

Better Elections Every Day

California Election Procedures Manual for ES&S Central Scanners (Models 550 and 650)

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State of California

PROCEDURES

Required for Use of the

Model 550 and Model 650 Voting Systems

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 Model 550 and Model 650 Voting Systems at all elections governed by the California Elections Code.

These procedures shall be effective beginning September 20, 2004, 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 elections officials to enhance the security and reliability of the electoral process.



Our Mission

Our Mission is to support democracy worldwide by providing proven, accurate, and innovative election systems and services to voters and election officials.

Our Vision

Our Vision is to continuously improve and grow our integrated total election solutions that provide "Better Elections Every Day." We will accomplish this vision with an uncompromising commitment to customer satisfaction and integrity within the election process.

Who We Are

ES&S is a company of dedicated people building integrated systems and developing solutions for the election official's total management needs:

- Election and voter registration management software
- Ballot counting and tabulation hardware
- Election information management software

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FCC Compliance:

Central scanners comply with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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Chapter 1: Introduction

The California Election Procedures Manual for ES&S Central Scanners (California Procedures Manual) contains guidelines for following election procedures adopted by California's Secretary of State according to the state Elections Code sections 19100 and 19205. Use the information in the California Procedures Manual to conduct all elections governed by the California Elections Code when you use ES&S central scanners (Models 550 and 650).

Follow the guidelines in the *California Procedures Manual* along with all other statutory and regulatory requirements. Whenever possible, carry out all of the procedures described in this manual in full view of the public.

The procedures described here constitute a minimum standard of performance and are not intended to preclude additional measures implemented by individual election officials to enhance security and reliability for the election process.

Consult the California Elections Code for the exact election requirements in your jurisdiction. Contact California's Secretary of State or go online to www.leginfo.ca.gov/cgi-bin/calawquery?codesection=elec&codebody=&hits=20 for a copy of the California Elections Code.

Contacting ES&S

Contact ES&S with any scanner or procedural questions. Support representatives are available between 8:00 a.m. and 5:00 p.m. Central Standard Time with extended support hours during election periods.

Telephone: 800-247-8683 (USA & Canada) or

402-593-0101 (International)

Fax: 402-593-8107

Mail: Election Systems & Software

11208 John Galt Blvd. Omaha, NE 68137 USA

Understanding Central Count Systems

Jurisdictions that use central scanners transport ballots from polling places to a central count location where election officials scan the ballots.

Jurisdictions save ballot data from central count scanners, such as the ES&S Model 550 or 650, to 3.5-inch disks or zip disks every half-hour. The jurisdiction loads the totals disks into Reporting Manager and produces results reports while continuing to scan ballots. The jurisdiction produces a final election report after loading the last scanner disk into Reporting Manager.

When selecting the installation location of the central scanner one should consider the physical security within the surrounding and the location of the installation.

Ballot counting should be performed in public view, but the location selected should still be secure to prevent unauthorized access to the tabulation equipment. All authorized personal should be clearly identified, by some type of visual identification such as an identification badge.

Scanner Functions

Central scanners perform the following functions:

- Authenticate ballot stock.
- Check the pre-printed codes along the ballot edge to determine the precinct, split, and type of each scanned ballot.
- Read voter choices for candidates or issues. The entire reading process takes only a fraction of a second for each ballot.
- Check for ballot irregularities. For example, if a voter opts not to vote in one race, the scanner recognizes and records that choice. Or, if the scanner detects a torn ballot, the scanner stops and provides the operator with instructions for handling the ballot.
- Tabulate votes for each race and track the race count by precinct, as well as tracking the total ballots counted by precinct and by ballot type.
- Track absentee results in several ways:

Tallied with the regular precinct totals
Tallied separately from the regular precinct totals
Tallied as a duplicate precinct set
If using ERS, tallies votes as a separate group within ERS

- Generate reports to show up-to-the-minute totals by individual precinct, city, or by county. Final reports serve as unofficial election night results. The scanner also generates a date stamped audit log of scanner activities.
- Save election results to disk, in order to save a permanent record of the election or to use as backup data.

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Chapter 2: Understanding Ballots

ES&S central scanners use 14-, 17- or 19-to-21-inch ballots. Standard, coded ballot stock measures 8.5 by 17 inches. The standard ballot that the scanner reads has three columns and is 8.5 by 14 inches with 36 rows of ballot selection text and 216 voting target (oval) locations. Use the extra three inches on the coded stock for ballot stubs. Place two stubs on your ballot if you bind your ballots. Use the bottom stub as the bind stub to tear the ballot away from the bound stack and use the next stub as the audit stub to keep a paper record of your registered voters. All ballots used with the election process must be produced and finished by a Secretary of State certified printer and the county must follow the Secretary of State procedures for ballot inventory.

A single, central scanner ballot usually fits on a single sheet of ballot stock, but the ballot can fill two sheets or more. You can format the ballot as single sided or double-sided, with up to three columns on each side. ES&S delivers ballots in stacks of 300 and shrink wraps or binds ballots according to the specifications of each jurisdiction.

