SEQUOIA VOTING SYSTEMS
OPTECH INSIGHT, AVC EDGE 5.0, & OPTECH 400-C

VOTING SYSTEM USE PROCEDURES FOR CALIFORNIA

DOCUMENT VERSION 1.01

FEBRUARY 2006

Part Number 190-32907-00
These Procedures establish the regulations governing the use of the Optech Insight in the election phases of testing, precinct and absentee voting, semi-official and official canvass, and Post-Election requirements.

These procedures have been adopted by the Secretary of State pursuant to the California Elections Code and shall regulate and govern the use of the Optech Insight at all elections governed by the California Elections Code.

These procedures shall be effective March 2005 and shall be used in conjunction with all other statutory and regulatory requirements. Should there be a conflict with current or future provisions of the California Elections Code, such provisions shall take precedence. 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.

The Secretary of State reserves the right to amend these procedures at any time.

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# Introduction

This chapter defines the following Introduction for the Optech Insight, AVC Edge, and Optech 400-C, as specified by Chapter 1 of the “Voting System Use Procedures for California Template” for *Introduction*:

- System Description and Components
- Terms and Definitions
- Related Documents

## 1.1 System Description and Components

This sub-chapter defines the System Description and Components, as specified by sub-chapter 1.1 of the “Voting System Use Procedures for California Template” for *System Description and Components*:

### 1.1.1 For Optech Insight:

![Figure 1-1: Optech Insight](image)

Figure 1-1: Optech Insight
System Description:

The Optech Insight, manufactured by Sequoia Voting Systems (SVS), is a portable Precinct Count System that uses Optical Scan Read-Head technology to electronically read and tabulate Optical Scan ballots at the Polling Place. The Optech Insight complements SVS's Optech 400-C Central Count System, as a versatile and Voter-friendly ballot tabulator.

The Optech Insight is classified by the Federal Election Commission as a Marksense Voting System used to cast and tabulate ballots. It allows Local Officials to conduct efficient, timely elections, and performs the following functions on the votes recorded on ballots, which are inserted by the Voter:

- **Record Votes**: Optically reads the marks made on the ballots.
- **Tabulate Ballot**: Tabulates ballots as they are cast, allowing the results of the election to be readily available when closing the Polls.
- **Print Results**: Produces Precinct Totals.
- **Store Precinct Totals**: Stores the Precinct Totals in the removable MemoryPack, for easy transfer to the Central Counting Location, after closing the Polls.

For more detail, please see the *Optech Insight Operators Manual: Optech Insight Overview*.

System Components:

The Optech Insight comprises the following system components, per *appendix B.1: For Optech Insight*:

- Paper Ballots
- Marking Devices
- Ballot Tabulator
- Ballot Box
- MemoryPack
- Ballot Guide Bar & Keys
- Printer and Paper Tape
- WinEDS 3.1 (Windows Electronic Database System), herein after referred to as WinEDS
- Insight Battery (Recommended)
1.1.2 For AVC Edge 5.0:

System Description:
The AVC Edge 5.0, herein after referred to as AVC Edge, is a Direct-Record Electronic voting machine. It performs the following functions:

- Validate and load ballot definitions.
- Perform pre-election testing and verifications.
- Perform Election Day voting.
- Perform post-election testing and verifications.
- Print Zero Proof and Results Reports.
- Consolidate vote data from multiple machines.
- Perform maintenance diagnostic tests and functions such as Audit Trail Transfer, Set Time/Date, and print the Event Log report.

For more detail, please see the AVC Edge 5.0 Operators Manual: Edge Description.
System Components:
The AVC Edge comprises the following system components, per appendix B.2: For AVC Edge:
- AVC Edge 5.0 Voting Machine, herein after referred to as AVC Edge voting machine
- WinEDS 3.1 (Windows Electronic Database System), herein after referred to as WinEDS
- Cartridges
- Card Activator 5.0, herein after referred to as Card Activator, and Voter/Smart Cards
- Verivote Printer
- Edge Audio Accessory 5.0, herein after referred to as Edge Audio Accessory
- Edge Aux Power Unit (Recommended)

1.1.3 For Optech 400-C:

![Figure 1-3: Optech 400-C](image)

System Description:
The Optech 400-C is a central count mark-sense ballot tabulator, which performs the following functions:
- Reads mark-sense ballots.
- Tabulates the results.
- Prepares output reports.

The Optech 400-C uses an automatic Ballot Feed Hopper to process the ballots at a high speed. A built-in sorting system diverts the tabulated ballots into the following three Ballot Bins:
- **Main Bin:** Contains all fully tabulated ballots.
- **Write-In Bin:** Holds all tabulated ballots that have one or more offices with a Write-In position marked.
- **Outstack Tray:** Holds ballots that are mis-read, blank, overvoted, or unprocessable.

A Roll-Around Cart holds the Main Bin.
For more detail, please see the *Optech 400-C Operators Manual: Optech 400-C Overview*.

**System Components:**
The Optech 400-C comprises the following system components, per *appendix B.3: For Optech 400-C*:

- Paper Ballots
- Power Switch and Cord
- Computer Running WinETP 1.12.2
- WinETP 1.12.2, herein after referred to as WinETP
- Ballot Feed Hopper
- Ballot Transport System
- Ballot Bins
- Printer(s)
- Marking Devices
- Summary System (Recommended)
- WinEDS 3.1 (Windows Electronic Database System), herein after referred to as WinEDS

### 1.2 Terms and Definitions

This sub-chapter defines the Terms and Definitions for the Optech Insight, AVC Edge, and Optech 400-C, as specified by sub-chapter 1.2 of the “Voting System Use Procedures for California Template” for *Terms and Definitions*.

Please see *Appendix A: Glossary*. 

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February 2006

Introduction
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<td>AVC Edge Acceptance Testing Guide</td>
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<tr>
<td>096050901</td>
<td>AVC Edge 5.0 System Maintenance Manual</td>
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<tr>
<td>096051101</td>
<td>AVC Edge 5.0 Operators Manual</td>
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<tr>
<td>096132301</td>
<td>Card Activator 5.0 Operators &amp; Maintenance Manual</td>
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<td>096116601</td>
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<td>096117301</td>
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<td>190-32849-00</td>
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<td>190-32638-00</td>
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<td>190-32389-00</td>
<td>Verivote Printer Operators Manual</td>
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<td></td>
<td>WinEDS 3.1 Installation Guide</td>
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<tr>
<td>190-32381-00</td>
<td>WinEDS 3.1 Reference Guide</td>
</tr>
<tr>
<td>190-32381-00</td>
<td>WinETP Reference Guide</td>
</tr>
</tbody>
</table>
2 Ballot Definition

At the Central Counting Location, the following activities are performed by the Technician, using WinEDS, as specified by Chapter 2 of the “Voting System Use Procedures for California Template” for Ballot Definition:

- Overview
- Paper and Printing Specifications: For Optech Insight & 400-C
- Layout Requirements and Specifications
- Distribution of Absentee and Sample Ballots to Voters

And for the Optech Insight & 400-C, the following individuals perform Ballot Inspection & Test of the printed Paper Ballots, per sub-chapter 2.3: Layout Requirements and Specifications:

- Inspection by Ballot Printer
- Inspection by Election Official
- Inspection by Poll Worker

2.1 Overview

The Technician used WinEDS to prepare the following Ballots, per sub-chapter 4.1: Programming and Configuration of Election Management System/Software, as specified by sub-chapter 2.1 of the “Voting System Use Procedures for California Template” for Overview:

- Paper Ballots: For Optech Insight & 400-C
- Touchscreen Ballots: For AVC Edge

Then, during Election Setup and Definition, the Ballot Definition data will be loaded onto the Optech Insight, AVC Edge, and Optech 400-C, per sub-chapter 4.2: Programming and Configuration of Vote Recording/Tabulation Devices.
2.1.1 **PAPER BALLOTS: FOR OPTECH INSIGHT & 400-C**

![Paper Ballot: 1, 2, and 3 Columns](image)

Figure 2-1: Paper Ballot: 1, 2, and 3 Columns

Paper Ballots may be any of the following three widths, per the above figure:

- **1 Column**: 3.690 inches
- **2 Columns**: 6.720 inches
- **3 Columns**: 9.750 inches

Ballot lengths may vary from 14 to 22 inches.

All ballots are controlled by the Secretary of State, pursuant to California Administrative 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.

When performing Ballot Definition, the operator uses WinEDS to define the Paper Ballot, itself. The resulting master Paper Ballot(s) is/are printed out, and sent to a Printing Company, along with instructions for how copies are to be printed.

Please see the *Optech Printers Manual* for the following overview of the Ballot Generation Process:

- Ballot Description
- Ballot Definition
- Ballot Printing
- Ballot Inspection & Test
- Ballot Tests
2.1.2 TOUCHSCREEN BALLOTS: FOR AVC EDGE

All ballots are controlled by the Secretary of State, pursuant to California Administrative Regulations, and shall be as specified by the Secretary of State.

When performing Ballot Definition, the operator uses WinEDS to define the Touchscreen Ballot.

The resulting software (for displaying the Touchscreen Ballot on the AVC Edge) is loaded onto the Results Cartridge(s), to be later inserted into the AVC Edges, per the AVC Edge 5.0 Operators Manual: Loading the Ballot.

