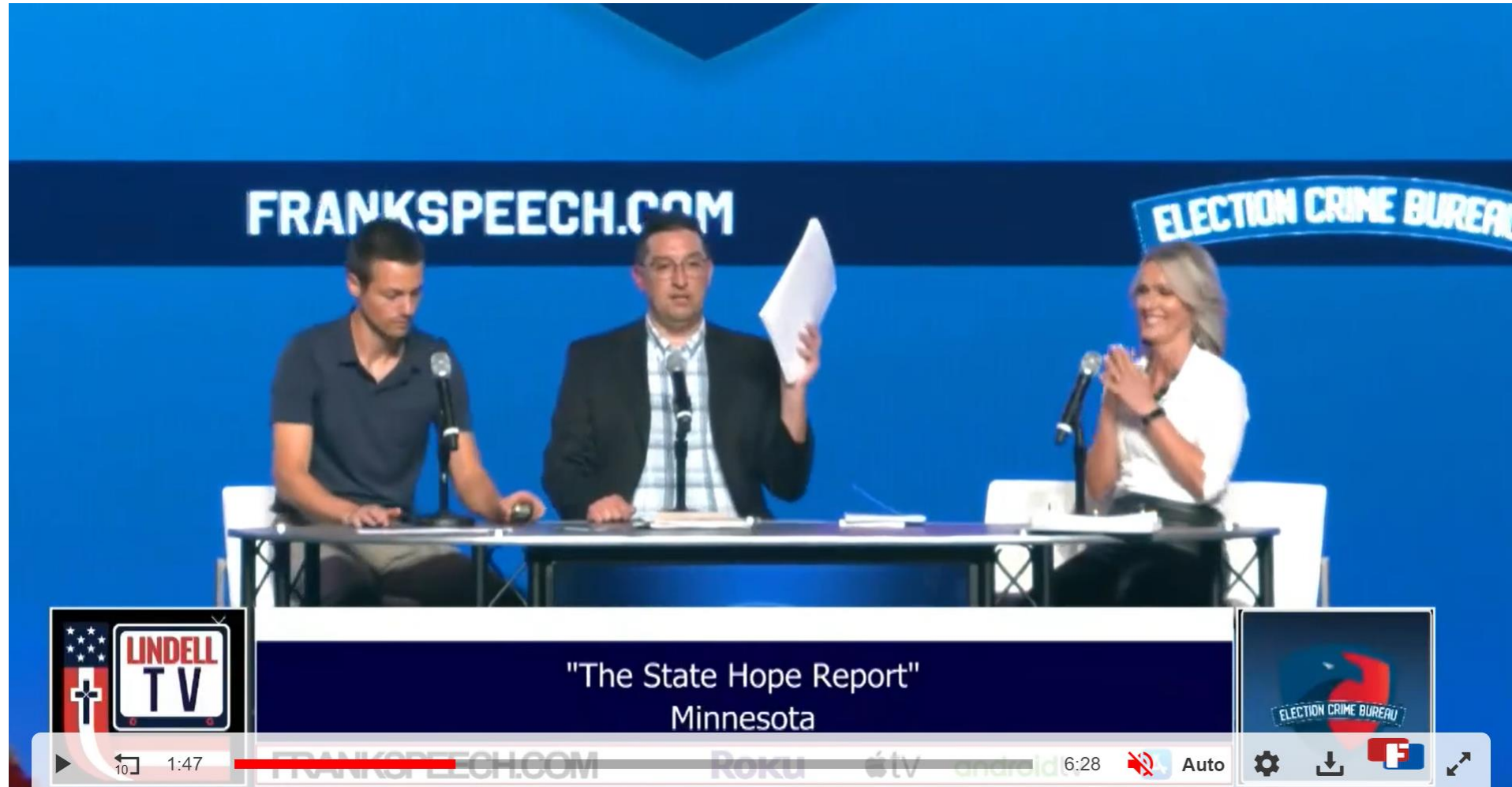
# Making Copies

3,000 Dodge County Ballots printed  
6 precincts, 2 copiers, 4 hours.

Copiers did not stop them from printing.



# 10,000 Blank Ballots - Not secure



# What is our backup plan?



NewsBreak Original

<https://original.newsbreak.com> > A. Nicole

## FBI Director Tells Ohio Sheriff, "There are More Red Flags ... ✓

Feb 10, 2024 — In response to alarming **warnings** from the FBI about potential terrorist attacks on the United States, Butler County **Sheriff** Richard Jones is ...

US says it blocked a China cyber threat, but warns hackers could still disrupt lives of Americans



The sheriff said he believes a terror attack is imminent and he wants Butler County to be ready.

That's where FBI Director Christopher Wray told the sheriffs that red flag warnings for terrorism threats against Americans are at their highest ever and the Chinese are ready to American infrastructure like electrical grids and water treatment plants if the U.S. and China ever go to war.