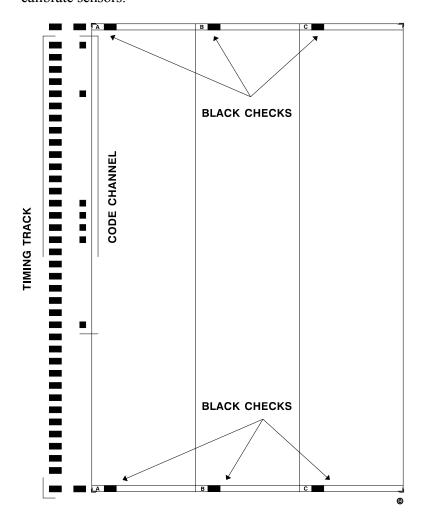
Ballot paper and punch cards used by any jurisdiction holding an election governed by California law are tinted, watermarked or overprinted with a design furnished by the Secretary of State of California. ES&S prints ballots to ensure that the watermark or overprint is clearly visible.

Voting Targets

Voting targets (ovals) appear to the left of each ballot selection and voters use special, machine-readable pencils to fill in the ovals to indicate ballot selections. Scanners cannot read the ink used to print the actual ovals or ballot text (such as contest descriptions and candidate names). Machine-readable ink is black and ink that the scanner cannot read is a shade of gray or another color. The six possible column positions for ovals correspond to fiber-optic sensors on the scanner.

Machine-Readable Marks

Other than voter marks, the machine-readable marks on the ballot include the timing track, code channel and black check marks. The timing track is the row of black boxes on the far-left edge of an optical scan ballot. Scanners read the timing track to locate oval positions on the ballot. The code channel is the column of numbered black boxes on the left side of a ballot immediately to the right of the timing track. The scanner reads combinations of boxes in the code channel to determine the precinct, split, type and style of a ballot. Black checks appear above and below each ballot column, above and below the timing track, and above and below the code channel on optical scan ballots. The locations of black checks correspond to sensor locations of ES&S ballot scanners (the black check mark in column 'A' corresponds with sensor 'A') Ballot scanners read black checks to calibrate sensors.



Understanding Ballot Data

Scanners draw three types of data from scanned ballots: audit information, ballot information and voter marks.

Audit Information

The scanner reads the timing track and black checks for audit information. The scanner rejects ballots with damaged or misprinted boxes in the timing track. The scanner reads black checks to calibrate sensors. ES&S prints all of the audit marks on a ballot in machine-readable ink.

Ballot Information

Scanners read the code channel for ballot precinct, type, split and style information. The code channel relays ballot information that matches the ballot sequence number, the party designation of the ballot (ballot type), and ballot split information.

Voter Marks

The scanner reads and records voter marks, combines the selections for each voter and produces election results based on the combined totals. The scanner reads properly marked ovals (completely filled) as well as check marks, X's and horizontal lines.

Ballot Contents

The ballots for ES&S central scanners contain the following information in accordance with section 13103 of the California Elections Code:

- The title of each office arranged to conform to the Elections Code.
- The names of all qualified candidates with exceptions outlined in the California Elections Code.
- Titles and summaries of measures submitted for voter approval.

Candidate and party names appear on ballots according to the guidelines in section 13105-13108 of the California Elections Code.

Contest order adheres to the guidelines in section 13109 of the Elections Code. Additional ballot formatting also adheres to the guidelines in Division 13, Chapter 3 of the Elections Code.

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Identifying Ballots

The precinct name appears in the lower left corner of most ballots. Use the precinct name to verify that scanned ballots belong to the correct precinct.

You can also use the three-digit sequence number (at the lower right corner of most ballots) to identify the ballot precinct. A colon and a split number follow the ballot sequence number on ballots from split precincts.

Ballot Stubs

Format each ballot with one or two ballot stubs and include the identifying information specified in section 13261 of the California Elections Code on each stub.

Sample Ballots

Use the guidelines from Division 13, Chapter 4 of the California Elections Code to create and send sample ballots to each registered voter in the jurisdiction that displays the ballot that will be used.

Ballot Shortages

Remind polling place workers to contact election central long before the polling place runs out of a particular ballot style. If your jurisdiction completely runs out of ballots and you do not have ballot-on-demand to print additional ballots on ES&S code stock which requires a separate certification by the Secretary of State, you can photocopy ballots. Hand-count the copied ballots when the ballots are returned to the central count location. The County Clerk or a designated election official should initial, stamp or mark each photocopied ballot to designate each copied ballot as a valid ballot that can be hand-counted or reproduced as duplicated ballots.

Note: Consult the California Elections Code for laws and regulations regarding the duplication of ballots.

Reserve Ballots

Keep copies of each ballot used in your jurisdiction at the central count location. If a polling place runs out of ballots, duplicate ballots at the central location, if necessary, and deliver the ballots to the correct polling place. Also keep copies of absentee ballots at the central location.

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Chapter 3: Pre-Election and Testing Requirements

Use the procedures in Chapter 2 to prepare and send absentee ballots, test your equipment and prepare your polling place for an election. Follow the guidelines in the California Elections Code sections 19320 to 19323 to prepare your scanners for an election. Use your central scanner operator's guides and maintenance guides to perform the following pre-election maintenance on your scanners:

- Replace the pick belt
- Clean and replace the retard pad
- Clean the rollers
- Clean the fiber optic sensor
- Clean the scanner
- Connect the scanner to the external printer
- Install the election definition for your scanner
- Handling unofficial totals
- Check physical surrounding.

Pre-Election Hardware Maintenance

Use the procedures described in your central scanner's maintenance manual to perform any necessary pre-election tests and maintenance.