2.2 PAPER AND PRINTING SPECIFICATIONS: FOR OPTECH INSIGHT & 400-C

WinEDS has been developed to adhere to the following paper and printing specifications of the FEC 2002 Standard, as specified by sub-chapter 2.2 of the “Voting System Use Procedures for California Template” for Paper and Printing Specifications:

- Introduction
- Ballot Description
- Ballot Definition
- Ballot Printing
- Tint and Water Mark

2.2.1 INTRODUCTION

The following introductory information is intended for the Technician, per the Optech Printers Manual: Introduction:

- Overview of Ballot Generation Process
- Suggestions to Election Officials and Ballot Printers
2.2.2 **BALLOT DESCRIPTION**

The following Ballot Description parameters are built into WinEDS, to be used by the Technician, as a part of the Ballot Definition process, per the *Optech Printers Manual: Ballot Description*:

- Layout Dimensions
- Voting Tracks
- Machine-Readable Ballot Components
- Text Areas
- Ballot Inspection Components
- Ballot Specifications

2.2.3 **BALLOT DEFINITION**

The Technician performs the following Ballot Definition activities, per the *Optech Printers Manual: Ballot Definition*:

- Using WinEDS to Define Ballot
- Using Ballot Master Overlays
- Duplicating Ballot Artwork
- “Ganging” Ballot Artwork
- Preparing Ballot Proof
- Correcting Ballot Proofs

2.2.4 **BALLOT PRINTING**

The Technician sends the Ballot Proof, to a printing company, to print the ballot, per the *Optech Printers Manual: Ballot Printing*:

- Preparing Printing Plate
- Preparing Ballot Stock
- Printing Ballot
- Secondary Print Operations
- Trimming Ballots
- Packaging Ballots

2.2.5 **TINT AND WATER MARK**

Printed Ballots are to be tinted and water-marked in accordance with the California Secretary of State.

2.3 **LAYOUT REQUIREMENTS AND SPECIFICATIONS**

This sub-chapter defines the Layout Requirements and Specifications, as specified by sub-chapter 2.3 of the “Voting System Use Procedures for California Template” for *Layout Requirements and Specifications*.

WinEDS has been developed to adhere to the following Ballot Layout requirements and specifications of the FEC 2002 Standard: Volume I: Paragraph 2.3.1: Ballot Preparation:

- 2.3.1.1: General Capabilities
- 2.3.1.2: Ballot Formatting
- 2.3.1.3: Ballot Production
For that reason, WinEDS will not allow the Technician to lay out a Ballot that violates the Ballot Layout requirements and specifications of the FEC 2002 Standard, as follows:

- Ballot Styles
- Ballot Layout
- Printing Plates: For Optech Insight & 400-C
- Paper Position: For Optech Insight & 400-C
- Inspection & Test of Printed Paper Ballots: For Optech Insight & 400-C

### 2.3.1 Ballot Styles

WinEDS automates the creation and management of Ballot Styles, which are unique ballots within an election, used to list contests and associated precinct assignments, per the WinEDS 3.1 Reference Guide: Election Setup: Ballot Management Overview: Ballot Style Management Overview.

Here, the Technician generates Ballot Styles that will be used in the election, as follows:

- Generate Ballot Styles.
- Change the order of the Ballot Styles.
- Maintain or add Ballot Styles.
- Edit Ballot Styles by Repositioning Contests.

### 2.3.2 Ballot Layout

WinEDS automates the creation and management of Ballot Layout, which specifies the voting machine and tally type attributes, such as ballot mode, per the WinEDS 3.1 Reference Guide: Election Setup: Ballot Management Overview: Layout.

Here, the Technician is able to view layout properties for each tally type that will be used in the election, and adjust them, as follows:

- Maintain Ballot Layouts.
- Generate Ballot Layouts, if necessary.
- View and change Ballot Layout properties.
- Alter or adjust default voting machine type positioning.

### 2.3.3 Printing Plates: For Optech Insight & 400-C

WinEDS allows the Technician to view the details of the Printing Plates that have been automatically generated by the system, print and save ballots, and change contest positions for specific Printing Places, as follows:

- View the Printing Plates and Ballot Styles for a voting machine type.
- Maintain the contest positions for a Printing Plate.
- Manually regenerate Print Plates for a voting machine type.
- Print and save Ballots in batches.

### 2.3.4 Paper Position: For Optech Insight & 400-C

WinEDS allows the Technician to move column positions for contests that belong to Ballot Styles on each tally type. In addition, they can perform the following functions:

- Generate Header Codes.
- Generate voting machine files.
- Change column positions for one or more contests.
2.3.5 **INSPECTION & TEST OF PRINTED PAPER BALLOTS: FOR OPTECH INSIGHT & 400-C**

The following individuals perform Ballot Inspection & Test of the printed Paper Ballots, per the *Optech Printers Manual: Ballot Inspection & Test*:

- Inspection by Ballot Printer
- Inspection by Election Official
- Inspection by Poll Worker

2.3.5.1 **BALLOT INSPECTION CRITERIA**

For the following Ballot Inspection Criteria, please see the *Optech Printers Manual: Ballot Inspection Criteria* for the following Ballot Inspection Criteria:

- Layout Dimensions
- Voting Tracks
- Machine-Readable Ballot Components
- Text Areas
- Ballot Inspection Components
- Ballot Specifications
- Distance Measurements

2.3.5.2 **BALLOT INSPECTION & TEST CHECKLIST**

Please see the *Optech Printers Manual: Ballot Inspection & Test Checklist*.

2.3.5.3 **LAYOUT DRAWINGS**

For the following layout drawings, please see the *Optech Printers Manual: Drawings*:

- Layout Dimensions
- Voting Arrow
- Cut Line Detail
- Stubs
- Ballot Components
- Layout Options
- Single-Sided Ballots
- Voting Tracks

2.4 **DISTRIBUTION OF ABSENTEE AND SAMPLE BALLOTS TO VOTERS**

Please see the *Optech 400-C Operators Manual: Ballot Definition and Preparation*. 
3 System Installation and Configuration

The Technician performs the following System Installation and Configuration, as specified by Chapter 3 of the “Voting System Use Procedures for California Template” for System Installation and Configuration:

- Hardware Requirements and Specifications
- Hardware and Network Setup and Configuration
- Software Installation and Configuration
- Acceptance Testing
- Software and Firmware Upgrade

3.1 Hardware Requirements and Specifications

The Technician needs to ensure that the Hardware Requirements and Specifications are met, as specified by sub-chapter 3.1 of the “Voting System Use Procedures for California Template” for Hardware Requirements and Specifications.

3.1.1 General

The Technician needs to ensure that the following Hardware Requirements and Specifications are met, for both the Polling Places and the Central Counting Location:

- **Power Requirements**: The Optech Insight requires an 110VAC 60Hz, single-phase power source. Testing may require the simultaneous operation of 10 to 20 percent of the total number of machines in a jurisdiction. Provide for power at the rate of 1 ampere per machine.

- **Environmental Requirements**: The Optech Insight meets FEC standards for operating and storage temperatures; however, for optimum performance, SVS suggests the following environmental conditions.
  - **Temperature**: 68-75 degrees Fahrenheit
  - **Humidity**: 20 to 60 percent

  Repeated exposure to extreme changes in temperature and humidity has a deleterious cumulative effect on electronic equipment.

- **Telephone Service**: Provide telephone service for Election Day support and routine business. A phone line must be installed near each Remote Accumulation system.

There are no special additional requirements. Most of the support equipment and facilities needed are on the administrative level and are usually centrally located within a jurisdiction.
3.1.2 **FOR OPTECH INSIGHT:**

At the Polling Place, the following system components are required:

- Paper Ballots, per *appendix B.1.1: Paper Ballots*
- Marking Devices, per *appendix B.1.2: Marking Devices*
- Ballot Tabulator, per *appendix B.1.3: Ballot Tabulator*
- Ballot Box, per *appendix B.1.4: Ballot Box*
- MPR, MemoryPacks, and Cables, per *appendix B.1.5: MPR, MemoryPacks, and Cables*
- Ballot Guide Bar & Keys, per *appendix B.1.6: Ballot Guide Bar & Keys*
- Paper Tape, per *appendix B.1.7: Printer and Paper Tape*
- WinEDS 3.1, per *appendix B.4: WinEDS 3.1*
- Insight Battery (Recommended), per *appendix B.1.9: Insight Battery (Recommended)*

**NOTE:** The Printer already is a part of the Ballot Tabulator.

3.1.3 **FOR AVC EDGE:**

At the Polling Place, the following system components are required:

- AVC Edge 5.0 Voting Machine, per *appendix B.2.1: AVC Edge 5.0 Voting Machine*
- WinEDS 3.1, per *appendix B.4: WinEDS 3.1*
- Cartridges, per *appendix B.2.3: Cartridges*
- Card Activator 5.0 and Voter/Smart Cards, per *appendix B.2.4: Card Activator 5.0 and Voter/Smart Cards*
- Verivote Printer and Paper Roll(s), per *appendix B.2.5: Verivote Printer and Paper Roll*
- Edge Audio Accessory 5.0, per *appendix B.2.6: Edge Audio Accessory 5.0*
- Edge Aux Power Unit (Recommended), per *appendix B.2.7: Edge Aux Power Unit (Recommended)*

3.1.4 **FOR OPTECH 400-C:**

At the Central Counting Location, the following system components are required:

