

**CHAPTER 8220
SECRETARY OF STATE
VOTING SYSTEM TESTING**

<p>8220.0325 TIMING. 8220.0700 REEXAMINATION AND RECERTIFICATION OF HARDWARE AND SOFTWARE. 8220.0825 CANDIDATE ROTATION ALGORITHM. 8220.1050 PREPARATION OF TEST DECK. 8220.1150 TEST BALLOTS.</p>	<p>8220.1350 PRELIMINARY TESTING OF COMPUTER PROGRAMS. 8220.2860 INSTRUCTIONS FOR BALLOT MARKING DEVICES CERTIFIED BEFORE JANUARY 1, 2010. 8220.2865 INSTRUCTIONS FOR BALLOT MARKING DEVICES ORIGINALLY CERTIFIED ON OR AFTER JANUARY 1, 2010.</p>
--	--

8220.0325 TIMING.

All applications for examination and initial certification of electronic voting systems must be submitted to the secretary of state between December 1 of an even-numbered year and December 1 of the following odd-numbered year. Applications for reexamination and recertification of electronic voting systems hardware or software may be submitted to the secretary of state at any time except between June 1 and December 1 of an even-numbered year.

Statutory Authority: *MS s 206.57*

History: *34 SR 1561*

8220.0700 REEXAMINATION AND RECERTIFICATION OF HARDWARE AND SOFTWARE.

After an electronic voting system has been certified by the secretary of state, the hardware and software necessary to operate the voting system, tabulate votes, and prepare ballot styles must be reexamined and recertified under part 8220.0650, subpart 1, by the secretary of state at any time that, in the opinion of the secretary of state, changes in Minnesota election law require reexamination of the voting system to determine continued compliance.

A modification to hardware or software of an electronic voting system which has been certified by the secretary of state must be submitted for reexamination and be recertified under part 8220.0650 unless the modification has been determined to be de minimis by an independent testing authority.

The vendor must notify the secretary of state of all de minimis modifications, provide the de minimis determination from an independent testing authority and receive a letter of acceptance of the de minimis modifications from the secretary of state before the modified electronic voting system may be used in an election.

Statutory Authority: *MS s 206.57*

History: *34 SR 1561*

8220.0825 CANDIDATE ROTATION ALGORITHM.

Subpart 1. **Base rotation.** The secretary of state shall determine the base rotation of candidates' names for partisan offices voted on at the state primary election. The county auditor shall determine the base rotation of candidates' names for all other offices for which rotation is required. The county auditor may delegate the authority to determine the base rotation of candidates' names for municipal and school district offices to the municipal and school district clerks, respectively. The base rotation must be determined by assigning the initial order of the candidates' names by lot.

Subp. 2. **Base number of registered voters.** For purposes of the rotation algorithm, the county auditor shall determine the number of registered voters in each precinct as of 8:00 a.m. on May 1 of the election year.

8220.0825 VOTING SYSTEM TESTING

538

Subp. 3. **Algorithm.** The algorithm in items A to F must be used to determine the rotation sequence for each race for which rotation is required.

- A. Determine the base rotation.
- B. Determine which precincts belong to the race being rotated.
- C. Arrange the precincts in order of the number of registered voters, from largest number to smallest.
- D. Calculate the number of rotations needed by determining the number of candidates for the office.
- E. Starting with the largest precinct, assign a precinct to each rotation. If there are more candidates than precincts, stop after the last precinct has been assigned and go on to item F. If there are more precincts than candidates, keep a running subtotal of the total registered voters assigned to each rotation. After each rotation has been assigned one precinct, assign the next largest precinct to the rotation with the lowest subtotal. Continue assigning the next largest precinct to the rotation with the lowest subtotal until all precincts for that race have been assigned.
- F. Print a report by race showing rotation subtotals.

Statutory Authority: *MS s 205.17; 206.84; 447.32*

History: *34 SR 1561*

8220.0950 [Repealed, 34 SR 1561]

8220.1050 PREPARATION OF TEST DECK.

The election jurisdiction requesting the computer program must prepare a test deck of ballots to be used to determine that the voting system and the computer program will correctly mark or count the votes cast for all offices and all proposals in compliance with the Minnesota election law.

The test deck must conform to part 8220.1150. A test deck must be prepared specifically for each election.