## Butler County sheriff changes how it arms, trains deputies after FBI director's ominous warning

Sheriff Jones says he is now convinced a terror attack in the U.S. is imminent by people who are already here living among us.

"We were told by the FBI director it's not a matter of if, it's a matter of when," the sheriff said at a news conference Wednesday.

By [Jennifer Edwards Baker](#) and [Ken Brown](#)

Published: Feb. 8, 2024 at 4:31 AM CST



[www.uscase.org](http://www.uscase.org)

Election Research

501c3





# The Folds

## 2.6.6 Folding Ballots

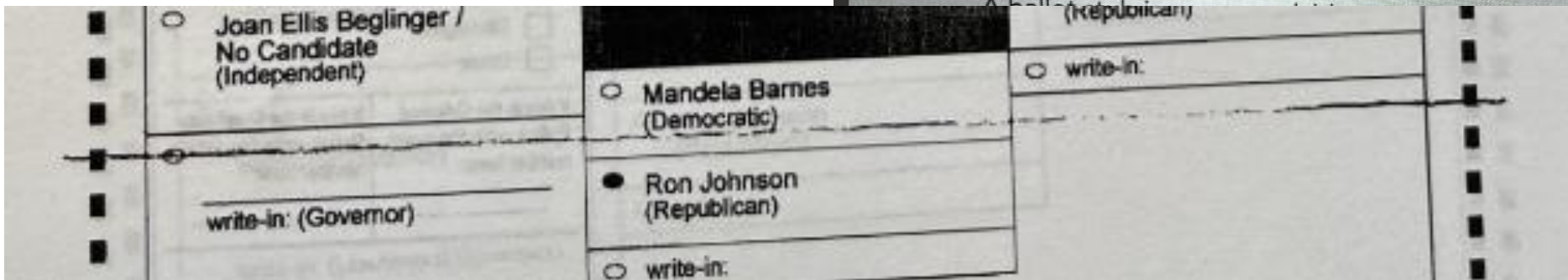
A folding machine should be used to expedite the process of folding ballots. In addition, roller pressures should be reduced to about 2 – 3X thickness of ballot stock.

### Caution



- Do not fold across timing marks, ovals, write-in spaces (marked or unmarked), or arrows, as this may cause tabulation errors.
- Fold as few times as possible.
- When removing from envelopes, place all ballots in the same orientation for proper back-bending.

## 2.6.7 Perforating and Numbering Ballot Stubs



... that election workers  
Stubs usually contain at least  
ification number or  
number that matches the  
ve been cast. Ballots should

where the voter intent was lost and the vote for that race did not count.

<b>Governor / Lieutenant Governor Vote for 1</b>	<b>State Treasurer Vote for 1</b>	<input type="radio"/> write-in
<input type="radio"/> Tony Evers / Sara Rodriguez (Democratic)	<input type="radio"/> Aaron Richardson (Democratic)	<b>County</b>
<input checked="" type="radio"/> Tim Michels / Roger Roth (Republican)	<input checked="" type="radio"/> John S. Leiber (Republican)	<b>Sheriff Vote for 1</b>
<input type="radio"/> Joan Ellis Beglinger / No Candidate (Independent)	<input type="radio"/> Andrew Zuzke (Constitution)	<input checked="" type="radio"/> Dale J. Schmidt (Republican)
	<input type="radio"/> write-in	<input type="radio"/> write-in
	<b>Congressional</b>	<b>County Clerk / Recorder Vote for 1</b>
<input type="radio"/> write-in (Governor)	<input type="radio"/> Mandela Barnes (Democratic)	<input checked="" type="radio"/> Kelly Enright (Republican)
<input type="radio"/> write-in (Lieutenant Governor)	<input checked="" type="radio"/> Ron Johnson (Republican)	<input type="radio"/> write-in
	<input type="radio"/> write-in	

# Over-Vote

A write-in vote for only a Lieutenant Governor candidate will not be counted.

Governor / Lieutenant Governor Vote for 1
<input type="radio"/> Tony Evers / Sara Rodriguez (Democratic)
<input checked="" type="radio"/> Tim Michels / Roger Roth (Republican)
<input type="radio"/> Joan Ellis Beglinger / No Candidate (Independent)
<input checked="" type="radio"/> <i>Tim Michels</i> write-in: (Governor)
<input type="radio"/> write-in: (Lieutenant Governor)

**Official Ballot  
Partisan Office and Referendum  
November 8, 2022**

Notice to voters: If you are voting on Election Day, your ballot must be initialed by two (2) election inspectors. If you are voting absentee, your ballot must be initialed by the municipal clerk or deputy clerk. Your ballot may not be excluded without initials (see end of ballot for initials).