Checking the System

Send written notice of the testing location and the testing time of your scanners to the chairperson of the county central committee of at least two political parties participating in your election. Allow one representative from each political party in your election to view your scanner tests. Party representatives verify that the scanners tabulate accurately and that county officials set all of the scanner's counters to zero before the election. Lock and seal the scanners after you prepare and test your equipment. Store your scanners at the central count location for your jurisdiction. Make sure you have the following equipment available for each scanner at the central count location:

• **Pick Belts:** Four-inch diameter rubber belts. ES&S manufactures and ships pick belts with your test deck and election definition. **Quantity: five**

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- **Retard Pads:** Thin, oval, rubbery pads about one inch wide. Only order from ES&S. **Quantity:** two
- **8.5**" x **11**", **continuous feed, three-part paper:** Use carbonless paper in your printer to avoid smearing. Use one-part paper if you use Election Reporting Manager. **Quantity: two boxes**
- Pressurized air cans: To clean sensors. Quantity: two
- Cloth and Isopropyl rubbing alcohol: To clean the rollers. Quantity: one bottle
- Small white adhesive labels, ½ inch wide: Used to cover stray marks on ballots. Only use labels from ES&S. Quantity: 12 sheets
- Formatted Diskettes, 3.5 inches or zip disks (Model 650): To store results. Quantity: 10
- **Spare printer ribbon:** Back-up ribbon for your printer. Refer to your printer manual for the ribbon type. **Quantity: one per printer**

Proofing the System

Verify the correctness of all of your election preparations, including the following:

- Make sure you assign each ballot type to the correct jurisdiction.
- Make sure each of your precincts receives the correct ballot type.
- Verify the ballot contents for each ballot type. Make sure contests and candidates appear on ballots for the correct precinct. Verify the ballot sequence and ballot code numbers.
- Proofread ballot instructions, contest titles, candidate names and all other ballot text. Make sure each ballot element appears in the correct location on the ballot.
- Verify the sample ballots for each of your polling places. Make sure that the sample ballot is correct and matches the official ballot for the polling place.
- Examine other ballot elements such as print quality, perforations, folds and ballot codes. Make sure each element appears correctly.
- Make sure that the voting target positions on the ballot match the positions programmed into your election definition.
- Verify the voter registration data for the active precincts in your election.

Testing for Error Conditions

Make sure your scanner responds properly to error conditions, including the following:

- Pick failures
- Ballot orientation errors
- Multi-sheet errors
- Invalid marks

Note: Consult your Operator's Guide for a complete list of scanner errors.

Testing Ballots and Equipment

Use the ballot test deck provided by ES&S to test your scanners and your election. A ballot test deck is a set of marked ballots used to check ballot scanners and tabulation software for accuracy. Test decks include sample ballots for every precinct, split and rotation in a jurisdiction. ES&S marks each voting position on the ballot and audits the test deck for elections coded at ES&S. Code your own test deck if you code your own elections. Prepare your test deck according to the California Elections Code sections 19320 to 19323.

Note: Clearly mark your test ballots so that you can distinguish test ballots from your official election ballots.

Follow sections 15000 to 15004 in the California Elections Code to test your ballots and equipment. The Elections Code requires you to adhere to the following testing guidelines.

- Test each of your central scanners no later than seven days prior to an election.
- Deposit a copy of the "computer vote count program" for a statewide election
 or a state special election to fill vacancies with the Secretary of State no later
 than 5:00 p.m. seven days before the election. If the program changes in the
 seven days leading up to the election, submit a new copy of the program to the
 Secretary of State no later than noon the day after the change. Read section
 15001 of the Elections Code for additional rules regarding the count program.

Testing Central Scanners

Use the following resources to test your ballot scanners:

- Have test ballots for each ballot type that your scanner counts on Election Day.
- Test Data from ES&S. ES&S scans and audits the test ballots for your election and provides summary and status reports with the correct totals for your test deck. Check your totals against those provided by ES&S after you test your ballots.
- Use the marked test deck from ES&S to test your scanners. The test deck contains ballots with valid votes, over-voted ballots and blank ballots to test the logic of your scanners for each ballot mark.

Use the following instructions as a general guideline to test each of your central scanners before an election. Use the instructions in your central scanner operator's and maintenance manuals as well as the rules in the California Elections Code to thoroughly test your scanner.

To test the scanner

- 1. Establish a Logic and Accuracy board to observe the test and send a test certification to the Secretary of State no later than seven days before your election. The Logic and Accuracy Board observes the logic and accuracy tests for your scanners and software and certifies your test and testing equipment.
- 2. Erase all of the totals from your scanner and turn off any activated ballot sorting options.
- 3. Load your ballot test deck into the input hopper and scan the deck. Read your central scanner operator's manual for ballot scanning procedures.
- 4. Print a summary report and a status report.
- 5. Compare your reports to the reports that ES&S supplied with the test deck. The report totals should match.

Note: Run the test again if your totals do not match the totals from ES&S. Contact ES&S if the totals do not match after the second test. Also, run the test a second time if you encounter an unreasonable number of scanning errors (pick failures, sensor read errors, etc.) during the test run. Recalibrate your scanner and repeat the test.

6. Zero your totals and run another summary report and status report to verify that your scanners do not have totals stored in memory. Keep your test deck, your summary report and your zero report for as long as you store ballots for the election.