The test deck prepared must consist of a preaudited configuration of ballots to record a predetermined number of valid votes for each candidate and issue.

Statutory Authority: *MS s 206.82*

History: *34 SR 1561*

8220.1150 TEST BALLOTS.

All test ballots must be marked "TEST."

Ballots must be prepared having votes in excess of the number allowed by law for each office and proposal appearing on the ballot.

For district offices in which the number of candidates appearing on the ballot for that office varies by district, test ballots must be prepared with the number of votes allowed by law for that office in that district.

In partisan primary elections test ballots must be prepared to check the program for splitting tickets. Test ballots must be prepared with votes appearing in the same ballot for candidates of opposite political parties, nonpartisan candidates, and proposals. At least one ballot must be prepared with votes for one party and including votes for a nonpartisan office in excess of the number permitted by law.

In preparing the test deck, a number of the ballots must be voted to include valid votes in the partisan, nonpartisan, and proposal sections of the ballot. The test deck must include ballots involving no overvotes or marks in unassigned locations, valid votes for each candidate and ballot question, overvotes, undervotes, and invalid votes in many different combinations.

At least one test ballot must be prepared in which marks appear in the precinct identifier or ballot style indicator.

Blank ballots in which no positions have been voted must be included in the test deck.

When required to be used in an election pursuant to Minnesota Statutes, section 206.57, subdivision 5, the test deck must include a number of ballots marked by an electronic ballot marker sufficient to have marked all vote targets on the ballot in every precinct.

Statutory Authority: *MS s 206.82*

History: *34 SR 1561*

8220.1350 PRELIMINARY TESTING OF COMPUTER PROGRAMS.

Prior to the public accuracy test, the election jurisdiction providing the computer programs shall test the voting systems and programs to ascertain that they will correctly mark or count the votes for all offices and measures. The computer programs must be tested on all precincts.

The election jurisdiction shall compare the zero tape with the ballots of all precincts to ascertain that the appropriate ballots are in each precinct and that the offices and questions to be voted on and the candidates' names are in the order that they appear on the ballots for each precinct. Each election jurisdiction shall make a certificate as to the above matters and file it with the county auditor.

The test must be conducted using the test deck prepared under the direction of the election jurisdiction, and the results must be compared against the predetermined results of the test deck.

Statutory Authority: *MS s 206.882*

History: *34 SR 1561*

8220.2860 INSTRUCTIONS FOR BALLOT MARKING DEVICES CERTIFIED BEFORE JANUARY 1, 2010.

Subpart 1. **Text instructions.** The instructions on the screen must read as follows:

- A. Before a ballot is inserted: "Please insert your ballot"
- B. On the voting instructions screen:

"[Month, Day, Year] [Primary or General or Special Primary or Special] Election"

Official Ballot

You are voting ballot

Voting instructions

To use this ballot marking device to mark your ballot:

1. You may touch the NEXT button in the lower right corner of the screen or the right arrow button to move on to the next screen at anytime.
2. To select a candidate, touch the name of the candidate. For ballot questions, touch YES or NO to make your selection.
3. Your choice will be highlighted in yellow and the oval will be filled in.
4. In general elections, you are allowed to write in the name of a candidate who is not on the ballot. You will be presented with a keyboard on the screen to type in the name of the person you want to write in.
5. Use the BACK arrow button in the lower left corner of the screen or the left arrow button to return to the previous screen at anytime.
6. When you have completed making your choices, a summary screen will display your selections.
7. Review your selections carefully.

8220.2860 VOTING SYSTEM TESTING

540

8. On the next screen, press the MARK BALLOT button to mark your ballot.

9. Remove your ballot and deposit it in the ballot counter or ballot box."

C. If a voter tries to make a selection without having viewed the names of all of the candidates: "You did not view all candidates. Do you want to view the rest of the choices?"

D. If a voter tries to vote for more than the number of candidates allowed in a multiseat race: "You have tried to select more candidates than are allowed in this race. Deselect at least one of the candidates you have selected before selecting another."

E. If a voter tries to move on to the next race without selecting the maximum number of candidates allowed: "You are allowed to vote for more candidates in this race than you have selected. You can return to the race to vote for more candidates, or you can continue on to the next race."

