State of California

PROCEDURES

Required for Use of the

InkaVote Optical Scan Voting System

AKA

InkaVote Procedures

These procedures have been adopted by the Secretary of State pursuant to Elections Code sections 19100 and 19205 and shall regulate and govern the use of the InkaVote Optical Scan Voting System at all elections governed by the California Elections Code.

These procedures shall be effective beginning November 1, 2010 and shall be used in conjunction with all other statutory and regulatory requirements. Insofar as feasible, all procedures prescribed herein shall be carried out in full view of the public.

These procedures constitute a minimum standard of performance. They are not intended to preclude additional steps being taken by individual election officials to enhance the security and reliability of the electoral process.
InkaVote Procedures

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1.0 The InkaVote Voting System

1.1 Introduction

The InkaVote voting system has been used in Los Angeles County since 2003. InkaVote replaced the former Votomatic punch card voting system, used since 1968, following the decertification in 2002 of all voting systems in California based on pre-scored punch card voting technology.

InkaVote employs a voting method similar to Votomatic but replaces pre-scored punch cards with optical scan ballots printed on the same sized 312 format ballot card. The InkaVote voting device (unit) is patterned after the Votomatic device and is used for holding the ballot card and vote recorder pages. However, the diameter of each voting position hole in the plastic template has been widened to ¼ inch in order to accommodate the use of an ink marking device for marking voting choices. The 312 vote position ballot card is virtually identical except the vote positions are not pre-scored for punching out, but are instead pre-printed circles with 312 voting positions for recording votes in ink. The ballots used for absentee voters by mail have larger target circles than the ballots used at the polls in the vote recorder.

Los Angeles County's previously certified Microcomputer Tally System (MTS) version 1.3.1 with the front end Election Tally System (ETS) and Automated Ballot Layout (ABL) system will continue to be used for election data collection, vote tabulation and related functions. The L.R. Computer Company card readers, 36 of which are used in Los Angeles County, were previously certified by the Secretary of State with a modified read head for reading optical scan marks. The electronic image sent from the card readers is identical to punch card electronic images; therefore, the tally interface routines do not change. Since the vote image data is the same, the MTS tally, reports and logic do not change.

InkaVote is was developed by the County of Los Angeles as a least-cost, least-risk alternative for replacing the Votomatic system. At the time of development it was determined that using any of the currently certified optical scan systems would have entailed much greater expense and may not have been feasible. For example, the equipment purchase alone for a system to count large optical scan ballots (with candidates/measures printed on ballot) would cost an estimated $30 million. Additionally, the ongoing operating expenses for ordering ballot cards whether for large optical scan ballots or for multiple cards needed for the optical scan small ballot card system is estimated at 2.5 to 5 million dollars per election,
which is prohibitive. Ordering ballot cards for one election with the 312 card InkaVote ballot costs less than one million dollars. Additionally, the County would need significant additional space to store and retrieve any other type of ballot.

InkaVote ballot cards are currently available from a certified vendor in a 312-position format (i.e. 312 voting positions printed on the front side of the ballot card). Voting positions on the ballot cards correspond to numbers assigned to candidate/ballot measure information printed in the official sample ballot booklets and on vote recorder pages as was previously done with Votomatic.

InkaVote ballot cards are adaptable to State of California precinct & absentee voting procedures and integration with touch screen voting system technology. Because of the ballot card format design similarity to the 312 rectangular pre-scored punch cards, there will be less confusion and training/outreach needed for precinct poll workers and voters and less administrative efforts/costs required for training polling place staff and educating the electorate on new voting procedures.

InkaVote voting with a vote recorder is also susceptible to curb-side voting. The device is lightweight and portable. The curb-side voting kit which is part of each poll’s supplies, needs little modification to accommodate InkaVote.

InkaVote ballot inspection is actually easier than it was with punch card ballots. Voting marks, which are light, partial, or questionable, may be over-marked with colored highlighter (other than yellow) to provide enough contrast for the card reader to recognize the vote. Ballot inspection applies to both poll and absentee ballot cards.

1.2 Definitions

Automated Ballot Layout: (ABL) is the County’s sub-system that formats the ballot by placing contests in ballot sequence, rotating candidates as required, and assigning them their vote positions for each ballot style or grouping of districts. ABL has been in use since 1981.

Ballot: The components necessary to provide a voter the opportunity to vote for all appropriate candidates and measures/propositions.

Ballot Assembly: A ballot page or group of ballot pages completely describing the ballot including sequence.
For precinct polling place voting: the ballot pages and a mask, which has all valid voting positions for the ballot type marked out, are assembled into a ballot frame which is secured into a base.

For absent voter voting: a sample ballot of the appropriate ballot type may serve in place of the ballot assembly.

Ballot Card: All ballot cards are controlled by the Secretary of State, pursuant to California Code of Regulations, and shall be printed with distinctive tints and designs as specified by the Secretary of State, and shall be produced and distributed in accordance with regulations adopted by the Secretary of State.

The ballot card is a tabulating card on which voters may record their votes by marking voting positions. The ballot card shall have two detachable serialized stubs.

The ballot card with its two perforated stubs measures 11 to 11-3/4 inches long (depending upon vendor hardware) by 3-1/4 inches wide, although the length may vary and there may be three stubs. With the ballot card held such that the corner cut is lower left, the several parts are: a serialized binding stub; a serialized voter's stub which is also used to position the ballot card in the punch frame; and, the ballot card which is always 7-3/8 inches in length. The binding stub is the stub stitched or stapled to a pad when the ballots are gathered, and is the part remaining affixed to the pad when the voter's ballot card and attached stub(s) have been removed for voting. The InkaVote positioning stub is used to secure the ballot card in the voting device, and may be of extended length for use as the write-in portion of the ballot. When the extended length write-in stub is used, it is attached to the ballot card, is not serialized, and is used to position the ballot card in the punch frame. The serialized voter's stub is then attached to the binding stub at the one end and to the InkaVote positioning stub at the other end.

All possible voting positions on the ballot card are numbered from one to 312 (or 19 or 26) in increments of one to the end of the ballot card and each voting position number is printed on the ballot card. If the card is stood on end with the corner cut in the lower left-hand corner, the numbering starts with ‘1’ in the upper left-hand corner (on the 12th row) and continues down the column (i.e., card row 12) until the column is filled at number 26. The number 27 begins the next column at the top of the card (on the 11th row) and so continues until the numbering ends at the lower right with the number 312 (at the beginning of the 9th row). The voting position number is printed above the circular voting portion of the area to be marked during the voting process (i.e., above the circle). The voters use a marking device to mark the ballot card to record their votes.

If any voting position on the ballot card is used for more than one candidate or ballot measure at the same election, each such ballot card shall have a ballot type identification code marked therein within the first four rows.
A party identification code shall be marked into each ballot card at the statewide direct primary election, also within the first four rows.

Absentee ballots will contain voter instructions on the stub. One instruction will tell the voter to use blue or black ink and not other colors. The other instruction will tell the voter to fill the circle completely and show an illustration of the same.

Ballot Card Format: Voting position characteristics of an InkaVote or Optical Sense Card ballot vary, such as the number and location of voting positions and/or printed voting information on the card. Ballot card formats are specifically approved by the Secretary of State for the InkaVote Optical Sense Card voting system and include the following: 38, 52, and 312 numbered voting positions printed on the ballot card. Each of these formats may have either the standard or extended length InkaVote positioning stub.

Ballot Frame: This is the plastic holder into which the ballot pages and mask are fastened, and which when taken together makes up the ballot assembly. Two stainless steel clamps, affixed onto the underside and at each end of the ballot frame, secure the ballot pages and mask in place.

Ballot Grouping: The various ballot groups are as follows:

Absent Voter: Contains voters who do not utilize polling places. Includes mail ballot precincts provided for in Elections Code Section 3005 as well as requested absent voter ballots.

No Voters: Contains no voters or polling places.

Voting: Contains voters and polling places.

Ballot Layout: The ballot configuration unique to each precinct which encompasses all candidates, including any rotation of candidate names, and ballot measures facing voters at that election.

Ballot Page: A reference page or card, secured in a ballot frame, upon which are printed instructions to voters, office titles and candidates’ names, and/or ballot measures/propositions. Voting position numbers and arrows are printed adjacent to each candidate’s name and each “Yes” and “No” response to ballot measures, such reference corresponding voting positions printed on the ballot card. The back of the ballot page usually carries instructions to voters.
Ballot Statement: A comparison of the number of ballot cards received from the elections official by each precinct board with the sum of all precinct voter voted ballots, returned absent voter voted ballots, early voters, provisional voter voted ballots, and all spoiled and unused ballot cards at an election.

Ballot Group: A (not necessarily unique) combination of candidate offices and ballot measures to be voted on at an election. There may be more than one such combination in a given election because of activating districts that are not in the election for reporting results purposes only.

Ballot Type/Print Group: A unique combination of candidate offices and ballot measures to be voted on at an election. The rotation of candidate names may also create additional ballot types, as can primary election partisan ballots. (In Los Angeles County this is referred to as a "print group").

Challenged or Questioned Ballot: A ballot on which the voter's intention is not automatically clear or whose right to vote may be in question.

Crimp Hinge: A metal “V” shaped bar with rounded tubular ends into which the ballot pages are crimped through the use of various mechanical aids so as to secure the page within the hinge. A small flag at one end of the hinge is a security stop to prevent removal of the ballot page and replacement with a spurious ballot page. The flag end of the hinge must be positioned at the bottom of the ballot page because of the ballot frame design.

   Ballot pages may NOT be affixed to the crimp hinge with tape.

Crimped Ballot Pages: Ballot pages that have been secured with a crimp hinge.

Damaged Ballot: A ballot card which has been torn, bent, or otherwise mistreated so that it cannot be processed through the card reader. Damaged ballots are sent to the Ballot Duplication Board for repair or duplication.

Destructible Seal: Any type of serialized device, such as a boxcar seal, used to close a container, room, or area which requires damage to or destruction of the device to gain access to the contents therein. Audit trail logs must be maintained recording the sealing, including the seal number, the date and time, and the person's name, as well as the unsealing, including the seal number, the date and time, and the person's name.

Election Tally System: (ETS) is the county's term for a group of sub-systems that have controlled ballot preparations, data preparation, tally and election results reporting. ETS has been in use since 1977.
InkaVote Ballot: The InkaVote ballot is a 312 voting position ballot card with four columns of identification information for the tally and extensions like those used on the votomatic pre-scored punch cards to designate political party, ballot style, precinct, etc. The identification information may be punched or marked.

InkaVote Device: The InkaVote device is a reusable voting device that secures the ballot card in place while the voter turns up to 12 pages while marking their votes with a marking device. The device uses a mask to protect unused voting positions. It has a guide for the marking device to mark the voting position. It uses offset holes in the top portion of the ballot to secure the ballot down in a voting position during the marking the ballot process.

Invalid Punch: These can occur in a precinct header card, for example, when the identification punches for the identification of the precinct, ballot type, or party do not match the identification expected for the precinct ballot cards which follow.

Latch Mechanism: A spring-loaded plunger for holding the ballot assembly in position over the template and device.

LRC 1000CPM Serial Ballot Reader: This is an airflow based ballot card reader produced by LR Computers and certified by the Secretary of State. The InkaVote version uses a modified read head that reads one-sided 312 vote positions ballots (InkaVote Ballot).