Note: According to the California Elections Code section 15004. "The county central committee of each qualified political party may employ, and may have present at the central counting place or places, not more than two qualified data processing specialists or engineers to check and review the preparation and operation of the tabulating devices, their programming and testing, and have the specialists or engineers in attendance at any or all phases of the election."

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Chapter 4: Election Procedures

Follow the procedures outlined in the California Elections Code Division 14, Chapter 3 to distribute and receive central scanner ballots. Follow the guidelines in Division 15 of the Elections Code to count ballots and produce final elections reports. Use the instructions in this chapter of the *Election Procedures Manual* as general guidelines for collecting ballots and counting votes on a central scanner. Consult the Elections Code for specific regulations regarding ballot tabulation in your jurisdiction.

Chapter 3 of the *Election Procedures Manual* contains instructions for the following tasks on Election Day:

- Performing final readiness checks
- Polling Place Procedures
- Closing the Polls
- Processing Ballots
- Storing vote totals on a disk
- Adding vote totals from a disk to a scanner
- Printing reports

Read the operator's manual for your central scanner for specific instructions for performing each of the tasks above.

Performing Final Readiness Checks

Perform a final readiness check before you count ballots on Election Day.

To check the scanner's readiness:

1. Turn off the ballot scanner, but leave it plugged in.

Note: Plug your scanner into a grounded, three-prong electrical outlet with only one scanner plugged into a single wall or floor outlet. Use the power strip that came with your scanner to power the scanner and printer.

2. Verify that your printer is on, properly loaded with paper and that the print head is at the top of the page. Refer to the printer manufacturer's instructions for guidance. Always store the printer manual in the drawer of the scanner stand.

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3. Turn on the scanner.

The indicator lights will flash and the following message will appear:

MEMORY NOT CLEARED

The MODE option defaults to "on-line," and the FORMAT in the REPORTS section automatically sets to "SHORT."

An automatic status report with the county or city name, the election type and date, log information reflecting checks on program configuration, election options, and hardware configuration will print.

Note: Contact ES&S customer support if any information on your status report is not correct.

- 4. Make sure the "on-line" lamp illuminates in the MODE section, press **SELECT** until the light goes on if it is not lit by default.
- 5. Simultaneously press **ZERO TOTALS** and **ZERO/ADD ENABLE**.

Indicator lights will flash and the message "CLEARING AND TESTING COUNTER MEMORY" will appear. All totals will be erased from the scanner's memory.

After the totals have been zeroed, the message "TOTALS HAVE BEEN SET TO ZERO" will appear in the display.

6. In the REPORTS section, press **FORMAT** until LONG is selected, and then press **GRAND TOTALS**.

The message "SUMMARY REPORT" will appear. Once the information has been downloaded, "READY" will appear in the display.

- 7. In the **REPORTS** section, press **STATUS REPORT**.
- 8. Verify that all totals on both reports are set to zero.

If the totals are not set to zero, repeat steps 5 through 7. If the problem persists, contact an ES&S technical support representative.

9. Set the appropriate SORT options for your election. Do not change the sort options after ballot scanning begins.

Note: If your jurisdiction counts sorted ballots immediately after the machine sorts them, be sure to turn on the appropriate sort option again *before* scanning the next precinct's ballots to ensure that all ballots scanned get sorted.

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Polling Place Procedures

Use the following procedures at the polling place.

Opening the Polls

- 1. Follow the guidelines in section 12321 of the Elections Code to complete the oaths of office and declarations of intention to faithfully discharge their duties as required of precinct inspectors and other members of the precinct boards.
- 2. Set up your voting booths with the display materials required by the Elections Code.
- 3. Post your sample ballots in a location accessible to your voters.
- 4. Open the Polls.

Election Procedures

- 1. Follow the guidelines in Division 14, Chapter 3 of the California Elections Code to verify voter qualifications and distribute ballots.
- 2. Assist voters and instruct voters on how to mark ballots properly.

Closing the Polls

Perform all of the tasks required for closing the polls in plain view of the public.

- 1. Follow the guidelines in Division 14, Chapter 4 of the California Elections Code when you close the polls.
- 2. Verbally declare that the polls are closed at the proper closing time.
- 3. Allow any voters remaining in line to vote, but turn away any voters that arrive at the polling place after the official closing time.
- 4. Package all of your unused ballots according to the guidelines in the Elections Code.

Processing Ballots

Refer to the California Elections Code, Division 15, for the regulations that govern scanning and tabulating ballots. Use the instructions in the "Scanning Ballots" section of the *Election Procedures Manual* as a general guideline for scanning your ballots. Consult the operator's manual for your central scanner for more detailed instructions for scanning ballots.

Guidelines for Processing Central Count Ballots

Use the following guidelines from the California Elections Code sections 15200 to 15213 when you transport and count ballots at a central count location:

- **15200**. If paper ballots are used in conjunction with this system, counting shall be as provided in Article 5 (commencing with Section 15270) and Article 6 (commencing with Section 15290).
- 15201. (a) As soon as the polls are closed, the precinct board shall, in the presence of the public do all of the following: (1) Seal the container used to transport voted ballots and insure that the precinct number is designated on the ballot container. (2) Certify, sign, and seal the several packages or envelopes as directed by the elections official. (3) By not less than two of their number, deliver the ballot container and packages to the elections official at the central counting place in the manner prescribed by the elections official. The ballot container and packages shall remain in their exclusive possession until delivered to the elections official. (b) This section also applies to ballots counted manually pursuant to Article 6 (commencing with Section 15290).
- 15202. If the ballots are to be counted at a central counting place, no fewer
 than two precinct board members shall, following the close of the polls,
 deliver the ballots, in a sealed container, to the central counting place or a
 designated receiving station. There may be two or more central counting
 places.
- 15203. The vote tabulating device may be located at any place within the state approved by the elections official of the county or other political subdivision using the device. The same device may be jointly owned, borrowed, leased, or used by two or more counties, cities, or other political subdivisions to tabulate ballots cast in any election.
- 15204. All proceedings at the central counting place, or counting places, if applicable, shall be open to the view of the public but no person, except one employed and designated for the purpose by the elections official or his or her authorized deputy, shall touch any ballot container. Access to the area where electronic data processing equipment is being operated may be restricted to those persons authorized by the elections official.

