

CHAPTER 22  
VOTING SYSTEMS AND ELECTRONIC POLL BOOKS  
[Prior to 7/13/88, see Secretary of State[750] Ch 10]

Chapter rescission date pursuant to Iowa Code section 17A.7: 1/1/28

TESTING AND EXAMINATION OF VOTING EQUIPMENT

**721—22.1(52) Definitions for certification of voting equipment.**

*“Accredited independent test authority”* means a person or agency that was formally recognized by the National Association of State Election Directors as competent to design and perform qualification tests for voting system hardware and software. “Accredited independent test authority” also includes voting system test laboratories accredited by the Election Assistance Commission to test voting systems for compliance with federal voting system standards and guidelines, as required by the Help America Vote Act, Section 231.

*“Audio ballot”* means the presentation of the contents of a ballot on an electronic ballot marking device in a recorded format, played to the voter over headphones.

*“Automatic tabulating equipment”* means apparatuses that are utilized to ascertain the manner in which optical scan ballots have been marked by voters or by electronic ballot marking devices and to count the votes marked on the ballots.

*“Ballot”* means the official document that includes all of the offices or public measures to be voted upon at a single election, whether they appear on one or more paper ballots. The term includes optical scan paper ballots designed to be read by automatic tabulating equipment. In appropriate contexts, “ballot” also includes conventional paper ballots.

*“Ballot marking device”* means a pen, pencil, or similar writing tool, or an electronic device, all designed for use in marking an optical scan ballot, and so designed or fabricated that the mark it leaves may be detected and the vote so cast counted by automatic tabulating equipment.

*“Certification”* means formal approval of an optical scan voting system for use in Iowa pursuant to Iowa Code sections 52.5 and 52.26.

*“De minimis change”* means a change to a certified voting system’s hardware, software, technical data package (TDP), or data, the nature of which will not materially alter the system’s reliability, functionality, capability, or operation. Under no circumstances shall a change be considered de minimis if it has reasonable and identifiable potential to impact the system’s performance and compliance with the applicable voting standard.

*“Early voting”* means the process of receiving ballots from voters before election day without using absentee voting procedures. Iowa law does not authorize this process.

*“Electronic ballot marking device”* means a component of an optical scan voting system designed to assist voters with disabilities by displaying audio and visual ballot information to the voter, providing accessible methods for the voter to make selections, and then printing the voter’s choices on an optical scan ballot.

*“Electronic poll book,” “epollbook,” “e-poll book,” or “electronic register”* means hardware and software components used to verify and process voting activity and changes in voter registration and to check in voters. This definition includes e-poll books in use in the commissioner’s office. However, this definition does not apply to the I-Voters statewide voter registration database.

*“Electronic transmission”* means using hardware and software components to send data over distances both within and external to the polling place and to receive an accurate copy of the transmission.

*“Examiners”* means the board of examiners for voting systems described in Iowa Code section 52.4.

*“Memory storage device”* means a small, removable device containing data files of the election definition programmed for use in voting equipment for each election.

“*Modification*” means a change to a certified voting system’s software or firmware. Modification also means a change to a certified voting system’s hardware that has the potential to affect the reliability, functionality, capability, security or operability of a system.

“*Optical scan ballot*” means a printed ballot designed to be marked by a voter with a ballot marking device and to be counted by use of automatic tabulating equipment.

“*Optical scan voting system*” means a system employing paper ballots under which votes are cast by voters by marking paper ballots with a ballot marking device and thereafter counted by use of automatic tabulating equipment.

“*Program*” means the written record of the set of instructions defining the operations to be performed by a computer in examining, counting, tabulating, and printing votes.

“*Qualification test*” means the examination and testing of a voting system by an independent test authority using the voting system standards required by Iowa Code section 52.5 and rule 721—22.2(52) to determine whether the system complies with those standards.

“*Vendor*” means a person or representative of a person owning or being interested in an optical scan voting system and seeking certification of the equipment for use in elections in Iowa.

“*Voting booth*” means an enclosure designed to be used by a voter while marking a conventional paper ballot, optical scan ballot or ballot card.

“*Voting equipment*” means an optical scan voting system which is required by Iowa Code sections 52.5 and 52.26 to be approved for use by the examiners.

“*Voting equipment malfunction*” means a problem with the voting equipment that renders the equipment inoperable for a period of time when it has been deployed for use during an election. “Voting equipment malfunction” does not include interruptions of equipment operations due to routine error messages as referred to in subrule 22.261(5), 22.262(6) or 22.266(5).

“*Voting system*” means the total combination of mechanical, electromechanical or electronic equipment (including the software, firmware and documentation required to program, control and support the equipment that is used to define ballots, to cast and count votes, to report or display election results and to maintain and produce any audit trail information). “Voting system” also includes the practices and associated documentation used to identify system components and versions of such components, to test the system during its development and maintenance, to maintain records of system errors and defects, to determine specific system changes to be made to a system after the initial qualification of the system and to make available any materials to the voter such as notices, instructions, forms or paper ballots. (See Section 301(b) of HAVA.)

[ARC 8244B, IAB 10/21/09, effective 10/2/09; ARC 9468B, IAB 4/20/11, effective 5/25/11; ARC 0801C, IAB 6/26/13, effective 7/31/13; ARC 3468C, IAB 11/22/17, effective 12/31/17]

**721—22.2(52) Voting system standards.** All electronic voting systems approved for use by the board of examiners after April 9, 2003, shall meet Voting Systems Performance and Test Standards, as adopted by the Federal Election Commission April 30, 2002, or the 2005 Voluntary Voting Systems Guidelines, as adopted by the U.S. Election Assistance Commission in December 2005. The report of an accredited independent test authority certifying that the system is in compliance with these standards shall be submitted with the application for examination.

This rule is intended to implement Iowa Code section 52.5.

[ARC 9468B, IAB 4/20/11, effective 5/25/11; ARC 9762B, IAB 10/5/11, effective 9/8/11]

**721—22.3(52) Examiners.** The examiners annually shall elect a chairperson. All three examiners must be present for any formal action. Approval by two of the three examiners is required to approve any action to be taken by the examiners.

**22.3(1)** Notice of the time and place of any meeting by the board of examiners must be published pursuant to Iowa Code section 21.4.

**22.3(2)** Meetings of the examiners are open to the public, except that closed meetings may be held as permitted by Iowa Code section 21.5.

**22.3(3)** Correspondence and materials required to be filed with the board of examiners shall be addressed to the examiners in care of the Elections Division, Office of the Secretary of State, Lucas State Office Building, 321 E. 12th Street, Des Moines, Iowa 50319.

**721—22.4(52) Fees and expenses paid to the examiners.**

**22.4(1)** The examiners shall be reimbursed for travel to and from the meeting place at the rate specified in Iowa Code section 70A.9. The examiners shall also be reimbursed for actual expenses for meals and lodging, if necessary.

*a.* If the meeting was called for the purpose of examining, reexamining, testing, or discussing the certification of voting equipment offered by a vendor, the examiners' expenses shall be paid by the vendor within seven days following the completion of the examination and testing of the voting equipment.

*b.* If the meeting was called for the purpose of advising the secretary of state regarding administrative rules for the examiners, or to hear complaints or requests for decertification of voting equipment, or any other business of interest to the examiners, the expenses shall be paid by the secretary of state.

**22.4(2)** The vendor shall pay the examiners the amount of compensation specified in Iowa Code section 52.6 at the beginning of each meeting for which compensation is required to be provided to the examiners. The fee shall be paid as follows:

*a.* For each meeting or series of meetings held for the purpose of certifying an optical scan voting system or component thereof.

*b.* For each meeting or series of meetings for reconsideration of an optical scan voting system or component thereof after denial of certification.

This rule is intended to implement Iowa Code sections 17A.19, 49.25(3), 52.5, 52.6, and 52.26.

[ARC 8244B, IAB 10/21/09, effective 10/2/09]

**721—22.5(52) Examination of voting equipment—application.** Any vendor who wishes to apply for certification of voting equipment for use in the state of Iowa shall apply to the secretary of state for an appointment with the examiners. The application shall include five copies of each of the following:

**22.5(1)** History of the equipment to be examined. This history shall include a complete description of the equipment to be examined, descriptions of any previous models of the equipment, the date the system to be examined went into production, and a complete list of jurisdictions which have used the equipment. The user list shall include jurisdictions which used the equipment experimentally without purchasing it, jurisdictions which purchased earlier versions of the equipment to be examined, and jurisdictions which purchased the current version of the equipment to be examined.

**22.5(2)** Copies of all manuals developed for use with the system including, but not limited to, technical manuals for repair and maintenance of the equipment, operations manuals for election officials, printer's manuals for ballot production, and any other written documents prepared by the vendor that describe the operation, use, and maintenance of the machine.

**22.5(3)** Report of an accredited independent test authority certifying that the system is in compliance with the voting systems standards required by rule 721—22.2(52). Copies of these reports are confidential records as defined by Iowa Code section 22.7 and Iowa Code chapter 550. Independent test authority reports shall be available to the secretary of state, deputy secretary of state, director of elections, members of the board of examiners, and any other person designated by the secretary of state to have a bona fide need to review the report. No other person shall have access to the reports, and no copies shall be made. All independent test authority reports shall be marked "CONFIDENTIAL" and shall also be accompanied by a list of those persons who are authorized to examine the report. The reports shall be kept in a locked cabinet.

**22.5(4)** Copies of the reports of any test authority who has examined the equipment in conjunction with certification requirements of other states.

**22.5(5)** Reports of the certifying authorities of any other states that have examined the equipment, whether or not the equipment was approved for use.

**22.5(6)** Brochures, photographs and advertising material used to encourage sales of the equipment.

**22.5(7)** Manuals for the use and maintenance of any components of the equipment that are not manufactured by the vendor.

**22.5(8)** Rescinded IAB 4/20/11, effective 5/25/11.

**22.5(9)** Reserved.

**22.5(10)** The form prescribed by the state commissioner of elections to request examination and testing of voting systems.

[ARC 8244B, IAB 10/21/09, effective 10/2/09; ARC 9468B, IAB 4/20/11, effective 5/25/11]

**721—22.6(52) Review of application by examiners.** Upon receipt of the application, the secretary of state shall immediately forward copies of the application to each of the examiners. The examiners shall review the application and within seven days a date shall be set for the examiners to meet and examine the equipment. If additional information is needed by the examiners, they may delay setting a date for the examination pending the submission of the requested materials.

**721—22.7(52) Consultant.** If the examiners determine that a consultant is necessary to determine whether a system meets the requirements of Iowa law or whether a change to a voting system is de minimis or a modification, the examiners shall notify the vendor of the decision. The vendor may suggest the names of reliable independent test authorities to the examiners and may decline to submit the equipment to the examination of an individual for good reason.

A consultant may be employed if no other state has certified the equipment for use. The examiners may require a consultant if the equipment has been modified following certification by other states, or if the examiners believe it to be necessary.

If a test authority has been determined to be necessary by the examiners and a suitable consultant cannot be agreed upon by the examiners and the vendor, the equipment shall not be approved for use.

[ARC 8244B, IAB 10/21/09, effective 10/2/09]

**721—22.8(52) Contact other users.** The examiners shall contact a representative sample of the users of the equipment to determine the nature of the experience of other users.

**721—22.9(52) Testing the equipment.** The vendor shall provide to the examiners one, or more, if deemed necessary by the examiners, production models of the equipment submitted for certification. The equipment shall be prepared by the examiners with the aid of the vendor to be tested at two sample elections: a sample partisan primary election, and a sample general election.

**22.9(1)** Test county for absentee voting. Voting equipment which is designed to be used for tabulation of absentee ballots shall be tested using a model county consisting of 155 precincts, with 180,000 registered voters. The county shall include one U.S. congressional district, five state senate districts, 11 state house of representatives districts, and 30 townships. Each township shall include both rural voters (who are eligible to vote for township officers) and city voters (who are not eligible to vote for township officers).

**22.9(2)** Test county for absentee systems. Voting equipment which is designed to be used for tabulation of absentee ballots only shall be tested using a model county consisting of 155 precincts, with 180,000 registered voters. The county shall include one U.S. Congressional District, five state senate districts, 11 state house of representatives districts, and 30 townships. Each township shall include both rural voters (who are eligible to vote for township officers) and city voters (who are not eligible to vote for township officers).