General Instructions	Statewide	Congressional
<p>If you make a mistake on your ballot or have a question, ask an election inspector for help (absentee voters; contact your municipal clerk).</p> <p>To vote for a name on the ballot, fill in the oval next to the name like this: ●</p> <p>To vote for a name that is not on the ballot, write the name on the line marked "write-in" and fill in the oval next to the name like this: ●</p>	<p><b>Attorney General Vote for 1</b></p> <p><input type="radio"/> Josh Kaul (Democratic)</p> <p><input checked="" type="radio"/> Eric Toney (Republican)</p> <p><input type="radio"/> write-in</p>	<p><b>Representative in Congress District 1 Vote for 1</b></p> <p><input type="radio"/> Mike Van Someren (Democratic)</p> <p><input checked="" type="radio"/> Scott Fitzgerald (Republican)</p> <p><input type="radio"/> write-in</p>
	<p><b>Secretary of State Vote for 1</b></p> <p><input type="radio"/> Doug La Follette (Democratic)</p> <p><input checked="" type="radio"/> Amy Lynn Loudensbeck (Republican)</p> <p><input type="radio"/> Neil Harmon (Libertarian)</p> <p><input type="radio"/> Sharyl R. McFarland (Wisconsin Green Party)</p> <p><input type="radio"/> write-in</p>	<p><b>Legislative</b></p> <p><b>Representative in Assembly District 13 Vote for 1</b></p> <p><input checked="" type="radio"/> John Jagler (Republican)</p> <p><input type="radio"/> write-in</p>
	<p>When voting for Governor and Lieutenant Governor, you have one of two choices:</p> <ul style="list-style-type: none"> <li>• Vote for candidates on one ticket, or</li> <li>• Write in names of persons on both write-in lines.</li> </ul> <p>A write-in vote for only a Lieutenant Governor candidate will not be counted.</p>	<p><b>Statewide</b></p> <p><b>State Treasurer Vote for 1</b></p> <p><input type="radio"/> Aaron Richardson (Democratic)</p> <p><input checked="" type="radio"/> John S. Leiber (Republican)</p> <p><input type="radio"/> Andrew Zuelke (Constitution)</p> <p><input type="radio"/> write-in</p>
<p><b>Governor / Lieutenant Governor Vote for 1</b></p> <p><input type="radio"/> Tony Evers / Sara Rodriguez (Democratic)</p> <p><input checked="" type="radio"/> Tim Michels / Roger Roth (Republican)</p> <p><input type="radio"/> Joan Ellis Beglinger / No Candidate (Independent)</p> <p><input checked="" type="radio"/> <i>Tim Michels</i> write-in: (Governor)</p> <p><input type="radio"/> write-in: (Lieutenant Governor)</p>	<p><b>Congressional</b></p> <p><b>United States Senator Vote for 1</b></p> <p><input type="radio"/> Mandela Barnes (Democratic)</p> <p><input checked="" type="radio"/> Ron Johnson (Republican)</p> <p><input type="radio"/> write-in</p>	<p><b>Clerk of Circuit Court Vote for 1</b></p> <p><input checked="" type="radio"/> Kelly Knight (Republican)</p> <p><input type="radio"/> write-in</p>

Typ:01 Seq:0034 Spl:01

Continue voting at top of next column.	Continue voting at top of next column.	Continue voting on back of ballot.
--	--	------------------------------------

Page 1 of 2-sided ballot. Ballot continues on other side. ➡

President /  
Vice President  
Vote for 1  
presidential candidate will not  
be counted.

President /  
Vice President  
Vote for 1

Joseph R. Biden/  
Kamala D. Harris  
(Democratic)

Donald J. Trump/  
Michael R. Pence  
(Republican)

Don Blankenship/  
William Mohr  
(Constitution)

Jo Jorgensen/  
Jeremy Spike Cohen  
(Libertarian Party)

Brian Carroll/  
Amar Patel  
(American Solidarity Party)

Donald Trump,  
write-in: (President)  
Michael R Pence  
write-in: (Vice President)

District Attorney  
Vote for 1

District Attorney  
Vote for 1

Melisa Arndt  
(Democratic)

Jon Plumer  
(Republican)

write-in:

District Attorney  
Vote for 1

Kurt F. Klomberg  
(Republican)

write-in:

County

County Clerk  
Vote for 1

Karen J. Gibson  
(Republican)

write-in:

County Treasurer  
Vote for 1

Patti K. Hilker  
(Republican)

write-in:

Register of Deeds  
Vote for 1

ballot at the request and direction of a  
voter who is authorized under Wis. Stat.  
assistance

I certify that I marked or read aloud this  
ballot at the request and direction of a  
voter who is authorized under Wis. Stat.  
§6.82 to receive assistance.

