CHAPTER 10  PREPARATION OF VOTING EQUIPMENT

TABLE OF CONTENTS
Voting Systems ............................................................................................................................................ 1
Tabulator Programming .................................................................................................................................. 2
Pre-Election Logic and Accuracy Testing .................................................................................................. 4
Security ..................................................................................................................................................... 5
Voter Assist Terminal Election Day Testing ............................................................................................. 6
Some Common Problems .......................................................................................................................... 6

VOTING SYSTEMS: There are various types of tabulators used around the state of Michigan. In
addition every precinct in the state must have available for use a Voter Assist Terminal (VAT), a ballot
marking device for people with disabilities.

A precinct must have its own tabulator. (Exceptions are made for Absentee Voter Counting Boards,
where a tabulator can be used for multiple counting boards.) A precinct must also have its own Voter
Assist Terminal except in cases where a single polling location contains multiple precincts. In that case
VATs must be available on the basis of one for every two precincts.

Promulgated Rules require that tabulator programs and voting devices be tested prior to all elections.
Voting systems employed in the precinct are composed of several elements all of which should be tested
prior to election day.

- Tabulator Program – Prepared for every election, testing ensures it has been prepared in
  accordance with Michigan law and promulgated rules and will properly tabulate votes.

- Tabulator – A mechanical device that can break or malfunction between elections. Periodic
  maintenance must be performed on the tabulator to ensure they are clean and in a good state
  of repair to work properly on election day.
• Ballot – Must be printed to tabulator manufacturer specifications to tabulate properly. Things like ink density, ballot stock weight, and squareness of cutting affect the ability of the tabulator to recognize and tabulate the ballot.

• Ballot box – Ballot boxes receive the ballots after each is tabulated. They are divided into bins;
  o the main bin where the majority of ballots are deposited
  o the auxiliary bin where ballots that are not immediately tabulated are deposited
  o the write-in bin where ballots that contain write-in votes are deposited for manual tally (not all tabulators have this bin)

• Voter Assist Terminal (VAT) – A ballot marking device required by state and federal law to be available in every polling place for voters with disabilities to vote in a secret manner. The program that allows the VAT to work to be tested along with the mechanical functioning of the machine.

**TABULATOR PROGRAMMING:** Ballots that are accepted when the voter has attempted to tabulate a blank ballot, a ballot containing an over voted office or a partisan primary ballot that has been crossover voted will result in the improper tabulation of votes. Federal law requires use of voting systems that allow the voter a “second chance” to correct improperly marked ballots.

To ensure an accurate vote count, all tabulators must be programmed to reject blank ballots, ballots containing overvotes and partisan primary ballots which are invalid due to crossover voting. If this programming feature is not employed as required, inaccurate vote results can occur due to ballots that contain false blank reads; ballots containing votes which cannot be scanned by the tabulator due to the voter’s use of an improper marking implement; false overvotes; and false crossover votes (if a partisan primary).

Proper programming affords the election inspector assigned to the tabulator the opportunity to offer the voter a replacement ballot. When the tabulator rejects these ballots, without looking at the ballot, the election inspector discretely explains the reason for the rejection to the voter and steps away from the tabulator while the voter visually inspects his or her ballot. If it is determined that a replacement ballot should be issued, the election inspector directs the voter back to the ballot station.

If the tabulator is not programmed to identify and reject overvoted ballots, the voter will not be given a chance to correct their errors and no vote will count in the race.
An explanation of how false blank ballots, false overvotes and false crossover votes can result in inaccurate vote totals is provided below:

**False overvote created by ballot correction:** Ballot instructs voter to “Vote for not more than 1.” Voter: 1) records a vote by filling in the oval or box 2) changes his or her mind and crosses out or attempts to erase the mark and 3) votes for a different candidate by filling in a second oval or box.

**False overvote created by invalid write-in:** Ballot instructs voter to “Vote for not more than 1.” Voter: 1) records a vote by filling in the oval or box 2) enters the name of an individual who is not a declared write-in candidate in the write-in position assigned to the office and 3) records a vote for the write-in candidate by filling in the oval or box assigned to the write-in position. (A write-in vote is invalid if it is cast for an individual who is not a declared write-in candidate for the office and political party (if a partisan primary) involved.)

**Blank ballot which contains valid votes:** Ballot instructions direct the voter to: “…use only a black or blue ink pen. DO NOT USE ANY OTHER INK COLOR!” The voter does not read the instructions and uses an unacceptable marking tool to mark his or her ballot or makes a mark that is not large enough or dark enough to be read.

**False crossover vote created by ballot correction:** The partisan primary ballot instruction advises voters: “IF YOU VOTE IN MORE THAN ONE PARTY SECTION, YOUR PARTISAN BALLOT WILL BE REJECTED.” Voter: 1) records a vote in one of the party columns appearing on the ballot 2) changes his or her mind and crosses out or attempts to erase the mark and 3) records a vote in one or more offices in another party column.