Marking device: A ballot card marking device is attached to each vote recorder. The marking device is designed to penetrate the ballot assembly and place a mark on the InkaVote ballot card in the corresponding numbered voting position. For absentee voters, any marking device used to mark the voting position.

Mask: A plastic sheet (usually black in color) approximately 3-1/3 inches wide by 7-7/8 inches long by .020 inches thick which is selectively punched for each ballot type before each election with ¼ inch holes in precise locations to designate valid voting positions when a ballot card is properly inserted into the vote recorder. One mask is required per vote recorder or ballot assembly. The purpose of the mask is to prevent voters from marking any voting positions not used for the ballot type.

Microcomputer Tally System: (MTS) is the county’s election tally software, which was certified by the Secretary of State on January 16, 1998.
Object Code: The version of a computer program in which the source code language has been converted or translated by a compiler or assembler into the binary-code machine language of the computer with which it is to be used. These machine instructions are unique to the particular computer processor being used and can be executed directly by the computer processor without further simplification. (Contrast with “Source Code.”)

Over vote: The condition that arises when the voter votes for more candidates than the number of candidates to elect. In an office to which one candidate can be nominated or elected, a second vote creates an over voted condition. The result is that no vote for that office can be tallied since the voter's intent is unknown.

In the case of ballot measures, a “Yes” vote and a “No” vote for the same measure creates the over voted condition.

Precinct Header Cards: An individually encoded precinct identification card is placed before the particular precinct’s ballot cards, telling the computer that a new precinct is being read. It identifies the precinct being processed and its unique ballot card identification punches. The precinct header card may contain other information.

Provisional Voter Ballot: A ballot issued, pursuant to Elections Code Section 14310, to a voter claiming to be properly registered, and whose qualification or entitlement to vote cannot be immediately established upon examination of the index of registration for the precinct or upon examination of the records on file with the county elections official, including the list of absent voters.

Semi-Final Official Canvass: The process of collecting, processing, and tallying ballots and, for statewide elections, reporting results to the Secretary of State on election night. The semi-final official canvass may include some or all of the absent voter vote totals. The semi-final official canvass is contrasted with the official canvass which begins not later than the first Thursday following the election and, for statewide elections, must result in final certification 35 days following the election (Elections Code section 15375).

Source Code: The version of a computer program in which the programmer’s original programming statements are expressed in a source language (e.g., Ada, Assembler, COBOL, Fortran, etc.) which must be compiled, or assembled, and linked into equivalent machine-executable object code, thereby resulting in an executable software program.
Spoiled Ballot: A ballot issued to a voter and returned by the voter for another ballot because of an error the voter made in voting. Template: A precision-molded polycarbonate black plastic part with a spring at one end, and it is the only moving part of the vote recorder. The template serves as the guide to the marking device tip as the voter positions the pen opposite the arrow, number, and candidate name or ballot measure on the ballot page. It ensures the marking device tip is directed onto the correct voting position with sufficient accuracy to achieve an inked ballot card as the voter pushes the marking device tip onto the card. The template format must be the same as the ballot card format so that when the ballot card is inserted into the vote recorder, the template holes align with the voting positions on the ballot card. InkaVote is only using the 312 ballot format and

VBM: Vote By Mail

Write-In Ballot: A paper ballot, envelope, or extended length ballot card stub with designated spaces provided for a voter to write in the title of any office for which write-in votes may be cast and the name or names of candidate(s) and measures. This information may or may not be printed on the ballot, depending on whether or not this is an absentee ballot, at the county elections official's discretion.

A write-in ballot may be in the form of a third, extended length stub, without any serial number, affixed to the ballot card, which the voter shall fold across the marked (voting) portion of the ballot card after having voted.

A write-in envelope or write-in stub shall be designed to preserve the secrecy of both write-in and marked votes.
Tests:

**Accuracy Tests**: Accuracy tests verify that the vote tallying hardware, especially the card readers, is operating correctly. The accuracy test deck consists of a known number of cards with a known number of voted response positions.

**Logic Tests**: Logic tests must be run both before and after, and sometimes during the processing of official ballots for an election. The logic test deck has predetermined totals for all contests on the ballot, with every candidate in a contest receiving a different number of votes than any other candidate in that contest. The output from the logic test is usually in the form of a press release bulletin, signed by the Logic and Accuracy Board prior to certification and submission of vote tally programs and files to the Secretary of State not less than seven days before the election. Each time a logic test is produced, a Logic and Accuracy Board Member, if available, should verify and sign the output.

**Manual Logic Test**: Ballot Cards from the vendor produced at the same time precinct and absentee ballots are produced are voted in a predetermined pattern to check that the ballot cards will process as they are supposed to and that the tally program accurately counts the votes ascribed to each candidate and measure.

**System Proofing**: System proofing verifies that all materials, files, and programs for an election are correctly prepared. This proofing is normally done in approximately three weeks, during the period consisting of 40 days to approximately 14 days prior to election day. Accuracy and Logic tests are included in system proofing.

Tracking Point: As used in other sections, a tracking point establishes an audit trail on election night and during the canvass.

1.3 **Vote Recorder and Demonstrator Components**

A completely assembled vote recorder includes an “InkaVote Device” with a “template” into which is placed a “ballot assembly” consisting of “crimped ballot pages” and a selectively punched “mask” assembled in a “ballot frame.”

A demonstrator device consists of a vote recorder with reduced voting capacity (fewer pages), marking device, demonstrator ballot card (modified so as not to process through the card readers), and instructions to voters. It is a mock ballot to help demonstrate how to vote on the system. A complete
vote recorder with a mock ballot and mock ballot pages may be used as a demonstrator.

1.4 Operation of Vote Recorder

Vote recorders may come in various configurations. Some sit in self-contained booths, while others are designed to sit on shelves. In all such devices, the voter inserts a ballot card into a slot at the top of the punch frame and pushes it down through the upper card guide into the lower card guide between the anvil plate below and the template above. When the bottom edge of the card contacts the foot of the template, a spring attached to the bottom of the template is depressed. Stops on the InkaVote frame halt the downward motion of the ballot card and the template that permits holes in the ballot stub to be fitted over two red pins at the top of the InkaVote frame. When the voter releases the card, tension on the template spring aligns the holes in the template with those selectively punched in the ballot assembly mask with voting positions on the card. Voters record their votes by inserting a marking device in the holes in the mask and template opposite their choices on the ballot pages and marking the voting positions on the ballot card.

2.0 Pre-Election and Testing Requirements

2.1 Preparing for the Election

The Election Tally System (ETS) with Automated Ballot Layout (ABL) has been in use in Los Angeles County for over 20 years. They cover the election data collection, election data preparation, ABL, and election preparation functions as they always have. Election preparation is the same as it was with Votomatic. The programs, procedures and processes are covered in separate manuals issued by various sections in the Department, just as they have been for the past thirty years. Only minor changes, if any, are required in those procedures to accommodate an optical sense ballot instead of a pre-scored punch card.

2.2 Ballot Assemblies and Vote Recorders

2.2.1 Ballot Assemblies

These are the procedures for assembling ballot assemblies.

- Mask Punching: Using the ballot layouts for each precinct or grouping of ballot types with identical combinations of voting positions, punch
holes corresponding to all possible voting positions for that ballot layout into the appropriate number of masks. Use the “Mask Punch Guide Report” for determining the hole positions to use and number of masks to prepare. Check for accuracy using the mask punch card the computer produces. Send a sample of each ballot style/type to another designated section to reproof.

- Using the “ballot assembly format” report, select the appropriate set of crimped ballot pages by style number and mask for each ballot type or precinct, as applicable.
- Using the “mask punch guide report” prepare the appropriate number of assemblies in the assembly tables. Have the quantity checked by at least two people.
- Assemble pages and masks into the ballot frames and close frame clamps.
- Using the “device assembly” report, have each assembly checked for the correct page styles and check that the mask has holes only for used punch positions. There should never be holes in the mask where there are no arrows, and vice versa.
- Incorrect assemblies are to be removed and corrected and re-inspected.
- Label each ballot assembly with precinct number and ballot identification code.
- Assemblies then go to computer checking. Each page style is scanned or keyed in after the ballot type is identified for the computer. The computer then verifies the correct page assembly for the ballot style.
- Correct assemblies then go to Vote Recorder Assembly. Incorrect assemblies are returned for fixing.

2.2.2 Vote Recorder

These are the procedures for vote recorder assembly.

- InkaVote devices are cleaned and inspected for damage. Accepted devices are used for vote recorder assembly. Damaged devices are repaired or salvaged as appropriate.
- Ballot assemblies are inserted into the InkaVote devices and pressed into position.
- A demonstrator ballot is inserted and seated into position and checked for correct mask holes and template alignment. The red circle of the vote position should show around the edge of the mask hole. If the vote position shows like a partial moon, the alignment is
off. Check the vote recorder and fix as needed, or retire the device after removing the ballot assembly.

- Voting the demonstrator ballot may be done. Choose one row of punches (one page) and using a voting marking device, mark at least one vote position per contest. Remove the demonstrator ballot and check that the vote position is filled in to the vote standards.

Vote recorders may contain more than one political party. Non-partisan must appear in the same punches for all parties within the same ballot style.

Each qualified political party must have a vote recorder available to vote in each precinct-polling place. This may be accomplished by sending minor party ballot assemblies to the poll and having a poll officer change out the assembly when needed.

A member of the poll staff, for the voter’s use when requested, may take a vote recorder to the voter at curbside.

At least one demonstrator vote recorder will be sent to each poll with demonstrator ballots for voters to practice on, if they so desire. No official election materials may be used for demonstration purposes.

### 2.3 Testing Procedures

Testing these procedures is done in three stages or components: System Proofing, Accuracy Testing and Logic Testing.

The test procedures described herein are a required \textbf{MINIMUM} and do not prevent additional testing performed at the option of the elections official.

In addition to the following test procedures, counties providing election night results on-line to the Secretary of State must conduct those tests required by the SOS.

All tests will be conducted using test materials below in such a manner as to meet these guidelines. All tests shall result in reporting that matches predetermined results. All reports and test materials must be retained as specified in Elections Code Sections 17305 or 17306.

Where test materials are stated as being available as either a card deck or magnetic media, this statement shall be understood to mean that magnetic media is comprised of card images. That is, whether the computer program
reads cards or magnetic media, the program work area in which the data is processed will use the same program logic and the same program statements as though the original format of the input (card or magnetic media) is transparent to the computer.

2.3.1 System Proofing

System proofing is the mandatory preliminary, in-house testing of all phases of election preparations except the Logic and Accuracy tests of the computer hardware and software used to tally and summarize votes. System proofing shall include, but is not limited to, verification of the correctness of the following:

- Assignment of jurisdictions participating in the election to ballot types/styles or print groups
- Linkage/assignment of precincts in which the election will be held to ballot type
- Ballot content of each ballot type, including offices, district designations, candidate assignment and rotation, ballot measures, all in the proper sequence
- Preparation of vote recorder pages, including instructions, candidates' names, political and/or occupational designations, number to be elected, candidate rotation (where applicable), ballot measures, voting position numbers, and all page, column, and office headings and designations
- Formatting of ballot pages into sample ballot pamphlets for each ballot type
- Printing, identification punching, scoring, numbering, padding, and verifying ballot dimensions using a card gauge on official ballot cards
- Election night summary report format;
- Preparation of all precinct identification (header cards and trailer cards), registration total and ballot definition cards as may be required to process ballots for all precincts (voting or absentee) and processing such cards, for 100 percent of the precincts;
- Ballot tabulation program's recognition of and response to precinct header cards and ballots that are damaged, improperly marked, or not in proper sequence or orientation
- All phases of preparation and assembly of vote recorder components as described in Section 2.2
- Voter registration data for jurisdictions participating in the election.