Signature of assistor

For Official Use Only

Inspectors: Identify ballots required to  
be remade:

- Overvoted
- Damaged
- Other

If this is the Original  
Ballot, write the serial  
number here:

If this is the Duplicate  
Ballot, write the serial  
number here:

Initials of inspectors who remade ballot

49

53

# Public CVRS

- Dodge County WI

<https://www.co.dodge.wi.gov/departments/departments-a-d/county-clerk/election-information>

- Sauk County WI

<https://www.co.sauk.wi.us/countyclerk/election-information-cast-vote-record-cvr-reports>

# Cast Vote Records (CVRs)

- Transparency is the inoculation to all conspiracy theories

Cast Vote Record: 34,195

Poll Place: Watertown W1&2  
 Precinct: C Watertown W1&2  
 Ballot Style: C Watertown W1&2 [ Sheet Number 1 ]  
 Party: Nonpartisan  
 Tabulator CVR: 45e21200b3ab0caa  
 Machine Serial: DS200 - 0317350792  
 Blank Ballot: NO  
 Reporting Group: Election Day

Contests:

Gov/Lt. Gov (245)

Vote For: 1

Michels / Roth (369) Overvoted

Write-in (247) Overvoted

(Marked)

Attorney Gen (250)

Vote For: 1

Eric Toney (375) Counted

Sec State (255)

Vote For: 1

Amy Lynn Loudenbeck (379) Counted

**Official Ballot**  
**Partisan Office**  
**November 8, 2022**

Notice to voters: If you are voting on Election Day, your ballot must be initialed by two (2) election inspectors. If you are voting absentee, your ballot must be initialed by the municipal clerk or deputy clerk. Your ballot may not be counted without initials (see end of ballot for initials).

General Instructions	Statewide	Congressional
<p>If you make a mistake on your ballot or have a question, ask an election inspector for help (absentee voters: contact your municipal clerk).</p> <p>To vote for a name on the ballot, fill in the oval next to the name like this: ●</p> <p>To vote for a name that is not on the ballot, write the name on the line marked "write-in" and fill in the oval next to the name like this: ●</p>	<p><input type="radio"/> Josh Kaul (Democratic)</p> <p><input checked="" type="radio"/> Eric Toney (Republican)</p> <p><input type="radio"/> write-in:</p>	<p><input type="radio"/> Mike Van Someren (Democratic)</p> <p><input checked="" type="radio"/> Scott Fitzgerald (Republican)</p> <p><input type="radio"/> write-in:</p>
<p>When voting for Governor and Lieutenant Governor, you have one of two choices:</p> <ul style="list-style-type: none"> <li>• Vote for candidates on one ticket, or</li> <li>• Write in names of persons on both write-in lines.</li> </ul> <p>A write-in vote for only a Lieutenant Governor candidate will not be counted.</p>	<p><input type="radio"/> Doug La Follette (Democratic)</p> <p><input checked="" type="radio"/> Amy Lynn Loudenbeck (Republican)</p> <p><input type="radio"/> Neil Harmon (Libertarian)</p> <p><input type="radio"/> Sharyl R. McFarland (Wisconsin Green Party)</p> <p><input type="radio"/> write-in:</p>	<p style="text-align: center;">Legislative</p> <p><input checked="" type="radio"/> John Jagler (Republican)</p> <p><input type="radio"/> write-in:</p> <p>Representative to the District 37 Vote for 1</p> <p><input type="radio"/> Maureen McCarville (Democratic)</p> <p><input checked="" type="radio"/> William Penterman (Republican)</p> <p><input type="radio"/> write-in:</p>
<p>Governor / Lieutenant Governor Vote for 1</p> <p><input type="radio"/> Tony Evers / Sara Rodriguez (Democratic)</p> <p><input checked="" type="radio"/> Tim Michels / Roger Roth (Republican)</p> <p><input type="radio"/> Joan Ellis Beglinger / No Candidate (Independent)</p>	<p><input type="radio"/> Aaron Richardson (Democratic)</p> <p><input checked="" type="radio"/> John S. Leiber (Republican)</p> <p><input type="radio"/> Andrew Zuelke (Constitution)</p> <p><input type="radio"/> write-in:</p>	<p style="text-align: center;">County</p> <p>Sherriff Vote for 1</p> <p><input checked="" type="radio"/> Dale J. Schmidt (Republican)</p> <p><input type="radio"/> write-in:</p>
<p>write-in: (Governor)</p> <p>write-in: (Lieutenant Governor)</p>	<p><input type="radio"/> Mandela Barnes (Democratic)</p> <p><input checked="" type="radio"/> Ron Johnson (Republican)</p> <p><input type="radio"/> write-in:</p>	<p><input checked="" type="radio"/> Kelly Enright (Republican)</p> <p><input type="radio"/> write-in:</p>
<p>Continue voting at top of next column.</p>	<p>Continue voting at top of next column.</p>	<p style="text-align: right;">Typ:01 Seq:0071 Spt:01</p>

Page 1 of 2-sided ballot. Ballot continues on other side. ➡

# Building the Evidence 2024

**During Public Accuracy Tests, ask for Ballot Images and CVRs, since there is no identifying information of a voter issue here...so privacy is not an issue at all. (Voters do not fill out ballots for the test decks)**

- 1) Get sample ballots from every precinct
- 2) Get test decks copies, and review where the folds may impact elections
- 3) Evaluate if they tested enough ballots with folds for each test deck
- 4) Get Test Deck Report(s) for each tabulator
- 5) Get the Cast Vote Records
- 6) Get the Ballot Images (there is no Personal Identifying Information)
- 7) Get the log files (system and election)

**If they can not provide this, they have not proven they know how to use the election equipment, nor have they proven the systems are secure.**

# Voter Expectations Meter





[www.uscase.org](http://www.uscase.org)

Election Research



# Disability Statutes - SD

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## **12-18-25. Assistance of disabled or illiterate voter by person of his choice.**

Any voter who by reason of physical disability or illiteracy is unable to read or mark a ballot may receive the assistance of any person whom such voter may select.