**22.9(3)** Test precinct for precinct count systems. The test precinct shall include both rural voters (who are eligible to vote for township officers) and city voters (who are not eligible to vote for township officers).

**22.9(4)** All requirements for preparation and printing of test ballots shall be met in the preparation of ballots for the test elections including, but not limited to, rotation of candidates' names and the provision of space for write-in votes.

**22.9(5)** Test ballots provided by vendor. The vendor shall provide the ballots to be used in the testing of the equipment. A total of at least 2000 ballots shall be printed for each of the two test elections. One thousand ballots for each test election shall be marked and manually tabulated by the vendor to use as a test of the ability to tabulate results accurately. The balance of the ballots shall be delivered to the examiners before the date set for the examination. The examiners shall mark and manually tabulate an additional set of at least 300 test ballots.

**22.9(6)** Accessibility testing by other interested parties. Any party interested in the accessibility of voting equipment that is being considered for state certification may request to be included on notices of meetings of the board of examiners. Requests shall be sent to the examiners, in care of the Elections Division, Office of the Secretary of State, Lucas State Office Building, 321 E. 12th Street, Des Moines, Iowa 50319. Any parties present at the meeting may complete accessibility testing on the equipment and submit a report on the accessibility of the voting system to the examiners within 30 days of the date of the examination and test. The report may be made in written or oral form. If an interested party would like to make an oral report, the examiners may hear the report either in person or by conference call organized by the elections division, whichever the examiners prefer.

[ARC 0736C, IAB 5/15/13, effective 6/19/13]

**721—22.10(52) Test primary election for three political parties.**

**22.10(1)** *Closed primary election.* Voters may only cast votes for the candidates of one of the parties.

**22.10(2)** *Offices.* The following offices shall each have two candidates for each party. Candidate names shall be rotated as required by Iowa Code section 43.28.

- a. U.S. Senator
- b. U.S. Representative
- c. Governor
- d. Secretary of State
- e. Auditor of State
- f. Treasurer of State
- g. Secretary of Agriculture
- h. Attorney General
- i. State Senator
- j. State Representative
- k. County Supervisor (vote for no more than three of six candidates)
- l. County Treasurer
- m. County Recorder
- n. County Attorney
- o. and p. Rescinded IAB 8/1/07, effective 7/13/07.

**22.10(3)** *Write-in votes.* Spaces for write-in votes shall be provided for each office on the ballot. The number of spaces shall equal the number of persons to be elected to the office.

**721—22.11(52) Test general election.** The ballots for the test general election shall include the following:

**22.11(1)** *Offices.* In the test general election all of the above offices shall be included with the addition of candidates for lieutenant governor to be voted for jointly with each candidate for governor. Each political party and nonparty political organization shall have one candidate for each office that appeared on the primary ballot, except county supervisor, which shall have three candidates for each party and nonparty political organization. Names of candidates for county supervisor shall be rotated as required by Iowa Code section 49.31, subsection 2.

The following nonpartisan offices shall also be included on the ballot with the heading “Nominated by Petition”:

- a. Township Trustee
- b. Township Clerk
- c. County Public Hospital Trustee
- d. Soil and Water Conservation District Commissioners
- e. Agricultural Extension Council

**22.11(2)** *Judicial ballot.* Portions of the judicial ballot may be printed separately if necessary.

- a. Supreme Court (five justices)
- b. Appeals (four judges)
- c. District Court (six judges)
- d. District Associate Judges (three judges)

**22.11(3)** *Public measures.*

- a. Constitutional Amendments (two)
  - b. Local public measures (three)
- 22.11(4)** Rescinded IAB 11/8/17, effective 12/31/17.

**22.11(5)** Write-in votes. Spaces for write-in votes shall be provided for each office on the ballot. The number of spaces shall equal the number of persons to be elected to the office. This does not include judges standing for retention.

[ARC 3447C, IAB 11/8/17, effective 12/31/17]

**721—22.12(52) Report of findings.** Within 60 days of examining a voting system pursuant to this chapter, the examiners shall complete a report showing their findings. The report shall include a checklist containing all statutory requirements for voting systems and shall indicate whether each requirement applies to the voting system being examined and whether the voting system is compliant or not compliant. The checklist must indicate that all applicable items are compliant with statutory requirements in order for the examiners to find that the voting system may be approved for use.

**22.12(1) Accessibility reports.** If interested parties are present at the examination and test and participate in accessibility testing of the equipment, the examiners shall wait a minimum of 30 days from the date of the examination and test before completing the report required by this rule so that the examiners have sufficient time to receive and review any accessibility reports submitted by interested parties pursuant to subrule 22.9(6).

**22.12(2) Approval prior to use.** If the report states that the voting system has been approved for use, the voting system may be adopted for use at elections.

**22.12(3) Report filed with the secretary of state.** The report shall be filed with the secretary of state. The secretary of state shall retain the vendor's application and other documents submitted pertaining to the certification as long as the voting system remains certified.

[ARC 0736C, IAB 5/15/13, effective 6/19/13]

**721—22.13(52) Notification.** The examiners shall promptly notify the vendor of their decision and shall provide the vendor with a copy of their report.

**721—22.14(52) Denial of certification.** If the examiners find that the equipment does not meet the requirements prescribed by the Code of Iowa and the Iowa Administrative Code, the examiners shall deny certification to the equipment. The report of the board shall specify the reasons for the denial, as well as all areas in which the equipment complied with the requirements of the law. Certification may be denied for any of the following reasons:

**22.14(1)** The absence of any feature required by Iowa Code section 52.5 or 52.26.

**22.14(2)** Failure to pay the examiners' fees and expenses, or the fees of any consultant mutually agreed upon by the examiners and the vendor.

**22.14(3)** Failure to provide the examiners with a complete application as required by rule 721—22.5(52).

**22.14(4)** Failure of the equipment to produce accurate results in one or both of the test elections. The test groups of ballots shall be tabulated manually to determine the expected outcome of each test election. If the equipment fails to reproduce exactly the results of the manual tabulation, the system shall not be approved for use, unless it can be demonstrated that the manual tabulation was in error and the machine tabulation was accurate.

[ARC 9468B, IAB 4/20/11, effective 5/25/11]

**721—22.15(52) Application for reconsideration.** Following denial of certification a vendor may make the necessary modifications to the system and apply for reconsideration. Aspects of the equipment which were approved in the initial application do not need to be reexamined unless the examiners find that the modifications may have affected the ability of the equipment to comply in other areas. If certification was denied for the reasons cited in 22.14(1) or 22.14(4), both test elections must be completed satisfactorily, or approval shall not be granted.

**721—22.16(52) Appeal.** If the vendor believes the denial of certification is in error, the vendor must file written exceptions with the examiners within 30 days after issuance of the report. The examiners will issue a response to the exceptions within 30 days after filing of the exceptions. A vendor who is aggrieved or adversely affected by a denial after a ruling on exceptions may seek judicial review pursuant to Iowa Code section 17A.19.

**721—22.17(52) Changes to certified voting systems.** The procedures in this rule shall be followed anytime a change is made to a certified voting system, including a change in tabulation software, firmware, or hardware.

**22.17(1) Notification of change.** The vendor shall notify the examiners of any changes in a certified voting system. The vendor shall provide the examiners with the following information at the time the vendor provides notice of the change(s):

- a. A description of the changes made.
- b. Reports of test results conducted by an accredited independent test authority, and any reports of test results conducted by or for other states following the changes to the voting system.
- c. Copies of manuals, instructions, advertisements and other documents submitted with the voting system's original application for certification that have been updated since the original application was submitted.
- d. An assessment from an accredited independent test authority of the change as either a de minimis change or a modification to the voting system.

**22.17(2) Commencing review proceedings.** Within seven days of receiving a voting system change notice from a vendor, the examiners shall commence review proceedings to independently determine whether the change submitted by the vendor is a de minimis change or a modification to the voting system. In making this independent determination, the examiners may use any means available, including hiring a consultant pursuant to rule 721—22.7(52).

**22.17(3) De minimis changes.** If the examiners determine a change to a voting system is de minimis, the examiners may approve the changes by motion and certify the changed voting system for use in the state.

**22.17(4) Modifications to voting systems.** If the examiners determine a change to a voting system is a modification to the voting system, the examiners shall require the vendor to submit a new application for certification and testing of the voting system pursuant to rules 721—22.5(52) to 721—22.11(52).

[ARC 8244B, IAB 10/21/09, effective 10/2/09]

**721—22.18(52) Rescinding certification.**

**22.18(1) Grounds for rescinding certification.** Certification may be rescinded if it is found that:

- a. The equipment does not produce accurate results and reports as required for an election.
- b. Modifications have been made in a certified voting system that have not been approved by the examiners.
- c. Equipment which has been certified for use has not been adopted by any county in Iowa, or is no longer used by any county in Iowa, and is no longer available for purchase from the manufacturer. The examiners may rescind certification of such voting equipment without a complaint or contested case proceedings.
- d. Equipment that has been certified for use no longer complies with the requirements of Iowa law.
- e. Any other grounds that may materially affect delivery or performance of the equipment.

**22.18(2) Procedure for rescinding certification.** Complaints regarding voting equipment certified for use in Iowa shall be filed with the secretary of state. The examiners shall review all complaints and may initiate a contested case to rescind certification on any ground listed above. The contested case may be conducted before the examiners or before an administrative law judge. A contested case for rescinding certification shall be conducted, to the extent applicable, in accordance with the procedural rules specified in 481—Chapter 10, Iowa Administrative Code.

**22.18(3) Suspension of certification.** If the administrative law judge hearing the contested case, or the examiners, as the case may be, find that the voting equipment can be modified to correct the deficiency, certification may be suspended until the deficiency is corrected. If it is found that the deficiency is limited

to a specific flaw not present in all models of the equipment, the suspension may be limited to the deficient models. While certification is suspended, the equipment may not be used for any election.

After the required modifications have been made the vendor may apply for reexamination of the equipment following the procedure described in rule 721—22.17(52).

**22.18(4) Further use prohibited.** If certification of voting equipment is rescinded without qualification, no further use shall be permitted by any county.

[ARC 8244B, IAB 10/21/09, effective 10/2/09]

These rules are intended to implement Iowa Code sections 17A.12, 21.4, 21.5, 52.4, 52.5, 52.6, 52.7, 52.26, and 70A.9.

**721—22.19(52) Examination of voting booths—application.** Rescinded IAB 10/21/09, effective 10/2/09.

**721—22.20(52) Review of application by examiners.** Rescinded IAB 10/21/09, effective 10/2/09.

**721—22.21(52) Contact other users.** Rescinded IAB 10/21/09, effective 10/2/09.

**721—22.22(52) Criteria for approval.** Rescinded IAB 10/21/09, effective 10/2/09.

**721—22.23(52) Report.** Rescinded IAB 10/21/09, effective 10/2/09.

**721—22.24(52) Notification.** Rescinded IAB 10/21/09, effective 10/2/09.

**721—22.25(52) Denial of certification.** Rescinded IAB 10/21/09, effective 10/2/09.

**721—22.26(52) Application for reconsideration.** Rescinded IAB 10/21/09, effective 10/2/09.

**721—22.27(52) Appeal.** Rescinded IAB 10/21/09, effective 10/2/09.

**721—22.28(52) Reexamination following changes in voting booth.** Rescinded IAB 10/21/09, effective 10/2/09.

**721—22.29(52) Rescinding certification.** Rescinded IAB 10/21/09, effective 10/2/09.

**721—22.30(50,52) Electronic transmission of election results.**

**22.30(1) Certification of equipment.** On or after December 17, 2003, new components for transmission of election results by any electronic means may be used in elections in Iowa only if the components are approved by the board of examiners for use with a certified voting system. Existing systems containing electronic transmission components in use before December 17, 2003, may continue to be used until January 1, 2006, when the Help America Vote Act voting system requirements become effective.

The examiners shall review the qualification test report submitted with the application for examination and testing of the voting system. If the test report for the voting system under examination shows that the electronic transmission components have met the voting system standards and the examiners concur, the electronic transmission components may be used in conjunction with the voting system. If the qualification test report or the examiners conclude that the electronic transmission components do not meet the voting system standards, or if this feature is not mentioned in the report, purchasers of the voting system may not transmit election results electronically.

**22.30(2) Procedures on election day.** The election results may be transmitted electronically from voting equipment to the county commissioner of elections' office only after the precinct election officials have produced a written report of the election results as required by Iowa Code section 50.11. All election officials of the precinct shall sign the printed report of the election results. The signed copy shall be the official tabulation from that precinct.