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- 15205. (a) A person may be employed to count, tally, and certify the ballots if he or she is not a candidate at the election and if he or she satisfies either of the following requirements: (1) Has the qualifications required for a precinct board member. (2) Is a deputy or employee of either of the following: (A) The governing board. (B) The elections official. (b) No person selected to count ballots need reside in any particular precinct.
- 15206. The elections official or any deputy authorized by the elections official may excuse or dismiss any person from any counting board and enforce the order.
- **15207**. The elections official or authorized deputy shall segregate the persons employed to count the ballots into counting boards. These counting boards shall be deemed to be precinct boards, and are subject to all laws governing precinct boards where ballots are counted at the polling place.
- 15208. Each container of ballots shall be opened and its contents removed. The ballots shall be checked to ascertain if the ballots are properly grouped and shall be arranged, if necessary, so that all similar ballots from the precinct are together. Any ballot that is torn, bent, or mutilated shall be segregated in the manner directed by the elections official and a duplicate shall be prepared as provided in Section 15210. Any ballot that is marked in a manner so as to identify the voter shall be marked "Void" and shall be placed in the container for void ballots.
- 15209. Any magnetic or electronic storage medium used for the ballot tabulation program and any magnetic or electronic storage medium containing election results shall be kept in a secure location and shall be retained for six months following any local election and 22 months following any federal election or so long thereafter as any contest involving the vote at the local or federal election remains undetermined.
- 15210. In preparing the voted ballots for processing, any ballot that is torn, bent, or otherwise defective shall be corrected so that every vote cast by the voter shall be counted by the automatic tabulating equipment. If necessary, a true duplicate copy of the defective ballot shall be made and substituted therefore, following the intention of the voter insofar as it can be ascertained from the defective ballot. All duplicate ballots shall be clearly labeled "duplicate," and shall bear a serial number that shall be recorded on the damaged or defective ballot. Should what appears to be a validly marked ballot be deemed unreadable in part or in its entirety by the scanner, processing will stop and operator intervention will be required. If, after the operator inspects the ballot, the ballot appears to be validly marked, it will be reprocessed. If, upon reprocessing, the ballot is again deemed unreadable, it will be sent to the Ballot Duplication Board wherein a true and accurate copy will be made and the duplicate ballot reentered into the ballot tabulation process.

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- 15211. If paper ballots are used for absentee voting, the canvass may be conducted in accordance with Chapter 1 (commencing with Section 15000), or the elections official may have a true duplicate copy of absentee voter paper ballots made on punchcard ballots that shall be verified in the presence of witnesses. After verification the punchcard ballots shall be counted in the same manner as other punchcard ballots.
- 15212. If voting at all precincts within a county is not conducted using the same voting system, the result as to the precincts not subject to this article shall be determined in accordance with other provisions of this code and the result of the vote at precincts subject to this article shall be determined as provided in this article. The statement of the vote in that case shall represent the consolidation of all the results and the results of the canvass of all absent voter ballots.
- 15213. In case of an emergency in which it becomes impossible to transport the ballots from the precinct to a central counting place, the elections official may direct that the ballots be counted at the precinct. In those cases, counting shall be conducted substantially in accordance with Article 5 (commencing with Section 15270).

Assigning Election Boards

Before processing ballots, the election administrator appoints election boards to carry out the following tasks:

- Absentee and provisional ballot processing
- Logic and accuracy testing
- Seal and ballot container inspection
- Ballot inspection
- Ballot processing
- Ballot duplication
- Write-in ballot processing
- Ballot storage
- Election observation

Absentee and Provisional Ballot Processing

Any person wishing to cast a provisional ballot must be allowed to do so and will be subjected to the verification process outlined within the California Elections Code. The ballot will only be counted after the legitimacy of the voter's right to cast it has been verified. Examine the ballots for defects or irregularities. Check the names of the absentee and provisional voters against the voter record. Make sure the absentee voter cast only one ballot and make sure the provisional voter can legally cast a ballot in all races in which a vote was cast.

Logic and Accuracy Testing

Perform scanner logic and accuracy tests before and after the election. See Chapter 2 for instructions for clearing and testing the scanner. Logic and accuracy testing consists of processing a group of pre-marked ballots whose totals are known in advance. These predetermined groups of test ballots or test decks will also contain an example of any error type ballot that can occur. All contests in all ballot types and/or ballot styles are tested in this manner. Any deviation from the predetermined totals are rectified prior to the conclusion of Logic and Accuracy Testing. Only when the foregoing conditions have been satisfied is the tabulating equipment certified for processing that specific election.