- **100% Test**: Ballot tabulation program's recognition of the precinct identification code contained in the precinct header card.
- **Manual Tally Test**: Ballot tabulation program’s testing of a sample of each ballot card, poll and absentee, to verify the
correctness of its identification code, acceptance of ballot cards with correct precinct and party (in a primary) identification code(s), and rejection of ballot cards with incorrect precinct identification codes.

- **Exception Processing:** Exception Processing is part of system proofing and includes a test to determine whether the system properly responds to error conditions. At least ten days prior to each election a deck shall be prepared which will cause all non-destructive errors for the card reader and the edit or counting programs. This test should contain, but is not limited to, the following types of errors, if they apply to the system:
  - Upside down precinct header cards
  - Upside down ballots
  - Reversed precinct header cards
  - Reversed ballots
  - Missing precinct header cards
  - Ballots torn in various places
  - Invalid precinct and group identifiers
  - Precinct identification in precinct header cards don't match those in the precinct ballot cards.
  - Additional errors should be tested, depending on the card readers and edit or counting programs. These might include upside down, reversed, and missing cards (header) for ballot definition, or other data read which is necessary for proper processing of the election.
  - For exception processing the ballot tally program(s) is to be used. The negative test data will be run on each card reader for all systems, and predetermined error conditions must result for each reader or system. Program restarts or equipment resetting are allowed for this test.

### 2.3.2 Accuracy Tests

Accuracy Testing consists of those processes and procedures necessary to ensure hardware to be used in the election is working properly, both as individual units and as a combined system. Emphasis is placed on verifying that ballot card readers can read every permissible mark on the ballot card, and that individual components as well as the interface between them function as required. These tests shall be run BEFORE Logic testing in order to assist in isolating problems.

Accuracy tests are an integral part of equipment maintenance and may be run as often as necessary before each election to ensure proper functioning of hardware as well as ballot cards used in the tallying process.
Accuracy tests shall be performed prior to Logic and Accuracy Certification (including amendments and re-certification, if necessary) to the Secretary of State and again within 72 hours prior to processing ballots on election day. The accuracy tests may be run more frequently and shall be run after equipment has had maintenance work. Any failure of the equipment to perform as expected shall be corrected before using that equipment for election processing, and any ballots tallied on equipment that failed shall be recounted.

In the event a processor, preprocessor, controller, or card reader fails after official ballot processing has begun, accuracy tests must be successfully run on the (failed) component after it has been repaired, replaced, or adjusted (in a manner deemed sufficient by the responsible elections official to require re-testing for accuracy) provided the component is to be returned to service. Diagnostic tests of hardware on election night are permitted.

The Accuracy Test Decks consist of 1,200 ballot cards marked as follows:
- 400 cards, marked in the 1st, 4th, 7th, 10th, and continuing in every 3rd card column to the end of the card.
- 400 cards, marked in the 2nd, 5th, 8th, 11th, and continuing in every 3rd card column to the end of the card.
- 400 cards, marked in the 3rd, 6th, 9th, 12th, and continuing in every 3rd card column to the end of the card.

These three sets or decks may be run separately if that is required of your testing program. A program, applicable to the card readers or counting device in use, will cause the marks for each position to be counted and/or compared. If counted, the count is to be displayed. If compared, discrepancies will be displayed.

Other equivalent card decks may be prepared and use as long as they cover all possible vote positions and all rows of the first four columns.

When the Accuracy Test Decks are processed, they produce reports showing 400 votes per voting response vote position and marked precinct identification position. These verify the equipment's ability to read all vote positions and marked precinct identification positions accurately. Exception reporting may replace the positive reporting of results. Exception reporting may be used in addition to the positive reporting.
Within forty days before each election, the Accuracy Test Decks shall be run at least twice through each card reader, and at least four times through each processor and/or preprocessor, prior to certification.

If ballots are to be counted at remote sites in addition to a centralized counting location, tests must include hardware used for transmission on the assigned phone/data lines. If ballot images are being transmitted, then the Accuracy Test Decks will be transmitted and the result run through a program to report any problems. If election results are to be transmitted, then predetermine election results files must be tested and balanced against the expected results.

2.3.3 Logic Testing

Logic testing consists of those processes and procedures necessary to ensure that vote tally programs and hardware correctly interpret, summarize and report votes for a specific election. This is normally a series of tests using cards, ballot images and/or removable media.

Successful testing demonstrates that:
- each candidate and ballot measure receives the predetermined number of votes;
- the system reports the proper number of over and under votes;
- the system accepts only the proper ballot types and rejects improper ones;
- the inactive voting positions are not being tabulated.

The inactive voting positions are ‘demonstrated’ by having ballots with only the inactive or invalid vote positions marked in the Logic Test. These marks are not 'reported' on any report.

Logic tests will be conducted using test materials described below in such a manner as to meet these guidelines. All tests shall result in reporting that matches predetermined results. All reports and test materials must be retained as in Elections Code Section 17305 or 17306.

The logic test shall be run on precinct, absentee and early voting systems. The early voting logic tests shall be run prior to using the system for voting. The precinct and absentee logic tests shall be run at least ten days prior to each election. The results of each run shall be balanced to the predetermined results.

The predetermined results for balancing of election processing must be available for inspection and signed off by the Logic and Accuracy
Board described in Section 7.4. A Certificate of Official Logic Testing must be completed, certified, and received by the Secretary of State seven days before each statewide election. If the early voting tally is different from the poll and absentee tally, then a Certificate of Logic Testing for each tally is required. It (or they) must accompany official copies of the ballot tally programs and files.

The logic test shall also be run and the results balanced to the predetermined results immediately prior to and after (following) any and all processing of official ballots including semi-official and official canvass updates. Each of these runs and the balancing shall be open to a political observer program run by the county. Each of these runs’ reports will be identified and signed by observers and county officials. These reports are part of the audit trail of the election and shall be retained as long as the ballots are retained for each election as determined by the Elections Code.

All ballot tally program(s) and hardware must remain operative from the time of the pre-ballot processing logic test, through the processing of all voted ballots, to the post-ballot processing logic test. Any failure, such as a power failure, which affects the central processing unit (CPU) and requires the program to be reloaded, shall require a new set of logic testing and shall require that all ballots processed since the last successfully completed logic test be rerun.

The logic test ballots, or ballot images on removable media, shall be tabulated, using the logic test program or the logic test portion of the vote tally program(s). The resulting logic vote tallies shall be compared in detail with the predetermined logic vote tallies. Any differences between the two logic vote tallies shall be resolved, and logic testing shall be performed as many times as may be necessary to achieve a logic vote tally which is identical to the predetermined count. This process shall also be done for any absent voter test ballots that are subject to separate logic and accuracy test. After balancing the two logic vote tallies, the logic test ballots and the documentation shall be locked in a facility with restricted access or sealed. Logs or records shall be maintained, recording each use of the logic test and by whom it was completed.

Logic Test Data
A logic test file, in card form, and also in magnetic form, if desired, will be prepared for all ballot styles/print groups to be used in the election. This logic test file card deck may be composed of regular ballot cards or it may be composed of standard tabulating cards. Any official ballots used for this purpose shall be marked “TEST”.

Early voting machines will run their logic tests and a sample of about 10% will print the results.

Logic tests performed during System Proofing for the Certification of Logic Testing to the Secretary of State must include all ballot types for the election. Logic tests run immediately before and after ballots are counted may include a sampling of ballot types, provided the sample includes all candidates and ballot measures for the election; however the use of all ballot types for this test is recommended where possible. This is known as the “compressed” L&A in Los Angeles County.

There shall be at least two identical sets of data representing precincts with polling places for each ballot style or print group used in the election and tallied by the program(s). One set of data for the logic test shall be prepared with cards. The other test data may use cards or magnetic image data. The logic test data shall contain: ballots where each contest/race has one vote in the first position, two votes in the 2nd position, etc.; plus a no vote or under voted card (image), an over voted card (image), and a card (or card set) for invalid (not used) vote positions. If the absentee process places those votes into “pseudo” absentee precincts representing each ballot group, then separate logic data sets must be prepared for absentee use. If absentee ballots are going to polling/voting precincts, then the same logic data sets may be used for testing precincts and absentee processes.

The logic card decks are parsed (broken up) into card trays of approximately equal total number of cards. These trays are labeled and run separately through the card readers on an MTS system. Balance/control totals are developed to indicate the total numbers of precincts and ballots cast that should show on each MTS screen when the trays have been successfully processed. A set of two trays may then be randomly used on each MTS system. The sets used across all MTS systems being activated must be consistent for each balancing run of the whole system in order to match the predetermined totals. For this reason, balancing totals are cumulative and printed for the total after each MTS. That way if an update is only using two MTS systems, we have a total for two to balance totals. For testing purposes, the elections official may use either the
primary or back-up logic test deck, but the backup deck must be subject to the same security requirements as is the primary logic deck. The test cards shall include:

- **“Voted” Test Ballots**
  A group of test ballots shall be voted in such a way that each candidate for every office on the ballot receives a predetermined number of votes that are different from the number of votes received by any other candidate for the same office. Also, the number of “Yes” votes on any ballot measure shall receive a different number of predetermined votes than the number of “No” votes. In the case of offices for which the voter is allowed to vote for more than one choice, at least one ballot of the group shall be voted the maximum allowed number of choices.

- **“Over Voted” Test Ballots**
  One test ballot shall be an “over voted” test ballot, on which every contest office and ballot measure has received exactly one more vote than is allowed. A vote will not be marked in an “over voted” test ballot for an uncontested office.

- **“No Votes” or Under Voted Test Ballots**
  One “no votes” test ballot shall not contain any marks other than those needed for precinct or ballot type identification. This test should result in under votes being cast for each contest in every occurrence in the test.

- **Invalid Votes or “Spaces” Test Ballots**
  Up to four test ballots called “Spaces Test Ballots” or invalid ballots shall be created to test that the vote tally programs are not tabulating inactive ballot positions for each ballot style or print group. Inactive ballot positions are those voting positions that are not being used in any contest for a given ballot style for a given election. This test may be created on one ballot card or using every fourth not used voting position spread out over four ballot cards. For example the first ballot will have marked every fourth voting position that is NOT being used for this ballot style, starting with the first unused position. The second ballot will have every fourth unused voting position marked starting with the second unused position. The third ballot will have every fourth unused voting position marked starting with the third unused position. The fourth ballot will have every fourth unused voting position marked starting with the fourth unused position.

- **“Recall Measure and Candidates Contest” Test Ballots**
Recall elections, conducted in accordance with California state recall rules and laws and which include two official candidates, shall consist of a series of at least fifteen test ballots shall be prepared as follows:

1. Voted “Yes” only
2. Voted “No” only
3. Voted “Yes” and for first candidate
4. Voted “No” and for first candidate
5. Voted “Yes” and for second candidate
6. Voted “No” and for second candidate
7. Voted “Yes” and for both first and second candidate
8. Voted “No” and for both first and second candidate
9. Voted both “Yes” and “No” and for first candidate
10. Voted both “Yes” and “No” and for second candidate
11. Voted “Yes” and “No” and for both first and second candidate
12. Voted only “Yes” and “No”
13. Voted for first and second candidate only
14. Voted for first candidate only
15. Voted for second candidate only

When the recall election has more than two candidates, additional test ballots shall be voted for each additional candidate with a “Yes” vote and a vote for the candidate, in each ballot. The third candidate should get 4 ballots; the fourth should get 5 ballots, etc.

