## CHAPTER 22 VOTING SYSTEMS

[Prior to 7/13/88, see Secretary of State[750] Ch 10]

#### 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 apparatus 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, the nature of which will not materially alter the system's reliability, functionality, capability, security and operation. In order for a change to qualify as a de minimis change, it must not alter the reliability, functionality, capability, security and operability of the system. A de minimis change shall also ensure that when the hardware is replaced, the original hardware and the replacement hardware are electronically and mechanically interchangeable and have identical functionality and tolerances. A change shall not be considered de minimis if it has reasonable and identifiable potential to affect the system's operation and compliance with applicable voting system standards.

"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 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.

"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 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]

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.

#### 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)** Straight party voting for three political parties and five nonparty political organizations.
- **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.
- 721—22.12(52) Report of findings. 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)** *Approval permits 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(2)** 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.
- 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.
  - *f.* For general elections:
- (1) A ballot marked with only a straight party vote is recorded with one vote for each candidate of the designated political party, and no other votes are recorded for partisan offices;
- (2) The voter may override a straight party vote for any office by voting for any candidate not associated with that political party; and
- (3) For offices to which more than one person will be elected, if a voter has chosen to override a straight party vote, only the candidates whose names are marked shall receive a vote.
  - **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.
- 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 AutoMARK VAT.
  - c. Mark each ballot "Test Ballot."

### **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. On general election ballots, leave the straight party choice blank.
  - b. For offices without candidates, mark all of the write-in ovals for that office.
- c. For offices in which the voter may vote for more than one candidate, vote for the maximum allowed on at least one ballot.
  - d. 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—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) If the test is for ballots that will be used in a general election, mark two straight party votes on one ballot. Do not mark any other ovals. In the test plan, this ballot should be tallied to show that the straight party selection was overvoted, and to show undervotes for all other offices and questions on the ballot.
- (3) 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.
- (4) Insert a blank ballot. This is a very important test of the accuracy of ballot printing. Printing errors sometimes put readable marks in the voting target area.
- (5) 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.
  - 22.42(5) Straight party test for general elections. For a straight party test, the commissioner shall:
  - a. For each set of ballots:
- (1) Mark straight party votes in a pattern, such as one vote for the first straight party choice, two votes for the second, and so on, and tally the expected results. Do not mark anything else on this group of ballots.
- (2) On a second set of ballots containing as many ballots as there are straight party choices, mark the straight party option and, for each office affected by the straight party vote, mark the write-in oval, and tally the expected results.
- (3) If the election includes an at-large county supervisor race with more than one person to be elected, mark a ballot with only a straight party vote and then vote for one candidate from the same political party as the straight party vote. Only this separately marked candidate should receive a vote.
  - b. Compile the results of the straight party test deck.

### 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.
- **22.50(2)** Computers. For security purposes, computers used in the commissioner's office to prepare ballots and voting equipment programs or to compile and report election results should not be used for any other function and should not be linked to any computer network or to the Internet.
- 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 Web site shall not be considered transmission of data over the Internet.
- *b.* Access shall be limited to persons specified by the commissioner in the written security policy. The level of access shall be included in a written security policy.
- (1) Uniqueness. Every ID and password shall be unique. The creation of generic or shared user IDs is specifically prohibited. Each user shall have exactly one user ID and password, except where job requirements necessitate the creation of multiple IDs 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 user IDs. Staff members with generic user IDs 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

- **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.
- 721—22.51(52) Memory cards. A memory card is a small, removable device containing data files of the election definition programmed for use in voting equipment for each election. For all voting equipment, the following security measures are required:
- **22.51(1)** *Serial number.* Each memory card shall have a serial number printed on a readily visible label. The label shall include the name of the county.
- **22.51(2)** *Inventory.* Memory cards owned by the county and retained in the custody of the county commissioner shall be maintained under perpetual inventory, with a record of inventory activity. The commissioner shall maintain a similar record of relevant actions if the memory cards are acquired from a vendor for each election. The record of inventory activity shall reflect:
  - a. The date each memory card was acquired;

- Each use of each memory card in an election;
- Each maintenance activity to a memory card, such as changing the battery;  $\mathcal{C}$ .
- d. Any problems or errors detected while using the memory card during its life;
- Records of the disposal of any memory cards at the end of their useful life or upon return to the vendor for maintenance or warranty claims.