- Optech 400-C unit, per *appendix B.3: For Optech 400-C*
- Paper Ballots, per *appendix B.1.1: Paper Ballots*
- Power Cord, per *appendix B.3.2: Power Switch and Cord*
- Computer Running WinETP 1.12.2, per *appendix B.3.3: Computer Running WinETP 1.12.2*
- WinETP 1.12.2, per *appendix B.3.4: WinETP 1.12.2*
- Ballot Bins, per *appendix B.3.7: Ballot Bins*
- Printer Paper, per *appendix B.3.8: Printer(s) and Paper*
- Marking Devices, per *appendix B.1.2: Marking Devices*
- Summary System (Recommended), per *appendix B.3.10: Summary System (Recommended)*
- WinEDS 3.1: Per *appendix B.2.2: WinEDS 3.1*

**NOTE:** The Power Switch, Ballot Feed Hopper, Ballot Transport System, and Printer already are a part of the Optech 400-C unit.
3.1.5 For WinEDS:

At the Central Counting Location, the following components are required:

- **Workstations:**
  - Pentium IV @ 1 GHz or equivalent
  - 512 MB RAM
  - 20 GB Hard Disk
  - 1024 x 768 32 MB video card
  - Windows 98, Me, 2000, or XP
  - Office 2000 or Office XP

- **SQL Server:**
  - Dual or Quad Pentium V @ 1 GHz or equivalent (depends upon jurisdiction size)
  - 1 GB RAM
  - 2x4 GB SCSII – RAID 0 System drives
  - 2x36 GB SCSI III – RAID 0 Log drives
  - 3x36 GB SCSI III – RAID 5 Data Drives
  - Windows 2000 or .Net Server with latest service pack
  - SQL Server 2000 with latest service pack

- **Printer:**
  A printer is required for printing reports of election results.
  Any printer that can be attached to the PC can be used. However, if you use a laser printer, it must be Hewlett-Packard (H-P) or H-P-compatible.

3.2 Hardware and Network Setup and Configuration

The Technician performs the Hardware and Network Setup and Configuration, as specified by sub-chapter 3.2 of the “Voting System Use Procedures for California Template” for Hardware and Network Setup and Configuration.

3.2.1 GENERAL

For Hardware and Network Setup and Configuration security, please see paragraph 10.1.2: Hardware and Network Setup and Configuration.

3.2.2 For Optech Insight:

For Optech Insight:

At the Warehouse, the following Hardware Setup is performed by the Technician.

- Ballot Guide needs to be adjusted to the proper Ballot size, per the Optech Insight Operators Manual: Adjusting Ballot Guide for Ballot Size:
  - 1-Column Ballot
  - 2-Column Ballot
  - 3-Column Ballots
For MPR and MemoryPacks:
At the Central Counting Location, the following Hardware Setup is performed by the Technician.
- Use the Communications Cable to hook up the MPR to the PC running WinEDS, to enable communication and transfer of data between the PC and the MemoryPacks in the MPR.

For Insight Battery (Recommended):
At the Warehouse, the following Hardware Setup is performed by the Technician.
- Install a fully-charged Insight Battery in the Optech Insight, per the Insight Battery Operators & Maintenance Manual: Installing the Fully-Charged Insight Battery in the Optech Insight.

3.2.3 **FOR AVC EDGE:**
No Hardware Setup is required for the AVC Edge.

3.2.4 **FOR OPTECH 400-C:**
The Technician sets up the Optech 400-C one time, as follows per the Optech 400-C Operators Manual, to remain at the Central Counting Location:
- Remove the Optech 400-C from the container.
- Set up the Optech 400-C.

3.3 **SOFTWARE INSTALLATION AND CONFIGURATION**
At the Central Counting Location, the Technician performs the Software Installation and Configuration, as specified by sub-chapter 3.3 of the “Voting System Use Procedures for California Template” for Software Installation and Configuration.

3.3.1 **GENERAL**
At the Central Counting Location, the Technician uses WinEDS to configure the Optech Insight, AVC Edge, and Optech 400-C.
And then the configuration options are loaded into the Optech Insight, AVC Edge, and Optech 400-C at the time of Election Setup and Definition, as follows, per *[sub-chapter 4.1: Programming and Configuration of Election Management System/Software]*:
- **For Optech Insight:** Via MemoryPack
- **For AVC Edge:** Via Results Cartridge
- **For Optech 400-C:** Via WinEDS disk
For Software Installation and Configuration security, please see *paragraph 10.1.2: Software Installation and Configuration.*

3.3.2 **FOR OPTECH INSIGHT:**
Please see the following appendices for configuration:
- **D.1: Voting Variations**
- **D.2.1: Ballot Disposition**
### 3.3.3 **FOR AVC EDGE:**

Please see the following appendices for configuration:

- D.1: Voting Variations
- D.3.1: Configurations and Operating Modes
- D.3.2: Features
- D.3.3: Auto/Manual Activation
- D.3.4: Review and Casting the Ballot
- D.3.5: Voting Disposition
- D.3.6: Reports
- D.3.7: Maintenance Diagnostics

### 3.3.4 **FOR OPTECH 400-C:**

Please see the following appendices for configuration:

- D.1: Voting Variations
- D.4.1: Election Files
- D.4.2: Passwords
- D.4.3: Running Standalone in a Non-Networked Configuration (Recommended)
- D.4.4: Hardware
- D.4.5: Ballot Handling Options
- D.4.6: Report Format Options
- D.4.7: Printers

### 3.3.5 **FOR WINEDS**

- **Workstations:**
  
  The following software needs to be installed and running:
  
  - Windows 98, Me, 2000, or XP
  - Office 200 or Office XP

- **SQL Server:**
  
  The following software needs to be installed and running:
  
  - Windows 2000 or .Net Server with latest service pack
  - SQL Server 2000 with latest service pack

- **Printer:**
  
  The PC running WinEDS needs to be configured for the printer selected in paragraph 3.1.5: For WinEDS.

### 3.4 Acceptance Testing

The Technician performs the Acceptance Testing, as specified by sub-chapter 3.4 of the “Voting System Use Procedures for California Template” for Acceptance Testing.
3.4.1 **FOR OPTECH INSIGHT:**

For Optech Insight:
At the Warehouse, the Technician performs the following Acceptance Testing, per the *Optech Insight Test & Verification Specification: Acceptance Test Specifications*:

- Preparation for Acceptance Testing
- Customer Acceptance Procedure
- Physical Inspection
- Complete Diagnostic Test
- Closing the Polls
- Optech Insight Acceptance Test Log
- Security
- Additional Tests
- Documentation and Records

For MPR:
At the Warehouse, the Technician performs the following Acceptance Testing, per the *MPR Test & Verification Specification: Acceptance Test Specifications*:

- Customer Acceptance Procedure
- Physical Inspection
- Acceptance Test Check-Off List

3.4.2 **FOR AVC EDGE:**

For AVC Edge Voting Machine:
At the Warehouse, the Technician performs the following Acceptance Testing, per the *AVC Edge Acceptance Testing Guide*:

- Preparation for AVC Edge Acceptance Testing
- Setting Up the Card Activator
- Performing Physical Inspection
- Initializing the AVC Edge and Resetting System
- Running Internal Hardware Test
- Performing Firmware Update (if necessary)
- Calibrating the Touch Screen
- Setting the Date and Time
- Loading the Demonstration Election and Vote Simulation
- Processing a Manual Vote
- Closing Polls
- Generating the Event Log Report (Optional)
- Resetting the System
- Testing the Battery
- Disassembling the AVC Edge
- Final Documentation and Records
For Card Activator:
At the Warehouse, the Technician performs the following Acceptance Testing, per the *AVC Edge Acceptance Testing Guide*:
- Programming Card Activator 5.0
- Setting Date and Time
- Activating a Voter Card
- Processing a Vote

For Verivote Printer:
At the Warehouse, the Technician performs the following Acceptance Testing, per the *AVC Edge Acceptance Testing Guide*:
- Complete Testing, on a Sample Basis
- Testing Using Small Thermal Paper Roll

For Edge Audio Accessory:
At the Warehouse, the Technician performs the Acceptance Testing, per the *AVC Edge Acceptance Testing Guide*.

For Edge Aux Power Unit (Recommended):
At the Warehouse, the Technician Tests the Edge Aux Power Unit, per the *Edge Aux Power Unit Operators & Maintenance Manual: Testing the Edge Auxiliary Power Unit*.

3.4.3 **FOR OPTECH 400-C:**
At the Central Counting Location, the Technician performs the following Acceptance Testing activities, per the *Optech 400-C Test & Verification Specification: Acceptance Test Specifications*:
- Non-Straight Party Test
- The Report Menu
- Non-Straight Party Vote Counts
- Straight Party Vote Counts
- The Report Menu

3.4.4 **FOR WINEDS:**
At the Central Counting Location, the Technician performs the following Acceptance Testing activities:
- **Overview:** During Acceptance Test, only the modes of operation that are used by the jurisdiction under test are used exercised by the testing team to assure accuracy and completeness. The testing team follows closely the processes of a jurisdiction working with the system.
- **Test Setup:** A client-server environment will be arranged, using the following setup.

![Figure 3-1: WinEDS: Test Setup](image)

Because of the following, the WinEDS QA team had prepared a set of databases that can be used to test and monitor the system features that apply to the jurisdiction:

- WinEDS success rides on data manipulation for specific data sets.
- The size of the results can be too large for a close inspection of each data item
- The test results must be easy to compute and understand.

- **Setup and Parameters:** Parameters setup will be verified for the following parameters:
  - Open Primary
  - Partisan Offices
  - Write-In
  - California-Style Rotation
  - Split Precinct
  - Vote For
  - Recall Voting
  - Provisional Voting

**NOTE:** There is only one profile data set with one set of parameters.

- **Profile Preparation:** A new Profile will be created, using a setup program on a new SQL Server installation.