Seal and Ballot Container Inspection

Ensure the security of the ballot boxes. Report any irregularities with the ballot boxes to the election administrator.

Ballot Inspection

Remove voted ballots from the ballot boxes. Remove any remaining portions of the ballot stub. Align and jog the ballots for scanning. Inspect all ballots for any apparent inadvertent mismarking, i.e., improper color of ink, x'ing or circling of candidate names, etc. If clear voter intent is present in these ballots, they should be forwarded to the Duplicate Ballot Board for appropriate action.

Ballot Processing

Process voted ballots on the central scanner. Sort write-in, blank, over-voted and unreadable ballots from the general population and give them to the resolutions board for interpretation and duplication. Return counted ballots to the correct ballot boxes and maintain the working order of the scanner.

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Ballot Duplication

Members of the resolutions board interpret and duplicate unreadable and overvoted ballots. Unreadable ballots are those that the scanner cannot process because they are entirely blank or contain one or more unreadable marks. Ballots containing unreadable marks are defined in section 15210 on page 17 of these procedures.

Write-in Ballot Processing

Members of the resolutions board view and record write-in votes according to the guidelines in the California Elections Code.

Ballot Storage

Receive counted ballots from the ballot processor. Secure the counted ballots until you run a final logic and accuracy test on your central scanners. Store the ballots after the legal period for calling a recount passes, according to the California Elections Code.

Election Observation

Appoint a panel to observe the counting process without interfering with the vote count. The panel ensures that all procedures are carried out legally and accurately.

Scanning Ballots from Early Voting

Early voting allows voters to cast valid ballots at the election office in advance of your election. If your jurisdiction allows early voting, use the guidelines in the California Elections Code to carry out early voting and securely store ballots until the polls close on Election Day or until the allowable time at which absentee ballots may be processed and counted.

Scanning Absentee Ballots

Follow the guidelines in sections 15100 to 15112 of the California Elections Code for counting absentee ballots. California law allows for verifying absent voter envelope signatures and other processing steps prior to Election Day. Absentee ballots may be counted but no results may be tallied or released prior to the close of polls. Depending on the laws in your jurisdiction, you can sometimes count absentee ballots before the polls close.

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Some election offices scan absentee ballots separately from the Election Day ballots and other jurisdiction mix absentee ballots with regular precinct ballots. ES&S central scanners can use either method to process absentee ballots.

To scan absentee ballots separately from Election Day ballots, press **ABSENTEE MODE** on the control panel. A confirmation message will appear and the scanner will add all of the totals from the scanned absentee results.

Note: Program your election definition with your absentee scanning method.

To scan mixed ballots, mix your absentee ballots with your Election Day ballots and it will add the totals from each absentee ballot to the totals for each ballot's home precinct.

Processing Provisional Ballots

Distribute provisional ballots to voters who do not appear on the voter registration record. Allow the voter to vote and separate the provisional ballot from the general ballot population. Use the guidelines in section 14310 of the California Elections Code to scan and record totals from provisional ballots.

Scanning Election Day Ballots

Use the following general procedure to scan your Election Day ballots. Read the California Elections Code, Division 15, and the instructions in your central scanner operator's manual for specific guidelines for scanning and tabulating ballots.

To scan ballots

- 1. Push the input hopper tray down until it latches, making sure to press down on the middle of the tray and not the edges.
- 2. Arrange the ballots so that they are all face-up and facing the same direction.
- 3. "Jog" the ballots by gently shuffling them until the pages separate to prevent ballots from sticking together and to reduce paper jams in the scanner.
- 4. Load the ballots face-up into the input hopper tray with the cut corners placed directly under the pick belt. Only one corner of each ballot is cut. When facing the front of a ballot, the cut corner is the upper-right corner. Lightly tap the ballots so that they are flush against the two metal sides of the input hopper.

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- 5. Push the input hopper tray down until the latch releases, and then let the hopper rise.
- 6. Press the **START** button to begin scanning ballots.

Ballot information will not be saved until a ballot moves all the way through the read area and is deposited in the output hopper.

If the scanner suddenly stops, read the error message on the display screen and consult your operator's manual to resolve the problem.

- 7. Press the **STOP** button to stop scanning if you need to stop the machine before the input hopper is empty.
- 8. Remove ballots from the output hopper when the hopper begins to fill and place the counted ballots in an appropriate location specified by local election procedures. **Separate the counted ballots from the uncounted ballots** to make sure ballots are not counted more than once.

Note: If you suspect that counted and uncounted ballots have been mixed, print a precinct status report and compare it to the ballot accounting form to verify if ballots have been scanned more than once.

Additional Ballot Processing Procedures

Use the following procedures when you process ballots.

- Sort and record write-in ballots. Central scanners automatically sort ballots with write-in votes as you process ballots.
- Present any damaged or unreadable ballots to the resolutions board for interpretation and duplication.

Storing Totals on a Disk

Store scanner results to a 3.5" disk or a zip disk if you use the Model 650. Save and store your scanner results or use the totals disk to transfer election information to election reporting software.

- 1. Insert a disk into the disk drive.
- 2. Press **SAVE TO DISKETTE** on the control panel.

The scanner automatically assigns system and diskette numbers to the disk. These numbers appear on the display screen.

3. Remove the disk and label it with the date, time, election title, disk number and scanner number.

Adding Totals from a Disk to a Scanner

If there is a power failure, or if you mistakenly zero totals on a scanner, reload the scanner with the last totals saved to disk.