F. On the summary screen, before the ballot has been marked:

"Summary Screen

Your selections for each race are listed below. To change your selections, touch the box for that race. To mark your ballot with these selections, touch "NEXT" at the bottom of the screen."

G. Marking ballot instructions:

"To mark your votes on your ballot:

1. Press the MARK BALLOT button below.
2. Your votes will be marked on your ballot and your ballot will be returned to you.
3. Put your ballot in the ballot counter or ballot box."

H. While the ballot is being printed: "Your votes are being marked on your ballot."

I. Thank you: "Thank you for using this ballot marking device. Please remove your ballot. Put it into the ballot counter or ballot box to have it counted."

J. If the ballot is not readable: "The ballot marking device cannot read your ballot. Please try again or contact an election judge for assistance."

K. If there is a paper jam: "There is a paper jam. Please contact an election judge."

L. If the voter tries to exit before the ballot is marked: "Exit now and your votes will not be marked on your ballot. Are you sure you want to exit?"

M. If the voter exits without having the ballot marked: "Thank you for using this ballot marking device. Please remove your blank ballot."

N. In partisan primary elections, the following instructions shall appear after the voter instruction screen:

"SELECT A POLITICAL PARTY

Instructions to Voters

You are only allowed to vote for the candidates of one political party for partisan offices in a primary election. Please select a political party below. No record will be made of your political party choice. Your selection will only be used to direct you to the proper ballot information. You will only see the names of candidates who are with the political party you choose. To see the names of candidates in other political parties, use the back button or left arrow button. At the screen called "Select a Political Party," choose a different political party."

O. When a voter inserts a ballot on which votes have already been marked: "Votes have already been marked on your ballot. If you thought you were using a blank ballot, please press EXIT to eject your ballot. Then contact an election judge for a new ballot. To review the selections on this ballot, press the NEXT arrow button to view a summary page. Note: you cannot use this ballot marking device to change any of these selections."

P. On the summary screen after the ballot has been marked:

"Summary Screen

Your selections for each race are listed below. Your ballot has already been marked. It cannot be changed by this ballot marking device. When you have reviewed your selections, press the RETURN BALLOT button below to eject your ballot. To change a selection, you will need to request a new ballot from an election judge."

Subp. 2. **Audio instructions.** The instructions must be as follows:

A. Before a ballot is inserted: "Please insert your ballot. It may take up to 30 seconds for the ballot to be scanned. Please wait. The audio will be silent while scanning."

B. The presentation of the voting instructions: "[Month, Day, Year] [Primary or General or Special Primary or Special] Election. Official Ballot. You are voting ballot..... Voting Instructions. This ballot marking device will guide you through choosing candidates in each race on the ballot. This ballot marking device can be controlled in several ways, including a small keypad that is located to the right of the screen. The buttons are labeled in Braille. At the far right, there are four buttons in a vertical line. The bottom button adjusts the volume when pushed left or right. The button above it adjusts the speed of the audio when pressed left or right. The round button repeats the last set of instructions. The top diamond button turns the display screen on or off for privacy. The instructions will begin again from the beginning if you use any of the top three buttons. To the left of these buttons, you will find a square center button with four arrow buttons surrounding it. Press the right arrow button at any time to skip to the next screen. Press the down arrow button to hear the name of the next candidate in the race. Press the up arrow button to hear the name of the previous candidate in the race. When you hear the name of the candidate you want to vote for, press the square select button in the center to select the candidate. Press the right arrow button to move to the next race on the ballot. Press the left arrow button to move to the previous race on the ballot. If you need help, please talk to an election judge. When you have completed your ballot, you will hear a summary of your selections. Listen to the summary carefully before completing the final step of marking your ballot. Remove your ballot and deposit it in the ballot counter or ballot box. To exit without marking votes on your ballot, press the diamond-shaped screen button four times in a row. Press the right arrow button now to begin voting. Press the round repeat button to hear these instructions again.

C. If a voter tries to make a selection without having heard the names of all of the candidates: "Warning. You did not hear all candidates in this race. To hear the rest, press the left arrow key. To continue on to the next race, press the right arrow key."

D. If a voter tries to vote for more than the number of candidates allowed in a multiseat race: "You have selected more candidates than are allowed in this race. Deselect at least one of the candidates you have selected before selecting another. Press the square select key or the left arrow to return to the race."