**NOTE:** Some report and application features may not be relevant to the testing jurisdiction.

- **Election Creation:** An election will be created at this time, to test WinEDS.

- **Election Data:** The data set that is being tested by the jurisdiction should closely resemble the actual data for that jurisdiction. This is done in order to unearth any potential problems with the actual data for that jurisdiction.
- **Vote Simulation:** This is not part of testing the system per-se. However, a good set of votes is important for Tally and Election Night Reporting.

- **Tally and Election Night Reporting:** This is the most time-critical component of the test.

- **Post-Election:** All Post Election activities are performed at this time, in order to test WinEDS.

### 3.5 SOFTWARE AND Firmware Upgrade

SVS-supplied Election Support Specialists perform Software and Firmware Upgrades, as specified by sub-chapter 3.5 of the “Voting System Use Procedures for California Template” for *Software and Firmware Upgrade*.

- New Software Releases, for the Optech Insight, AVC Edge, and Optech 400-C, will be installed by SVS-supplied Election Support Specialists.

- System Test must be performed for every major release of software for the Optech Insight, AVC Edge, and Optech 400-C, per its respective Test and Verification Specification. The QA tester and the project manager conduct the system test in cooperation with the system implementers.

- No software will ever be installed or supplied that has not been approved by the Secretary of State.

- Please contact the Secretary of State before installing any new Windows security patches.

- SVS will send out a memo of what should be installed.
4 Election Setup and Definition

At the Warehouse and the Central Counting Location, the Technician performs the following Election Setup and Definition, as specified by Chapter 4 of the “Voting System Use Procedures for California Template” for Election Setup and Definition:

- Programming and Configuration of Election Management System/Software
- Programming and Configuration of Vote Recording/Tabulation Devices
- System Diagnostic Testing Procedures
- System Proofing
- Logic and Accuracy Testing of System and Components
- Ballot Tally Programs
- Election Observer Panel
- Hardware Maintenance and Preparation for Use

4.1 Programming and Configuration of Election Management System/Software

At the Central Counting Location, the Technician uses WinEDS to perform the following Programming and Configuration of Election Management System/Software, as specified by sub-chapter 4.1 of the “Voting System Use Procedures for California Template” for Programming and Configuration of Election Management System/Software:

- **Profile Management:** To maintain jurisdictional parameters such as the following, per the *WinEDS 3.1 Reference Guide: System Configuration: Profile: Overview*:
  - Political districts
  - Precincts
  - Polling places
  - Offices
  - Parties

- **Election Setup:** To perform the following functions, per the *WinEDS 3.1 Reference Guide: Election Setup*:
  - Initialize an election.
  - Define the following:
    - Political parties
    - Offices and party positions
    - Political subdivisions
    - Types of elections
    - Other global election variables

- **Candidate Management:** To identify the following information for an election, per the *WinEDS 3.1 Reference Guide: Election Data*:
  - Contests
  - Candidates

- **Ballot Management:** To provide the following information, per the *WinEDS 3.1 Reference Guide: Election Setup: Ballot Management Overview*:
  - Layout of the visual ballots
  - Generation of the ballots in electronic or paper form
4.2 Programming and Configuration of Vote Recording/Tabulation Devices

The Technician performs the Programming and Configuration of Vote Recording/Tabulation Devices, as specified by sub-chapter 4.2 of the “Voting System Use Procedures for California Template” for Programming and Configuration of Vote Recording/Tabulation Devices.

4.2.1 For Optech Insight:

At the Warehouse, the Technician uses a programmed MemoryPack to load the WinEDS-generated Ballot Definition data onto the Optech Insight, as follows, per the MPR Operators Manual:

- Turning On the MPR
- Burning (programming) MemoryPacks for each Precinct
- Turning Off the MPR
- Testing MemoryPack Data in Optech Insight
- Delivering Optech Insight to Polling Place

4.2.2 For AVC Edge:

At the Warehouse, the Technician uses a programmed Results Cartridge to load the WinEDS-generated Ballot Definition data onto the AVC Edge, per the AVC Edge 5.0 Operators Manual.

4.2.3 For Optech 400-C:

At the Central Counting Location, the Technician uses a programmed WinEDS disk to load the WinEDS-generated Ballot Definition data onto the Optech 400-C, as follows, per the Optech 400-C Operators Manual:

- Install WinEDS Files for New Election.
- Perform Logic and Accuracy Test
- Open Election
- Initialize Election.
- Set Up Election Passwords

4.3 System Diagnostic Testing Procedures

The Technician performs the System Diagnostic Testing Procedures, as specified by sub-chapter 4.3 of the “Voting System Use Procedures for California Template” for System Diagnostic Testing Procedures.

4.3.1 For Optech Insight:

At the Warehouse, the Technician performs the following System Diagnostic Testing Procedures, per the following appendices:

- E.1.1: Entering Diagnostic Monitor
- E.1.2: Group 1 Tests
- E.1.3: Group 2 Tests
- E.1.4: Group 3 Tests
- E.4: Ballot Specifications Diagnostic Testing: For Optech Insight and 400-C
4.3.2 FOR AVC EDGE:

At the Warehouse, the Technician performs the following System Diagnostic Testing Procedures, per the following appendices:

- E.2.1: LCD
- E.2.2: Printer Test
- E.2.3: Set Date and Time
- E.2.4: System Reset
- E.2.5: Event Log Report
- E.2.6: Aux Cartridge Reports
- E.2.7: Hardware Tests

4.3.3 FOR OPTECH 400-C:

At the Central Counting Location, the Technician performs the following System Diagnostic Testing Procedures, per the following appendices:

- E.3.1: Optech 400-C Diagnostic Tests
- E.3.2: Summary System Diagnostic Tests
- E.4: Ballot Specifications Diagnostic Testing: For Optech Insight and 400-C

The Technician may also perform the following Diagnostic Tests, per the following appendices:

- E.3.3: Read Head Alignment
- E.3.4: Read Head Sensitivity
- E.3.5: Cleaning Procedure
- E.3.6: Revitalization of Feeder Drum

4.4 SYSTEM PROOFING

The Technician performs the System Proofing, as specified by sub-chapter 4.4 of the “Voting System Use Procedures for California Template” for System Proofing.

4.4.1 FOR OPTECH INSIGHT AND 400-C:

The Technician performs 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 tabulate and summarize ballots. 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 styles
- Linkage of precincts in which the election will be held to ballot styles
- Ballot content of each ballot style, including offices, district designations, candidate assignment and rotation, ballot measures, all in the proper sequence
- Printing of official ballots, including instructions, candidates' names, political and/or occupational designations, number to be elected, candidate rotation (where applicable), ballot measures, voting positions and all column and office headings and designations
- Formatting of ballots into or for sample ballot pamphlets for each ballot style
- Header code printing, precinct identification (if used), start and stop lines, fold scoring, numbering, padding and verifying ballot dimensions by suitable means
- Optech Insight/400-C recognition of and response to precinct header codes, and ballots that are damaged, or improperly marked
- Optech Insight/400-C ability to accept ballots with correctly printed header codes, and to reject ballots with incorrectly printed header codes
- All phases of preparation and assembly of the Optech Insight/400-C as described variously herein
- Voter registration data for jurisdictions participating in the election

The Reusable Test Deck consists of ballots which are pre-scored for folding. If the Optech Insight/400-C is to be used for Absentee tabulation, test ballots may be folded before the test is begun.

**Exception Processing:**

Exception Processing is part of system proofing and includes a test to determine whether the system properly responds to error or anomaly conditions. At least 10 days prior to each election a deck shall be prepared which will cause all non-destructive errors or anomalies for the Optech Insight/400-C. The Optech Insight/400-C is tolerant of ballots introduced in orientations which could be considered anomalous, such as upside down or reversed. This tolerance should be tested by introducing test ballots in these orientations.

The exception processing test should contain, but is not limited to, the following types of conditions, if they apply to the system:

- Upside down ballots
- Reversed ballots
- Ballots torn in various places

Exception testing is also required to assure that the error condition of extraneous clock marks is detected.

**Error Ballots:**

Six ballots shall be prepared, as follows:

- One ballot for each votable track on a double-sided, 3-column ballot
- Four ballots for a double-sided, 2-column ballot
- Two ballots for a double-sided, single-column ballot.

One extra clock mark (voting position arrow graphic) shall be made in an active column of the ballot. The extra clock mark shall be drawn between the ballot start and the ballot stop and shall be drawn to approximate the thickness and dimension of the printed clock marks. Tests for Error Ballots will comply with the ballot processing regulations herein.

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1 As opposed to destructive errors, such as a power failure, which can damage equipment.
For exception processing the Ballot Tabulation program(s) must be used. Program restarts or equipment resetting are allowed for this test.

