Ballot Printing

Commercial Printing

Ballot on Demand
Current Ballot Printing Certification Regulations

Commercial Printing
Certification Background

- California Elections Code section 13004 requires Secretary of State to certify ballot printers

- Current certification requirements include:
  - Reporting (e.g. chain of custody, inventory control, etc.)
  - Physical security (e.g. ballot storage, access control, etc.)
  - Shipping
Testing and Certification Requirements

- Application is submitted containing:
  - Company information
  - Documentation on how the company will meet requirements, mainly chain of custody and inventory control logs
  - A confirmation letter from the voting system vendor stating that test ballots processed by the printer meet the voting system requirements

- Security and storage inspection of facilities
Issues during an Election

- Use of ballot paper that does not meet voting equipment specifications
- Ballots cut incorrectly, PCOS cannot scan, so ballots tabulated centrally or duplicated
- Ink smudges/smears picking up as votes, ballots need duplication
- Ballots shipped directly to voters with incorrect information
Discoveries from 2014 Inspections

- L&A ballots printed on uncertified equipment
- L&A ballots printed on different equipment and technology than Election ballots
- Ballots for same jurisdiction printed using multiple print technologies
- Corn starch, baby powder, etc. used to dry ink, affecting voting equipment
- Over contracting without the capacity to fulfill orders
Proposed Ballot Printing Certification Regulations

Commercial Printing
Application and Documentation Requirements

- Ballot print company information
- Type of ballots requesting to print (e.g. voting system ballot style)
- Make and model of print equipment
- Type of print press (e.g. lithographic, xerographic, inkjet, etc.)
- Type of ink or toner (e.g. pigment-based, dye-based, waterproof, solid, etc.)
List of all other equipment, chemicals, or substances used for drying or adhering the toner or ink to the ballot.

List of vendor, brand, and specifications for ballot paper being used.

Printer must disclose any known flaw or defect in printing process that previously affected the casting or tallying of votes.
Testing and Certification Requirements

- Test conducted by voting system vendor confirming ballots meet the voting system specifications. The test plan must be approved by the Secretary of State; or
- Test conducted by the Secretary of State confirming ballots meet the ballot specifications in the voting system’s TDP
- Security and storage inspection of facilities
Accuracy Test Criteria

- The ballots must be scanned in all possible orientations on every voting system component.
- The accuracy error rate shall be zero.
- The ballot rejection rate can not exceed two percent.
- The ballots must meet the voting system’s ballot specification, as certified with the voting system’s TDP.
One major issue in ballot printing is the bleeding, smearing, and transfer of ink, so we will run the following tests:

1) Spill Test
2) Spray Test
3) Drip Test
4) Rub Test

After the ballots are dry, scan them through every type of tabulator
Moisture Test Criteria (continued)

- PCOS - scan the ballots a minimum of five times, including one pass in every orientation permitted by the tabulating equipment

- CCOS – create a batch of 100 and scan the batch into the tabulator. Scan the batches a minimum of five times, including one pass in every orientation permitted by the tabulating equipment
Pass/Fail Criteria

- All ballots shall be tabulated with 100% accuracy; any inaccurate tabulation will be considered a failed test
  - In the case of a scanner that maintains an image of the ballot - if the ballot is electronically outstacked for reconciliation, the test will be considered a failed test
Post Certification Requirements

- No change in any of the information contained within the application can be made without Secretary of State approval
- Documentation and log maintenance requirements
- Biennial inspections of facilities and documentation
- Flaw and defect disclosure requirements
Ballot on Demand Testing and Certification

Current Regulations
Certification Background

- California Code of Regulations (CCR) was updated in 2012 to include ballot on demand (BOD)
- The amendments did not separate BOD from commercial printing
- CCR requires that every location that BOD is used to be certified, just like a commercial print facility
- Prohibitive outside Elections Offices
Ballot on Demand Testing and Certification

Proposed Regulations

California Secretary of State's Office
Accracy Requirements

- Same accuracy requirements as commercial printers
- A BOD system connected to VR system must have ballots produced in that manner
- The BOD system must accurately import the ballot style data for each voting system
Security and Communication Requirements

- The BOD system must secure ballot data access
- Any electronic communication to or from the BOD system must be tested for accuracy and security
- Components that communicate directly to the BOD system that generate the voter’s ballot style information may be tested as part of the ballot on demand system
Ballot Duplication or Remake Functionality

- Components that duplicate and/or remake a ballot, inclusive of the ballot marks, but **do not** save or export any ballot content data for tabulation may be tested as part of the BOD system.

- Components that duplicate and/or remake a ballot, inclusive of the ballot marks, **and** saves or exports any ballot content data for tabulation may be tested as part of the voting system.
The system must log and report the following:

- Quantity of ballots produced
- Quantity of ballots produced by style
- Quantity of ballots produced accurately
- Quantity of ballots misprinted including the ballot style
- Quantity of ballots produced by user
- Audit log of user activity
Jurisdiction User Requirements

- Documentation including:
  - The BOD system it’s using
  - Voting system ballots it will be printing
  - Configuration (e.g. single voter/OTC, VBM/batch)
  - Network connectivity (e.g. VR system, ePB)

- Use procedures including:
  - Ballot accounting and inventory logging
  - System and ballot security
Testing During L&A Requirement

- During L&A, ballots must be produced from the BOD and tabulated through the voting system.
- Elections officials must sign an attestation that BOD ballots have been tested and maintain that document with its election records.
Questions ???