To add vote counts to the scanner:

- 1. Zero election totals by simultaneously pressing **ZERO/ADD ENABLE** and **ZERO TOTALS** on the control panel.
- 2. Insert a disk with previously saved totals into the disk drive.
- 3. Simultaneously press **ZERO/ADD ENABLE** and **ADD TO MEMORY**.

The system and diskette number appears on the display screen. In addition, the messages "VERIFYING," "LOADING" and "ADDED" will appear during the process to indicate the current processing stage of the load.

- 4. The READY indicator light appears after you add totals.
- 5. Remove the disk from the scanner.

Printing Reports

There are four ballot tabulation reports that you can generate directly from the ballot scanner – the Grand Totals Report, the Status Report, the Precinct Report, and the Last Precinct Report. Use any of the reports to provide vote summary information to candidates and the media. Consult your central scanner operators manual for report explanations.

To print reports:

- 1. In the REPORTS area of the control panel, press **FORMAT** to select either short or long format.
- 2. Press the appropriate button to print a report.

Note: Wait for the READY indicator light to appear before printing additional reports.

Handling Unofficial Totals

Report your preliminary absentee vote counts, according to section 15101 of the Elections Code, to the Secretary of State immediately after the polls close. This requirement applies to all elections that require you to report results to the Secretary of State.

Chapter 5: Post-Election Procedures

Use the guidelines in Division 15, Chapter 4 of the California Elections Code to build the official election canvass and announce your election results.

Understanding the Official Canvass

The official canvass is a post-election audit of several voting precinct's ballot returns and absentee ballot returns. The official canvass is used to:

- Validate the outcome of an election by verifying that the number of ballots
 cast is not greater than the total number of voters that signed the voter index or
 were issued absentee ballots.
- Account for all official ballots produced for the election and to ensure that the precinct board properly executed all required certificates and oaths.
- Verify the accuracy of the computer count by manually recounting voted ballots from at least one precinct of the voting precincts and comparing the manual totals to the system generated totals.

The official canvass must be performed by a minimum of three people.

Official Canvass Guidelines from the Elections Code

Use the following guidelines from sections 15301 to 15304 of the California Elections Code when you perform the official canvass:

• **15301.** The canvass shall commence no later than the Thursday following the election, shall be open to the public, and, for state or statewide elections, shall result in a report of results to the Secretary of State. The canvass shall be continued daily, Saturdays, Sundays, and holidays excepted, for not less than six hours each day until completed.

- 15302. The official canvass shall include, but not be limited to, the following tasks: (a) An inspection of all materials and supplies returned by poll workers. (b) A reconciliation of the number of signatures on the roster with the number of ballots recorded on the ballot statement. (c) In the event of a discrepancy in the reconciliation required by subdivision (b), the number of ballots received from each polling place shall be reconciled with the number of ballots cast, as indicated on the ballot statement. (d) A reconciliation of the number of ballots counted, spoiled, canceled, or invalidated due to identifying marks, overvotes, or as otherwise provided by statute, with the number of votes recorded, including absentee and provisional ballots, by the vote counting system. (e) Processing and counting any valid absentee and provisional ballots not included in the semifinal official canvass. (f) Counting any valid write-in votes. (g) Reproducing any damaged ballots, if necessary. (h) Reporting final results to the governing board and the Secretary of State, as required.
- 15303. If the returns from any precinct are incomplete, ambiguous, not properly authenticated, or otherwise defective, the elections official may issue and serve subpoenas requiring members of the precinct board to appear and be examined under oath concerning the manner in which votes were counted and the result of the count in their precinct. This section shall apply when ballots are tabulated manually or automatically at the polls.
- 15304. In jurisdictions using a central counting place, the elections official may appoint not less than three deputies to open the envelopes or containers with the materials returned from the precincts. If, after examination, any of the materials are incomplete, ambiguous, not properly authenticated, or otherwise defective, the precinct officers may be summoned before the elections official and examined under oath to describe polling place procedures and to correct the errors or omissions.

Completing the Official Canvass

Manually recount the ballots from at least one percent of your precincts, chosen at random, according to the guidelines described in section 15360 of the California Elections Code. Use the manual recount to verify the results from your central scanner.

Ballot Security and Reporting Results

Use the following instructions as a general guideline for reporting results. Consult sections 15370 to 15376 of the California Elections Code for specific regulations governing the reporting of results.

To report results

- 1. Complete the official canvass and add any write-in votes or other totals to the final vote count. Post the final vote count at the counting location for public inspection.
- 2. Prepare a certified statement of the election results and submit the statement to the governing district within 28 days of the election. Show results on a precinct by precinct basis. Include the following information on your statement of results:
 - The total number of votes cast
 - The number of votes cast at each precinct for each candidate and for and against each measure
 - The total number of votes cast for each candidate and for and against each measure
 - The number of votes cast in each city, Assembly District, congressional district, State Senate District, State Board of Equalization District, and supervisorial district located in whole or in part of the county.
- 3. Send a copy of the results to each of the following:
 - All candidates participating in your statewide election.
 - All of the candidates voted for in the following offices:

Member of the Assembly

Member of the Senate

Member of the U.S. House of Representatives

U.S. Senate

Member of the State Board of Equalization

Justice of the State Supreme Court

Justice of the Court of Appeal

Judge of the Superior Court

Judge of the Municipal Court

All persons voted for in a presidential primary

- The vote given for persons for electors of President and Vice President of the United States.
- All statewide measures.