**4.4.2 For AVC Edge:**

At the Warehouse, the Technician performs the System Proofing, which 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, verifying of the correctness of the following:

- Assignment of jurisdictions participating in the election to ballot styles
- Linkage of precincts in which the election will be held to ballot style
- Ballot content of each ballot style, including offices, district designations, candidate assignment and rotation, ballot measures, all in the proper sequence
- Precinct identification coding (if used)
- Election Night summary report format
- All phases of preparation of voting machines and Results Cartridges, as described herein
- Testing of all cartridges to be used in the election

**4.5 Logic and Accuracy Testing of System and Components**

The Technician performs the following Logic and Accuracy Testing of System and Components, as specified by sub-chapter 4.5 of the “Voting System Use Procedures for California Template” for Logic and Accuracy Testing of System and Components:

- Pre-Conditions for Performance of Tests
- Accuracy Test Procedures
- Logic Test Procedures
- Retention of Test Materials
- Logic and Accuracy Board and Certification of Testing

**4.5.1 Pre-Conditions for Performance of Tests**

The Technician ensures that the Pre-Condition for Performance of Tests are met, as specified by paragraph 4.5.1 of the “Voting System Use Procedures for California Template” for Pre-Conditions for Performance of Tests.

- For Optech Insight and 400-C: Please see appendix F.1.1: for Optech Insight and 400-C.
- For AVC Edge: Please see appendix F.1.2: For AVC Edge.

**4.5.2 Accuracy Test Procedures**

The Technician performs the Accuracy Test Procedures, as specified by paragraph 4.5.2 of the “Voting System Use Procedures for California Template” for Accuracy Test Procedures.

Please see appendix F.2: Accuracy Test Procedures, and the following appendices for Performance of Pre-Election and Post-Election LAT:

- For Optech Insight: F.6.1: For Optech Insight
- For AVC Edge: F.6.2: For AVC Edge
- For Optech 400-C: F.6.3: For Optech 400-C
4.5.3 Logic Test Procedures

The Technician performs the Logic Test Procedures, as specified by paragraph 4.5.3 of the “Voting System Use Procedures for California Template” for Logic Test Procedures.

Please see appendix F.3: Logic Test Procedures, and the following appendices for Performance of Pre-Election and Post-Election LAT:

- **For Optech Insight**: F.6.1: For Optech Insight
- **For AVC Edge**: F.6.2: For AVC Edge
- **For Optech 400-C**: F.6.3: For Optech 400-C

4.5.4 Retention of Test Materials

This paragraph defines the Retention of Test Materials, as specified by paragraph 4.5.4 of the “Voting System Use Procedures for California Template” for Retention of Test Materials:

- **For Optech Insight & 400-C**: Please see appendix F.4.1: For Optech Insight and 400-C.
- **For AVC Edge**: Please see appendix F.4.2: For AVC Edge.

4.5.5 Logic and Accuracy Board and Certification of Testing

This paragraph defines the Logic and Accuracy Board and Certification of Testing, as specified by paragraph 4.5.5 of the “Voting System Use Procedures for California Template” for Logic and Accuracy Board and Certification of Testing.

Please see appendix F.5: Logic and Accuracy Board and Certification of Testing.

4.6 Ballot Tally Programs

This sub-chapter defines the Ballot Tally Programs, as specified by sub-chapter 4.6 of the “Voting System Use Procedures for California Template” for Ballot Tally Programs.

The election official shall send Ballot Tally programs to the Secretary of State pursuant to the next paragraph. These must be received by the Secretary of State no later than seven (7) days before each statewide election.

Ballot Tally programs for statewide elections are to be deposited with the Secretary of State no later than seven (7) days prior to each statewide election. Ballot Tally programs must be accompanied by the Election Official's certification of testing, the list of Ballot Tabulation equipment used and a notification that they have caused the Optech Insight to be programmed in conformity with the ballot processing regulations as set forth herein. Refer to the California Elections Code. Should changes be required following certification and submission to the Secretary of State, resubmission and recertification is required.

4.7 Election Observer Panel

This sub-chapter defines the Election Observer Panel, as specified by sub-chapter 4.7 of the “Voting System Use Procedures for California Template” for Election Observer Panel.

All procedures prescribed herein shall be carried out in full view of the public insofar as feasible. In addition, the responsible Election Official shall devise a plan whereby all critical procedures of the Ballot Tabulation process are open to observation by an Election Observer Panel. Representatives of the qualified political parties and representatives of the news media may be among those invited to serve on this panel and shall be given the opportunity to observe that the correct procedures are followed in the receiving, processing, and tally of all voted ballots.
Pursuant to the California Elections Code, all proceedings at the Central Counting Location shall be open to
the view of the public and no person except one employed and designated for the purpose by the Election
Official or authorized deputy shall touch any ballot container, or other tabulating equipment. Access to the
area where the electronic data-processing equipment is being operated may be restricted to those authorized
by the Election Official.

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 the restrictions established by the responsible Election Official to
ensure the efficiency and integrity of the Ballot Tally process.

4.8 HARDWARE MAINTENANCE AND PREPARATION FOR USE

The Technician performs the Hardware Maintenance and Preparation for Use, as specified by sub-chapter
4.8 of the “Voting System Use Procedures for California Template” for Hardware Maintenance and
Preparation for Use.

4.8.1 FOR OPTECH INSIGHT:

For Optech Insight:

Please see Optech Insight Maintenance Manual for the following activities that are performed before the
election:

- Cleaning Optech Insight
- Changing Paper Tape

Please see Optech Insight Maintenance Manual for the following activities that are performed annually:

- Checking Ballot Thickness
- Performing MemoryPack Battery Test
- Performing MemoryPack Data Retention Test

Please see the Optech Insight Maintenance Manual for the following Storage Requirements:

- Storage Requirements for the Optech Insight
- Storage Requirements for Ballot Bins
- MemoryPack Storage Rack Area

For Transportation and Storage security, please see paragraph 10.1.4: Transportation and Storage.

For Insight Battery (Recommended):

At the Warehouse, the Technician charges the Insight Battery, per the Insight Battery Operators &
Maintenance Manual.

For Transportation and Storage security, please see paragraph 10.1.4: Transportation and Storage.

4.8.2 FOR AVC EDGE:

For AVC Edge Voting Machine:

Please see the AVC Edge 5.0 System Maintenance Manual for the Preventive Maintenance activities that
performed at the following time intervals:

- Once a Month: Recharge the internal 12-volt battery(s) by plugging the machines in for 12 to 24
  hours.
- Once every Three Months
- Prior to Election Setup
- After the Machines Return from an Election
Please see the AVC Edge 5.0 System Maintenance Manual for the following Battery Care and Service, per the *AVC Edge 5.0 System Maintenance Manual*:

- 12-Volt Internal Battery Care
- 12-Volt Battery Replacement

Storage is as follows, per the *AVC Edge 5.0 System Maintenance Manual*:

- There are no extraordinary measures required for the storage and maintenance of this equipment. A clean and dry environment is the only storage criteria.
- Remove the Results Cartridge from the Results port compartment, and place in the cartridge tray for storage.

For Transportation and Storage security, please see *paragraph 10.1.4: Transportation and Storage.*

**For Card Activator:**

Please see the *Card Activator 5.0 Operators & Maintenance Manual* for the following procedures, which are performed after the Polls are Closed:

- Status – Checking the Card Activator’s Status
- Erase - Erasing the Voter Activation card
- SetSys – Loading New Firmware
- Exit – Exiting the Card Activator Menu

For Transportation and Storage security, please see *paragraph 10.1.4: Transportation and Storage.*

**For Verivote Printer:**

Please see the *Verivote Printer Maintenance Manual* for the following Preparation, Assembly, and Setup of the Verivote Printer, which is performed before the election:

- Open Verivote Printer
- Remove Used Thermal Paper Roll, if Applicable
- Properly Seat New Core on Take-Up Reel
- Install Paper
- Perform Functional Test
- Attach Cover
- Place Verivote Printer in Nylon Case for Transport

Please see the *Verivote Printer Maintenance Manual* for the following Preventive Maintenance Procedures:

- Cleaning Paper Dust from Unit
- Wiping Fingerprints from Window

The Verivote Printer can be stored in a normal warehouse environment such as normally used for the storage of the AVC Edge. Shelves sufficient to store the number of Verivote Printers at a jurisdiction is an adequate method of storage between elections.

For Transportation and Storage security, please see *paragraph 10.1.4: Transportation and Storage.*

**For Edge Aux Power Unit (Recommended):**

At the Warehouse, the Technician charges the Edge Aux Power Unit, per the *Edge Aux Power Unit Operators & Maintenance Manual.*

For Transportation and Storage security, please see *paragraph 10.1.4: Transportation and Storage.*
4.8.3 **FOR OPTECH 400-C:**

At the Central Counting Location, the Technician performs the following Preventive Maintenance Procedures, per the *Op tech 400-C Maintenance Manual*:

- **Cleaning:** At the following time intervals:
  - Prior to each election, inspect and thoroughly clean the Optech 400-C.
  - During the election, inspect for dust build up every 2,000 to 3,000 ballots. If you see dust, thoroughly clean the Optech 400-C.
  - During the election, after every 5,000 ballots, clean the Read Head area.

- **Safety Check:** After cleaning the Optech 400-C

- **Inspection:** As a minimum Inspections should be done before and after each election or central tabulation.

The procedure for changing Printer Paper will depend upon the Printer Type selected by the jurisdiction’s requirements.

The Optech 400-C is capable of being moved using its four caster wheels. It can be stored in a warehouse or central counting area.

For Transportation and Storage security, please see paragraph 10.1.4: *Transportation and Storage*. 
5 Polling Place Procedures

This chapter discusses the following Polling Place Procedures, as specified by Chapter 5 of the “Voting System Use Procedures for California Template” for Polling Place Procedures:

- Precinct Supplies, Delivery, and Inspection
- Polling Place Setup
- Opening the Polls
- Polling Place Procedures
- Special Needs Voters
- Provisional Voters
- Closing the Polls and Vote Reporting
- Securing Audit Logs and Backing Up Records
- Troubleshooting and Problem Resolution
- Printer/Ballot Jams
- Vote Save Failure – Use Backup Voting Procedure: For AVC Edge
- Improperly/Not Activated Voter Card: For AVC Edge

NOTE: This chapter applies ONLY to the Optech Insight and AVC Edge.