**22.30(3) Procedures after election day.** Before the canvass by the board of supervisors, the county commissioner of elections shall compare the signed, printed report from each precinct with the results

transmitted electronically from the precinct on election night. The commissioner shall report any discrepancies between the two sets of election results to the board of supervisors. The signed, printed results produced pursuant to Iowa Code section 50.11 shall be considered the correct results.

This rule is intended to implement Iowa Code sections 50.11 and 52.41.

**721—22.31(52) Acceptance testing.** When the commissioner receives voting equipment from a vendor, the commissioner shall carefully examine and test the equipment to:

**22.31(1)** Verify that the system delivered is certified for use in Iowa. The commissioner shall compare the voting system version numbers with the list of certified voting equipment provided by the state commissioner;

**22.31(2)** Verify that everything in the contract has been delivered by:

- a. Comparing a copy of the purchase contract with the items received;
- b. Making certain that all components, such as power cords, casters, and keys, are included;
- c. Reviewing instruction and maintenance manuals to be sure that the correct version of each manual was provided; and

**22.31(3)** Verify that everything delivered actually works. The commissioner shall run a simulated election to confirm that each part of the system and the system as a whole function properly.

**721—22.32(52) Optical scan voting system purchase program.** Rescinded IAB 4/20/11, effective 5/25/11.

**721—22.33 to 22.38** Reserved.

**721—22.39(52) Public testing for direct recording electronic voting machines.** Rescinded IAB 10/8/08, effective 9/19/08.

**721—22.40(52) Public testing of lever voting machines.** Rescinded IAB 8/1/07, effective 7/13/07.

**721—22.41(52) Public testing of optical scan systems.** All automatic tabulating equipment (including equipment used to tabulate absentee ballots) shall be tested before use at any election, as required by Iowa Code section 52.35. The process and results of the test shall be documented and available for inspection.

**22.41(1)** Each automatic tabulating device (including equipment that will be used for counting absentee ballots) shall be tested to determine the following:

- a. The device and its programs will accurately tabulate votes for each candidate and question on the ballot.
- b. Votes cast for more candidates for any office than the number to be elected will result in the rejection of all votes cast for that office on that ballot. Votes properly cast for other offices on the same ballot shall be counted.
- c. The tabulating equipment records all votes cast and no others. A written tally of the test votes shall be prepared before the test. The results of the test voting shall be recorded. The results of the machine tabulation shall be printed and compared with the test plan.
- d. The voter may cast as many write-in votes for each office on the ballot as there are positions to be filled, and the write-in votes are tallied correctly.
- e. For primary elections, the tabulating equipment accurately records votes cast for all political parties.

**22.41(2)** Conducting the test.

a. The commissioner shall follow the process described in rule 721—22.42(52) for preparing test decks.

b. If, during the test, there are differences between the test plan and the results produced by the optical scan device, the cause of the discrepancy shall be determined. If the cause of the discrepancy cannot be determined and corrected, the faulty program or equipment shall not be used in the election.

c. The test decks, the preparer's tally, and the printed results of the test shall be kept with the records of the election and preserved as required by Iowa Code section 50.19.

[ARC 3447C, IAB 11/8/17, effective 12/31/17]

**721—22.42(52) Preparing test decks.** The commissioner shall prepare test decks from all ballots printed for use in the election, including those for use at the polling places and for absentee balloting. Each of the following test decks shall be prepared for every precinct and ballot style in the election. Commissioners may use additional test methods to supplement the process described in this rule.

**22.42(1) Requirements for all test decks prepared by the commissioner and used in public testing.** The commissioner shall:

- a. Replace ballots spoiled during the marking process instead of attempting to correct errors.
- b. Fill in each oval completely using the recommended pen, pencil or voter assist terminal.
- c. Mark each ballot “Test Ballot.”
- d. Mark at least one valid vote for each candidate and question on the ballot using the OVI unit (if applicable). The ballots marked by the OVI unit may be used as part of the systematic test deck (if applicable).
- e. Mark at least one valid vote for each candidate and question on the ballot using the ImageCast Evolution or ImageCast Precinct with audio and printer (if applicable). The ballots marked by one of these units may be used as part of the systematic test deck (if applicable).

**22.42(2) Required test method.** The commissioner shall:

- a. Prepare a test plan showing the planned number of votes, including undervotes and overvotes for each oval on the ballot. Follow the instructions in subrules 22.42(3) through 22.42(5) in preparing the test decks.
- b. Mark the test ballots according to the test plan.
- c. Print a zero totals report from the optical scan tabulator before inserting any ballots.
- d. Insert the ballots into the optical scan tabulator and print a report showing the number of votes recorded for all offices, questions and judges, including undervotes and overvotes.
- e. Compare the printed report with the test plan to ensure that the correct number of votes was counted for each oval.
- f. If the commissioner finds errors, the commissioner shall identify and correct them. The commissioner shall repeat the testing process until the printed results from the tabulator match the test plan. If the commissioner cannot produce an errorless test, the equipment shall not be used in the election.

**22.42(3) Systematic test deck.** The commissioner shall determine a unique number of votes for each candidate in each office, such as one vote for each write-in oval for the office, two votes for the first candidate listed (or “NO” votes on public measures and judges), three votes for the second candidate, etc. It is not necessary to have a different number of votes for each write-in oval for offices for which the voter may select more than one candidate. However, the write-in oval shall have a different number of votes marked than any candidate for the office. The commissioner shall:

- a. For offices without candidates, mark all of the write-in ovals for that office.
- b. For offices in which the voter may vote for more than one candidate, vote for the maximum allowed on at least one ballot.
- c. On a ballot that contains at least one valid vote, overvote one other office or question.

**22.42(4) System-specific testing requirements.** Separate tests are prescribed for each certified voting system.

a. *Election Systems & Software, Unisyn OpenElect and Dominion Democracy Suite—overvote and blank ballot test.* For an overvote and blank ballot test, the commissioner shall:

(1) Overvote all offices and questions (including judges) on one ballot, by marking one more vote than permitted. Do not mark the write-in ovals for any offices for which there are no candidates’ names on the ballot.

(2) When the overvoted ballots are rejected by the optical scan tabulator, override the rejection and include the ballot in the tally. Add to the manual tally the number of overvotes in this test. The tally for this part of the test deck will show no votes for any candidate.

(3) Insert a blank ballot. When the blank ballot is rejected by the optical scan tabulator, override the rejection and include the ballot in the tally. This is a very important test of the accuracy of ballot printing. Printing errors sometimes put readable marks in the voting target area.

(4) Orientation test. Mark the maximum number of choices for each office and question on one ballot. Scan this ballot in each of the four possible orientations:

- Face up, head first.
- Face down, head first.
- Face up, feet first.
- Face down, feet first.

*b. Premier Election Solutions.*

(1) Blank and fully voted test. The commissioner shall use two ballots for this test.

1. Leave one ballot completely blank.
2. On the second ballot, mark every oval on both sides of the ballot.
3. Select “Test Blank Ballots” and insert the blank ballot in all four orientations:
  - Face up, head first.
  - Face down, head first.
  - Face up, feet first.
  - Face down, feet first.

4. Select “Test Fully Voted Ballots” and insert the second ballot in each of the four orientations listed in numbered paragraph “3” above.

5. Reinsert the blank ballot and the fully voted ballot and override the rejection feature.

(2) Overvote. Overvote all offices and questions (including judges) on one ballot, by marking one more vote than permitted. Do not mark the write-in ovals for any offices for which there are no candidates’ names on the ballot.

[ARC 0238C, IAB 8/8/12, effective 7/11/12; ARC 0801C, IAB 6/26/13, effective 7/31/13; ARC 3447C, IAB 11/8/17, effective 12/31/17]

#### **721—22.43(52) Conducting the public test.**

**22.43(1)** The equipment shall be inspected to determine whether it has been prepared properly for the election at which it will be used. The following information shall be verified:

*a.* The correct program cartridge or memory card is in place for the election and the precinct or precincts in which it will be used.

*b.* All counters are set at zero before the test is begun.

**22.43(2)** The commissioner shall conclude the test not later than 12 hours before the polls open on election day. Following the test, the tabulating equipment shall be inspected to determine that:

*a.* All counters have been returned to zero.

*b.* All required locks or seals are in place.

*c.* The automatic tabulating equipment is ready for operation at the election.

The results tape from each scanner produced during the public test shall be signed by the person conducting the test and by any observers present at the test. The signers shall write their signatures at the end of the tape where it will be detached from the machine. The tape shall be torn or cut across the signatures, so that a portion of the signature is on the tape remaining on the tabulating device. The test results tape, including a part of the tester’s signature, shall be retained with the appropriate test deck for the period of time required by Iowa Code section 50.19.

**22.43(3)** Test deck submitted by observers. Any person who is present at the public test may mark ballots to be used to test the voting equipment. The following conditions apply:

*a.* Not more than ten ballots may be submitted by any person.

*b.* Only official ballots provided by the commissioner at the test shall be used.

*c.* The observer submitting the test shall provide a written tally of the test deck.

*d.* The results of the machine tabulation shall be printed and compared with the observer's tally. If there are differences, the cause of the discrepancy shall be determined. If the cause of the discrepancy cannot be determined and corrected, the program or equipment shall not be used at the election.

*e.* The test decks, the tally, and the printed results of the test shall be kept with the records of the election and preserved as required by Iowa Code section 50.19.

Rules 721—22.41(52) through 721—22.43(52) are intended to implement Iowa Code section 52.35.

**721—22.44 to 22.49** Reserved.

**721—22.50(52) Voting system security.** Each county shall have a written security policy. The policy shall include detailed plans to protect the election equipment and data from unauthorized access. The policy shall describe the methods to be used to preserve the integrity of the election and to document the election process.

**22.50(1) Staff access.** The security policy shall describe who shall have access to the voting equipment, including the computers used in the commissioner's office to prepare ballots and voting equipment programs or to compile election results.

**22.50(2) Computers.** For security purposes, computers used in the commissioner's office to prepare ballots and voting equipment programs or to compile election results shall not be used for any other function and shall not be linked to any computer network or to the Internet unless the commissioner has on file in the office of the state commissioner a current Election Computer Risk Acceptance Form indicating acceptance of this security risk. The Election Computer Risk Acceptance Form, once submitted, is current until the end of the next even-numbered calendar year.

*a.* If the election computers are linked to a network or to the Internet, the commissioner shall use a firewall to filter network traffic. Data transmissions over the Internet shall be encrypted and password-protected. Information posted to a website shall not be considered transmission of data over the Internet.

*b.* Access to the computer(s) used to prepare ballots and voting equipment programs or to compile election results shall be limited to persons specified by the commissioner in the written security policy. The level of access granted to each person identified in the policy shall be specified.

(1) Uniqueness. The usernames and passwords for each user authorized in the security policy shall be unique. The creation of generic or shared usernames is specifically prohibited. Each user shall have exactly one username and password, except where job requirements necessitate the creation of multiple usernames to access different business functions.

(2) Authority. Each user shall be granted only the level of access specifically required by the user's job. Use of "Administrator," "Super User," "Security Administrator," or "SA" levels of authority shall be severely restricted.

(3) Generic usernames. Staff members with generic usernames are not allowed to sign on to voting systems.

(4) Password standards.

| Account Policy   | Recommended Setting                 |
|--|-------------------------------------|
| Maximum Password Age                                     | 90 days                             |
| Minimum Password Age                                     | 2 days                              |
| Minimum Password Length                                  | 8 characters                        |
| Enforced Password History                                | 6 passwords (last 6 cannot be used) |
| Account Lockout (number of unsuccessful log-on attempts) | 3 bad attempts                      |
| Account Lockout Duration                                 | 6 hours                             |
| Reset Account Lockout Counter After                      | 6 hours                             |

*c.* Hardened operating system. For security purposes, users of Election Systems & Software, Unity 3.4.0.1, Election Systems & Software EVS 5.3.0.0, Democracy Suite 4.6 and Democracy Suite 4.14B shall harden the operating system on the computer on which the election management system is housed according to the specifications of the vendor and the recommendations of the county information technology department (if any).

**22.50(3) Evacuation.** If it is necessary to evacuate the election office, a satellite absentee voting station or a polling place, the precinct election staff or the election officials shall immediately attempt to notify the commissioner and take the following actions:

*a.* Keep people safe.