**False crossover vote created by invalid write-in:** The partisan primary ballot instructions advise voters: “IF YOU VOTE IN MORE THAN ONE PARTY SECTION, YOUR PARTISAN BALLOT WILL BE REJECTED.” Voter: 1) enters an “invalid” write-in in one of the party columns on the ballot 2) records the vote by filling in the oval or box assigned to the write-in position and 3) records votes in one or more offices in another party column. (A write-in vote is invalid if it is cast for an individual who is not a declared write-in candidate for the office or political party (if a partisan primary) involved.)
**PRE-ELECTION LOGIC AND ACCURACY TESTING OF TABULATORS AND VOTER ASSIST TERMINALS:** The conduct of Pre-election Logic and Accuracy Testing of all tabulators and voter assist terminals (VAT) prior to each election is the responsibility of the local election commission.

A **preliminary** accuracy test is required for all tabulators and VAT prior to each election. In addition a **public** test of one or more selected tabulators must be performed as discussed below. A public test of the voter assist terminal is not required.

The **preliminary** accuracy test should be conducted for both the tabulator and the VAT as soon as the program(s) and ballots are received by the clerk. The **public** accuracy test for the tabulator must be conducted no later than five days before the election. In addition, a notice of the test must be published in a newspaper or journal of general circulation at least 48 hours prior to the conduct of the test.

All election materials used to conduct the pre-election logic and accuracy testing (including the test deck, chart of predetermined results, zero tape and accuracy test results) must be secured in an approved ballot container for the duration of the retention period.

- The number on the seal used to secure the pre-election test materials must be recorded on the Tabulator Test Certification form, Voter Assist Terminal Preparation Checklist and Test Certification form, and the Ballot Container Certificate.

- The serial numbers on the seals used to seal the programs into the tabulator and terminal following successful testing must be recorded in the Poll Book (Clerk’s Preparation Certificate).

It is acceptable to use the same ballot container for the preliminary and public tests (but **not** Election Day), provided that the following steps are taken to ensure proper security:

A. The test materials from the preliminary accuracy test are sealed into an approved container directly following the test and the seal number is documented on the proper test certification forms and ballot container certificate.

B. Prior to the conduct of the public accuracy test, the original ballot container seal is broken, verified and deposited into the container. The tabulator test deck is removed and used to conduct the public accuracy test.

C. The test materials from the public accuracy test are deposited into the ballot container directly following the test and a new seal is affixed.
D. The new seal number is documented on the test certification form and on the ballot container certificate.

Detailed instruction on pre-election logic and accuracy testing of tabulators and voter assist terminals can be requested for groups and associations depending on the availability of BOE representatives.

**SECURITY:** After the completion of the preliminary test ensuring the program is correct, the program memory device must be stored and transported either sealed in the tabulator or in an approved container with the seal numbers properly recorded through the state retention period. When the program has been prepared for an election with federal offices, the program used on election day must be retained for an additional 22 month federal retention period. (The program can be moved to a different medium for the federal retention period.)

Independent of the logic and accuracy testing and program security, the electronics of the tabulator need to be protected as well by the proper application of adhesive security seals. These seals are designed to reveal access to the inside of the tabulator cases after the conclusion of the preliminary accuracy test. Documentation of the application of the adhesive seals (recording of the seal number and date of sealing) should be on signed letterhead stationary kept in the clerk’s office.

At the conclusion of the preliminary test the VAT program should be sealed in the VAT with the seal number properly recorded for the state retention period. There is no federal retention requirement of the VAT program.

**VOTER ASSIST TERMINAL ELECTION DAY TESTING:** The VAT needs to be tested in the precinct prior to the opening of the polls on election day. For the test the clerk needs to include a “Test” ballot in the precinct supplies. An official precinct ballot **must not** be used for this test. The VAT test consists of loading the ballot marked “test” into the device and completing the process for a blank ballot to print.

This test ballot **must not** be tabulated, it must be returned to the local clerk in the local clerk’s envelope at the end of the day.

**SOME COMMON PROBLEMS:**

- Tabulator not working off AC power.
  - Ensure the power cord is securely plugged into the back of the tabulator
- Ensure the power cord is securely plugged into the power source
- Ensure the power source (wall socket or power strip) is live

- Ballots not feeding into the tabulator. Ensure there is an unobstructed path for the ballot to feed through from the front of the tabulator into the ballot box. The feed slot into the ballot box comes with a security flap that can be locked down. This flap needs to be opened.

- Public counter shows ballots tabulated at the start of the day or zero tape shows votes cast. Program was not zeroed after the public accuracy test. Zero the program before the polls open.