5.1 Precinct Supplies, Delivery, and Inspection

This sub-chapter discusses the Precinct Supplies, Delivery, and Inspection, as specified by sub-chapter 5.1 of the “Voting System Use Procedures for California Template” for Precinct Supplies, Delivery, and Inspection.

5.1.1 Precinct Supplies

Prior to Election Day, the Precinct Board ensures the Precinct Supplies.
For Optech Insight:

- Check all pads of Paper Ballots to ensure that Ballot Style identification numbers, serial numbers, and precinct numbers (if used) printed on the Paper Ballots are correct.
- Report any problems to the Election Official responsible for the election.
- Supplies necessary for the conduct of elections at Polling Places shall be delivered as follows:
  - Paper Ballots shall be in the quantity and manner required by the California Elections Code, as well as demonstrator ballots marked for Demonstration use only.
  - In primary elections, Paper Ballots shall be appropriately tinted for each Political Party and for Non-Partisan Voters, as directed by the Secretary of State.
  - Demonstration or voting instruction placards.
  - General purpose precinct supplies as provided in the California Elections Code.
  - Secrecy sleeves or envelopes, if ballots are printed on two sides.
  - Marking Devices.
  - A Certificate of Packaging and Sealing, in duplicate, together with a postage paid self-addressed stamped business reply envelope, or postcard addressed to the responsible Election Official.
  - Sample Ballots of each Ballot Style as required by the California Elections Code.
  - Seals and any other supplies and forms deemed necessary.

For AVC Edge:

- Each polling place will be given a Card Activator and a number of Voter Cards in their supplies.
- Tables
- Power Cords
- Card Activator’s
- Voter Cards
- Seals
- Machine/Seal Log
- Voter Instructions
- Machine Stickers
- Results Cartridges
- Audit Trail Cartridges
- Simulation Cartridges
- Machine File Folders for official Pre-Election LAT tapes

5.1.2 DELIVERY

For Optech Insight:

At the Warehouse prior to Election Day, the Technician prepares the voting machines for delivery, per the Optech Insight Operators Manual:

- Pre-Election:
  - Preparing Optech Insight for Shipment
- Opening the Polls:
  - Inserting Programmed MemoryPack into Optech Insight and Sealing It
For AVC Edge:
At the Warehouse, prior to Election Day, the Technician prepares the voting machines for delivery, per the Optech Insight Operators Manual: Election Day Preparation:

- Advance to Official Election.
- Seal and Close Up Voting Machine
- **For Verivote Printer:** Verivote Printer should already have been placed in Nylon Case for Transport, per paragraph 3.2.3: For AVC Edge.

### 5.1.3 INSPECTION

**For Optech Insight:**
After the Optech Insights have been delivered to the Polling Place, the Poll Worker performs the following inspection:

- Verify that a MemoryPack is already installed and coded for the specific precinct.
- Verify the serial number of the Optech Insight and the identification number of the MemoryPack, per the Optech Insight Operators Manual: Verifying Identification.

**For AVC Edge:**
After the AVC Edges have been delivered to the Polling Place, the Poll Worker performs the following inspection:

- Check leg assembly and all external parts.
- Verify that the correct polling place, machine number, and delivery address have been identified on the voting machine.
- After power-up, verify that the voting machine has been fully charged (no yellow or red warning bars are displayed by the screen).
- **For Card Activator:** The Poll Worker performs the following inspection, per the Card Activator 5.0 Operators & Maintenance Manual: Preparing Card Activator for an Election:
  - Power – That the Card Activator is fully charged
  - Site -- That the Precinct Site is correct
  - Time – That the Card Activator Date and Time are correct
- **Verivote Printer:** The Poll Worker verifies that there is a Verivote Printer for each AVC Edge, and spare Verivote Printers, as specified by the jurisdiction.
- **Edge Audio Accessory:** The Poll Worker verifies the following:
  - That there is an Edge Audio Accessory for each AVC Edge
  - That there is no obvious damage
- **Edge Aux Power Unit (Recommended):** The Poll Worker verifies the following:
  - That there is an Edge Aux Power Unit for each AVC Edge
  - That there is no obvious damage
  - Connect the Edge Aux Power Unit to the AVC Edge, per the Edge Aux Power Unit Operators & Maintenance Manual, and verify that the power switch, on the front of the Edge Aux Power Unit, lights up.

After the AVC Edges have been delivered to the Polling Place, the Poll Worker performs the following inspection:

- Check leg assembly and all external parts.
5.1.4 **Spare Verivote Printers On Hand: For AVC Edge**

SVS recommends having spare Verivote Printers, on hand, in case of printer jam or malfunction. These Verivote Printers should already have been prepared, assembled, and set up, per the *Verivote Printer Maintenance Manual*.

5.1.5 **Some Paper Ballots and Sealing Envelopes On Hand: For AVC Edge**

SVS recommends having some Paper Ballots and sealing envelopes, on hand, in case of Vote Save Failure.

5.2 **Polling Place Setup**

The Poll Worker sets up the Polling Place, as specified by sub-chapter 5.2 of the “Voting System Use Procedures for California Template” for *Polling Place Setup*.

5.2.1 **For Optech Insight:**

Per the *Optech Insight Operators Manual*:

- Setting Up Ballot Box
- The Programmed MemoryPack should already have been inserted into the Optech Insight and sealed.

5.2.2 **For AVC Edge:**

For AVC Edge Voting Machine:

Please see the following Election Day procedure, per the *AVC Edge 5.0 Operators Manual*:

- Set Up the Voting Machines.

For Card Activator:

Each polling place will be given a Card Activator and a number of Voter Activation Cards in their supplies. The Voter Activation Cards are used to activate the machine for the voter. To set-up the Card Activator/HAAT:

1. Plug the Card Activator into an AC outlet.
2. Turn the Power Switch on.
3. The Card Activator will be ready for a Voter Card.

For Verivote Printer:

Please see the following System Installation and Test procedures, per the *Verivote Printer Operators Manual*:

- Preparation, Assembly, and Setup
- Mounting Verivote Printer onto AVC Edge
- Connection and Power Up
- Pre-Election LAT

5.3 **Opening the Polls**

The Poll Worker performs the Opening the Polls procedures, as specified by sub-chapter 5.3 of the “Voting System Use Procedures for California Template” for *Opening the Polls*:

5.3.1 **General**

Please see *appendix G.1: General*. 
5.3.2 FOR OPTECH INSIGHT:

Please see appendix G.2: For Optech Insight.

5.3.3 FOR AVC EDGE:

Please see appendix G.3: For AVC Edge.

5.4 POLLING PLACE PROCEDURES

The Poll Worker performs the Polling Place Procedures, as specified by sub-chapter 5.4 of the “Voting System Use Procedures for California Template” for Polling Place Procedures.

5.4.1 GENERAL

Please see appendix H.1: General.

5.4.2 FOR OPTECH INSIGHT:

Please see the following appendices:
- H.2.1: General Procedures
- H.2.2: For Regular Ballot:
- H.2.3: For Blank Ballot:
- H.2.4: For Overvoted Ballot:
- H.2.5: For Undervoted Ballot:
- H.2.6: For Write-In Ballot:
- H.2.7: For Cross-Voted Ballot:
- H.2.8: For Error Ballot:
- H.2.9: For Unprocessable Ballot:
- H.2.10: For Voted Absentee Ballot:
- H.2.11: For Surrender of Unvoted Absentee Ballot:
- H.2.12: Provisional Voting:

5.4.3 FOR AVC EDGE

Please see the following appendices:
- H.3.1: General Procedures
- H.3.2: If Voter Wishes to Change a Selection:
- H.3.3: Entering Write-In Candidate
- H.3.4: For Blank Ballot:
- H.3.5: For Fleeing Voter:
- H.3.6: For Undervote:
- H.3.7: Overvote is Not Allowed:
- H.3.8: Provisional Voting:
5.5 **SPECIAL NEEDS VOTERS**

This sub-chapter defines the following procedures for Special Needs Voters, as specified by sub-chapter 5.5 of the “Voting System Use Procedures for California Template” for Special Needs Voters:

- Audio Voting: Use AVC Edge
- Wheelchair Voting: Use AVC Edge

5.5.1 **AUDIO VOTING: USE AVC EDGE**

Please see the following appendices:

- H.4.1: General Procedures
- H.4.2: If Voter Wishes to Change a Selection:
- H.4.3: Entering Write-In Candidate
- H.4.4: For Blank Ballot:
- H.4.5: For Fleeing Voter:
- H.4.6: For Undervote:
- H.4.7: Overvote is Not Allowed:
- H.4.8: Provisional Voting:

5.5.2 **WHEELCHAIR VOTING: USE AVC EDGE**

The AVC Edge’s display and touchscreen are adjustable to different viewing angles to accommodate a wide range of conditions, including wheelchair-bound Voters.