*b.* If possible, gather and secure voted ballots, election equipment and critical election documents.

[ARC 0801C, IAB 6/26/13, effective 7/31/13; ARC 1746C, IAB 12/10/14, effective 1/14/15; ARC 2074C, IAB 8/5/15, effective 9/9/15]







### Memory Storage Device Shipping Record for \_\_\_\_\_ County

#### Shipped for programming:

Record each storage device number before packing to ship, and check out each storage device number on the chain of custody record. Enclose a photocopy of the Memory Storage Device Record with the storage devices.

Shipped by: \_\_\_\_\_ Date: \_\_\_/\_\_\_/\_\_\_ Time: \_\_\_:\_\_\_ a.m./p.m.  
Print name Signature

Shipped to: \_\_\_\_\_ Shipped via: \_\_\_\_\_  
Tracking number: \_\_\_\_\_

**Instructions to vendor:**  
 Check in each storage device number on the enclosed chain of custody record when unpacking storage devices.

By: \_\_\_\_\_ Date: \_\_\_/\_\_\_/\_\_\_ Time: \_\_\_:\_\_\_ a.m./p.m.  
 Print name Signature

- If memory storage devices are removed from this inventory for any reason, make a notation of which storage device(s) on the Memory Storage Device Record.
- Replacement storage device(s) if issued should be added to the bottom of the Memory Storage Device Record as a new storage device. A serial number will be assigned later by the receiving county.

Shipped via: \_\_\_\_\_ Date: \_\_\_\_\_ Tracking number: \_\_\_\_\_

#### Received by County Election Department on Date: \_\_\_/\_\_\_/\_\_\_

Was the package sealed? \_\_\_\_\_ Was the seal intact? \_\_\_\_\_ Notes: \_\_\_\_\_

Keep the memory storage devices in secure storage after they are received and until they are installed in the voting equipment.

**22.51(5) Preparation and installation.** When memory storage devices are installed, they shall be sealed immediately into the machine using a numbered, tamper-evident seal. Appropriate log entries shall be completed.

**22.51(6) Replacing seals or memory storage devices.** If a seal is accidentally broken or a memory storage device is replaced for any reason, the issuance of a new seal and the entry into the log shall be witnessed by more than one person. The facts of the incident and the names of the individuals who detected and resolved it shall be recorded.

**22.51(7) Opening the polls.** Immediately before the polls open on election day, the precinct election officials shall turn on the voting equipment and print the report showing that all counters are set at zero.

**22.51(8) Verification log.** The commissioner shall provide to each precinct a precinct verification log with the ballot record and receipt. The verification log shall provide places for precinct election officials to record or check the following information before the polls open and again before leaving the polling place at the end of the day:

- a. Seal numbers from the voting equipment; and
- b. Condition of seals on ballot containers.

**22.51(9) Election day.**

- a. Before the polls are opened, the precinct election officials shall verify the required information in the verification log and sign the log.
- b. After the polls are closed, the precinct election officials shall verify the required information in the verification log and sign the log before leaving the polling place.

c. If the precinct election officials remove the memory storage devices from the voting equipment, the officials shall first print the results report from the voting equipment.

**22.51(10) Return of memory storage devices.** If the precinct election officials remove the memory storage devices from the voting equipment on election night, they shall return to the commissioner the memory storage devices and the seals used to secure them in a sealed envelope or other container. All officials of the precinct shall witness the statement on the envelope or other container. The label on the envelope or other container shall be in substantially the following form:

### Memory Storage Devices

Election Date: \_\_\_\_\_

Precinct: \_\_\_\_\_

This envelope contains Memory Storage Devices and memory storage device access seals from this precinct.

| Machine Number | Memory Storage Device # | Memory Storage Device Seal # |
|----------------|-------------------------|------------------------------|
|                |                         |                              |
|                |                         |                              |
|                |                         |                              |
|                |                         |                              |

[Signatures of all precinct election officials shall be included on the label.]

**22.51(11) Storage.** If the memory storage devices are returned inside the voting equipment to the commissioner, the machine serial numbers and the seal numbers shall be verified against the verification log described in subrule 22.51(8). When the memory storage devices are removed, their serial numbers shall also be verified against the verification log returned by the precinct’s election officials. The memory storage device audit log shall be retained for the time period required by Iowa Code section 50.19.

**22.51(12) Results verified.** Before the conclusion of the canvass of votes, the individual results reports from the precincts, as signed by the precinct election officials at the polls on election night, shall be compared to the election results compiled for the canvass (either manually or electronically) to verify that transmitted and accumulated totals match the results witnessed by the election officials. Any discrepancies in these totals shall be reconciled before the supervisors conclude the canvass.

**22.51(13) Retention of programmed memory storage devices.** The election information on all memory storage devices used for an election shall be retained on the memory storage devices until after the time to file requests for recounts and election contests has passed. If a contest is pending, the memory storage devices shall be retained until the contest is resolved. Before the memory storage devices are permanently erased, the commissioner shall print the memory storage device audit log from each storage device.

**22.51(14) Retention of program information.** The commissioner shall retain all instructions and other written records of the process for programming the memory storage devices and the memory storage device audit logs for the period required by Iowa Code section 50.19. The contents of memory storage devices and other electronic records of the election process shall be collected and retained in an electronic or other medium and stored with the other election records for the time period required by Iowa Code section 50.19. [ARC 0801C, IAB 6/26/13, effective 7/31/13]

**721—22.52(52) Voting equipment malfunction at the polls.** The precinct election officials shall immediately cease using any malfunctioning voting equipment and report the problem to the commissioner. Only a person who is authorized in writing by the commissioner to do so shall be permitted to attempt to repair malfunctioning voting equipment. The person shall show identification to the precinct election official. The commissioner shall keep a written record of all known malfunctions and their resolution. The precinct election officials shall return the voting equipment to service only if the malfunction is corrected.

**22.52(1) Routine resolution.** Some problems may be easily resolved by following simple instructions. If the commissioner and the precinct election officials are able to resolve a problem without replacing the

equipment, the officials shall document the problem, the time it occurred, how it was resolved, and by whom.

**22.52(2) Repair or replacement.** Repairs to voting equipment at the polls on election day shall be limited. If the problem cannot be easily resolved, a person who is authorized to do so by the commissioner shall replace the equipment as soon as possible. Two election officials, one from each political party, shall witness repair or replacement of any voting equipment, including memory cards. The authorized person making the repair or replacement and the two election officials shall sign a report of the incident.

**721—22.53 to 22.99** Reserved.

#### OPTICAL SCAN VOTING SYSTEMS

**721—22.100(52) Optical scan ballots, automatic tabulating equipment, and absentee voting.** Rescinded IAB 10/8/08, effective 9/19/08.

**721—22.101(52) Definitions.** The definitions established by this rule shall apply whenever the terms defined appear in relation to an optical scan system used with the type of ballot defined in this rule.

*“Ballot”* means the official document that includes all of the offices or public measures to be voted upon at a single election, whether they appear on one or more optical scan ballots.

*“Optical scan voting system”* means a system employing optical scan ballots under which votes are cast by voters by marking the optical scan ballots with a ballot marking device and thereafter counted by use of automatic tabulating equipment.

*“Overvote”* means to vote for more than the permitted number of choices for any office or question on a ballot.

*“Secrecy envelope”* means a reusable envelope of sufficient construction that when the optical scan ballot is inserted in it all portions indicating voting marks are hidden from view.

*“Tabulating device”* means the portable apparatus which examines and counts the votes recorded on the optical scan ballot and produces a paper printout of the results of the voting.

*“Ticket”* means each list of candidates nominated by a political party or group of petitioners.

*“Undervote”* means to vote for fewer than the permitted number of choices for any office or question on a ballot.

*“Voting system”* means the total combination of mechanical, electromechanical or electronic equipment (including the software, firmware and documentation required to program, control and support the equipment that is used to define ballots, to cast and count votes, to report or display election results and to maintain and produce any audit trail information). “Voting system” also includes the practices and associated documentation used to identify system components and versions of such components, to test the system during its development and maintenance, to maintain records of system errors and defects, to determine specific system changes to be made to a system after the initial qualification of the system and to make available any materials to the voter such as notices, instructions, forms or paper ballots. (See Section 301(b) of HAVA.)

*“Voting target”* means the space on an optical scan ballot which the voter marks to cast a vote for a candidate, judge or question. This target shall be printed according to the requirements of the voting system to be used to read the ballots.

**721—22.102(52) Optical scan ballots.** The optical scan ballots shall be printed pursuant to Iowa Code chapters 43 and 49 and by any relevant provisions of any statutes which specify the form of ballots for special elections, so far as possible within the constraints of the physical characteristics of the system.

**22.102(1)** The optical scan ballots may be printed on both sides of a sheet of paper. If both sides are used, the words “Turn the ballot over” shall be clearly printed on the front and the back of the optical scan ballot, at the bottom.

**22.102(2)** Printed at the top of the front side of the optical scan ballot shall be the name and date of the election; the words “Official Ballot”; a designation of the ballot style or precinct, if any; and a facsimile of the commissioner’s signature.

**22.102(3)** The voting target shall be printed opposite each candidate's name and write-in line on the optical scan ballot, and opposite the "yes" and "no" for each public measure and judge. The voting target shall be printed on the left side of the name or "yes" and "no". The voting target shall be an oval unless the voting system requires a target with a different shape.

**22.102(4)** For partisan primary elections, the names of candidates representing each political party shall be printed on separate optical scan ballots. The ballots shall be uniform in quality, texture and size. The name of the political party shall be printed in at least 24-point type (1/4" high) at the top of the ballot.

**22.102(5)** There shall be printed on the ballot a line to accommodate the initials of the precinct election official who endorses the ballot as provided in Iowa Code sections 43.36 and 49.82.

**22.102(6)** It is not necessary for public measures to be printed on colored paper.

**22.102(7)** Ballots shall be coded as necessary to allow the tabulation program to identify the appropriate ballots for the precinct. Ballots shall be coded so the tabulating device can identify by precinct the votes cast for each office and question on the ballot by precinct. The votes from the absentee and special voters precinct shall be reported as a single precinct except in general elections pursuant to Iowa Code section 53.20 as amended by 2008 Iowa Acts, House File 2367. Identical ballots shall not be coded to identify groups of voters within a precinct.

**22.102(8)** No office or public measure on any ballot shall be divided to appear in more than one column or on more than one page of a ballot. If the full text of a public measure will not fit on a single column of the ballot, the commissioner shall prepare a summary for the ballot and post the full text in the voting booth as required by Iowa Code section 52.25.

**22.102(9)** Ballots shall be stored in a locked room or storage area. Access to the storage area shall be restricted to those persons identified in the election security plan. Throughout the election process, the commissioner shall keep accurate records of the number of each type of ballot or ballot style printed for the election. This record shall include the number of ballots:

- a. Ordered from the printer.
- b. Printed and delivered by the printer to the commissioner. The commissioner may store sealed, unopened packages of ballots without verifying the number of ballots in the package.
- c. Used for testing as required by Iowa Code sections 52.9 and 52.35 and rule 721—22.41(52).
- d. Held in reserve for emergencies as required by Iowa Code section 49.66.
- e. Delivered to and returned from the polling places as required by Iowa Code sections 49.65 and 50.10.
- f. Used for absentee voting, including any spoiled ballots.
- g. Issued as sample ballots to the public as permitted by Iowa Code section 43.30.
- h. Photocopied ballots used pursuant to Iowa Code section 49.67.
- i. Printed by the commissioner using any voting system program, such as Election Systems & Software's Ballot on Demand program.

**721—22.103 to 22.199** Reserved.

#### PRECINCT COUNT SYSTEMS

#### **721—22.200(52) Security.**

**22.200(1)** At least one tabulating device shall be provided at each precinct polling place for an election. If the tabulating device is delivered to the polling place before election day, it shall be secured against tampering or kept in a locked room.

**22.200(2)** The maintenance key or keys used to gain access to the internal parts of the tabulating device shall be kept in a secure place and in a secure manner, in the custody of the commissioner. On election day, the key used to obtain the paper printout shall be kept by the chairperson of the precinct election officials in a secure manner. Small electronic devices, such as memory cards, cartridges or other data storage devices used to activate tabulation equipment or to store election information, shall be in the custody of the precinct chairperson when the devices are not installed on the voting equipment.

**22.200(3)** If a password is needed for precinct election officials to have routine access to the tabulating device during election day, the password shall be changed for every election. The commissioner shall restrict access to the password in the written security policy.

