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# L & A Best Practices

Division of Elections

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# Requirements for Testing of Tabulation Equipment

- **CONDUCT logic & accuracy (L&A)** testing of voting systems used for tabulation (after maintenance and programming of all electronic or electromechanical voting system) to determine that:
  - System is “properly programmed”
  - Election is “correctly defined” on the voting system.
  - Input, output and communication devices are working properly.

Source: Section 101.5612(1), Fla. Statutes

# L & A Test Dates

PUBLICLY TEST automatic tabulation equipment

- NO LATER THAN **10-days before early voting** to ascertain that the equipment will correctly count the votes cast for all offices and all measures.

“Automatic tabulation equipment” includes apparatus necessary to automatically examine, count, and record votes.

# Current Practice: Preparing for the Test

- Most Florida counties use the “1-2-3” test deck pattern
  - This methodology does not provide sufficient information that the election is “properly programmed”

# Current Practice (cont'd): Preparing for the Test

## **“1-2-3” Test Deck Pattern:**

- Does not show that the candidates' votes that are on the paper ballot went to the correct candidates in the correct contest in either the tabulator and/or the election management system's reporting module.
- Cannot verify the paper votes are correct in the tabulation counters when an election has two or more contests with the same number of candidates in those contests.

# Recommendations

- **Add more test ballots** to make up unique votes for each candidate.
- **Use other means to verify** that the election is “**correctly defined**” to satisfy section 101.5612, F.S

## Recommendations (cont'd)

Conduct public logic & accuracy test (L&A) as a **simulated election** that includes:

- upload of early voting, absentee, and election day ballots
- including modeming where applicable, and
- election night reporting.

# Pre-L&A Test (aka 100% L&A)

- THOROUGHLY TEST after maintenance and programming concluded “all” electronic or electromechanical voting systems to sufficiently determine:
  - ❖ Voting system is properly programmed
  - ❖ Election is correctly defined
  - ❖ All of the voting system input, output, and communication devices are working properly.

\*This means testing also the tabulators that will be used for absentee ballots and any systems used for ADA compliance that interface with such tabulation system.

Source: Section 101.5612(1), F.S.



# Public L&A Test of automatic tabulation equipment

- Within 10-day period before early voting
- At least 48-hour advance public notice
  - SOE website
  - Newspaper or 4 conspicuous spots in county
- Notice to candidates & party committee by applicable qualifying officer
- Use actual ballots printed for use on Election Day (**NO TEST-TYPE ballot deck**). **If using ballot-on-demand ballots, use same BOD equipment and same paper stock to create test ballots.**

Source: Section 101.5612(2), F.S.

# Public L&A Test (cont'd)

## Steps 1-10

1. Test *all* or *sample* devices to be used in the election. If *sample*, randomly select:
  - ❖ At least 5% or 10 of optical scan device whichever is greater
  - ❖ At least 2% of 'touchscreen devices' used by persons with disabilities
2. Produce group of ballot so there is predetermined (preaudited) number of valid votes for each candidate and on each measure and so the system can be tested as to whether it is able to reject a ballot for an overvote for each office.

Source: section 101.5612(2)&(4), F.S.  
(aka precinct L&A test)

# Public L&A Test

3. Process group of ballots and compare results to results expected for ballots processed.
  4. If error in tabulation on particular device,
    - Deem device is unsatisfactoryTake steps to find out cause of error
    - Find out if other devices for the same kind of error
    - Test a number of other devices sufficient to determine that all devices are satisfactory.
- \* Canvassing board has option to test all devices or to declare all devices unsatisfactory.

## Public L&A Test (cont'd)

5. If error is in operation or output of particular device, report problem to canvassing board
6. Canvassing board determines whether problem should make device unsatisfactory for use.
7. Reset and seal devices that passed pre-election test in presence of canvassing board or representatives, political parties, and candidates

# Public L&A Test (cont'd)

8. Written statement executed by canvassing board or representative to include:
  - Statement that devices were tested,
  - Test results
  - Protective counter number, if applicable,
  - The number of the seal securing each tabulation device,
  - Any problems reported to the board,
  - Whether each device tested satisfactory or unsatisfactory.
9. Retesting of 'unsatisfactory devices may be done AFTER recoding, repair, or replacement at publicly noticed time in order to be able to use at election.
10. Retain all pre-election testing records and make available for public inspection

# Public L&A Testing

## -Absentee tabulation equipment

### 1. Produce group of ballot so

- There is predetermined (preaudited) number of valid votes for each candidate and on each measure and
- The system can be tested as to whether it is able to reject a ballot for an overvote.