**Source:** SL 1897, ch 60, §§ 28, 30; RPolC 1903, §§ 1917, 1919; RC 1919, §§ 7267, 7268; SDC 1939, § 16.1204; SL 1939, ch 81; SL 1959, ch 99, § 10; SDC Supp 1960, § 16.2210; SDCL, § 12-18-37; SL 1974, ch 118, § 128; SL 1976, ch 105, § 59; SL 1983, ch 111; SL 1995, ch 84.

# So the counting is supposed to be at the precinct, if appointed....

**12-20-1. Delivery of supplies to counting board--Certificate of transmittal and receipt--Commencement of count--Continuation without adjournment--Comparison and correction of poll lists--Penalty.**

As soon as the polls are closed, the precinct superintendent and precinct deputies shall audit the ballot count as prescribed in §§ 12-20-2 and 12-20-3. The precinct superintendent and precinct deputies shall then immediately deliver the ballot boxes, registration book, pollbook, and other election supplies, including voided and unused ballots, to the counting board, if appointed, and sign a certificate of transmittal and receipt as prescribed by the State Board of Elections. The members of the precinct election board or the counting board, if appointed, shall then immediately proceed to count publicly, in the presence of all persons desiring to attend the count, the votes received at the polls, and continue without leaving the site of the count until the count is completed. A person charged with implementing this section may not delay the counting of ballots other than to authorize short recesses for the health and wellbeing of those employed to implement this section. In counting the votes, the members of the precinct election board or counting board shall use the tally sheets provided.

**Source:** SDC 1939, § 16.1701; SL 1975, ch 119, § 11; SL 1976, ch 105, § 68; SL 1993, ch 113, § 13; SL 1993, ch 118, § 20; SL 1999, ch 69, § 39; SL 2002, ch 76, § 7; SL 2021, ch 68, § 1.

# No where does it say we have to use it...

## **12-16-32. Separate tally sheets provided.**

A separate tally sheet shall be provided for computing the votes for candidates of each political party, for independent candidates, and for judicial offices, and for all constitutional amendments, referred laws and initiated measures submitted to the voters at such elections as they appear on separate ballots.

**Source:** SDC 1939, § 16.1109 as added by SL 1961, ch 101, § 1; SL 1974, ch 118, § 87.

## **12-16-34. Rules and columns on tally sheets.**

The tally sheets in the area for tallying votes cast shall be ruled by horizontal and perpendicular lines so as to form squares of suitable size to contain five tally marks each, four of which may be upright and the fifth crossing the same at an oblique angle, every fifth perpendicular line in the ruling to be red, so that five squares for tally marks are contained between each two red lines. In a perpendicular column at the left margin of each tally sheet, there shall be left sufficient space so that there may be printed or written in ink in plain and legible manner the names of all candidates and all questions submitted to the voters at the election, in the same order that they are arranged upon the official ballots used in such election. At the extreme right margin of the tally sheet there shall be a perpendicular column labeled as follows: "Total Votes."

# No where does it say we have to use it...

## **12-16-35. Listing of candidates and submitted questions on tally sheets.**

The names of candidates and all questions submitted to the voters shall be listed in the perpendicular column at the left of the tally sheet as required by § 12-16-34.

**Source:** SDC 1939, § 16.1109 as added by SL 1961, ch 101, § 1.

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## **12-16-36. Space for tally marks and vote totals on tally sheets.**

There shall be at the right of each name or question in one or two horizontal lines a sufficient number of squares for the tally marks as provided in § 12-16-34, on the tally sheets for each precinct, to contain the tally marks for one-third more votes than were cast in the precinct at the last preceding general election, not exceeding six hundred in any case. There shall be sufficient spaces at the right of the squares on the tally sheet so that a member of the precinct election board may write out the total number of votes tallied for the candidate or question.

**Source:** SDC 1939, § 16.1109; SL 1961, ch 101, § 1; SL 1997, ch 81, § 4; SL 1999, ch 69, § 19.

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## **12-16-37. Space for tallying votes on submitted questions.**

There shall be sufficient spaces at the right of the squares on each tally sheet used for questions submitted to the voters to tally in full the total number of votes tallied for each question voted upon.

# No where does it say we have to use it...

## **12-16-37. Space for tallying votes on submitted questions.**

There shall be sufficient spaces at the right of the squares on each tally sheet used for questions submitted to the voters to tally in full the total number of votes tallied for each question voted upon.