When there is a recall and only one official candidate, test ballot card sets, numbered 1, 2, 3, 4, 9, 12 and 14, only shall be prepared.

Note: in 2003 for the gubernatorial recall election, a federal judge in San Diego declared the above California Recall logic and unconstitutional. A vote for a candidate may be counted even if no vote was cast for the measure. This section may be deleted in the future if this decision holds.

- **Certification of Logic Test**
  Logic test requirements apply to all elections; however, submission of the seven-day certification of logic testing to the Secretary of State is required only prior to statewide elections and elections to fill vacancies in the legislature or congress.

- **Retention of Test Materials and Results**
  The successful logic and accuracy tests, conducted at the time of certification (or re-certification, if necessary) to the Secretary of State, storage logs or records, if any, and balancing reports, if any, shall be retained as long as the ballots are kept for the election. The official logic test ballot cards used for balancing prior to and upon completion of processing official ballots shall also be kept for as long as the
ballots are kept. Back-up decks and other test decks may be destroyed or used to train operators for other elections.
2.4 Hardware Maintenance

- **MTS**
The hardware maintenance for MTS remains the same. Run standard diagnostic tests and conduct manufacturer's prescribed preventive maintenance routines on each CPU and every peripheral device that will be used in the ballot tabulation process. If any errors are encountered as evidenced by a diagnostic test, repair or replace CPU components as needed. Verify printer accuracy. If any printer errors occur, repair or replace the printer or printer cabling, as needed. Verify removable drive works and reads and writes disks. Repair or replace as needed.

- **Card Readers**
The hardware maintenance for LRC card readers is an on-going contract with LRC. Verify accuracy of each card reader. If any errors are encountered, repair or replace, as needed. Run several test precincts through each card reader to verify that error conditions are properly recognized and handled. If any improper error recovery situations are encountered, repair or replace equipment as needed. In addition to the above card reader preventive maintenance, the following additional items will be emphasized when checking card readers. Check each drive belt for proper tension and adjust or replace, as needed. Inspect each rubber capstan roller for ink glaze or pitting and clean or replace, as needed. Adjust picker mechanisms against actual ballot card stock and clean or replace, as needed. Thoroughly vacuum and clean each read station.

- **InkaVote Device**
The maintenance of the InkaVote device entails minimal cleaning after each election. Wipe down and clean as needed. Inspect to assure that the ballot holding pins are still intact. Check that the spring on the template is still working. Repair or discard as appropriate.

- **Marking Devices**
Marking devices are sent with election supplies, one per device and one extra per precinct. Marking devices are returned in the supplies to the election official. Used marking devices are maintained by having the ink cartridge replaced after each election.

- **Other**
Voting booths, ballot box/supply tubs, etc. are inspected and cleaned, repaired or replaced the same as has been done for the past thirty five years.
3.0 Election Procedures

3.1 Precinct Poll Supplies

Instruct precinct inspectors to make the following checks prior to election day:

- Check all pads of ballot cards to ensure that ballot type identification numbers, serial numbers, and precinct numbers (if used) printed on the ballot cards are correct.
- Check vote recorder:
  - Ensure that ballot group or precinct identification on the vote recorder is for the correct precinct.
  - Using a sample ballot, compare its pages with those on each vote recorder assembly. Make sure the pages are identical in all details.
  - For partisan primary elections, repeat this process for each party.
  - Insert a demonstrator ballot card into each vote recorder over the red pins and mark a vote next to every arrow. Inspect the card to make certain each hole was marked properly and completely.
- Report any problems to the elections official responsible for the election.

Supplies necessary for the conduct of elections at polling places shall be delivered as follows:

- Ballots shall be in the quantity and manner required by Elections Code Sections 14102 through 14104, as well as demonstrator ballot cards marked for demonstrator device use only.
- In primary elections, ballots shall be appropriately marked for each political party and for nonpartisan voters, as directed by the Secretary of State. Optical scanning of ballots requires tinting to be done on the back of and/or the top stub of card ballots. InkaVote ballots must be white with dropout red printing.
- Vote recorders to accommodate the registered voters at the precinct
- Ballot assemblies for each booth
- Demonstrator devices and demonstrator ballot cards
- Pens
- General-purpose precinct supplies as provided in Elections Code Sections 14105 through 14110
- A Certificate of Packaging and Sealing, in duplicate, together with a self-addressed stamped business reply envelope, addressed to the responsible elections official
- Two copies of the ballot pamphlet, state pamphlet, and two sample ballots of each ballot type and in each language required to be voted on in the precinct
- Seals and any other supplies and forms deemed necessary

3.2 Polling Place

Pursuant to California election laws, registered voters may go to their assigned precinct polling locations to vote a precinct ballot or may submit an absentee ballot application and vote-by-mail or go to the elections office or any designated regional offices to vote during the early voting period.

3.2.1 Before Poll Opens

- Complete Oath of Office and Declaration of Intention forms pursuant to Elections Code section 1637.
- Assemble voting booths and in each booth display a copy of materials required by the Elections Code.
- One vote recorder and the voting pages shall be placed in each booth and, if a primary, place the party sign on the booth. If there is more than one ballot type in the precinct, the board shall make certain that each voter is directed to the proper voting booth.
- Set up the demonstrator device and have demonstrator ballot cards available.
- Set up the tables, chairs, flag, and supplies including the roster of voters, and street index, as instructed in training.
- At the opening of the poll, make the verbal announcement, “The polls are open.”

3.2.2 While the Poll is Open

- During the day, at least every hour, inspect each vote recorder to ensure that ballot pages have not been damaged or marked and marking devices are not dried out or broken. If ballot pages must be replaced, follow elections official's instructions.
- Offer to instruct each voter in the proper method of inserting and voting a ballot card into the vote recorder. Offer each voter further instruction and practice time, if necessary.
- Space is provided on the ballot secrecy envelope (or extended ballot stub) to write in the name of a candidate. The voter should write both the name of the candidate and the office.
IN PERSON – PRECINCT BALLOT VOTING

1) Insert ballot card into the InkaVote Voting Device.
2) Make sure that the holes at the top of the ballot card fit over the red posts.
3) Use the Marking device provided in the voting booth or issued by election poll workers to mark voting choices on ballot card (ink their vote).
4) Fill inside the circle voting position for candidate or ballot measure of choice with marking device so the computer can properly scan/read and record voting choices. Do not mark voting choices outside of the circle or oval or make any markings or notations on ballot card that will identify the voter.
5) If a mistake is made or a voting position is marked in error, return ballot card to Precinct Poll Worker/Elections Staff and request another ballot. Do not try to erase/strikeover an error then fill in another voting position to correct the error.

➢ TO VOTE FOR A CANDIDATE – Fill in the circle for voting position:
   • For the associated number of candidate of choice.
   • Do not vote for more candidates than allowed for that office because that will result in an invalid over-vote for that contest. Neither vote will count.

➢ TO VOTE FOR A BALLOT MEASURE – Fill in the circle voting position:
   • For the associated number for either YES or NO.
   • Do not vote for both YES and NO because that will result in an invalid over-vote for that contest. Neither vote will count.

➢ TO VOTE FOR A QUALIFIED WRITE-IN CANDIDATE –

Write-in qualified candidate’s name & office title (provided on a list at the voting precincts) on the gray or pink secrecy sleeve in the designated write-in space.

Do not write in a candidate’s name and also fill in a voting position on the ballot for a candidate running for the same office because that will result in an
invalid over-vote for that contest. Neither vote will count.

6) Pull the ballot card off the red pins and remove it from the vote recorder. Check that the voting circles are filled in with black ink for the vote positions the voter desires.

7) Place voted ballot in secrecy sleeve and remove stub.

8) Return voted ballot to Precinct Election Poll Worker/Elections Staff or personally deposit it in the ballot box.

♦ IN PERSON – ABSENTEE/PROVISIONAL BALLOT VOTING AT THE POLL

No person to whom an absent voter ballot was issued is permitted to vote at the polling place unless he or she surrenders the ballot. The ballot is to be marked “Surrendered AT POLL” and placed in the container marked for spoiled and unused ballot cards. The voter is then permitted to vote in the normal method for the precinct. Same procedure steps 1-6 outlined for In Person – Precinct Ballot Voting.

If the person is returning a voted absentee ballot then do this:
1) Provide required information on the Absentee/Provisional Ballot envelope.
2) Seal voted ballot inside the envelope.
3) Sign/date the envelope and return to Precinct Poll Worker/Elections Staff or personally deposit in the ballot box.

3.3 Processing VBM Ballots

Before distribution (mailing or providing in person) of VBM ballots to voters who request them, the ballot type/group numbers of the ballot card and the sample ballot shall be compared to ensure a match.

VOTE-BY-MAIL BALLOT VOTING
1) Place ballot card on a clean table or flat surface and use voter instructions and Official Sample Ballot to mark voting choices.
2) Use dark black/blue ink pen to mark voting choices on ballot card to assure ballot choices are readable by machinery. Do not use a red, yellow or light color ink pen or #1 lead pencil for marking voting choices.

3) Fill inside the entire circle or oval voting positions for candidate or ballot measure choice with pen/pencil so computer can properly scan/read and record voting choices. Do not mark outside the circle or oval or make any markings or notations on ballot card that will identify you as the voter. Such marks may invalidate the entire ballot.

4) If you make a mistake and mark a voting position in error, you may destroy the ballot card and contact the Elections Office to request another ballot. (OR) Mark voting choices in the Official Sample Ballot booklet; place booklet inside Absentee Ballot return envelope and mail to Elections Office for duplication onto a replacement ballot card. Do not try to erase/strikeover an error and then fill in another voting position to correct error. Do not send the spoiled ballot card back with the sample ballot in the envelope.

- TO VOTE FOR A CANDIDATE – Fill in the circle or oval voting position:
  - For the associated number for candidate choice.
  - Do not vote for more office candidates than allowed because this will result in an invalid over-vote for that contest and no votes will be counted for that office.

- TO VOTE FOR A BALLOT MEASURE – Fill in the circle or oval voting position:
  - For the associated number for either YES or NO.
  - Do not vote for both YES and NO because this will result in an invalid over-vote for that contest. Neither vote counts in that situation.

- TO VOTE FOR A QUALIFIED WRITE-IN CANDIDATE – Write-in qualified candidate’s name & office title (from listing provided) in the designated write-in space:
  - On the secrecy ballot sleeve.
  - Do not write in a candidate’s name and also fill in a voting position on the ballot card or Official Sample Ballot for a candidate running for the same office, because this will
result in an invalid over-vote for that contest and neither vote is counted.

5) Place voted ballot in secrecy ballot sleeve.

6) Provide required information on the Absentee Ballot return envelope.

7) Seal voted ballot inside the envelope.

8) Sign/date the envelope; affix 1st class postage stamp and mail to the Elections Office for processing.