E. If a voter tries to move on to the next race without selecting the maximum number of candidates allowed: "Warning. You are allowed to vote for more candidates in this race than you have selected. To return to this race to select more candidates, please press the left arrow key. To continue on to the next race, press the right arrow key."

F. With the summary screen, before the ballot has been marked: "This is the summary screen. Use the up and down arrow keys to scroll through each race and hear your selections. If you want to change a selection, use the square select key to return to that race. If you like your selections, press the right arrow key."

G. Marking ballot instructions: "To mark your votes on your ballot: 1. Press the square select key. 2. Your votes will be marked on your ballot and your ballot will be returned to you. 3. Put your ballot in the ballot counter or ballot box. To change a selection, use the left arrow key to return to the summary screen. To exit without marking your votes on your ballot, use the left arrow key until you hear the exit message. Follow the instructions. Your blank ballot will be returned to you."

H. Write-in instructions: "You have chosen to input a write-in candidate. Use the up and down arrows to scroll through the letters. Use the select key to select a letter. The hyphen, space, and backspace appear after the Z. Use backspace to remove a letter. At any time, you can press the round repeat key to hear the letters you have selected so far. When you are finished typing, press the right arrow key to return to the list of candidates in this race. Then select this write-in candidate. To cancel and return to the race without typing in a name of a write-in candidate, press the left arrow key. Press the down arrow now to begin moving through the alphabet. To repeat these instructions, press the round repeat key."

I. While the ballot is being printed: "Your votes are being marked on your ballot. Please wait. It should take about 15 seconds. Your ballot will then be returned to you. Put your ballot into the ballot counter or ballot box."

J. Thank you: "Thank you for using the ballot marking device. Please remove your ballot. Put it into the ballot counter or ballot box to have it counted. If you need help, please talk to an election judge."

K. If the ballot is not readable: "This ballot marking device cannot read your ballot. Please try again or contact an election judge for assistance."

L. If there is a paper jam: "There is a paper jam. Please contact an election judge."

M. If the voter tries to exit before the ballot is marked: "Exit now and your votes will not be marked on your ballot. Press the left arrow key to return to voting. Press the right arrow key to exit and receive your blank ballot."

N. If the voter exits without having the ballot marked: "Thank you for using this ballot marking device. Please remove your blank ballot."

O. In partisan primary elections, the following instructions shall appear after the voter instruction screen:

"SELECT A POLITICAL PARTY.

Instructions to Voters.

You are only allowed to vote for the candidates of one political party for partisan offices in a primary election. On this screen you will select a political party. No record will be made of your political party choice. Your selection will only be used to direct you to the proper ballot information. You will only hear the names of candidates who are with the political party you choose. To hear the names of candidates in other political parties, use the left arrow button until you get to a screen called "Select a Political Party." Then choose a different political party."

P. When a voter inserts a ballot on which votes have already been marked: "Votes have already been marked on your ballot. If you thought you were using a blank ballot, please press the left arrow key twice to eject your ballot. Then contact an election judge for a new ballot. To review the selections on this ballot, press the right arrow key to view a summary page. Note: you cannot use this ballot marking device to change any of these selections."

Q. With the summary screen after the ballot has been marked: "This is the Verification Screen. Use the up and down arrow keys to scroll through each race and hear your selections. When you are finished, press the right arrow key to eject your ballot. If you want to change your selections, you will need to request a new ballot from an election judge."

Subp. 3. **Brand name.** The brand name of the ballot marking device may be substituted for the words "the ballot marking device" and "this ballot marking device" throughout the instructions.

Statutory Authority: *MS s 206.84*

History: *34 SR 1561*

8220.2865 INSTRUCTIONS FOR BALLOT MARKING DEVICES ORIGINALLY CERTIFIED ON OR AFTER JANUARY 1, 2010.

Each ballot marking device originally certified by the secretary of state on or after January 1, 2010, must deliver substantially the same text and audio instructions as required in part 8220.2860. At the time of any certification after January 1, 2010, the secretary of state must approve any alternate text and audio instructions conforming with part 8220.2860 to the extent practicable, which are necessary to accommodate the navigational method and presentation of the ballot to the voter which are unique to the device being certified. Alternate instructions approved during the certification process must be used for all following elections at which the device is used.

Statutory Authority: *MS s 206.84*

History: *34 SR 1561*