**Source:** SL 1893, ch 82, § 1; RPolC 1903, § 1896; RC 1919, § 7245; SDC 1939, § 16.1109; SL 1961, ch 101, § 1.

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## **12-16-38. Tallying and marking of votes--Entry of total votes.**

After the tallying and marking in the tally sheet of the votes for each candidate, the number of votes so tallied for each candidate shall be counted, and the numerical result shall be placed in the column opposite the candidate's name.

**Source:** SDC 1939, § 16.1109 as added by SL 1961, ch 101, § 1; SL 1997, ch 81, § 5.

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## **12-16-39. Tally sheets for candidates and submitted questions.**

The tally sheets for candidates for public office and submitted questions shall be prescribed by the State Board of Elections.

# South Dakota Laws/Rules

**5:02:17:07. Tally sheets.** The tally sheets must be ruled by horizontal and perpendicular lines to form squares of suitable size to contain five tally marks each, four of which may be upright and the fifth crossing the others at an oblique angle. Each fifth perpendicular line in the ruling must be red, so that five squares for tally marks are contained between each two red lines. In a perpendicular column at the left margin of each tally sheet sufficient space must be left to legibly print or write in ink the names of all candidates and all questions submitted to the electors at the election, in the same order as on the official ballots used in the election. At the extreme right margin of the tally sheet there must be a perpendicular column with sufficient space to label the column at the top of the tally sheet as follows: "Total Votes."

**Source:** 4 SDR 26, effective October 27, 1977; 6 SDR 25, effective September 24, 1979; 23 SDR 236, effective July 17, 1997; 25 SDR 8, effective August 3, 1998.

**General Authority:**SDCL [12-1-9\(4\)](#).

**Law Implemented:**SDCL [12-16-28](#), [12-16-34](#), [12-16-39](#).

# South Dakota Laws/Rules

**5:02:16:14. Scrutiny of ballots by counting board.** At least two precinct deputies of the counting board of opposite political parties shall scrutinize each ballot to determine the vote on that ballot. The precinct superintendent shall break any tie on a ballot.

Source: 4 SDR 26, effective October 27, 1977; 20 SDR 4, effective July 19, 1993; 25 SDR 167, effective July 6, 1999.

General Authority:SDCL [12-1-9\(4\)](#), [12-20-52](#).

Law Implemented:SDCL [12-15-14](#), [12-15-14.1](#), [12-20-5](#).

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**5:02:16:15. Tally of ballots.** As the vote is announced, one counting board member shall make the required mark on the tally sheet in the pollbook and another counting board member shall make the required mark on the duplicate tally sheet.

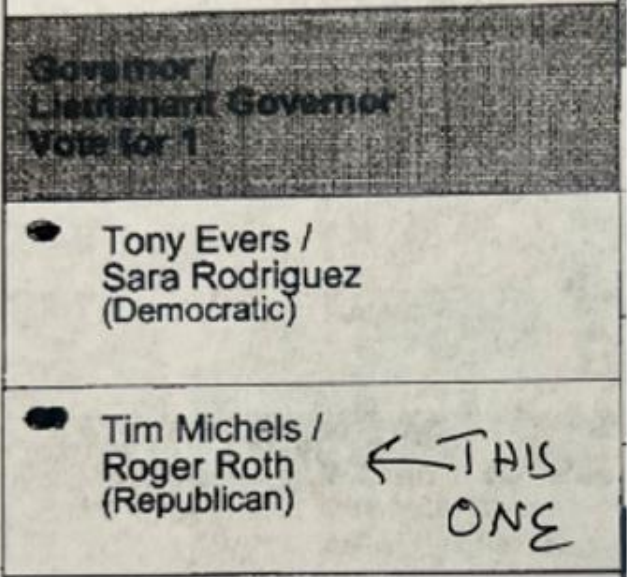
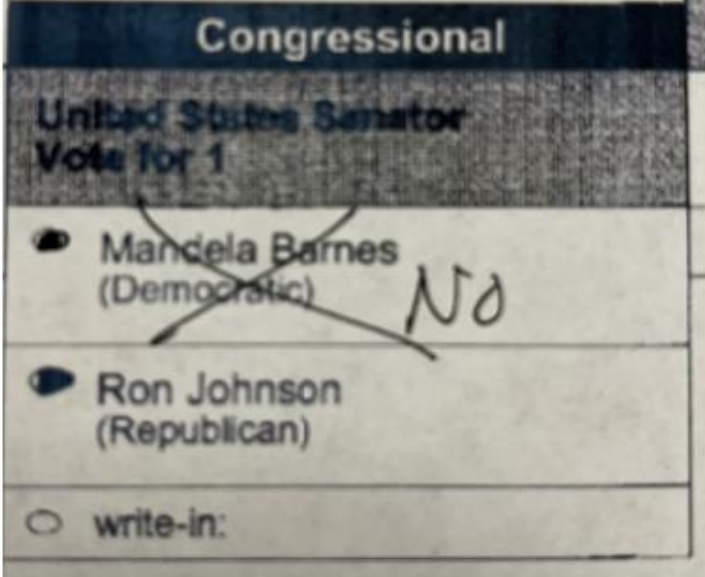
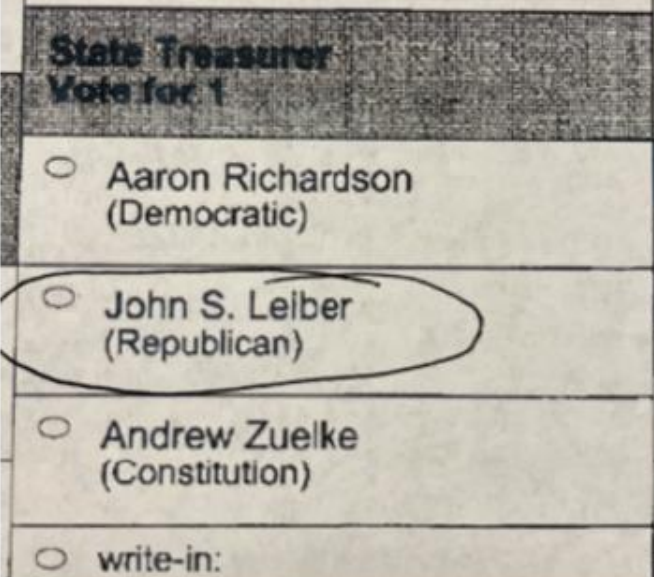
Source: 4 SDR 26, effective October 27, 1977; 20 SDR 4, effective July 19, 1993; 25 SDR 167, effective July 6, 1999.