Wheelchair Voting is identical to Regular Voting, per the following appendices:

- H.3.1: General Procedures
- H.3.2: If Voter Wishes to Change a Selection:
- H.3.3: Entering Write-In Candidate
- H.3.4: For Blank Ballot:
- H.3.5: For Fleeing Voter:
- H.3.6: For Undervote:
- H.3.7: Overvote is Not Allowed:
- H.3.8: Provisional Voting:

5.6 **PROVISIONAL VOTERS**

This sub-chapter defines the following procedures for Provisional Voters, as specified by sub-chapter 5.6 of the “Voting System Use Procedures for California Template” for Provisional Voters:

- In Precinct
- Out of Precinct
5.6.1 **IN PRECINCT**

This paragraph defines the procedure for In Precinct Provisional Voters, as specified by paragraph 5.6.1 of the “Voting System Use Procedures for California Template” for *In Precinct*.

- **For Optech Insight:** Please see the following appendices:
  - H.2.12: Provisional Voting
  - I.1.6: For Provisional Ballots
- **For AVC Edge: Regular Voting:** Please see the following appendices:
  - H.3.8: Provisional Voting
  - I.2.3: For Provisional Votes
- **For AVC Edge: Audio Voting:** Please see the following appendices:
  - H.4.8: Provisional Voting
  - I.2.3: For Provisional Votes

5.6.2 **OUT OF PRECINCT**

This paragraph defines the procedure for Out of Precinct Provisional Voters, as specified by paragraph 5.6.2 of the “Voting System Use Procedures for California Template” for *Out of Precinct*.

The procedure for Out of Precinct Provisional Voters is determined by the jurisdiction. Before the election, please check with them about their procedure.

5.7 **CLOSING THE POLLS AND VOTE REPORTING**

The Poll Worker performs the activities for Closing the Polls and Voting Reporting, as specified by sub-chapter 5.7 of the “Voting System Use Procedures for California Template” for *Closing the Polls and Vote Reporting*.

5.7.1 **FOR OPTECH INSIGHT:**

Please see the following appendices:
- I.1.1: General Procedures
- I.1.2: Obtaining Regular Ballots from Rear Bin
- I.1.3: Checking Center Bin for Write-In Ballots
- I.1.4: Checking Auxiliary Bin for Blank, Overvoted, Undervoted, Cross-Voted, Error, and Unprocessable Ballots
- I.1.5: For Voted Absentee Ballots:
- I.1.6: For Provisional Ballots:

5.7.2 **FOR AVC EDGE:**

Please see the following appendices:
- I.2.1: General Procedures
- I.2.2: Vote Consolidation (Optional)
- I.2.3: For Provisional Votes:
- I.2.4: Audit Trail Transfer: If Results Cartridge Damaged or Unreadable
5.8 SECURING AUDIT LOGS AND BACKING UP RECORDS

This sub-chapter defines the procedures for Securing Audit Logs and Backing Up Records, as specified by sub-chapter 5.8 of the “Voting System Use Procedures for California Template” for Securing Audit Logs and Backing Up Records.

5.8.1 FOR OPTECH INSIGHT:

The following procedures are included as a part of Closing the Polls (paragraph 5.7.1: For Optech Insight), per the Optech Insight Operators Manual: Closing the Polls:

- Obtaining Signatures and Public Counter Number
- Distributing Vote Totals Report
- Printing Electronic Log Report

5.8.2 FOR AVC EDGE:

Vote data is redundantly stored, using separate data paths. One copy is in the machine’s internal Audit Trail memory; the other is in the Results Cartridge. Both copies are stored onto non-volatile, sold-state memory devices. In the case of a catastrophic failure of the internal Audit Trail memory, the Results Cartridge will still have the data. In the event of a catastrophic failure of the Results Cartridge, provisions exist, once at the polls closed state, for transferring a copy of the Audit Trail memory onto a special Audit Trail Transfer Cartridge.

The process of saving votes on the AVC Edge involves double and triple-checks at each step. These checks include:

- Data being read from a file, such as vote totals to be incremented, are read twice and compared before being used.
- Data being written to a file is read back, twice, and compared to the original data.
- Arithmetic operations, such as bit-packing and incrementing, are double-checked.

Any error in the above tests is considered fatal. If one were to occur, that machine would report an error condition and disable itself from further voting.

The Event Log provides a record of the events.

5.9 TROUBLESHOOTING AND PROBLEM RESOLUTION

This sub-chapter discusses the Troubleshooting and Problem Resolution, as specified by sub-chapter 5.9 of the “Voting System Use Procedures for California Template” for Troubleshooting and Problem Resolution:
5.9.1 FOR OPTECH INSIGHT:

For the following Troubleshooting and Problem Resolution, please see the *Optech Insight Operators Manual: Troubleshooting*:

- Optech Insight Will Not Generate Initial Printout
- Zero Tape Will Not Advance on Printer
- Printed Paper Tape Not Legible
- Keypad Not Working
- Optech Insight Accidentally Unplugged While Tallying Ballots
- Path Sensor Error
- Ballot Returned to Voter
- Optech Insight Stops Accepting Ballots during Voting Hours
- Paper Tape Shows Red Line on Edge
- Red Power Light Not On
- Machine Out of Service
- Excessive Rejection of Ballots
- Optech Insight Not Reading Ballots
- Optech Insight Will Not Read Ballots in Certain Orientations
- Short MemoryPack Battery Life
- Optech Insight Stops Processing, and Prints Checksum Error Message

5.9.2 FOR AVC EDGE:

Most Election Day issues can be handled over the phone and rarely require a technician to be deployed. However, if this should occur, the technician should be equipped with a communication device and toolkit to handle problems.

For the following Troubleshooting and Problem Resolution, please see the *AVC Edge 5.0 Operators Manual: Troubleshooting*:

- Polls Closed Prematurely
- Results Cartridge Removed
- Low Battery Message
- Touchscreen Totally Unreadable on Power-Up
- On-Screen Buttons Not Responding on Power-Up
- Touchscreen Contrast and Calibration “OFF”
- Fingerprints on Touchscreen

5.10 PRINTER/BALLOT JAMS

This sub-chapter discusses the procedures for the following Printer/Ballot Jams:

- For Verivote Printer: For AVC Edge
- Resolution of Ballot Jam on Election Day: For Optech Insight
5.10.1 RESOLUTION OF VERIVOTE PRINTER JAM ON ELECTION DAY: FOR AVC EDGE

On Election Day, the Verivote Printer can jam at any of the following times:
- While Printing Zero Proof Report
- While Voter Was Reviewing Ballot
- While Voter Was Making Changes to Ballot
- After Voter Cast Ballot
- While Printing Results Report(s)

The county should establish procedures for printer jam and documentation. However, the following procedure and documentation are recommended by SVS.

5.10.1.1 PROCEDURE

**WARNING! ELECTRIC VOLTAGE AND MOVING PARTS ARE PRESENT. TURN OFF ALL ELECTRICAL POWER TO THE VERIVOTE PRINTER BEFORE SERVICING. ANY REPLACEMENT MUST BE PERFORMED BY A TECHNICIAN.**

A Technician replaces the Verivote Printer, as follows:

1. Power down the AVC Edge, by opening the cover for the Power Switch, and switching the Power Switch to OFF.

**IMPORTANT! DO NOT TOUCH THE POLLS OPEN/CLOSE SWITCH.**

2. Disconnect the Verivote Printer from the AVC Edge, per the *Verivote Printer Operators Manual: Connection and Power Up*.

3. Dismount the Verivote Printer from the AVC Edge, per the *Verivote Printer Operators Manual: Mounting Verivote Printer onto AVC Edge*.

4. Store the replaced Verivote Printer in a safe location, along with a label that indicates that it is a replaced printer.

**IMPORTANT! THIS REPLACED PRINTER WILL ACCOMPANY ELECTION RESULTS, TO THE CENTRAL COUNTING LOCATION, AT THE END OF THE ELECTION.**

5. Mount the Verivote Printer onto the AVC Edge, per the *Verivote Printer Operators Manual: Mounting Verivote Printer onto AVC Edge*.

6. Connect the Verivote Printer to the AVC Edge, per the *Verivote Printer Operators Manual: Connection and Power Up*.

7. Power up the AVC Edge, by opening the cover for the Power Switch, and switching the Power Switch to ON.

**NOTE: Upon power-up, the AVC Edge will resume operation. The Technician who replaced the Verivote Printer should print several test prints to insure that the Verivote Printer is advancing paper properly.**
8. Complete the form, per Appendix K-3: Resolution of Verivote Printer Jam on Election Day Form: For AVC Edge.

**IMPORTANT! COMPLETED FORM MUST ACCOMPANY ELECTION RESULTS, TO CENTRAL COUNTING LOCATION, ALONG WITH REPLACED VERIVOTE PRINTER, AT THE END OF THE ELECTION.**

**While Printing Zero Proof / Results Report(s):**
- After replacement of the Verivote Printer, the Poll Worker should print another copy of the Zero Proof Report.

**While Voter Was First Attempting to Cast Ballot and/or Reviewing/Making Changes to Ballot:**
- Before replacing the Verivote Printer, the Voter should be instructed that their vote will not be lost. Without powering down the AVC Edge, disconnect the Power Cable to the Verivote Printer; then the Data Cable. Now, replace the Verivote Printer.
- Once the AVC Edge is powered up, after replacement of the Verivote Printer, a “Please Review Paper” pop-up window will be displayed by the AVC Edge, with the following options:

  **IMPORTANT! THE VOTER NEEDS TO BE INSTRUCTED THAT THEIR VOTE HAS NOT BEEN LOST, AND ON THE RESULTS OF EACH OF THE FOLLOWING ACTIONS.**

  - **Make Changes:** The Voter touches this button, without making any changes. When they go to cast their ballot, the paper record will be printed at that time.
  - **Cast Ballot:** The Voter touches this button to cast ballot as is.