**721—22.201(52) Programming and testing the tabulating devices for precinct count systems.**

**22.201(1)** All programming of tabulating devices shall be performed under the supervision of the commissioner. The devices shall be programmed to ensure that all votes will be counted in accordance with the laws of Iowa. Tabulating devices shall be programmed to return to the voter any ballots:

- a. That are not coded to be used in the precinct.
- b. That are read as blank.
- c. That have one or more overvoted offices or public measures.

**22.201(2)** Digital ballot images that are saved as the voted ballots are scanned and the portions of those images that are printed on the results tapes may be used for the purpose of tallying write-in votes cast in the election. Digital ballot images that are saved as the voted ballots are scanned shall not be transferred to the election computer used as part of the voting system as defined by rule 721—22.1(52). Digital ballot images shall be treated as voted ballots under Iowa Code section 50.12 in terms of preservation, access, retention, and destruction, except the images shall not be accessed in the event of an official recount as required by Iowa Code section 50.48(4)“a” or election contest unless the actual physical ballots are unavailable.

[ARC 1548C, IAB 7/23/14, effective 8/27/14]

**721—22.202(50) Unique race and candidate ID numbers for election night results reporting.** All tabulating devices programmed for primary and general elections and for special elections conducted pursuant to Iowa Code section 69.14 shall be programmed using the unique race and candidate ID numbers assigned by the state commissioner. The unique race and candidate ID numbers will be provided to the county commissioners with the candidate certification prepared by the state commissioner.

This rule is intended to implement Iowa Code chapter 50.

[ARC 9989B, IAB 2/8/12, effective 1/17/12]

**721—22.203(50) Reporting election night results electronically.** For all primary and general elections, the county commissioner shall provide the state commissioner with an electronic results file generated from the county’s vote tabulation software system, if any. For special elections conducted pursuant to Iowa Code section 69.14, the county commissioner shall provide election night results in the manner requested by the state commissioner.

This rule is intended to implement Iowa Code chapter 50.

[ARC 9989B, IAB 2/8/12, effective 1/17/12]

**721—22.204 to 22.220** Reserved.

**721—22.221(52) Sample ballots and instructions to voters.** Sample special paper ballots and printed instructions for casting votes on special paper ballots shall be prominently displayed in each polling place. Instructions shall also be displayed inside each voting booth. Each special paper ballot shall also include an example of the method of marking the ballot recommended by the manufacturer of the tabulating device. Further instructions shall be provided to any voter who requests assistance in accordance with Iowa Code section 49.90.

**721—22.222 to 22.230** Reserved.

**721—22.231(52) Emergency ballot box or bin.** Each precinct shall be furnished with an emergency ballot box or bin that is suitably equipped with a lock and key or numbered, tamperproof seal. In the event of power failure or malfunction of the tabulating device, voted ballots shall be deposited in the locked or sealed emergency ballot box or bin. A precinct election official shall put the ballot into the emergency ballot box or bin for the voter. The voted ballots so deposited may be removed from the locked emergency ballot box or bin and tabulated before the polls close whenever a properly functioning tabulating device

becomes available, or the voted ballots so deposited may be removed and counted electronically or manually immediately after the polls are closed. If the ballots are counted manually, the precinct election officials shall follow the requirements of 721—Chapter 26.

**721—22.232(52) Manner of voting.** After the precinct election official has endorsed a ballot, the official shall instruct the voter to use only the marker provided. The ballot shall be inserted in a secrecy folder and given to the person who is entitled to receive the ballot in accordance with the provisions of Iowa Code section 49.77.

**22.232(1)** The precinct officials shall provide each voter with a secrecy folder. The commissioner may print basic ballot marking instructions on the secrecy folder. It is not necessary to print information on secrecy folders that will limit the usefulness of the secrecy folder to one or more elections or election types. Upon receipt of the ballot in the secrecy folder, the voter shall retire alone to a voting booth and without delay mark the ballot.

**22.232(2)** The voter shall vote upon the ballot by marking the appropriate voting target with an appropriate pen or pencil in the manner described in the instructions printed on the ballot.

When a write-in vote has been cast, the ballot must also be marked in the corresponding voting target in order to be counted.

**22.232(3)** After marking the ballot, the voter shall replace it in the secrecy folder and leave the voting booth at once.

**22.232(4)** The voter shall at once deposit the ballot, still enclosed in the secrecy folder, in the tabulating device so that the ballot is automatically removed from the secrecy folder, the votes tabulated, and the ballot deposited in the ballot box.

**22.232(5)** If the tabulating device is equipped with a mechanism that will not permit more than one ballot to be inserted at one time, the voter may insert the ballot into the tabulating device. If the tabulating device cannot detect and reject multiple ballots, the voter shall be required to hand the ballot in the secrecy folder to the precinct election official without revealing any of the marks on the ballot. The precinct election official shall at once deposit the ballot in the manner described in subrule 22.232(4).

**22.232(6)** If the tabulating device returns a ballot, the precinct official attending the device shall ask the voter to wait. Without examining the ballot, the official shall enclose the returned ballot in a secrecy folder. If necessary, the official shall read to the voter the information provided by the device about the reason the ballot was returned. The official shall offer the voter the opportunity to correct the ballot. The precinct official shall mark the returned ballot “spoiled” and shall also tear or mark the ballot so that the tabulating device cannot count it. The voter may use the spoiled ballot as a guide for marking the corrected ballot. After the voter has marked the corrected ballot, the precinct officials shall collect the spoiled ballot and keep it with other spoiled ballots.

**22.232(7)** If the voter who cast the returned ballot is not available, or declines to correct the ballot, the precinct official shall not mark the ballot “spoiled.” Either the voter or the official shall reset the tabulating device to accept the ballot. The voter, or the official if the voter has gone, shall insert the ballot into the precinct counter without further examination.

**721—22.233 to 22.239** Reserved.

**721—22.240(52) Results.** After the polls are closed and the tabulating device has processed all of the ballots, including any ballots from the emergency ballot box or bin, the precinct election officials shall:

**22.240(1)** Unlock the tabulating device and obtain a paper printout showing the votes cast for each candidate and public measure.

**22.240(2)** Fasten the paper printout to the official tally sheet.

**22.240(3)** Unlock or remove the seal on the ballot box or bin containing ballots with write-in votes and open it. The precinct officials shall remove the ballots and manually count the write-in votes as required by 721—Chapter 26. The officials shall record the write-in votes in the tally list. A single tally list is sufficient for use when tabulating write-in votes.

**22.240(4)** Seal all ballots in a transfer case to be returned to the commissioner in accordance with Iowa Code section 50.12.

**22.240(5)** It is not necessary for the precinct officials to separate primary election ballots by political party.

**721—22.241(52) Electronic transmission of election results.** If the equipment includes a modem for the electronic transmission of election results, the precinct officials may transmit the results after a printed copy has been made. If the voting system includes a data card, cartridge or other small device that contains an electronic copy of the election results, the precinct chairperson shall secure the device and ensure its safe delivery to the commissioner.

**721—22.242 to 22.249** Reserved.

**721—22.250(52) Absentee voting instructions.** Printed instructions shall be included with the ballot or ballots given to or mailed to each absentee voter. Written instructions to the voter shall be sent with every absentee ballot. For federal elections, the commissioner shall use only the instructions provided by the state commissioner.

**721—22.251(52) Absentee voting instructions.** Rescinded IAB 11/23/05, effective 12/28/05.

**721—22.252 to 22.259** Reserved.

**721—22.260(52) Specific precinct count systems.** Additional rules are provided for each voting system approved for use in Iowa. The requirements in rules 721—22.261(52) through 721—22.265(52) apply only to the voting systems indicated and are in addition to the general provisions set forth in rules 721—22.200(52) through 721—22.250(52).

[ARC 0238C, IAB 8/8/12, effective 7/11/12]

**721—22.261(52) Election Systems & Software Voting Systems—preparation and use in elections.**

**22.261(1) Security.** The commissioner shall have a written security plan for the voting system. Access to equipment, programs and passwords shall be limited to those persons authorized in writing by the commissioner. The security plan shall be reviewed at least annually.

*a.* Passwords used at the polling places on election day shall be changed for each election.

*b.* The control key for the precinct automatic tabulators shall be in the possession of the precinct chairperson on election day.

**22.261(2) Precinct automatic tabulator configuration choices.** The following settings are mandatory for all elections.

*a. Ballot control.* In an official election, the commissioner shall not program the precinct automatic tabulators for unconditional acceptance of all ballots, shall not divert blank ballots to the write-in bin, and shall always accept undervoted ballots. The system shall be programmed to query the voter in each of the following situations:

(1) Overvoted ballot.

(2) Blank ballot.

(3) Unreadable ballot.

*b. Unit control.* The commissioner shall not select automatic transmission of election results by modem. The precinct officials must print the official results at the polling place before transmitting them.

*c. Reports.* The following are required reports:

(1) Opening the polls. Print the Zero Certification report.

(2) Closing the polls. Print the poll report before transmitting the election results by modem. The poll report is the official record of the votes cast in the precinct on election day. The following certification text shall appear at the end of the poll report:

We, the undersigned precinct election officials of this precinct, hereby attest that this tape shows the results of all ballots cast and counted by the Optical Scan tabulation device at this election.

[print lines for each of the officials to sign]

Precinct Election Officials

Date: \_\_\_\_\_

Time: \_\_\_\_\_

*d. Reopen polls.* The commissioner shall enable the option to reopen the polls, but protect it against unauthorized use. If it is necessary to reopen the polls, the chairperson of the precinct board shall contact the commissioner for the password.

*e. Ballot images.* Rescinded IAB 7/23/14, effective 8/27/14.

**22.261(3) Central count automatic tabulator configuration choices.** The following settings are mandatory for all elections in which the M650 or DS850 is used.

*a. Ballot control.* In an official election, the commissioner shall program the central count automatic tabulator to accept overvoted ballots and undervoted ballots. The commissioner shall program the central count automatic tabulator to sort blank ballots and unreadable ballots as required by Iowa Code section 52.37. Ballots with write-in votes may be sorted for further review by the absentee and special voters precinct board at the commissioner's discretion.

*b. Reports.* The following are required reports:

(1) Opening the polls. Before ballots are tabulated in the central count automatic tabulator, a Zero Certification report shall be printed.

(2) Closing the polls. After all ballots are tabulated by the central count automatic tabulator, a poll report shall be printed. The poll report is the official record of ballots tabulated in the absentee precinct. The following certification text shall appear at the end of the poll report:

We, the undersigned precinct election officials of this precinct, hereby attest that this tape shows the results of all ballots cast and counted by the Optical Scan tabulation device at this election.

[print lines for each of the officials to sign]

Precinct Election Officials

Date: \_\_\_\_\_

Time: \_\_\_\_\_

*c. Reopen polls.* The commissioner shall enable the option to reopen the polls, but protect it against unauthorized use.

*d. Ballot images.* Rescinded IAB 7/23/14, effective 8/27/14.

**22.261(4) Ballot printing.**

*a. Format.* The office title, instructions about the maximum number of choices the voter can make for the office, the candidate names and all write-in lines associated with each office on the ballot shall be printed in a single column on the same side of the ballot. When describing the maximum number of choices the voter can make for the office, the following description for each office shall be used: "Vote for no more than xx." Do not include "vote for" language for public measures or judges. All text and the "yes" and "no" choices for each public measure and for each individual judge on a ballot shall be printed in a single column on the same side of the ballot. No office or public measure on any ballot shall be divided to appear in more than one column or on more than one page of a ballot.

*b. Instructions for voters.* The following instructions shall be printed on ballots:

(1) Voting mark. "To vote, fill in the oval next to your choice."

(2) Public measures. "Notice to voters. To vote to approve any question on this ballot, fill in the oval in front of the word 'Yes'. To vote against a question, fill in the oval in front of the word 'No'."

**22.261(5) System error messages.** At the discretion of the commissioner, precinct election officials may be provided with a list of routine error messages, including messages that relate to paper jams, which do not rise to the level of voting equipment malfunctions and the appropriate responses. The officials may be instructed to contact the commissioner or the commissioner's designee on election day for all other messages or routine errors for which appropriate responses have not been provided by the commissioner.