General Authority:SDCL [12-1-9\(4\)](#), [12-20-52](#).

Law Implemented:SDCL [12-20-5](#).

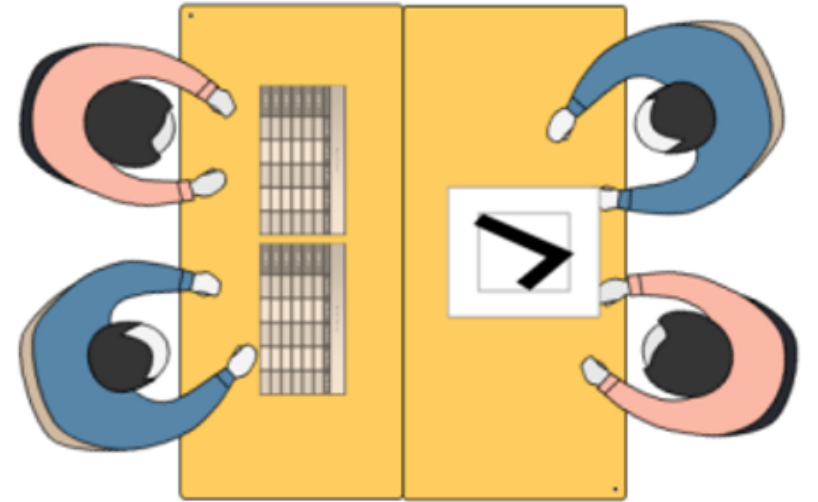


Here are some examples of voter intent the machines would miss.

 <p>3 Governor / Lieutenant Governor Vote for 1</p> <ul style="list-style-type: none"><li><input checked="" type="radio"/> Tony Evers / Sara Rodriguez (Democratic)</li><li><input checked="" type="radio"/> Tim Michels / Roger Roth (Republican)</li></ul> <p>← THIS ONE</p>	 <p>Congressional United States Senator Vote for 1</p> <ul style="list-style-type: none"><li><input checked="" type="radio"/> <del>Mandela Barnes (Democratic)</del> NO</li><li><input checked="" type="radio"/> Ron Johnson (Republican)</li><li><input type="radio"/> write-in:</li></ul>	 <p>State Treasurer Vote for 1</p> <ul style="list-style-type: none"><li><input type="radio"/> Aaron Richardson (Democratic)</li><li><input checked="" type="radio"/> John S. Leiber (Republican)</li><li><input type="radio"/> Andrew Zuelke (Constitution)</li><li><input type="radio"/> write-in:</li></ul>
<p><b>Voter Intent is Clear</b></p>	<p><b>Voter Intent is Clear</b></p>	<p><b>Voter Intent is Clear</b></p>

## The Seating of the judges

We recommend having 4 election judges per table, 2 from each party, 2 people for different parties will review the ballots and call out the name of the winner of each race on the ballot, in order. The other 2 election judges, from each party, will mark their sheets with the candidate receiving the vote. They will review each vote on the ballot, skipping those races without a selection for a candidate, no mark is needed for empty races.