- Applied VBM Voter List
  A list, or an identification on the Roster-Index, of VBM voter ballot applicants is to be supplied to each precinct. This may be mailed with a certified voter list and certified write in candidate list to the Inspector after the normal absent voter application period ends seven days prior to the election.

- Not more than seven days prior to an election, begin preparing returned absent voter ballots for counting, as follows:
  - Confirm that the voter's signature on the Identification envelope has been verified.
  - Open each envelope and remove the voted ballot.
  - Place empty identification envelopes in a designated storage area.
  - Examine absent voter ballots for write-in votes, cause for rejection and damage. Process in the manner prescribed for Ballot Inspection Boards.
  - Deliver processed ballots to designated official for secure storage until time for computer processing.

### 3.4 Processing Provisional Ballots

Provisional voter ballots are in substantially the form of absent voter ballots and are to be used at all elections by voters who claim to be registered, but whose right to vote cannot be immediately established.

Provisional voter ballot envelopes shall be printed in substantially the same form as absent voter ballot envelopes, but shall be of a different color.

Procedures for tallying provisional voter ballots shall be those set forth in Elections Code section 14310 and by the elections official.
3.5 Closing of the Polls

The Following Procedures Must Be Completed In Public View.

- Promptly at 8 p.m. declare, “The polls are closed.”
- Any voter in line at the closing must be allowed to vote.
- No one who arrives after 8 p.m. may vote.
- Deface and/or seal all unused official ballot cards, as directed.
- Seal all official InkaVote devices against further use. If the ballot box serves as the InkaVote container, open the box, remove the contents, enclose the InkaVote devices and affix a tamper-proof seal.
- Count contents of ballot box:
  - Absent voter ballots, if any.
  - Provisional voter ballots.
  - Precinct voter ballots (do not separate from write-in envelopes or ballot stubs).
  - Inspect ballots.
- Complete the Official Ballot Statement, showing:
  - Total number of official ballot cards received from the elections official.
  - Number of spoiled ballot cards.
  - Number of unused ballot cards.
  - Number of provisional voter ballots.
  - Number of precinct voter ballots.
  - The sum of the numbers of spoiled ballot cards, unused ballot cards, provisional voter ballots, and precinct voter ballot should equal the number of official ballot cards entered as received from the elections official.
  - The number of write-in and damaged ballots.
  - The number of persons who voted in the precinct.
  - A certification to the accuracy of the Ballot Statement.
  - The signatures of all board members.
- Process Voted Ballots
  - If voted absent voter ballots were placed in the ballot box, leave Identification Envelopes sealed, enter the number of such ballots in the appropriate space on the Official Ballot Statement (Certificate of
Packaging and Sealing), and place the ballots in the designated container for return to the elections official.

- Enter the number of provisional voter ballots removed from the ballot box in the appropriate space on the Official Ballot Statement (Certificate of Packaging and Sealing), and place the ballots in the designated container.
- Process voted ballots as follows:
  - Without separating the ballot card from the write-in stub or envelope, (hereafter: “write-in ballot”) check for write-in votes.
  - If there is no write-in vote, separate the ballot card from the write-in ballot. Place the ballot cards in one stack, and the write-in ballots in another. If a write-in vote was cast, leave the ballot card and write-in ballot attached.

- When all ballots have been examined, place non-voted and separated write-in ballots in a designated container for delivery to the counting center.
- If the validity of any voted ballot is questionable because of unauthorized marks on the ballot or because it is a write-in ballot, leave the voted ballot inside the secrecy sleeve.
- Count all voted ballots to be accounted for on election night. The count includes ballots with no write-in votes, ballots with write-in votes and questioned ballots. It does **NOT include** absent voter ballots or provisional voter ballots.
- Enter the total in the proper box on the Official Ballot Statement (Certificate of Packaging and Sealing) and elsewhere as directed. This total should agree with the Ballot Statement (i.e., the number of precinct voter voted ballots).
- Place all voted ballots to be processed on election night in the appropriate return container.
- Voted ballots must include:
  - Voted ballot cards separated from non-voted envelopes or stubs.
  - Un-separated ballots with write-in votes.
  - Un-separated questioned ballots.
- Close the return container and seal with a tamper-proof seal.
- Packaging for Return.
  - Seal precinct voter ballots, absent voter ballots, and provisional voter ballots in container(s), as directed.
- Repack Roster of Voters, Street Index, and write-in list, if any, as directed.
- Package or seal all other supplies, as directed.
- Dismantle separate voting booths, if any.

- **Official Ballot Statement second (yellow) copy or Certificate of Packaging and Sealing**
  Verify that the numbers of precinct voter ballots, absent voter ballots, and provisional voter ballots have been correctly entered on the Official Ballot Statement (Certificate of Packaging and Sealing). Verify that the required materials have been placed into the appropriate container or containers, listing the materials inserted in each container and indicating that the container or containers were appropriately sealed. After all entries have been completed, each member of the board shall **sign** the Official Ballot Statement (Certificate of Packaging and Sealing). After the polls close, a member of the precinct board other than the members who return the ballot container should **mail** the second (yellow) copy of the Official Ballot Statement (Certificate of Packaging and Sealing) to the elections official. A self-addressed stamped envelope should be provided for this specific purpose. If using the Certificate of Packaging and Sealing, then the copy shall accompany the ballot container to the central counting location. If using multi-page Official Ballot Statement, the original remains attached to the Roster of Voters and is returned in the designated container.

- **Returning Voted Ballots**
  Return all ballots and supplies as directed by the elections official. At least two precinct board members must accompany all ballots until they are in the custody of the elections official and a properly executed receipt has been provided.

  *Do not release ballots to custody of any other person without first obtaining a receipt.*

3.6 **Tally Processing (Semi-Final Official Canvass)**

- **Report Preliminary VBM Tally Results**
  Report preliminary VBM vote counts, compiled pursuant to Elections Code section 15150, to the Secretary of State immediately following the close of the polls. This requirement shall apply to all elections for which election results are reported to the Secretary of State.

- **Appointment of Boards**
  The elections official responsible for the conduct of an election shall appoint boards to carry out the following semi-final official canvass functions:
  - VBM Voter and Provisional Voter Ballot Processing
- Logic and Accuracy Testing
- Seal and Container Inspection
- Ballot Inspection
- Ballot Processing
- Ballot Duplication
- Write-In Ballot Processing
- Ballot Storage
- Elections Observer Panel
- Other boards deemed necessary by the responsible elections official. Individuals appointed may perform more than one function or serve on more than one board.

The semi-official canvass functions listed above must be performed by a minimum of three persons. Each board member shall be appointed to perform the function designated. **Each person who handles ballots at the central or remote counting location shall sign the following declaration:**

“To the best of my knowledge and belief, I did not tamper with any ballot, precinct header card, or ballot counting equipment, nor did I observe any other person in any way tamper or interfere with the ballot counting process.”

- Establish Audit Trails
  The responsible elections official shall establish procedures to account for all voted ballots during the semi-official canvass. Each function listed above is designated as a tracking point, and the responsible elections official must track the receipt and processing of voted ballots by boards assigned to perform these functions.

- VBM Voter and Provisional Voter Ballot Processing
  VBM voter ballots and provisional voter ballots returned to polling places on election day are sealed in envelopes by precinct boards for return to the designated counting location. These envelopes shall be removed from the precinct supply kits after election night. The condition of the seals shall be inspected, and any defects shall be noted and reported as required by the elections official.

  VBM voter and provisional voter ballots received on election night shall be processed in accordance with these procedures and the Elections Code or maintained in a secure location accessible only to designated persons under controlled conditions before being so processed.

- Transport Receipt (TRACKING POINT)
  - Unloaded transportation devices (white bags) are taken to an Unpack Board where they are opened.
• Ballot Boxes (Red Boxes) are removed and packed in cardboard trays with the ends facing up for moving to the scanning area.
• Transport Log is removed and stored as directed.
• Ballot Box trays are taken to one of the scan lines.
• Ballot Box bar code is scanned into the primary system for all ballot boxes without removing them from the tray.
• If a bar code does not scan, the precinct serial number is keyed into the primary system.
• Ballot Box tray is slid down the table to the back-up system when the primary computer reports all transactions were accepted.
• Ballot Box bar code is scanned into the backup system for all ballot boxes in the tray.
• If a bar code does not scan, the precinct serial number is keyed into the backup system.
• Ballot Box tray is slid to end of table where the ballot boxes are removed from the tray and placed into transport carts for delivery to inspection area.
• Teams of two take the transport carts to the inspection area where the carts are unloaded onto tables for distribution.

• Ballot Box (Red Box) and Seal Inspection (TRACKING POINT)
  • Runners take ballot boxes from the tables and distribute them to inspection boards.
  • The Inspection Boards do the following functions:
  • Examine each sealed voted ballot container, paying particular attention to the condition of the container and seal.
  • Note and initial control document as instructed with the precinct number of ballot containers with broken or improperly secured seals.
  • Send any defective Ballot Box to the Snag Board as directed.
  • Forward properly sealed ballot containers for ballot inspection.

• Ballot Inspection (TRACKING POINT)
  This may be the same inspection board as the ballot box inspection board above. In LA County it usually is the same team.
  • Receive, break the seal, and open the inspected containers.
  • Remove the voted ballots and precinct header card(s).
  • Ballots still in the ballot security sleeve (gray envelope) contain write-in votes and should be placed in the ballot remake box. If the whole precinct is still in ballot security envelopes, send the precinct to the Snag Board or follow instructions for checking and removing ballots as instructed.
  • Remove any portion of the ballot stub, such as an incompletely detached perforation, that remains attached to a ballot card.
  • Fan cards for static electricity removal.
  • Inspect the ballots for tears, folds, or damage.
• Damaged ballots are to be placed in the ballot remake box.
• Inspect the ballots for any identifying marks, such as a person's name, as instructed.
• Ballots with identifying marks are placed in the ballot remake box.
• Inspect the marks on all ballots as instructed.
• Use a highlighter (not yellow) to enhance any marks that will not read, as instructed.
• When all ballots have been inspected align them so the corner cut is in the upper left corner, then place the header card(s) face up on top of the ballots.
• Initial back of header card.
• Place the precinct header cards and ballots in a card tray.

• Repack and Transportation
Runners pick up the card trays and take them to a repack board, providing another empty card tray as needed. The Repack Board performs the following functions:
  • Check the ballot trays for precinct headers followed by ballot cards, aligned with left corner cuts.
  • Combine precincts from other trays to make one tray for sending to the tally processing room (MTS room).
  • Place empty trays as directed.
  • Send full trays to processing.
  • Runners take full trays into the tally processing room and place them on input tables as directed.
  • Runners bring back empty ballot trays and distribute to inspection or repack as needed.

• Ballot Processing
Ballot processing shall be done in the presence of at least three people, one of whom will be the system operator (MTS Supervisor) who is responsible for managing and monitoring each MTS system operation and reporting.

Utilize one operator assigned to each card reader so there are two operators for each MTS system.

Input runners are used for moving input trays to be read to each card reader. They also take empty trays and place under the tables for reuse.

Output runners are used to provide empty ballot storage trays to each MTS operator and take full trays to the Ballot Storage Loggers.

Maintain an audit trail that links operators and ballots to specific card readers.
MTS operators separate ballots that cannot be read by card readers. These ballots must be identifiable to the precinct from which they are separated. MTS Supervisor gives the ballots to the Systems Logger for logging and placing them in the ballot remake box. This includes such items as damaged ballots or ballots in the incorrect precinct. At the end of the night, before sealing the ballot remake box, put the log in the box.