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Retaining Election Materials

Consult sections 17300 to 17506 of the Elections Code for guidelines on retaining election 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 22 months. Extend retention periods in the case of a court challenge.

Chapter 6: Election Security

The "safety first" rule is especially important in an election environment. Federal authorities and independent experts agree that strict security measures must be in place during all phases of the election cycle to protect against unauthorized interference with election procedures and to ensure the accuracy of election results.

The scanner system should be given a dry run simulating as closely as possible specific conditions to be faced on Election Day and election night. Enough pre-election testing (such as running the test deck) should be done so that any discrepancies between programming and the ballots can be identified.

Strict security procedures should be in place for:

- 1. Election equipment
- 2. Transporting of ballots
- 3. Central tabulating facility
- 4. Dissemination of election results

To reduce risks, no one individual should control all election procedures. Duties and responsibilities should be assigned systematically to many individuals to ensure that all phases are covered. For example, an election administrator should use members of more than one political party to serve as election judges at precincts. Separation of responsibilities for receiving ballot boxes and for ballot scanning is another example.

Personnel should have the necessary training and guidance to minimize errors and misunderstandings. The employees should maintain a spirit of professional integrity and should carry out their assigned duties in a manner reflecting the importance of the election process.

The election official shall ensure the protection of the election tally process from intentional and/or fraudulent manipulation, malicious mischief, accidents, and errors. Each jurisdiction shall implement the following procedures to ensure security protocol is followed.

- Before accepting the ballot tallying system, the vendor shall provide the jurisdiction an optimum configuration list including a list of programs necessary to the operation of the system. The 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 shall limit changes to those necessary for election purposes and shall include processes to ensure such changes are only made after being previously approved by authorized personnel. Further, these procedures shall include provisions for the installation, continuous use, and update prior to each election of both firewall and anti-virus software on the computer(s) running the ballot tallying system. These procedures should also include a checklist and sign-off requirement for the system proofing tasks outlined in Section 2.
- Establish procedures for the physical protection of the facilities, as well as communication and data access controls. These should include intrusion and fire alarms, temperature and humidity sensors, etc. The procedures should also include provisions for locked facilities for computers that are directly dedicated to elections, as well as for voted and non-voted ballots and counted and uncounted ballots. Such procedures shall not preclude the accessibility of ES&S Models 550 and 650, nor computers for purposes of testing, repair, demonstration, training and for other purposes which are deemed justifiable by the election official. The procedures shall include provisions for securing ES&S Models 550 and 650 after the memory media has been installed both before and after distribution to the voting centers. These procedures shall also include provisions for the use of tamper evident seals on key locks, access doors/panels, memory cards and unused ports on any component of the voting system, including a log of such seals.

- ballot counting facilities under the election official's supervision, or the availability of such facilities from another jurisdiction, or from a vendor, or from another source. If modem transmission of unofficial election results is used, such plans shall make contingencies for the creation of a back-up election database prior to such results being sent, for the modem to only be enabled when such transmissions are anticipated, and for official results to be loaded into the back-up created prior to such transmissions. Such plans may take note of the existence of multiple ES&S Models 550 and 650, and/or multiple components of the Summary System, if such is the case, citing these situations as adequate back-up. In addition to the ballot counting program sent to the Secretary of State pursuant to Elections Code section 17500, each election official shall store another copy of the ballot counting program in an off site secure-but-readily-accessible location.
- Establish procedures for internal security, i.e., the protection of ballot counting hardware, firmware, and software from fraudulent manipulation by persons inside or outside the elections office. These procedures must provide for: restricted access to ballot counting hardware, firmware, and software; restricting connection of the election management software to any network that has an external Internet connection; individual passwords used only by the person to whom they have been issued which must meet or exceed best practices and be frequently changed including before each election; preventing the ballot tabulation system from being left unattended without password protection in place; limiting use of administrative user logins to when needed, with at least two persons having administrative access; and physical protection of all non-voted precinct and absentee voter ballots, as well as all tallied and non-tallied ballots, by use of logs to chronicle their quantity, use, and access before and after the election.
- A complete copy of each election official's security procedures shall be submitted to the Secretary of State for review prior to any election in which the system is intended to be used. In lieu of the submission of this plan, the election official may affirm that no change has been made to previously approved procedures.

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Chapter 7: Certification Requirements

Consult the California Elections Code, Division 19, for certification and approval requirements. Use the following requirements as guidelines; consult the Elections Code for specific regulations.

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.

Hardware Certification and Notification

All ES&S election 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.

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.

Logic and Accuracy Tests

Seven days before each statewide 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 the certification and prior to completion of the official canvass of the vote, 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.

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Certifying Logic and Accuracy

Appoint a logic and accuracy board to perform the following tasks:

- Receive all required test materials from the election official.
- Verify the correctness of the election definition and test deck.
- Observe scanner performance and verify results.
- Note any discrepancies between test results and the results from ES&S.
- Deliver all the required test material to the election official.
- Certify the performance of the scanner.

Escrow of Ballot Tally Source Code

Prior to its use in any election, an exact copy of the source code for all ballot tally software programs shall be placed in an approved escrow facility, pursuant to the procedures and requirements of Elections Code section 19103 and Title 2, Division 7, of the California Code of Regulations, beginning with section 20610.

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