**22.261(6) Record retention.** The precinct automatic tabulating equipment uses thermal printers. The maximum anticipated life span of the results from each automatic tabulator is only five years. In order to preserve the permanent record of the precinct results required by Iowa Code section 50.19, the commissioner shall print a copy of the results of each precinct on permanent paper and store these copies with the tally lists from precincts where the precinct automatic tabulators were used.

[ARC 9468B, IAB 4/20/11, effective 5/25/11; ARC 0801C, IAB 6/26/13, effective 7/31/13; ARC 1548C, IAB 7/23/14, effective 8/27/14; ARC 3447C, IAB 11/8/17, effective 12/31/17]

**721—22.262(52) Premier Election Solutions’ AccuVote OS and AccuVote OSX precinct count devices.**

**22.262(1) Security.** The commissioner shall have a written security plan for the voting system. Access to voting equipment, programs and passwords shall be limited to those persons authorized in writing by the commissioner. The security plan shall be reviewed at least annually.

*a.* Passwords used at polling places shall be changed for each election.  
*b.* For each election, the precinct chairperson shall be responsible for the custody and security of the control card and ballot box keys and the security of the voting system.

**22.262(2) Configuration choices.** The following selections are mandatory for all elections:

*a.* Reject settings shall be configured as follows:  
(1) Return to voters ballots that include one or more overvoted races and blank-voted ballots. Include on the override log the number of times the override option was used for overvoted and blank-voted ballots.  
(2) Divert to the write-in ballot bin only ballots with write-in votes.  
(3) Do not include reject settings for blank voted races, undervoted races, or duplicate votes.

*b.* Tally settings shall be as follows: The write-in setting shall be “Combined.”

**22.262(3) Zero totals reports.** Long form zero totals reports showing all counters at zero shall be printed following memory card programming, before counting ballots in the Pre-Election Mode and as the ballot reader is opened on election day.

**22.262(4) Ballot printing.** Although the Premier Election Solutions’ GEMS voting system software includes choices for variations in ballot layout, all ballots shall be prepared according to the requirements of Iowa Code sections 43.26 through 43.29 and 49.30 through 49.48. For all elections the voting target shall be an oval printed on the left side of each choice on the ballot.

**22.262(5) Preelection testing.** All voting equipment shall be tested pursuant to the provisions of Iowa Code section 52.30 and rule 721—22.42(52). At the commissioner’s discretion, the commissioner may conduct additional tests.

**22.262(6) System error messages.** At the discretion of the commissioner, precinct election officials may be provided with a list of routine error messages, including messages that relate to paper jams, which do not rise to the level of voting equipment malfunctions and the appropriate responses. The officials may be instructed to contact the commissioner or the commissioner’s designee on election day for all other messages or routine errors for which appropriate responses have not been provided by the commissioner.

[ARC 0801C, IAB 6/26/13, effective 7/31/13; ARC 3447C, IAB 11/8/17, effective 12/31/17]

**721—22.263(52) AutoMARK Voter Assist Terminal (VAT).**

**22.263(1) Acceptance testing.** Upon receipt of the equipment from the vendor, the commissioner shall subject each AutoMARK VAT to an acceptance test. The test shall be in addition to any testing provided by the vendor and shall include a demonstration of all functionalities of the device.

**22.263(2) Audio ballot preparation.** Each candidate shall have the opportunity to provide a record of the proper pronunciation of the candidate’s name. The same voice shall be used for recording the entire ballot including instructions, office titles, candidate names and the full text of all public measures.

**22.263(3) Preelection testing.** Each AutoMARK VAT shall be tested before each election in which it will be used. The commissioner may use the AutoMARK VAT to prepare some ballots for test decks required by rule 721—22.42(52). In addition, the commissioner shall:

*a.* Perform the test ballot print, then review the ballot to be sure that all ovals are darkened and the appropriate names are printed on each line.

*b.* Calibrate the touchscreen.

*c.* Select, then deselect each voting position in each race.

*d.* Verify that the overvote and undervote functions are programmed correctly.

*e.* Test the write-in function for each office on one ballot, and test all of the letters in the alphabet.

*f.* Use the audio ballot function to mark one ballot.

*g.* Tabulate the marked ballots from this test on the appropriate optical scanner.

*h.* Ensure that the AutoMARK VAT is available for demonstration at public tests.

**22.263(4)** *Compact flash memory cartridge or memory card.* The compact flash memory cartridge shall be installed before the AutoMARK VAT is locked, sealed and shipped to the polling place for election day. In addition to locking the memory cartridge access door, the commissioner shall seal the door with a numbered seal, record the seal number, and provide the number to the precinct election officials as required by rule 721—22.51(52). From the time the AutoMARK VAT is delivered to the polling place until the time the precinct election officials arrive, the AutoMARK VAT shall be stored securely to prevent tampering. On election day, the precinct election officials shall inspect the seal and verify that the original numbered seal is present and undamaged.

**22.263(5)** *Calibration testing.* The commissioner may provide for printer and touchscreen calibration testing after delivery of the AutoMARK VAT to the polling place. If calibration testing is performed at the polling place, the delivery staff shall complete the testing before the polls open on election day and shall keep a log for each AutoMARK VAT and record the machine serial number, the precinct name or number, the date and time of the test, the name of the person performing the test, and the lifetime printer counter number at the completion of the test. The ballot to be used in the calibration test shall be provided to the tester and shall be labeled with the precinct name and election date. The completed calibration test ballot shall be returned to the commissioner and kept with the election records.

**22.263(6)** *AutoMARK VAT keys.* Possession of the AutoMARK VAT keys shall be restricted to precinct election officials and authorized members of the commissioner’s staff.

**22.263(7)** *Table.* The table used to support the AutoMARK VAT shall meet the following requirements: The table shall be sturdy enough to hold the 40-pound AutoMARK VAT safely. Clearance shall be at least 27 inches high, 30 inches wide, and 26 inches deep. The top of the table shall be from 28 inches to 34 inches above the floor.

**22.263(8)** *Privacy.* The commissioner may provide each AutoMARK VAT with a privacy shield to protect the secrecy of each voter’s ballot. The commissioner shall instruct the precinct election officials to position the AutoMARK VAT to provide maximum access for voters (especially voters who use wheelchairs) as well as privacy.

**22.263(9)** *Abandoned ballots.* If a voter or precinct election official discovers that a voter has left the AutoMARK VAT without printing the voter’s ballot, the two precinct election officials designated to assist voters shall print the ballot without reviewing the ballot or making any changes, enclose the ballot in a secrecy folder, and immediately deposit the ballot in the tabulating device.

#### **721—22.264(52) Unisyn OpenElect OVO unit—preparation and use in elections.**

**22.264(1)** *Security.* The commissioner shall have a written security plan for the voting system. Access to equipment, programs and passwords shall be limited to those persons authorized in writing by the commissioner. The security plan shall be reviewed at least annually.

*a.* Passwords used at the polling places on election day shall be changed for each election.

*b.* For each election, the precinct chairperson shall be responsible for the custody and security of the keys for the voting equipment, the ballot boxes and the security of the voting system on election day.

**22.264(2)** *Configuration choices.* The following selections are mandatory for all elections:

*a.* *Access, messaging and tabulating selections.* In the Election Manager, “Election Options” menu, the following selections shall be made:

(1) “Allow Add Precinct” shall be checked.

(2) “Full Voter Ballot Review” shall not be checked. The commissioner may select either “Alert Print Only” or “Alert on-screen.”

(3) “Show Precinct Split Totals” shall not be checked.

(4) “Overvote by Vote For” shall be checked.

(5) “No Undervote Check” shall be selected in the Undervote Checking dropdown menu.

*b.* *Printing selections.* In the Election Manager, “Printing Options” menu, the following selections shall be made:

(1) “Auto Print Alerts” may be checked.

(2) “Voter Receipts” shall not be checked.

(3) “Show Contest Results on Election Day” shall be checked.

c. *Ballot acceptance by the OVO unit.* In an official election, the commissioner shall not program the OVO for unconditional acceptance of all ballots and shall program the OVO unit to accept undervoted ballots. The system shall also be programmed to query the voter and give the voter the on-screen option to “Cast Ballot as Marked” in each of the following situations:

- (1) Overvoted ballot.
- (2) Blank ballot.
- (3) Unreadable ballot.

d. *Reports.* The following are required reports:

- (1) Opening the polls. Print a zero vote totals report.
- (2) Closing the polls. The poll report is the official record of the votes cast in the precinct on election day.

(3) Certification text. The following shall appear at the end of the poll report:

We, the undersigned precinct election officials of this precinct, hereby attest that this tape shows the results of all ballots cast and counted on this tabulating device at this election.

(Include signature lines for each of the officials to sign.)

**22.264(3) *Ballot layout.*** Although the Unisyn OpenElect voting system software includes choices for variations in ballot layout, all ballots shall be prepared according to the requirements of Iowa Code sections 43.26 through 43.29 and 49.30 through 49.48.

a. *Format.* The office title, instructions about the maximum number of choices the voter can make for the office, the candidate names and all write-in lines associated with each office on the ballot shall be printed in a single column on the same side of the ballot. All text and the “yes” and “no” choices for each public measure and for each individual judge on a ballot shall be printed in a single column on the same side of the ballot. No office or public measure on any ballot shall be divided to appear in more than one column or on more than one page of a ballot. For all elections, the voting target shall be printed on the left side of each choice on the ballot.

b. *Instructions for voters.* The ballots shall contain instructions for voters, including:

- (1) How to mark the ballot;
- (2) Where to find the judicial ballot (if any); and
- (3) Constitutional amendment (if any) as required by Iowa Code section 49.48 and notices to voters on ballots with public measures (if any) as required by Iowa Code section 49.47.

**22.264(4) *System error messages.*** Precinct election officials shall be provided with a list of known system error messages and the appropriate responses. The officials shall be instructed to contact the commissioner or the commissioner’s designee for all other messages, errors or voting equipment malfunctions on election day.

**22.264(5) *Preelection testing.*** All voting equipment shall be tested pursuant to the provisions of Iowa Code section 52.30 and rule 721—22.42(52). At the commissioner’s discretion, additional logic and accuracy tests may be conducted.

**22.264(6) *Record retention.*** The OVO unit uses a thermal printer. The maximum anticipated life span of the results from each OVO unit is only five years. In order to preserve the permanent record of the precinct results required by Iowa Code section 50.19, the commissioner shall print a copy of the results of each precinct on permanent paper and store these copies with the tally lists from precincts where the OVO unit was used.

**22.264(7) *Central count automatic tabulator configuration choices.*** The following settings are mandatory for all elections in which the OVCS is used.

a. *Ballot control.* In an official election, the commissioner shall program the central count automatic tabulator to accept overvoted ballots and undervoted ballots. The commissioner shall program the central count automatic tabulator to sort blank ballots and unreadable ballots as required by Iowa Code section 52.37. Ballots with write-in votes may be sorted for further review by the absentee and special voters precinct board at the commissioner’s discretion.

b. *Reports.* The following are required reports:

(1) Opening the polls. Before ballots are tabulated in the central count automatic tabulator, a Zero Certification report shall be printed and shall be signed by the members of the absentee and special voters precinct board.

(2) Closing the polls. After all ballots are tabulated by the central count automatic tabulator, a poll report shall be printed. The poll report is the official record of ballots tabulated in the absentee precinct and shall be signed by the members of the absentee and special voters precinct board.

*c. Reopen polls.* The commissioner shall enable the option to reopen the polls, but protect it against unauthorized use.

[ARC 0238C, IAB 8/8/12, effective 7/11/12; ARC 0801C, IAB 6/26/13, effective 7/31/13; ARC 1548C, IAB 7/23/14, effective 8/27/14; ARC 1746C, IAB 12/10/14, effective 1/14/15; ARC 3447C, IAB 11/8/17, effective 12/31/17]

## **721—22.265(52) Unisyn OpenElect OVI unit.**

**22.265(1) Acceptance testing.** Upon receipt of the equipment from the vendor, the commissioner shall subject each OVI unit to an acceptance test. The test shall be in addition to any testing provided by the vendor and shall include a demonstration of the functionalities of the device.

**22.265(2) Audio ballot preparation.** Each candidate shall have an opportunity to provide a record of the proper pronunciation of the candidate's name. The same voice shall be used for recording the entire ballot including instructions, office titles, candidate names and the full text of all public measures.