# 2024 Hand Count Demo

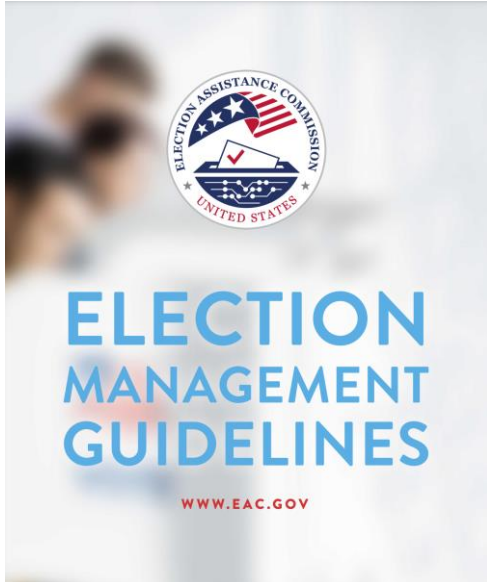
## Dodge County 2022 Clyman Ballots

### Quick Notes for this session

- 1) There are 126 ballots in each folder on the table, the seal number is [759354](#)
- 2) Both types of ballots are here, user filled in and ExpressVote disability ballots.
- 3) One side of the table is the calling team, represented by both parties.
- 4) The other side of the table is the tally team with the binders, represented by both parties.
- 5) 1<sup>st</sup> – You will count to confirm that your team has 126 ballots,
  - a. Separate approximately the pile of ballots in half, one for each side of the table.
  - b. Your 2 teams will count and sort the ballots into groups of 50's, so you should end up with 50-50-26 as final stacks.
- 6) 2<sup>nd</sup> Your table team will verify that all ballots have the stamp or initials required, in-person ballots should have 2 initials, absentee ballots 1 initial. Any ballot that does not have an initial or stamp...you will set that ballot aside and mark the spoiled section of the master tally totals sheets. Rebalance any stack of 50 ballots by drawing a ballot from the remainder stack....so you may end up with 50-50-25 stack of ballots.
- 7) We will be calling and marking one race at time, the first race should marked be in Blue, with a /
- 8) The next race would be in Red.
- 9) If a recount is needed use the same color and mark with an X, if a 3<sup>rd</sup> recount is needed, fill in the box.

# Materials at US CASE

- [www.uscase.org](http://www.uscase.org)



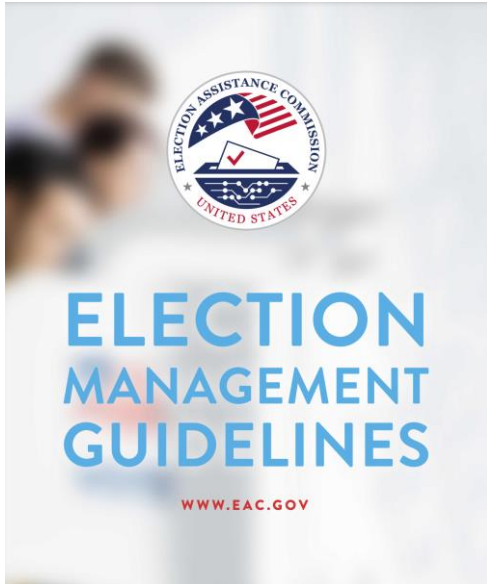
### End-to-End Voting System Acceptance Test

The end-to-end test is sometimes referred to as a test of the election management system (EMS). It tests the election management system itself and tests the ability of the EMS to interface with all the types of components. It also verifies that the EMS correctly tabulates votes and prints reports. Election officials should conduct this test on all newly acquired voting systems and after any event that could have altered the voting system, such as a system upgrade or if the EMS hardware leaves the custody and control of the election authority.

**Materials Required:** Election officials must know the correct versions of the operating systems and EMS software. In addition, the testers will need the following:

- A complete election management system with all required election management system software installed.

- If Optical Scanners are used:
  - At least one ballot scanner. If different types are used (e.g., precinct-based for polling locations and bulk/high-speed for central counting), then at least one of each type will be needed.
  - One blank memory device used to load the election definition onto the ballot scanner(s),
  - A memory device for each scanner to store tabulated results and Cast Vote Records.
  - At least one set of pre-marked optical scan test ballots with known results. This can be the same test deck used to conduct acceptance tests on the ballot scanners.



**Documentation:** If any component of the voting system experiences a failure during any of the above steps that the tester cannot correct, the test should be terminated. The tester should prepare documentation that lists the serial number of the election computer and the serial number or other identifying information for any other component that failed, the persons conducting the tests, the date, and a description of the failure.

Election officials should make two copies of this documentation; one copy for the permanent record and another copy that stays with the failed component of the voting system to assist those making any required repairs. All printouts should be attached to the copy retained for the permanent record.

If the voting system passes all the above tests, election officials should prepare documentation for the permanent record, including the names of those conducting the tests and the date. All printouts should be attached to this documentation.

[www.uscase.org](http://www.uscase.org)

Election Research