#### 22.51(3) Custody.

- In counties where the commissioner has the necessary software and equipment to program the memory cards locally, the commissioner shall maintain a memory card log for each election as required in subrule 22.51(4) during the period when the memory cards are removed from storage, prepared for an election, and until they are sealed into a voting device. Only county employees and precinct election officials, as applicable, authorized by the county's security policy shall be permitted to handle the memory cards. No one individual should be alone with the unsecured memory cards at any time. If a person who is not authorized by the security policy to have access to the memory cards transports them to another location, such as a warehouse, the memory cards shall be enclosed in a transport container with a tamper-evident seal.
- In counties where the commissioner purchases programming services from a vendor, the memory cards shall be shipped to and from the vendor by a shipping service that employs tracking numbers. The memory cards shall be enclosed in a package sealed with a numbered, tamper-evident seal. Programmed memory cards shall be shipped in a package sealed with a numbered, tamper-evident seal from the vendor to the commissioner. If the seal is not intact upon arrival, the commissioner shall immediately contact the vendor for replacement cards. Only county employees authorized by the county's security policy (and precinct election officials, as applicable) shall be permitted to handle the memory cards. No one individual should be alone with the unsecured memory cards at any time.
- 22.51(4) Memory card log. For each election, the commissioner shall create a log to record the serial numbers of each memory card, the voting device into which the memory card was installed, the serial number of the seal, the ballot style and the precinct to which the machine is assigned. The log shall be in substantially the same form as Form A or Form B, as applicable:

#### Form A

				State of	Iowa				
	E	lection Lo	g: Memo	ry Card	ls for _		Cou	nty	
Use 1	this form i	in counties wh	ere the mem	ory cards a	re progra	mmed locall	y.		
Men	ory card	chain of cust	ody record f	or:		<b>Election t</b>	o be held	//20_	
	Momory	Procinct	Duagrammad	Installed in	Installed	Installation	Soal	Cand	1

Memory Card Serial #	Precinct and/or Polling Place		nmmed By	Installed in Machine #	Installed By	Instal	lation	Seal Number	Retu	ord orned Polls
		Date	Time			Date	Time		By	Date

Memory Card Serial #	Precinct and/or Polling Place		ammed By	Installed in Machine #	Installed By	Instal	lation	Seal Number	Retu	ard arned Polls
		Date	Time			Date	Time		By	Date

# Form B\*

# **State of Iowa**

<b>Election Log: Memory Cards for _</b>	Cou	unty
Use this form if a vendor programs the memory cards.  Memory card chain of custody record for:	Election to be held	/ /20

Memory Card Serial #	Precinct and/or Polling Place	Sent Progra	t for imming	Installed in Machine #	Installed By	Instal	lation	Seal Number	Retu	ard irned Polls
		Date Out	Date In			Date	Time		Ву	Date
										<u> </u>
										-
										1
										<del>                                     </del>

<sup>\*</sup>Form B continues on next page.

Form B (cont'd)

ipped for	r programı	ning:	
			ip, and check out each card number on the chai Iemory Card Record with the cards.
pped by:			Date:// Time::a.m./p.m.
		Signature	
pped to:			Shipped via:
			Tracking number:
Check in	each card numbe	endor: er on the enclosed cha	in of custody record when unpacking cards.
Check in	each card numbe	endor: er on the enclosed cha	
By: Print r  If n care Rep	name nemory cards are relaced on the Memory cards are relaced	endor: er on the enclosed character of the e	in of custody record when unpacking cards.

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

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

- **22.51(5)** *Preparation and installation.* When memory cards 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 cards. If a seal is accidentally broken or a memory card 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 cards from the voting equipment, the officials shall first print the results report from the voting equipment.
- **22.51(10)** Return of memory cards. If the precinct election officials remove the memory cards from the voting equipment on election night, they shall return to the commissioner the memory cards 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 Cards**

Election Date:				
Precinct:				
This envelope con	tains Memory Car	ds and memory o	eard access seals from	this precinct
	Machine Number	Memory Card #	Memory Card Seal #	

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

- **22.51(11)** *Storage*. If the memory cards 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 cards are removed, their serial numbers shall also be verified against the verification log returned by the precinct's election officials. The memory card 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 cards. The election information on all memory cards used for an election shall be retained on the memory cards until after the time to file requests for recounts and election contests has passed. If a contest is pending, the memory cards shall be retained until the contest is resolved. Before the memory cards are permanently erased, the commissioner shall print the memory card audit log from each card.
- **22.51(14)** Retention of program information. The commissioner shall retain all instructions and other written records of the process for programming the memory cards and the memory card audit logs for the period required by Iowa Code section 50.19. The contents of memory cards 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.
- 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) Rescinded IAB 10/25/06, effective 10/4/06.