**22.265(3) Timeout value.** The OVI timeout value shall be set to 600 seconds. Precinct election officials shall monitor the use of the OVI unit to ensure that voting sessions are not automatically terminated due to inactivity. If a voter abandons a voting session initiated on the OVI unit without printing a ballot, the two precinct election officials designated to assist voters shall print the ballot without reviewing it or making any changes to the voter's choices before the OVI unit times out due to inactivity, enclose the ballot in a secrecy folder, and immediately deposit the ballot in the tabulating device.

**22.265(4) Preelection testing.** Each OVI unit shall be tested before each election in which it will be used. The commissioner must use the OVI unit to prepare some ballots for the test decks as required by paragraph 22.42(1) "d." In addition, the commissioner shall verify that:

- a.* The vote response fields on the screen align with the candidate names or choices.
- b.* All contests and candidates appear on the screen for each precinct.
- c.* All contests and candidates are included in the audio ballot for each precinct.
- d.* All voting positions in each race can be selected, then deselected, using the touchscreen and the keypad.
- e.* Selections on the printed ballots accurately reflect the voter's choices.
- f.* Overvote and undervote functions are programmed correctly.
- g.* The write-in function for each office is working correctly. All letters in the alphabet must be tested.
- h.* There is enough paper on the paper roll to print a minimum of ten ballots for the election in which the OVI unit is being used.

**22.265(5) Availability at public test.** The commissioner shall ensure that the OVI unit is available for demonstration at public tests.

**22.265(6) TM.** The TM device used with the OVI unit shall be installed before the OVI unit is locked, sealed and transported to the polling place for election day. The commissioner shall lock and seal the OVI unit, record the seal number and provide the number to the precinct election officials as required by rule 721—22.51(52). From the time the OVI unit is delivered to the polling place until the time the precinct officials arrive, the OVI unit shall be stored securely to prevent tampering. On election day, the precinct election officials shall inspect the seal and verify that the original numbered seal is present and undamaged.

**22.265(7) Touchscreen and printer testing.** The commissioner may provide for printer and touchscreen testing after delivery of the OVI unit to the polling place. If touchscreen testing is performed at the polling place, the delivery staff shall complete the testing before the polls open on election day. Staff shall keep a log for each OVI unit and record the machine serial number, precinct name or number, nature of the test, date and time of the test and name of the person performing the test.

**22.265(8) OVI unit keys.** Possession of the OVI unit keys shall be restricted to the precinct chairperson and authorized members of the commissioner's staff.

**22.265(9)** *Table or voting booth.* The table or voting booth used to support the OVI unit shall meet the following requirements:

- a. The table shall be sturdy enough to hold the OVI unit safely.
- b. Clearance shall be at least 27 inches high, 30 inches wide, and 26 inches deep.
- c. The top of the table shall be from 28 inches to 34 inches above the floor.

**22.265(10)** *Privacy.* The commissioner shall instruct the precinct election officials to position the OVI unit to provide maximum privacy and access to voters.

**22.265(11)** *Abandoned ballots.* If a voter or a precinct election official discovers that a voter has left the voter's ballot at the OVI unit, the two precinct election officials designated to assist voters shall enclose the ballot in a secrecy folder and immediately deposit the ballot in the tabulating device.

**22.265(12)** *Extra paper rolls.* Each precinct in which an OVI unit is being used shall be equipped with an extra paper roll for the OVI unit, and precinct election officials shall be instructed as to the method of replacing the paper roll.

[ARC 0238C, IAB 8/8/12, effective 7/11/12]

**721—22.266(52) Dominion Democracy Suite Voting Systems—preparation and use in elections.**

**22.266(1)** *Security.* The commissioner shall have a written security plan for the voting system. Access to equipment, programs and passwords shall be limited to those persons authorized in writing by the commissioner. The security plan shall be reviewed at least annually.

- a. Passwords used at the polling places on election day shall be changed for each election.
- b. For each election, the precinct chairperson shall be responsible for the custody and security of the keys for the voting equipment and the ballot boxes and the security of the voting system on election day.

**22.266(2)** *Precinct automatic tabulator configuration choices.* The following selections are mandatory for all elections.

a. *Access, messaging and tabulating selections.* The Machine Behavioral Settings shall be configured as follows:

- (1) The option to allow voters to review ballot selections detected by the precinct automatic tabulator shall be disabled.
- (2) Results for each precinct automatic tabulator shall be consolidated by precinct and shall not be reported by split within a precinct.
- (3) The automatic tabulators shall be configured to report write-in votes when the oval is darkened, regardless of whether there is text written on the corresponding write-in line.

b. *Ballot acceptance.* In an official election, the commissioner shall not program the precinct automatic tabulators for unconditional acceptance of all ballots and shall program the automatic tabulators to accept undervoted ballots. The automatic tabulators shall also be programmed to query the voter in each of the following situations:

- (1) Overvoted ballot.
- (2) Blank ballot.
- (3) Unreadable ballot.
- (4) Ambiguous marks. Ambiguous marks shall be defined as those marks where 5 to 24 percent of the voting target is darkened.

c. *Reports.* The following are required reports:

- (1) Opening the polls. Print a zero vote totals report.
- (2) Closing the polls. The poll report is the official record of the votes cast in the precinct on election day.
- (3) Certification text. Substantially the following text shall appear at the end of the poll report:

We, the undersigned precinct election officials of this precinct, hereby attest that this tape shows the results of all ballots cast and counted on this tabulating device at this election.

(Include signature lines for each of the officials to sign.)

**22.266(3)** *Central count automatic tabulator configuration choices.* The following settings are mandatory for all elections in which the ImageCast Central automatic tabulator is used.

*a. Ballot control.* In an official election, the commissioner shall program the central count automatic tabulator to accept overvoted ballots and undervoted ballots. The commissioner shall program the central count automatic tabulator to sort or notify the user when blank ballots, unreadable ballots and ballots with write-in votes are detected so such ballots can be separated for further review by the absentee and special voters precinct board as required by Iowa Code section 52.37.

*b. Reports.* The following are required reports:

(1) Opening the polls. Before ballots are tabulated in the central count automatic tabulator, a Zero Certification report shall be printed and shall be signed by the members of the absentee and special voters precinct board.

(2) Closing the polls. After all ballots are tabulated by the central count automatic tabulator, a poll report shall be printed. The poll report is the official record of ballots tabulated in the absentee precinct and shall be signed by the members of the absentee and special voters precinct board.

*c. Reopen polls.* The commissioner shall enable this option, but protect it against unauthorized use.

**22.266(4) Ballot layout.** Although the Dominion Democracy Suite voting system software includes choices for variations in ballot layout, all ballots shall be prepared according to the requirements of Iowa Code sections 43.26 through 43.29 and 49.30 through 49.48.

*a. Format.* The office title, instructions about the maximum number of choices the voter can make for the office, the candidate names and all write-in lines associated with each office on the ballot shall be printed in a single column on the same side of the ballot. When describing the maximum number of choices the voter can make for the office, the following description for each office shall be used: "Vote for no more than xx." Do not include "vote for" language for public measures or judges. All text and the "yes" and "no" choices for each public measure and for each individual judge on a ballot shall be printed in a single column on the same side of the ballot. No office or public measure on any ballot shall be divided to appear in more than one column or on more than one page of a ballot. For all elections, the voting target shall be printed on the left side of each choice on the ballot.

*b. Instructions for voters.* The ballots shall contain instructions for voters, including:

(1) How to mark the ballot;

(2) Where to find the judicial ballot (if any); and

(3) Constitutional amendment (if any) as required by Iowa Code section 49.48 and notices to voters on ballots with public measures (if any) as required by Iowa Code section 49.47.

**22.266(5) System error messages.** At the discretion of the commissioner, precinct election officials may be provided with a list of routine error messages, including messages that relate to paper jams, which do not rise to the level of voting equipment malfunctions and the appropriate responses. The officials may be instructed to contact the commissioner or the commissioner's designee on election day for all other messages or routine errors for which appropriate responses have not been provided by the commissioner.

**22.266(6) Preelection testing of automatic tabulators.** Each ImageCast Evolution or ImageCast Precinct with or without audio and printer unit shall be tested pursuant to the provisions of Iowa Code section 52.30 and rule 721—22.42(52). At the commissioner's discretion, additional logic and accuracy tests may be conducted.

**22.266(7) Audio ballot preparation.** Each candidate shall have an opportunity to provide a record of the proper pronunciation of the candidate's name. The same voice shall be used for recording the entire ballot, including instructions, office titles, candidate names and the full text of all public measures.

**22.266(8) Preelection testing of accessible components.** The accessible components of each ImageCast Evolution or ImageCast Precinct with audio and printer unit shall be tested before each election in which the unit will be used. The commissioner must use the ImageCast Evolution or ImageCast Precinct with audio and printer unit to prepare some ballots for the test decks as required by paragraph 22.42(1) "e." In addition, the commissioner shall verify that:

*a.* The vote response fields on the screen align with the candidate names or choices on the ImageCast Evolution.

*b.* All contests and candidates appear on the screen for each precinct on the ImageCast Evolution.

*c.* All contests and candidates are included in the audio ballot for each precinct on the ImageCast Evolution or ImageCast Precinct with audio and printer unit.

*d.* All voting positions in each race can be selected, then deselected, using the touchscreen on the ImageCast Evolution and the keypad on the ImageCast Evolution or ImageCast Precinct with audio and printer unit.

*e.* Selections on the printed ballots accurately reflect the voter's choices.

*f.* Overvote and undervote functions are programmed correctly.

*g.* The write-in function for each office is working correctly. All letters in the alphabet must be tested.

**22.266(9) *Touchscreen and printer testing.*** The commissioner may provide for printer and touchscreen testing after delivery of the ImageCast Evolution or ImageCast Precinct with audio and printer unit to the polling place. If touchscreen testing is performed at the polling place, the delivery staff shall complete the testing before the polls open on election day. Staff shall keep a log for each unit and record the machine serial number, precinct name or number, nature of the test, date and time of the test and name of the person performing the test.

**22.266(10) *Table or voting booth.*** A table or voting booth shall be available to a voter using the ImageCast Precinct with audio and printer unit. A chair shall be provided for voters using the ImageCast Evolution keypad and headphones components. Any table or voting booth used shall meet the following requirements:

*a.* Clearance shall be at least 27 inches high, 30 inches wide, and 26 inches deep.

*b.* The top of the table shall be from 28 inches to 34 inches above the floor.

**22.266(11) *Privacy.*** The commissioner shall instruct the precinct election officials to position the ImageCast Precinct with audio and printer unit to provide maximum privacy and access to voters.

**22.266(12) *Abandoned ballots.*** If a voter or a precinct election official discovers that a voter has left the voter's ballot at the ImageCast Precinct with audio and printer unit, the two precinct election officials designated to assist voters shall enclose the ballot in a secrecy folder and immediately deposit the ballot in the tabulating device.

**22.266(13) *Ballot stock.*** Each precinct in which an ImageCast Precinct with audio and printer unit is being used shall be equipped with ballot stock for the printer. The ballot stock shall be kept in a secure place throughout election day. Precinct election officials shall be instructed as to appropriate methods for securing the ballot stock and shall only place a sheet of ballot stock in the printer when an audio ballot is authorized on the unit.

**22.266(14) *Record retention.*** The ImageCast Evolution, ImageCast Precinct and ImageCast Precinct with audio and printer unit use thermal printers. The maximum anticipated life span of the results from each unit is only five years. In order to preserve the permanent record of the precinct results required by Iowa Code section 50.19, the commissioner shall print a copy of the results of each precinct on permanent paper and store these copies with the tally lists from precincts where the units were used.

[ARC 0801C, IAB 6/26/13, effective 7/31/13; ARC 1548C, IAB 7/23/14, effective 8/27/14; ARC 3447C, IAB 11/8/17, effective 12/31/17]

**721—22.267 to 22.339** Reserved.

#### OPTICAL SCAN VOTING SYSTEM USED FOR ABSENTEE AND SPECIAL VOTERS PRECINCT

**721—22.340(52) *Processing.*** All scanners used to tabulate absentee and provisional ballots shall be configured to sort blank ballots and ballots containing marks in write-in vote targets for review by the resolution board. The scanners shall not be configured to sort ballots with overvotes. However, if it is not possible to configure the scanners used to count absentee ballots differently from those used at the polling places, the person operating the scanner shall override the scanner and accept overvoted ballots as they are processed. The resolution board shall follow the requirements of 721—subrule 26.2(2). The commissioner shall provide the resolution board with a copy of 721—Chapter 26, "Counting Votes."