### 2. Process group of ballots and compare output results to results expected for ballots processed.

Source: section 101.5612(3), F.S.

# Public L&A Testing (cont'd)

## -Absentee tabulation equipment

### 3. If error detected

- **Repeat** immediately **pre-election test** immediately (before start of official count) and keep repeating until cause is corrected and no more errors occur.
- **CONDUCT POST-ELECTION L&A TEST ONLY IF ERROR** occurred during pre-election absentee L&A test (after completion of official start)
- Implies using the same test deck

### 4. Retain programs and sealed tested ballots in custody of canvassing board.

## 2<sup>nd</sup> Public L&A Test

- **If** actual (election day) ballots not available for pre-early voting test period\* CONDUCT 2<sup>nd</sup> public L&A
  - Within 10 day period before election day
  - Apply same notice requirements as original public test

This implies that this public L&A is only for the precinct (election day) tabulators, if the election day ballots are not present during the original public L&A.



# Division of Election

## Unofficial Observation

### Checklist Tasks for L&A

- Contact SOE before the L&A
- Be present in the SOE central site at the pre-determined date and time for L&A
- Determine that the county has conducted the 100% L&A
- Verify a sample of 5% or a minimum of 10 optical scan devices per Section 101.5612(4)(a)1, F.S.
- Verify a sample of 2% of the touchscreen devices per Section 101.5612(4)(a)1, F.S.
  
- Verify the audio ballot, if not using a touchscreen
- Review the audited test deck for touchscreen, if applicable and in accordance with Section 101.5612(4)(a)1, F.S.
  - Verify the poll's open
  - Verify the zero tapes
  - Verify the poll's closed
  - Verify the results tapes
  - Examine the audio ballot

# Division of Election

## Unofficial Observation

- Review the “audited” test deck for the central count scanner (a.k.a., absentee tabulator) in accordance with Section 101.5612(3), F.S.
  - Verify that all or a portion of the test deck has a sample of the actual ballots
  - Verify that a portion of the test deck has BOD printed ballots, if applicable
  - Verify that all or a portion of the test deck has manual marked ballots
  - Verify the test deck include valid votes for each candidate and on each measure
  - Verify the test deck include activated voting positions in excess of the number allowed to reject such votes (i.e., overvote contest)
  - Verify the test deck has a blank ballot
  - Verify the test deck has an undervote contest
  - Verify the absentee open
  - Verify the zero tapes
  - Verify the absentee closed
  - Verify the results tapes
  - Note that the county must perform the post L&A in accordance with Section 101.5612(3), F.S.

NOTE: An absentee tabulator test deck has an overvote ballots and blank ballots to verify that the tabulator can out-stack those ballots. During an election, the canvassing board duplicates an absentee overvote ballot that removes the overvote to allow capturing the remaining valid votes using the tabulator. See Section 101.5414(5), F.S.

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# Division of Election

## Unofficial Observation

- Review the audited test deck for precinct count tabulator in accordance with Section 101.5612(4)(a)1, F.S.
  - Verify that all or a portion of the test deck has a sample of the actual ballots
  - Verify that a portion of the test deck has BOD printed ballots, if applicable
  - Verify that all or a portion of the test deck has manual marked ballots
  - Verify the test deck include valid votes for each candidate and on each measure
  - Verify the test deck include activated voting positions in excess of the number allowed to reject such votes (i.e., overvote contest)
  - Verify the test deck has a blank ballot
  - Verify the test deck has an undervote contest
  - Verify the poll's open
  - Verify the zero tapes
  - Verify the poll's closed
  - Verify the results tapes

# Division of Election

## Unofficial Observation

- ❑ Upload test results into the election management system
  - ❑ Verify upload using a modem transmission to simulate ED, if applicable
  - ❑ Verify the summary results
  - ❑ Produce the export file and transmit this data via SFTP or other means
  - ❑ Produce the election database and transmit this data within 24 hrs via SFTP and/or certified mail in accordance with Section 101.5607(1)(b), F.S.
- ❑ Verify that after the test that applicable seals are installed, if observed
- ❑ Verify that the protective count is recorded, if applicable
- ❑ Contact FLDoE if any tested tabulation device is found to have an error, in accordance with Section 101.5612(4)(a)2.

# Discussion and Questions