Maintain ballots together by precinct for delivery to the Storage Board. MTS operator to place the precinct headers and ballots in the storage trays after processing.

MTS Summary Computer Operator produces election results bulletins as required. During continuous processing, this process is done by the computer on a time schedule the operator put into the computer. This process may also send files to Internet, Intranet, and creates files for the media to download, if these setting are activated.

Report election results, as specified, to the Secretary of State for statewide elections and specified special elections.

- Ballot Processing Audit Logs

MTS maintains an audit log for each system used to process ballots. The audit log records the sequence in which precincts were processed along with a recording of system irregularities in processing. This log is printed to hard copy and stored on disk. It may be searched for a given precinct and report all entries relating to that precinct.

The audit logs written to disk are stored in a file named MTSLOG.DAT, which is located in the election data directory for the current election. The election data directory, and the MTSLOG.DAT file contained therein, are local to each MTS workstation and server.

Following each election tally update, the audit logs on each MTS workstation and server are archived and full system backups are copied to removable storage and placed in a fireproof safe. Copying audit log data from the local disk to the removable disk involves executing a Copy command using the MS DOS interface and specifying the From and To directories for the audit log file.

It is established practice and policy that all audit logs and other election data are stored on electronic disk storage and never destroyed. Election-specific data stored on removable disk are retained for the required 22-month retention period before the disks are reused.
MTS is programmed such that the system operator cannot destroy logs through any user actions. The system does not overwrite logs, but only appends to them.

Audit logs may be retrieved from the removable disks (within the 22 month retention period) or from the permanent electronic disk storage. Logs are filed by election name, system name, and tally update run number. Locate the desired log and copy to a storage media of choice or print to hard copy.

In the audit logs, all codes are accompanied by descriptive text that explains their meaning. The list below shows all the codes used by the system in the manner they appear on the log:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tr>
<td>&quot;001-&quot;</td>
<td>BALLOT GRP ERROR</td>
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<td>&quot;002-&quot;</td>
<td>BALLOTS GROUP NO. BAD</td>
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<td>&quot;003-&quot;</td>
<td>CARD READER ERROR</td>
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Audit logs are saved in text format, which can be read by any text-reading software, or printed on a printer. No special export or reformatting is required.

The audit log procedures described above are in compliance with the Secretary of State’s requirement that the jurisdiction, “before taking any action that could delete or overwrite any audit log, create an electronic copy, when applicable, or a clean paper copy, of all audit logs, to be maintained for the timeframe mandated by law.” Following each election, the Los Angeles County Registrar-Recorder/County Clerk department head or designee shall submit promptly to the Secretary of State a signed statement attesting that this requirement has been met.
• Ballot Storage
  A Ballot Storage Board shall:
  Receive directly from the MTS Operator through the Output Runner all ballot cards, accompanied by the appropriate precinct header cards, for each precinct in ballot storage trays.

  Process ballot storage location tracking as directed by removing the tray card and second header cards. Have these cards processed in the ballot storage system.

  Secure all voted ballots until the final logic and accuracy test is run following the semi-official canvass by having the ballot storage trays placed in the appropriate cabinets.

  If a precinct needs to be located and reprocessed for any reason, the Ballot Storage Boards will go into the storage cabinets and retrieve the precinct header and ballots for re-processing. They shall re-file the precinct in the cabinet when it has been processed.

  When the post tally logic tests are completed and balanced, ensure that all ballot storage cabinets are padlocked and sealed. Sign the log and record the seal number on the log.

  Following the final logic and accuracy test for the semi-official canvass and during the official canvass, all voted ballots and appropriate precinct header cards must be maintained in a locked and sealed room or containers any time the ballots are unattended.

  A record or log denoting time, place, persons involved, and reasons for breaking the seal must accompany any authorized entry into ballot containers. Two persons need to be present whenever ballots are being handled for any reason.

  Following certification of election results and the period for recount requests, the ballots may be moved to storage for the ballot retention requirements of the election, provided the ballot containers remain sealed and identified as to contents.

  The elections official shall not open any ballots or permit any ballots to be opened except as permitted in Elections Code sections 15305 and 15306, or in the event of a recount.

  For purposes of this section, all seals shall be destructible seals.

• Certification of Unescorted Personnel
All unescorted persons present within the security area, including visitors, media representatives, and standby personnel, shall be clearly identified by a badge or other means. All unescorted personnel shall be subject to restrictions established by the responsible elections official to ensure the efficiency and integrity of the vote tallying process.

- **Snag Boards**
  The precinct snag process is under the direct control of the Department and shall use experienced personnel who are familiar with the processes or have had extensive training. The Snag Boards process precincts that have a problem. Among their duties are the following functions.

**Ballot Duplication (TRACKING POINT)**
Damaged ballots shall be processed according to the following procedure:

- Deliver damaged voted ballot cards to the appropriate location for processing. All ballot cards prepared as duplicates of damaged voted ballots shall be of a distinctive color, clearly labeled “duplicate,” and shall be given a serial number which shall also be recorded on the damaged card.

- In creating the duplicate ballot, one board member shall duplicate voting positions marked on the damaged ballot. Another member shall verify that the marks on the duplicate ballot exactly match those in the damaged ballot.

- If doing ballot remake during a tally process, then duplicates of damaged ballot cards shall be placed with voted ballot cards of the appropriate precinct for further processing, tallying, and storage. If remaking during official canvass, then the duplicate ballot shall be handled as directed by the Official Canvass Coordinator for processing during a tally update.

- The original ballot card that has been duplicated shall be distinctively voided, placed in a clearly identified container for damaged ballots, and segregated in a secure location so it cannot be counted inadvertently. The original ballots may be inspected during a recount and compared to the duplicated ballot for accuracy.

**Write-in Ballot Processing (TRACKING POINT)**
If un-separated ballots containing write-in votes are found in the voted ballot container, the Snag Board, or a separate Write-In Processing Board, shall prepare the ballots for counting, as follows:
- Cross-index each ballot card to its corresponding write-in ballot by writing the same unique serial number on both.

- Check the sample ballot or source designated for the precinct to determine the number of candidates to be elected to the office for which there was a write-in, and the voting position numbers used for that office.

- Examine the voting positions on the ballot card for the office specified on the write-in ballot. If any of the voting positions are marked and the number of marks plus the number of write-in votes for the office exceeds the number of candidates to be elected (vote for rule), an over-vote exists and none of the votes for the office may be counted.

  - If an over-vote is found, invalidate all votes for the over-voted office by writing “VOID” across the write-in name(s) and modify the ballot card in one of the following ways:
    - As described in Section 3.6.7, duplicate the ballot card except for the hole(s) punched for the over-voted office.
    - Mark a over-vote voting position for the office using the highlighter provided as directed.

Separate the ballot card from the write-in ballot. Place the write-in ballot in the designated container. Place the ballot card with the ballots of the precinct to be counted as directed.

If there is no over-vote, separate the ballot card from the write-in ballot. Place the ballot card with the ballots to be counted as directed. Refer to the list of qualified write-in candidates provided by the elections official:

  - If the name written in is not on the list, write “VOID” across the name and place the write-in ballot in the designated container.
  - If the name is on the list but the office does not appear on the sample ballot for the precinct, write “VOID” across the name and place the write-in ballot in the designated container.
  - If the write-in vote is for a qualified candidate in the precinct, place the write-in ballot in the container designated for valid write-in votes and, if so directed, mark a tally sheet.

- Ballots with Potentially Identifying Marks (TRACKING POINT)
  If ballots were submitted by precinct officials as questionable due to potentially identifying marks, cross-index the ballot cards to the write-in portion of the ballot.
Ballots discovered during the semi-official canvass process to have potentially identifying marks will no longer be attached to the write-in portion of the ballot and therefore will not be cross-indexed.

Examine the unauthorized marks to determine if they would identify the voter.
- If the marks WOULD IDENTIFY the voter, write or stamp "REJECTED" on the ballot and place it in the designated container.
- If the marks WOULD NOT IDENTIFY the voter, then separate the ballot card from the write-in ballot and place voted ballot card with ballots to be counted or place in the designated container.

Forward accepted ballots for processing during canvass.

Certification of Unescorted Personnel
All unescorted persons present within the security area, including visitors, media representatives, and standby personnel, shall be clearly identified by a badge or other means and a log of their arrival and departure times. All unescorted personnel shall be subject to restrictions established by the responsible elections official to ensure the efficiency and integrity of the vote tallying process.

3.7 Early Voting Program
Los Angeles County discontinued its popular Touchscreen Early Voting Program in 2008, following the Secretary of State’s promulgation of the 100% manual recount requirement of all direct record electronic (DRE) voting devices used for voting in California, which rendered infeasible the operation of over 170 DRE devices in 16 different early voting locations throughout the County. During the early voting period, Los Angeles County voters may continue to vote early in person at the Registrar-Recorder/County Clerk’s Norwalk headquarters using VBM ballots.

3.8 Official Canvass Processing
Purpose of the Official Canvass
The Official Canvass consists of a post-election audit of the several voting precinct’s returns and the absent voter ballot returns in order:
- To validate the outcome of the election by verifying that there were not more ballots cast than the sum of the numbers of voters who signed the precinct Roster/Index and who applied for and were issued absent voter ballots;
- To account for all official ballots produced for the election;
- To ensure that all required certificates and oaths were properly executed by the precinct board; and,
- To verify the accuracy of the computer count by manually recounting the voted ballots from at least one percent of the voting precincts and comparing the manually-tallied results to the computer-generated results.

Each Official Canvass function must be performed by a minimum of three persons. At least two people shall be present for all activities involving ballot cards.

3.8.1 Canvassing Provisional Ballots

Process provisional voter ballots returned by each precinct. Processing functions are:
- Verify eligibility of persons who cast ballots provisionally.
- Open envelopes of eligible voters and remove ballots.
- Examine ballots for write-in votes, noting cause for rejection and damage.
- Process in the manner prescribed for Ballot Inspection Boards.
- Identify original or duplicate provisional ballots by precinct and deliver to the designated official for updating computer tallies.
- Write the reason for rejection on envelopes of ineligible voters. Place unopened envelopes with election materials to be retained for the period prescribed by law.

3.8.2 Canvassing Precincts

Examine the Ballot Statement prepared by each precinct board. Enter the information into the Roster Reconciliation System. Note that to resolve issues with the Ballot Statement, it may be necessary to contact the Inspector for that precinct.

Compare the number of official ballots reported “received” by each precinct to the number issued by the elections official. Resolve or explain any discrepancy.

Verify that the number of ballots voted (including those voted provisionally), plus spoiled and unused ballot cards, equals the number received by the precinct. Resolve or explain any discrepancy.
Reconcile ballots to be counted to tallied ballots cast by precinct. Using the Roster Reconciliation reports of out of balance precincts:
- Compare the number of signatures in the Roster-Index to the number of precinct voter ballots reported on the Ballot Statement. Resolve or explain any difference between the two.
- Compare the number of ballots voted by provisional and precinct voters to the precinct's computer tally. Resolve or explain any discrepancy.
- Locate any ballots not counted on election night because of damage, invalid identification punches, improper orientation, or any other reason.
- Search election supplies and equipment, including unused and spoiled ballots, write-in envelopes, InkaVote devices, ballot containers, etc., for ballots not accounted for.
- Process any found ballots in the tally updates.
- Count voted ballots (ballots cast), manually or by card reader, without counting race votes. If the original computer count proves to be incorrect, ballots must be reprocessed through the ballot counting program.