This rule is intended to implement Iowa Code section 52.33 as amended by 2007 Iowa Acts, Senate File 369, section 9.

**721—22.341(52) Reporting results from absentee ballots and provisional ballots.** Absentee and provisional ballot results shall be reported as a single precinct as required by subrule 22.102(7).

**721—22.342(52) Tally list for absentee and special voters precinct.**

**22.342(1)** Write-in votes shall be reported on a separate tally sheet which provides a column for the names of offices, a column for the names of persons receiving votes, space to tally the votes received, and a column in which to report the total number of votes cast for each person. In tally lists provided for primary elections, separate pages shall be provided to tally the write-in votes for each political party. Each member of the board who participated in the count shall attest to each tally sheet for write-in votes.

**22.342(2)** The officials shall certify the procedures followed. The certification shall be in substantially the following form:

## Absentee and Special Voters Tally Certificate

\_\_\_\_\_ County

We, the undersigned officials of the Absentee and Special Voters Precinct for this county, do hereby certify that all ballots delivered to the Board for this election were tabulated as shown in the attached report.

We further certify that a record of any write-in votes or other votes manually counted pursuant to Iowa Code chapter 52 is included in this Tally List, and that the numbers entered in the column headed "Total Votes" are the correct totals of all votes manually counted by us.

Signed at \_\_\_\_\_ on \_\_\_/\_\_\_/\_\_\_, \_\_\_:\_\_\_ a.m./p.m.

[signatures of officials] 1. \_\_\_\_\_  
2. \_\_\_\_\_ (etc.)

**22.342(3)** The record generated by the tabulating equipment shall be attached to or enclosed with the tally list and shall constitute the official return of the precinct.

This rule is intended to implement Iowa Code section 52.33 as amended by 2007 Iowa Acts, Senate File 369, section 9.

**721—22.343(39A,53) Counting absentee ballots on the day before the general election.** When absentee ballots are tabulated on the day before the election as permitted or required by Iowa Code section 53.23 as amended by 2009 Iowa Acts, House File 670, the absentee and special voters precinct board and county commissioner shall implement the following security precautions:

**22.343(1)** *Seal and label voted ballot envelopes or other containers with date of tabulation.* The precinct election officials shall seal all ballots tabulated on the day before the election in a voted ballot envelope or other container labeled with the date of tabulation. The precinct election officials shall seal and sign the envelope or other container in a manner that will make it evident if the envelope or other container is opened.

**22.343(2)** *Ensure secure storage of all ballots.* Before adjourning for the day, the precinct election officials shall transfer custody of all absentee ballots to the commissioner. The commissioner shall ensure all absentee ballots are stored in a secure location until tabulation is resumed on election day.

**22.343(3)** *Ensure memory card security.* Before the absentee and special voters precinct board adjourns for the day, the memory card used in the tabulator(s) on the day before the election shall be secured by the precinct election officials in one of the following ways:

*a.* The memory card may be left in the tabulator when a tamper-evident seal is affixed over the memory card in a manner that will make it evident if the seal is removed.

*b.* The memory card may be removed from the tabulator and placed in an envelope. The precinct election officials shall seal the envelope in a manner that will make it evident if the envelope is opened.

**22.343(4)** *Ensure security of the tabulator(s).* Before adjourning for the day, the precinct election officials shall ensure the security of the tabulator(s). The tabulator(s) must be stored in a secure location until the absentee and special voters precinct board resumes tabulation on election day.

**22.343(5)** *No results tape printing on the day before the election.* No results tapes may be printed from the tabulator(s) on the day before the election.

**22.343(6)** *No upload of results to tabulating software until election day.* No results may be uploaded or input into tabulating software on the day before the election.

**22.343(7)** *Verify no tampering before resuming tabulation on election day.* Before tabulation resumes on election day, the absentee and special voters precinct board shall verify the tabulator(s), memory card(s) and memory card port(s) have not been obviously tampered with overnight.

**22.343(8)** *Resume tabulation.* The absentee and special voters precinct board shall resume tabulation using one of the following methods:

*a.* Using the same memory card(s) used on the day before the election and resuming tabulation.

*b.* Using a new memory card(s) and compiling the results contained on the memory card(s) used on election day and on the day before the election.

**22.343(9)** *Print audit logs.* After the election, the audit logs must be printed and be available for public inspection.

This rule is intended to implement Iowa Code section 39A.5, section 1, paragraph “a,” subparagraph (3), and Iowa Code section 53.23 as amended by 2009 Iowa Acts, House File 670.  
[ARC 8698B, IAB 4/21/10, effective 6/15/10]

**721—22.344 to 22.349** Reserved.

**721—22.350(52) Election Systems & Software models.** Rescinded IAB 10/8/08, effective 9/19/08.

**721—22.351(52) Diebold Election Systems’ AccuVote-OS central count process.** Rescinded IAB 10/8/08, effective 9/19/08.

**721—22.352 to 22.430** Reserved.

**721—22.431(52) Temporary use of printed ballots in voting machine precincts.** Rescinded IAB 10/8/08, effective 9/19/08.

**721—22.432(52) Abandoned ballots.** Rescinded IAB 10/8/08, effective 9/19/08.

**721—22.433(52) Prohibited uses for direct recording electronic voting machines.** Rescinded IAB 10/8/08, effective 9/19/08.

**721—22.434(52) Audio ballot preparation.** Rescinded IAB 10/8/08, effective 9/19/08.

**721—22.435 to 22.460** Reserved.

**721—22.461(52) MicroVote Absentee Voting System.** Rescinded IAB 8/1/07, effective 7/13/07.

**721—22.462(52) Fidler & Chambers’ Absentee Voting System.** Rescinded IAB 10/30/02, effective 1/1/03.

**721—22.463(52) Election Systems & Software iVotronic.** Rescinded IAB 10/8/08, effective 9/19/08.

**721—22.464(52) Diebold Election Systems AccuVote TSX DRE.** Rescinded IAB 10/8/08, effective 9/19/08.

**721—22.465 to 22.499** Reserved.

**721—22.500(52) Blended systems.** Rescinded IAB 10/8/08, effective 9/19/08.

**721—22.501 to 22.599** Reserved.

These rules are intended to implement Iowa Code chapter 52.

#### E-POLL BOOKS

**721—22.600(47) Revolving loan fund.** The purpose of this rule is to establish an e-poll book and polling place modernization panel to review applications submitted to the state commissioner for distribution of moneys from the revolving loan fund created by 2017 Iowa Acts, House File 516, section 37, to be codified at Iowa Code section 47.11.

**22.600(1) Definitions.**

“*E-poll book*” is as defined in rule 721—22.1(52).

“*Vendor*,” for purposes of this rule, means a person or representative of a person developing, offering, or supporting an e-poll book.

**22.600(2)** In order to ensure that the public funds in this rule are used responsibly and efficiently, this rule creates a panel consisting of designees of the state commissioner of elections, the state auditor, and the director of the department of management. Attendance by two of the three members constitutes a quorum.

The panel shall conform to the party and gender balance requirements of Iowa Code sections 69.16 and 69.16A.

**22.600(3)** The state commissioner shall convene the panel whenever necessary to review loan applications received from county commissioners requesting moneys from the fund.

**22.600(4)** The state commissioner may convene the panel to review proposed expenditures for updating technology standards for elections. If the state commissioner determines that there is an urgent need that an expenditure of moneys from the fund be used to update technology standards, the state commissioner may spend the moneys without convening the panel. In such instance, the state commissioner shall report that expenditure at the next meeting of the panel.

**22.600(5)** The panel shall create guidelines for loaning moneys from the fund to county commissioners for the updating of polling place technology. The guidelines shall be published on the state commissioner's website.

**22.600(6)** Before distributing or loaning funds, the panel shall consider the published guidelines, but may take additional factors into consideration. The panel shall not waive any information technology security standards, but may waive other requirements. A majority vote of the panel members present is sufficient to approve funding.

**22.600(7)** Before any funds from the revolving loan fund are provided for the acquisition of e-poll books, the e-poll book system shall conform to the security requirements within this chapter.

This rule is intended to implement 2017 Iowa Acts, House File 516, section 37.

[ARC 3468C, IAB 11/22/17, effective 12/31/17]

#### **721—22.601(47) Operational features of e-poll books.**

##### **22.601(1) Definitions.**

"E-poll book" is as defined in rule 721—22.1(52).

"Vendor," for purposes of this rule, means a person or representative of a person developing, offering, or supporting an e-poll book.

**22.601(2) Operational features.** When assessing applications for funding from the revolving loan fund established by 2017 Iowa Acts, House File 516, section 37, as implemented in rule 721—22.600(47), the e-poll book and polling place modernization panel shall consider whether the e-poll book sought includes the operational features described in this subrule. Commissioners using only county funds for the purchase of e-poll book systems are not subject to the operational features described below, but are subject to all of the security requirements set forth in rule 721—22.602(47). The panel shall consider:

a. Whether the e-poll book is able to accept a secure data file that imports voter registration data into the e-poll book application from the statewide voter registration system. This requirement may not be waived by the panel.

b. Whether the e-poll book is able to securely export data files that can be imported into the statewide voter registration system, including a file to update the voter activity portion of the statewide voter registration system.

c. Whether the e-poll book is able to scan the barcodes of driver's licenses, DOT-issued nonoperator identification cards, and the voter identification card issued pursuant to 2017 Iowa Acts, House File 516, section 18, to be codified at Iowa Code section 48A.10A.

d. Whether the e-poll book is able to verify the voter against the felon database.

e. Whether the e-poll book is able to process, record, and export the complete range of possible voter registration updates available to voters under Iowa law. The state commissioner shall maintain a form that lists the possible updates that are required by this subrule.

f. Whether the e-poll book is able to complete and print the following forms:

- (1) State of Iowa Official Voter Registration Form.
- (2) Election Day Voter Registration Form, including Voter's Oath and Attester's Oath, if applicable.
- (3) Provisional Ballot Form, including the State of Iowa Official Voter Registration Form and Statement to Person Casting a Provisional Ballot.
- (4) Challenger's Statement.
- (5) Affidavit of Voter Requesting Assistance.

**22.601(3) Certification.** A vendor providing an e-poll book platform in this state shall certify in writing to the state commissioner that the requirements of subrule 22.601(2) are met. If any of the requirements are not met, the vendor shall note the exceptions conspicuously.

This rule is intended to implement 2017 Iowa Acts, House File 516, section 37.

[ARC 3468C, IAB 11/22/17, effective 12/31/17]

**721—22.602(47) Security features of e-poll books.** All e-poll book systems in use in this state, including those funded by county moneys, shall conform to the following security standards.

**22.602(1) Definitions.**

“*E-poll book*” is as defined in rule 721—22.1(47).

“*Secure*,” for purposes of this rule, means “encryption” as defined by Iowa Code section 715C.1(5).

“*Vendor*,” for purposes of this rule, means a person or representative of a person developing, offering, or supporting an e-poll book.

**22.602(2) Encryption of data at rest.** The e-poll book system shall ensure that all voter data is encrypted at rest. “Encrypted at rest” includes encryption of the whole hard drive, database, application data deemed confidential, and removable media. The data encryption keys shall be stored separately from the e-poll book hardware and software.

**22.602(3) Encryption of data in transit.** The e-poll book system shall ensure that all voter data is encrypted in transit via secure transfer protocols.

**22.602(4) Security updates.** The commissioner shall ensure that the computer maintains the most recent security updates available for the computer’s operating system. The vendor shall ensure that the e-poll book software remains compatible with all security updates issued for the computer’s operating system. An e-poll book system in use in Iowa shall not be installed on an operating system that is no longer supported by the developer.

**22.602(5) Authentication.** Every e-poll book system shall require authentication to the operating system and to the e-poll book application separately through a minimum of a username-password combination. A commissioner shall use a unique username-password combination for each precinct.

**22.602(6) Decommissioning.** At the time of decommissioning, the hard drive from the computer shall be destroyed by the owner of the hardware. This shall occur before the commissioner or vendor resells, gifts, repurposes, or otherwise disposes of the equipment. A record of the destruction shall be kept by the owner.

**22.602(7) Notification.** A vendor upon offering a new e-poll book platform, or upon making a change to the security features of an existing e-poll book, shall notify the state commissioner of the encryption and authentication standards utilized.

This rule is intended to implement 2017 Iowa Acts, House File 516, section 37.

[ARC 3468C, IAB 11/22/17, effective 12/31/17]

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