#### 721—22.202 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 the following systems approved for use in Iowa. Rule 721—22.261(52) applies only to the voting system indicated and is in addition to the general provisions set forth in rules 721—22.200(52) through 721—22.250(52).

# 721—22.261(52) Election Systems & Software Model 100—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 Model 100 shall be in the possession of the precinct chairperson during election day.
  - **22.261(2)** Configuration choices. The following selections are mandatory for all elections:
- a. Maximum number of votes. 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.
- b. Ballot control. In an official election, the commissioner shall never program the Model 100 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.
- *c. 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.
  - d. 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.
  - (3) Certification text to 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 M100 Optical Scan tabulation device at this election.

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		[print	lines for e	ach of th	e officials to	sign]	
	Precinct Election	on Officials	Da	ate:	Time:		
	Reopen polls.	The commis	sioner sha	ll enable	this option,	but protect it	against u
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e. Reopen polls. The commissioner shall enable this option, 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.

# **22.261(3)** *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. 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.

$\bigcirc$	CANDIDATE NAME
	CANDIDATE NAME

(2) Straight party voting. To vote for all candidates from a single party, fill in the oval in front of the party name. Not all parties have nominated candidates for all offices. Marking a straight party vote does not include votes for nonpartisan offices, judges or questions.

### (3) 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(4)** *System error messages.* Precinct election officials shall be provided with the following list of 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.

Overvoted ballot returned. Ask voter to reinsert ballot. If the ballot is returned again, do not look at the voter's ballot. Put it in a secrecy folder. Tell the voter that for one or more offices the scanner read more votes than the maximum number of votes allowed. To correct the error, the voter must mark a new ballot and may copy votes from the original ballot. Only if the voter agrees to mark a new ballot, write "spoiled" on the original ballot and tear off one corner to prevent it from being accepted by the scanner. Advise the voter to return to the booth and mark the new ballot. Be sure to collect the spoiled ballot before the voter leaves

**Overvoted ballot accepted.** This message will appear when the scanner accepts an overvoted ballot. **Unidentified mark—check your ballot.** One or more marks on the ballot are not dark enough to be seen as a vote. Do not look at the voter's ballot. Put it in a secrecy folder and return the ballot to the voter. Ask the voter to review the ballot and to darken the marks. Then the voter may put the ballot back into the scanner.

If any of the following messages appear more than twice for the same ballot, call the auditor's office to report the problem:

- 100—MISSED ORIENTATION MARKS/Turn Ballot Over and Try Again.
- 101—MISSED TIMING MARKS/Turn Ballot Over and Try Again.
- 102—NO DATA FOUND/Please Reinsert Ballot After Beeps.
- 104—ORIENTATION SKIP ERROR.
- 106—MISSED TIMING MARKS/Turn Ballot Over and Try Again.

If any of the following messages appear, ask the voter to remove the ballot and reinsert it. If the same message appears more than twice for the same ballot, call the auditor's office to report the problem.

- 107—BALLOT ERROR: INVALID CC SEQUENCE.
- 108—BALLOT ERROR: INVALID CC TYPE.
- 109—BALLOT ERROR: INVALID CC SPLIT.
- 115—MISSED BACK ORIENTATION MARK/Turn Ballot Over and Try Again.
- 119—MULTIPLE BALLOTS DETECTED/Please Reinsert Ballot After Beeps. Did the voter actually try to put an extra ballot in? Is the ballot folded?
- 123—UNABLE TO READ TIMING BAND/Turn Ballot Over and Try Again.
- 124—BALLOT DRAGGED/Turn Ballot Over and Try Again.
- 126—BLACK CHECK: FACE DOWN HEAD EDGE/Turn Ballot Over and Try Again.
- 127—BLACK CHECK: FACE DOWN TAIL EDGE/Turn Ballot Over and Try Again.
- 128—BLACK CHECK: FACE UP HEAD EDGE/Turn Ballot Over and Try Again.
- 129—BLACK CHECK: FACE UP TAIL EDGE/Turn Ballot Over and Try Again.
- 130—POSSIBLE FOLDED BALLOT/Turn Ballot Over and Try Again.