3.8.3 Election Processing Hardware Failure
In the event a processor, preprocessor, or card reader fails during the semi-official or once the official ballot tally process has begun, regardless of whether or not the equipment is returned to service following repair and successful processing of the prescribed logic and accuracy tests, the ballots from the precincts tallied on that equipment prior to the failure shall be re-processed during tally updates.

3.8.4 Canvassing VBM Voter Ballots
The elections official is accountable for VBM voter ballots to the same extent, as nearly as practicable, as for precinct ballots.

Prepare a Ballot Statement for each ballot type or special VBM voter “precinct” showing the number of ballots produced (received), any defective ballots received from the vendor, spoiled or damaged ballots, the number of returned ballots that were challenged, and the number to be counted.

Reconcile the statement to demonstrate that the total of unused, defective, spoiled, issued, and replaced ballots equals the number received. Resolve or explain any discrepancy.
Compare the computer count to the number of ballots to be counted, as shown on the Ballot Statement. Resolve or explain any discrepancy.

Process any outstanding ballots not counted in the semi-official count in the tally updates.

3.8.5 Canvassing Write-In Votes
Examine the write-in ballots that were processed by Ballot Inspection Boards, separate Write-in Processing Boards, VBM Voter Ballot Processing Boards or Canvassing Boards to verify that the names written in are for valid candidates. See instructions above.

Tally valid write-in votes by precinct, or VBM voter ballot type, and summarize by Jurisdiction.

Prepare “Statement of Write-in Votes” for inclusion in the official “Certified Statement of Election Results.”

3.8.6 Canvass Tally Updates
After processing ballots in tally updates, compare new computer counts to Ballot Statements. Roster Reconciliation reports can do this electronically. Resolve or explain any remaining discrepancies.

If the original computer count for any precinct has been found to be incorrect, or if there are precincts in which unresolved discrepancies remain, the ballots from such precincts, with appropriate precinct header card, shall be reprocessed through the card reader and ballot counting program. Compare new computer counts to Ballot Statements. Resolve or explain any remaining discrepancies.

3.9 Manual 1% Recount Tally
For the purpose of validating the accuracy of the computer count, within fifteen days after every election at which the InkaVote system was used, a public manual recount of the ballots cast in at least one percent of the precincts, chosen at random shall be conducted. This count will include all candidates and ballot measures voted on in each of the precincts and on each card reader used to count ballots. If the random selection of precincts results in an office or ballot measure not being manually recounted, as many additional precincts as necessary shall be selected by the elections official and manually recounted for any office or ballot measure not recounted in the
original sample. In LA County this usually results in more than 1% of the
precincts being counted.

Precincts selected at random pursuant to Elections Code section 15360
shall be chosen by an individual who is designated by the responsible
elections official and who is not the same person responsible for
programming the ballot counting computer program. Selected precinct
numbers shall not be revealed to computer programming personnel until the
semi-official count is complete.

In the event a processor, preprocessor, or card reader fails after the
semi-official or official ballot tally process has begun, and regardless of
whether or not the equipment is to be returned to service following repair
and successful processing of the prescribed logic and accuracy tests, the
ballots from the last precinct tallied on the equipment prior to the failure shall
be included in the automatic manual recount.

If a discrepancy is discovered between the automated tally and the
automatic manual recount tally, each precinct's ballots which had been read
and processed by the failed equipment, subsequent to the time of the last
successfully completed logic and accuracy test by the failed equipment,
shall be tallied again.

3.10 Tally Updates (update computer counts)

Tally Updates or Update Computer Counts (this may be done as often as
the elections official deems necessary during the canvass process) are
additional runs of tally to process additional ballots or delete and reprocess
precinct ballots. Since about 30% of the absentee ballots are received after
the pre-election processing, these are added during tally updates. The tally
update process is as follows:

- Run Logic tests and confirm results. Sign the reports.

- Restore previous election results. Print a report and check that they
  match.

- Process any precinct deletes. Print a report and confirm that the number
  of deletes matches the number of precincts to be deleted.

- Process additional VBM ballots and print a report.

- Reprocess the deleted precinct ballots. Do this before processing ballots
to be added onto existing precinct totals.
- Verify that provisional voter ballots, add-on ballots from election night or found during the canvass, and re-made ballots are behind the correct header cards prior to processing into tally.

- When done, print a report to assure that tally is back to 100% precincts reporting. If it is, create the files to update the Internet, Intranet, media and, if needed, the Secretary of State files.

- Rerun Logic and Accuracy Tests and confirm results. Once this is balanced, the update is good and completed. If it does not balance, the update needs to be re-run reloading the previous tally files before trying again.

4.0 Vote Determination

4.1 Valid Votes

See Valid Vote criteria below. Refer to the InkaVote Ballot Card Vote Counting Procedures (Count/Don't Count Guidelines) for specific ballot types and voting conditions.

4.1.1 Precinct & VBM Ballots

Count Precinct & VBM Ballot votes that are clearly marked by voter or where voter clearly indicates intended voting choice.

Note: Voter should completely fill inside the circle or oval voting position or clearly indicate candidate/measure voting choices by using a distinctive and consistent marking pattern throughout the ballot. All contests on ballot card or sample ballot booklet pages must have the same marking pattern.

4.1.2 Write-In Ballots

Count Write-in votes for qualified candidates or where voter clearly indicates intended voting choice. Examine Write-in ballot candidate/measure votes election night and/or during official canvass to make sure that there are no over-votes, invalid markings or notations on ballot card before votes are counted.

Note: Voter should write in qualified write-in candidate’s name/office title shown on qualified candidate listing in the
designated write-in space. Name/Office title abbreviations/misspellings are acceptable as long as candidate name/office title & division number is recognizable/determinable.

4.1.3 Damaged Withheld Ballots

Duplicate a ballot card for each damaged ballot so that computer can scan/read and properly record votes. Duplicates must be remade on a different color card stock and be clearly identified as “duplicate” ballot on the front of ballot cards. Voting positions on the ballot card must be duplicated identically to the way the voter originally cast his/her votes.

Note: A duplicate ballot must be made even if no voting positions are filled in on a ballot card to account for every Precinct/VBM ballot that was issued/cast for an election.

4.2 Invalid Votes

Invalid votes occur when voter intent is undeterminable. Voting choices are not clearly marked and/or ballot card contains questionable markings, indentations, impressions, punctures or identifiable voter notations. See Invalid Vote criteria below. Refer to the InkaVote Ballot Card Vote Counting Procedures (Count/Don't Count Guidelines) for specific ballot types & voting conditions.

4.2.1 Precinct & VBM Ballots

Do not count ballot votes when voting choices are not clearly marked and/or voter intent cannot be determined.

4.2.2 Write-In Ballots

Do not count write-in ballot votes when voting choices are not clearly marked in designated space and/or voter intent cannot be determined.

4.2.3 Damaged Withheld Ballots

Do not duplicate ballot votes when voter intent is questionable/cannot be determined.
4.2.4 Invalid Ballot Vote Categories

- Over-Vote – More voting positions are filled in than the number of candidates to be elected OR both YES and NO are filled in for a ballot measure.
- No Vote – Voter does not fill in a voting position; write-in a qualified candidate name or clearly indicate a voting choice for any office candidate OR YES or NO vote for a ballot measure.
- Questionable Vote – Ballot contest has identifiable voter markings or notations such as name/address, initials, Voter ID #, SS# or Drivers License #, etc. that would violate voting privacy.
- Undeterminable Vote – Ballot contest has random markings, indentations, impressions, punctures, squiggly/dimpled or crimp marks, pinholes or pinpricks.
- Void/Spoiled Ballot Vote – Ballot contains notation by Precinct Poll Workers/Voter indicating that ballot vote(s) are invalid.

5.0 Post Election Procedures

5.1 Checking Unused Ballots

Unused ballot cards will be processed in accordance with Elections Code section 14403 or 14404. Precinct officers will deface or seal unused precinct ballot cards, and election personnel in the office of the elections official will seal or deface unused absent voter ballot cards and un-issued ballot cards. The elections official may inspect and count unused ballot cards as necessary to reconcile the ballot count during the official canvass.

5.2 Vote Recorders

Remove ballot assembly. Place ballot assemblies in storage envelopes by precinct. Label each envelope with precinct and election information. Keep the assembly together, properly marked and identified for security storage. Keep these until ballots can be destroyed for the election. If needed, pages and masks may be dis-assembled from the ballot assembly and stored together.

Clean the InkaVote device and ballot assembly with cleanser and/or water as needed.
Inspect and determine if device or ballot assembly need repairs or replacing.

5.3 Retention of Election Materials

Upon the certification of the election results, Elections Code sections 17300 through 17306 apply to the handling, security and disposition of unused ballot cards, pages, masks, and other elections materials. The retention period for ballots and related election materials is six months for all elections if no federal elections are involved. The federal election retention period is twenty-two months. Retention periods may be extended in the event of a court challenge. If in doubt consider the materials to be like the ballots and apply those regulations.

5.4 Adherence to Established Procedures

All operations associated with the official canvass and post-election procedures shall be performed in accordance with the applicable provisions of this manual, the Secretary of State regulations, the California Elections Code or other laws.

No operation or activity which revises election results produced by the semi-final official canvass shall be performed without the presence of a properly-constituted Election Observer Panel, Logic and Accuracy Board, and/or an equivalent administrative and technical control body authorized to verify the correctness of the operations and responsible for maintaining accurate and complete audit records.

5.5 Manual Recount

Manual Recount Procedures

Request for Recount
A request for a recount and the conduct of the recount shall be made in accordance with Elections Code section 15620 and following.

Observers
Each candidate, and each side in the case of a ballot measure, shall be allowed not more than two observers for each recount board. Observers may not interfere in the recount process, or direct questions to any member of the recount board, and may not touch or handle the ballots. All questions must be directed to the elections official in charge of the recount.

Hours of Operation
Prior to the beginning of the recount, all parties will be notified of the hours of operation.

Ballot Supervision/Breaks
At least two people will attend ballots at all times during the recount, including breaks and lunch periods.

   Recount boards will be permitted break periods in the morning and afternoon, in addition to a lunch break. They will not stop for a break or for lunch while recounting a precinct.

Valid Marks
See *InkaVote Vote Matrix* for determining voter intent and marks.

Over vote
Over vote is a ballot condition, which arises when the voter votes for more candidates than the number of candidates to elect. In an office to which one candidate can be nominated or elected, a second vote creates an over voted condition. The result is that no vote for that office can be tallied, since the voter's intent is unknown.

   In the case of ballot measures, a “Yes” vote and a “No” vote for the same measure creates the over voted condition.

   No vote shall be counted for any candidate or ballot measure when an over vote occurs. The number of over votes shall be recorded for each office or ballot measure.

Under vote
Under vote is a ballot condition that arises when the voter votes for fewer candidates than the number of candidates to elect, or when the voter does not vote for or against a ballot measure.

   Tallying the number of under votes in a manual recount will add significant time to the manual recount process. The under votes should be tallied only as part of the machine tally process.

Blank (non) Votes
Blank vote is a ballot condition that arises when the voter does not vote for any candidate to an office or for or against a ballot measure.

   Refer to the *InkaVote Vote Matrix* for voter intent.
6.0 Election Security Provisions

6.1 Ballot Counting System Security

The elections official shall ensure the protection of the election tally process from intentional manipulation, fraudulent manipulation, fraudulent and intentional manipulation, malicious mischief, accidents, and errors.

Each Jurisdiction shall:

Establish procedures to identify changes to the ballot tallying system, including dates and times that files are created, modified, or accessed, and by whom. These procedures must also include a check list and sign-off requirement for the system proofing tasks outlined in Section 2.

Establish procedures for the physical protection of facilities, and data and communications access controls; including intrusion and fire alarms, temperature and humidity sensors, etc.

The procedures shall also include provisions for locked facilities for computers as well as for voted and non-voted ballots and counted and uncounted ballots.

Establish contingency plans for ballot counting, including either backup ballot counting facilities under the elections official's supervision, or a reciprocal agreement with a neighboring InkaVote Jurisdiction to count ballots in the event of hardware failure.

In addition to the ballot counting (tally) program(s) sent to the Secretary of State pursuant to Elections Code section 15000, each elections official shall store another copy of the ballot counting program(s) in a off site secure-but-readily-accessible location. The original program must be kept in an escrow account as prescribed by the Secretary of State.

Establish procedures for internal security, i.e., the protection of ballot counting hardware, firmware, and software from fraudulent manipulation by persons within the elections office. These procedures must provide for:

- Restricted access to ballot counting hardware, firmware, and software;
- Individual passwords which must be complex and frequently changed;
- Physical protection of all non-voted precinct and absent voter ballots, as well as of all tallied and non-tallied ballots, by use of logs
to chronicle their quantity, use, and access before and after the election.

6.2 Audit Trails

All ballot-counting operations including mandated pre- and post-election testing must be documented in sequential order. An automated and/or manual record or log must be maintained to record the time and date of “system events” related to ballot counting.

“System events” in the ballot counting process include:
- Initiation of the ballot count program
- Clearing totals
- Running logic and accuracy tests
- Hardware failures
- Repairing hardware (including running accuracy tests after repairs are completed)
- System crashes and restarts
- Communications between multiple systems
- Lost communication to remote sites
- Time communication is restarted

This log or record shall be continued until final certification of results, shall be retained for the same time period as ballots for that election, and shall be subject to the same physical security and integrity measures.

Specific audit trails shall include:

6.2.1 Exception Handling and Error Messages

Exception handling and error messages during ballot tallying will include:
- Messages generated by the computer's exception handlers\(^1\) or error routines.
- Identification code and number of hardware and software failures (their source and disposition).
- Record of the operating system's data read/write/verify, parity or check sum errors and retries.

6.2.2 System Status Messages

System status messages as the following:

\(^1\)Exception handlers are programming codes invoked only in the event of an error. This code may be part of either the operating system or the application program.
- Diagnostic and status messages upon start up of ballot tallying.
- “Zero totals” check.
- Initiation or termination of card readers.

6.2.3 Operator Interaction With System
Operator interaction with system will include the date, time, and action taken.

6.2.4 Ballot Related Exceptions
Ballot-related exceptions (e.g., ballot cards not machine-readable, ballot cards requiring special handling, aborted or deleted precincts, etc.)

6.2.5 Copies of Required Tests
Copies of all tests run shall be kept. Pre and Post Logic tests will be kept as long as the ballots are kept.

6.3 Statistical Ballot Data Required
The following items are critical to tracking and reporting the ballot counting process, and must be maintained:

- For the election definition phase, diagnostic proof listings of candidates and active vote positions for each ballot type or precinct, or an active vote position printout alone.

- The number of ballots read within each precinct, by type, including totals for each party in primary elections.

- The total number of ballots processed.

- Separate accumulations and reporting of the quantity of over votes, under votes, and write-ins within each precinct for each race or issue.

The above audit shall be available in summary and by precinct.
7.0 Certification and Reporting Requirements

7.1 Biennial Certification of Hardware

Elections Code section 19220 requires each elections official to inspect and certify the accuracy of their voting or vote tabulating equipment at least once every two years. The elections official shall certify the results of their inspection to the Secretary of State.

A copy of a sample certificate is attached to these procedures as Appendix B.

7.2 Hardware Certification and Notification.

7.2.1 Certification

All card readers and specialized vote tabulating equipment must be certified for use in elections by the Secretary of State prior to use in any election.

Certification procedures are available upon request from the Secretary of State's Elections Division.

7.2.2 Notification

For each statewide election, the responsible county elections official shall cause to be prepared a list, including quantities, of all equipment to be used to tabulate votes during the semi-official and official canvass.

7.2.3 Certification of Logic and Accuracy Testing

Seven days before each statewide or special election, the elections official shall certify to the Secretary of State the results of the logic tests as well as the accurate functioning of all ballot counting equipment. This certification shall also affirm the use of the same equipment for pre-election testing and for semi-official and official vote canvasses. In the event of a change to the ballot tally program occurring after this certification, an amended certificate shall be submitted no later than the day before the election.

In the event any equipment is repaired, altered or replaced following this certification and prior to completion of the official canvass, an amended certification of logic and accuracy testing and a revised list
of equipment used must be submitted to the Secretary of State not later than submission of official canvass results.

7.3 Election Observer Panel

All procedures prescribed in this Manual shall be carried out in full view of the public insofar as feasible. In addition, the responsible elections official shall devise a plan, whereby all critical procedures of the vote tallying process described in this Manual are open to observation by an Election Observer Panel. Representatives of the qualified political parties and representatives of the news media shall be among those invited to serve on this Panel and shall be given the opportunity to observe that the correct procedures have been followed in the receiving, processing and tallying of all the voted ballots.

7.4 Logic and Accuracy Board

A Logic and Accuracy Board shall be appointed by the responsible elections official and, insofar as is practicable, shall be comprised of the same persons prior to, during, and after the election. The Board shall have the following duties:

- Receive from the elections official all required test materials and take steps to ensure the security of said materials prior to, during, and after the election, except when the materials are properly in the possession of one of the other boards or elections officials as required by these procedures.

- Verify the correctness of the program card decks, logic and accuracy test program card decks, and logic and accuracy test ballot cards. This verification shall also be required for any of said material that must be replaced.

- Observe the performance and verify results of all required tests.

- Note any discrepancies and problems and affirm their resolution or correction.

- Deliver into the custody of the elections official all required test materials and printed output.

- Certify to the performance of each of the above-prescribed duties as well as those otherwise established by the procedures; provided that
all members of the Board shall sign the appropriate certificate or certificates.

Final pre-election certification shall be made to the Secretary of State no less than seven days before each statewide election. The responsible elections official shall make this certification based on the Logic and Accuracy Board's certification of successful testing. In the event an amendment to the ballot counting program is required following this certification, the elections official must immediately re-certify to the Secretary of State.

7.5 Submit Ballot Tally Programs to Secretary of State.

Ballot tally programs for statewide and special elections are to be deposited with the Secretary of State no later than seven days prior to each statewide election. The elections official's certification of testing as well as the list of vote counting equipment used must accompany ballot tally programs. Refer to Elections Code section 17500. Should changes be required following certification and submission to the Secretary of State, resubmission and re-certification is required.

7.6 Election Night and Post-Election Reporting

Any delays in election night's semi-official canvass reporting due to hardware, software, environmental, or human causes which result in failure to report results to the Secretary of State at least every two hours shall be reported to her or him by the 28th day following the election. The responsible elections official may also report other delays in the processing of ballots, as he or she deems appropriate.

7.7 Preparation of Specific Written Procedures

Each elections official shall prepare specific written procedures for each phase, step and procedure in the preparation, operation of polling places, vote counting and official canvasses of elections. Written procedures must also include instructions to precinct officials regarding proper handling of absent voter and provisional voter ballots as well as a description of procedures used to manually recount ballots pursuant to Elections Code section 15600.
Table 1
Election Test Schedule and Requirements

<table>
<thead>
<tr>
<th>Test</th>
<th>Days Before or After the Election</th>
<th>Time Period</th>
<th>Ballot Types Used</th>
<th>Cards or Digital Media</th>
<th>Vote Count Program</th>
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<tr>
<td>System Proofing</td>
<td>E -40 - E -10</td>
<td>Prior to E -7 Certification</td>
<td>All</td>
<td>Ballot cards or Digital media</td>
<td>Yes</td>
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<tr>
<td>Exception</td>
<td>E -40 - E -10</td>
<td>Prior to E -7 Certification</td>
<td>All</td>
<td>Ballot cards</td>
<td>Yes</td>
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<tr>
<td>Election-Specific</td>
<td>E -40 - E -10</td>
<td>Prior to E -7 Certification</td>
<td>All</td>
<td>Ballot cards</td>
<td>Yes</td>
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<tr>
<td>Logic</td>
<td>E -40 - E -10</td>
<td>Prior to E -7 Certification</td>
<td>All</td>
<td>Ballot cards or Digital media</td>
<td>Yes</td>
</tr>
<tr>
<td>Accuracy</td>
<td>E -40 - E -10</td>
<td>Prior to E -7 Certification</td>
<td>N/A</td>
<td>Reusable cards</td>
<td>No</td>
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<tr>
<td>Logic</td>
<td>E -10</td>
<td>For E -7 Certification</td>
<td>All</td>
<td>Ballot cards</td>
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<tr>
<td>Accuracy</td>
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<td>For E -7 Certification</td>
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<td>Reusable cards</td>
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<td>Logic</td>
<td>E</td>
<td>Immediately before and after counting any ballots</td>
<td>Recommend all; permit sampling to include all candidates and measures</td>
<td>Ballot cards or Digital media</td>
<td>Yes</td>
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<td>Accuracy</td>
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<td>For official canvass</td>
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<td>Reusable cards</td>
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<td>For official canvass</td>
<td>N/A</td>
<td>Ballot cards or Digital media</td>
<td>Yes</td>
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APPENDIX A

Certification by Logic and Accuracy Board

We, the undersigned, having been appointed by the elections official in the county named below to verify the logic of the computer vote count program for the election indicated below, as required by the Procedures adopted pursuant to Elections Code section 19205, do hereby certify through the Elections Official to the Secretary of State:

THAT the pre-vote counting tests, as defined in the above mentioned procedures, have been performed;

THAT the pre-vote counting test results have been compared with the pre-determined correct totals for each office and ballot measure;

THAT the cause of any discrepancy was found and corrected; and,

THAT the logic test programs, test ballot cards, and test printed output which were certified as correct by the Logic Verification Board were delivered into the custody of Elections Official.

<table>
<thead>
<tr>
<th>ELECTIONS OFFICIAL’S NAME AND TITLE</th>
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<tr>
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<tr>
<th>SIGNATURE OF THIRD BOARD MEMBER</th>
<th>DATE</th>
</tr>
</thead>
</table>
APPENDIX B

Certificate of Biennial Inspection

I, the elections official named below, hereby certify that in the normal course of pre-election hardware maintenance and testing of our voting and vote tabulating equipment, for the election indicated below, that I have found the voting and vote tabulating equipment for the city/county named below to be operating correctly and accurately. This certificate is issued pursuant to Elections Code section 19220.

ELECTIONS OFFICIAL’S NAME AND TITLE

ELECTION DATE COUNTY

SIGNATURE AND DATE

SEAL