**22.261(5)** *Record retention.* The Model 100 uses a thermal printer. The maximum anticipated life span of the results from each Model 100 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 Model 100 was used.

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

# 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, straight party overvotes, multiparty overvotes or duplicate votes.
  - b. Tally settings shall be as follows:
  - (1) The straight party shall be "Exclusive."
  - (2) 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.

#### 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 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.r	n.
[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.

#### **VOTING MACHINES**

**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) Fidlar & 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.

These rules are intended to implement Iowa Code chapter 52.

[Filed 9/2/75]

[Filed emergency after Notice 9/24/80, Notice 8/20/80—published 10/15/80, effective 10/15/80]

[Filed emergency 10/1/81—published 10/28/81, effective 10/1/81]

[Filed 12/3/81, Notice 10/14/81—published 12/23/81, effective 1/27/82]

[Filed 12/3/81, Notice 10/28/81—published 12/23/81, effective 1/27/82]

[Filed 11/30/83, Notice 10/12/83—published 12/21/83, effective 1/25/84]

[Filed emergency 4/15/86—published 5/7/86, effective 4/15/86]

[Filed without Notice 6/13/86—published 7/2/86, effective 9/3/86]

[Filed 10/16/87, Notice 9/9/87—published 11/4/87, effective 12/9/87]

[Filed 6/23/88, Notice 5/18/88—published 7/13/88, effective 8/17/88]

[Filed 7/26/88, Notice 6/15/88—published 8/10/88, effective 9/14/88]

[Filed 3/30/90, Notice 2/21/90—published 4/18/90, effective 5/23/90]

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[Filed emergency 5/8/90—published 5/30/90, effective 5/23/90]
          [Filed 5/8/92, Notice 4/1/92—published 5/27/92, effective 7/1/92]
         [Filed 3/25/94, Notice 2/16/94—published 4/13/94, effective 5/18/94]
         [Filed 6/28/96, Notice 5/22/96—published 7/17/96, effective 8/21/96]
        [Filed 8/22/97, Notice 7/16/97—published 9/10/97, effective 10/15/97]
        [Filed 12/12/97, Notice 11/5/97—published 12/31/97, effective 2/4/98]
          [Filed 6/11/99, Notice 4/7/99—published 6/30/99, effective 8/4/99]
            [Filed emergency 6/5/00—published 6/28/00, effective 6/5/00]
        [Filed without Notice 10/10/02—published 10/30/02, effective 1/1/03]
         [Filed 2/13/03, Notice 12/25/02—published 3/5/03, effective 4/9/03]
       [Filed 10/24/03, Notice 7/23/03—published 11/12/03, effective 12/17/03]
       [Filed 11/4/05, Notice 9/28/05—published 11/23/05, effective 12/28/05]
       [Filed 11/24/05, Notice 10/12/05—published 12/21/05, effective 1/25/06]
 [Filed emergency 4/21/06 after Notice 3/15/06—published 5/10/06, effective 5/10/06]
            [Filed emergency 5/3/06—published 5/24/06, effective 5/3/06]
[Filed emergency 10/4/06 after Notice 8/30/06—published 10/25/06, effective 10/4/06]
            [Filed emergency 6/12/07—published 7/4/07, effective 6/12/07]
            [Filed emergency 7/13/07—published 8/1/07, effective 7/13/07]
         [Filed 9/7/07, Notice 8/1/07—published 9/26/07, effective 10/31/07]
            [Filed emergency 4/2/08—published 4/23/08, effective 4/2/08]
           [Filed emergency 9/19/08—published 10/8/08, effective 9/19/08]
           [Filed Emergency ARC 8244B, IAB 10/21/09, effective 10/2/09]
[Filed ARC 8698B (Notice ARC 8541B, IAB 2/24/10), IAB 4/21/10, effective 6/15/10]
[Filed ARC 9468B (Notice ARC 9292B, IAB 12/29/10), IAB 4/20/11, effective 5/25/11]
            [Filed Emergency ARC 9762B, IAB 10/5/11, effective 9/8/11]
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