  **IMPORTANT! THIS IS FINAL! IF A VOTER CHOOSES TO CAST THEIR BALLOT AS IS, THEY MAY NOT GO BACK AND CHANGE IT.**

  - If the Voter wishes to start over, their voting session (on the AVC Edge) may be deactivated, and a new voting session activated for them.

  Once the AVC Edge is powered up, after replacement of the Verivote Printer, the following pop-up window should be displayed by the AVC Edge:

**After Voter Cast Ballot**
- Before replacing the Verivote Printer, the Voter should be instructed that their vote will not be lost.
- Since there will be a discrepancy between the Results Cartridge and Paper Trail, it is especially important that the documentation be completed, per paragraph 5.10.1.2: Documentation.

**5.10.1.2 DOCUMENTATION**

For sample documentation, please see Appendix K-3: Resolution of Verivote Printer Jam on Election Day Form: For AVC Edge.

**5.10.1.3 IF NO REPLACEMENT VERIVOTE PRINTERS AVAILABLE:**

Shut down the AVC Edge voting machine from further voting.
5.10.2 Resolution of Ballot Jam on Election Day: For Optech Insight

A jam may occur in any of the following ways:

- Jammed Ballot -- Returned to Voter
- Jammed Ballot -- NOT Returned to Voter
- Ballot Not Where Expected -- Processed
- Ballot Not Where Expected -- NOT Processed
- Ballot Stuck in Center Output Slot
- Ballot Stuck in Rear Output Slot

5.10.2.1 Jammed Ballot -- Returned to Voter:

- The following message will be displayed by the Optech Insight:
  
  BALLOT JAMMED RETURNING TO VOTER. REMOVE IT AND HAVE VOTER REMAKE IT.

  *** BALLOT HAS NOT BEEN PROCESSED!!! ***

- Remove Ballot from Optech Insight and have Voter remake it.

5.10.2.2 Jammed Ballot -- NOT Returned to Voter:

- The following message will be displayed by the Optech Insight:

  BALLOT JAMMED. REMOVE IT AND PLACE IT IN THE CENTER BIN

  **** BALLOT HAS BEEN PROCESSED!!!! ****

- Remove Ballot and place it in the Center Bin.

5.10.2.3 Ballot Not Where Expected -- Processed:

For Center Bin:

- The following message will be displayed by the Optech Insight:

  BALLOT NOT WHERE EXPECTED. REMOVE FROM MACHINE AND PLACE IN CENTER BIN. IF BALLOT IS NOT TORN, CALL FOR SERVICE TECHNICIAN

  **** BALLOT HAS BEEN PROCESSED!!!! ****

- Remove Ballot from machine, and place in Center Bin, if Ballot is not torn.
- Call for Service Technician.

For Rear Bin:

- The following message will be displayed by the Optech Insight:

  BALLOT JAMMED. REMOVE IT AND PLACE IT IN THE REAR BIN

  **** BALLOT HAS BEEN PROCESSED!!!! ****

- Remove Ballot from machine, and place in Rear Bin.
- Call for Service Technician.
5.10.2.4 **BALLOT NOT WHERE EXPECTED – NOT PROCESSED:**

- The following message will be displayed by the Optech Insight:

  BALLOT NOT WHERE EXPECTED. REMOVE FROM MACHINE AND RETURN TO VOTER. IF BALLOT IS NOT TORN, CALL FOR SERVICE TECHNICIAN

  *** BALLOT HAS NOT BEEN PROCESSED!! ***

- Remove Ballot from Optech Insight and return to Voter.
- Call for Service Technician.

5.10.2.5 **BALLOT STUCK IN CENTER OUTPUT SLOT:**

- The following message will be displayed by the Optech Insight:

  BALLOT APPEARS TO BE STUCK IN THE CENTER OUTPUT SLOT. IT COULD BE STUCK OR THE BIN MAY BE FULL. MAKE SURE THE BALLOT HAS CLEARED THE MACHINE AND IS IN THE CENTER BIN.

  **** BALLOT HAS BEEN PROCESSED!!!! ****

- It could be stuck, or the Center Bin may be full.
- Make sure the Ballot has cleared the machine and is in the Center Bin.

5.10.2.6 **BALLOT STUCK IN REAR OUTPUT SLOT:**

- The following message will be displayed by the Optech Insight:

  BALLOT APPEARS TO BE STUCK IN THE REAR OUTPUT SLOT. IT COULD BE STUCK OR THE BIN MAY BE FULL. MAKE SURE THE BALLOT HAS CLEARED THE MACHINE AND IS IN THE REAR BIN

  **** BALLOT HAS BEEN PROCESSED

- It could be stuck, or the Rear Bin may be full.
- Make sure the Ballot has cleared the machine and is in the Rear Bin.

5.11 **VOTE SAVE FAILURE: FOR AVC EDGE**

On Election Day, For Vote Save Failure, the AVC Edge will display a pop-up window with the following error message:

Vote Save Failure
[Error Detail]

*Use The Backup Voting Procedure*

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**NOTE:** For [Error Detail], please see the AVC Edge 5.0 System Maintenance Manual: Error Message Descriptions: Election Program.

The county should establish procedures for backup voting and documentation. However, the following Backup Voting Procedures and documentation are recommended by SVS.

5.11.1 **PROCEDURE #1 – RETIRE VOTER CARD AND ISSUE ANOTHER ONE.**

**NOTE:** This is the preferred procedure.

1. The Voter Card is probably bad.
   Retire it (with a note indicating “Bad Card”), and issue another activated Voter Card to the Voter.
5.11.2 PROCEDURE #2 – HAVE VOTER VOTE ON ANOTHER AVC EDGE VOTING MACHINE.

NOTE: Use this procedure ONLY if retiring the Voter Card does not work. Of Procedures #2 and #3, this is the preferred procedure for an Audio Voter.

1. Notify the Election Official.
2. The Election Official should power down the affected AVC Edge voting machine, by opening the cover for the Power Switch, and switching the Power Switch to OFF.

   IMPORTANT! DO NOT TOUCH THE POLLS OPEN/CLOSE SWITCH.

3. Activate another Voter Card, and hand it to the Voter.
4. Instruct the Voter that their vote was not saved, and that they should start over.
5. If they are an Audio Voter, another AVC Edge voting machine should be set up for Audio Voting, per the Edge Audio Accessory 5.0 Poll Workers & Operators Manual: Preparing the Edge for Audio or Regular Voting.
6. Usher the Voter to another AVC Edge voting machine, where they will start over.

   NOTE: From this point, the Voting process will be normal.

7. Complete the form, per Appendix K-4: Vote Save Failure – Used Backup Procedure Form: For AVC Edge.

   IMPORTANT! COMPLETED FORM MUST ACCOMPANY ELECTION RESULTS, TO CENTRAL COUNTING LOCATION, ALONG WITH RESULTS CARTRIDGE FROM AFFECTED VOTING MACHINE.

8. Once the Voter has voted, receive their Voter Card, and treat it as normal.
9. If they are an Audio Voter, return the AVC Edge voting machine to normal operation, per the Edge Audio Accessory 5.0 Poll Workers & Operators Manual: Preparing the Edge for Audio or Regular Voting.
10. At the time of Closing the Polls, the affected AVC Edge voting machine will be powered up, and the Polls Closed as normal, with the following exception:

    The completed “Vote Save Failure – Used Backup Voting Procedure” form will accompany the Results Cartridge from the affected machine.

5.11.3 PROCEDURE #3 – HAVE VOTER VOTE ON A PAPER BALLOT.

1. Notify the Election Official.
2. The Election Official should power down the affected AVC Edge voting machine, by opening the cover for the Power Switch, and switching the Power Switch to OFF.

   IMPORTANT! DO NOT TOUCH THE POLLS OPEN/CLOSE SWITCH.

3. Provide the Voter with a Paper Ballot.
4. Instruct the Voter that their vote was not saved, and that they should start over, by using the Paper Ballot.
5. Usher the Voter to a booth, or private location, where they will use the Paper Ballot to start over.

6. Complete the form, per Appendix K-4: Vote Save Failure – Used Backup Procedure Form: For AVC Edge.

   IMPORTANT! COMPLETED FORM MUST ACCOMPANY ELECTION RESULTS, TO CENTRAL COUNTING LOCATION, ALONG WITH RESULTS CARTRIDGE FROM AFFECTED VOTING MACHINE, AND PAPER BALLOT (IN A SEALED ENVELOPE).

7. Once the Voter has voted, receive their Paper Ballot, log it, and put it into a sealed envelope, for later processing at the Central Counting Location.

8. At the time of Closing the Polls, the affected AVC Edge voting machine will be powered up, and the Polls Closed as normal, with the following exceptions:

   The completed “Vote Save Failure – Used Backup Voting Procedure” form will accompany the Results Cartridge from the affected machine, and Paper Ballot (in a sealed envelope).

   NOTE: At the Central Counting Location, the Paper Ballot will be counted as an Absentee Ballot.

5.11.4 DOCUMENTATION

For sample documentation, please see Appendix K-4: Vote Save Failure – Used Backup Procedure Form: For AVC Edge.

   NOTE: This documentation applies ONLY to Procedures #2 and #3.

5.12 IMPROPERLY/NOT ACTIVATED VOTER CARD: FOR AVC EDGE

1. Put the Voter Card in the pile of used Voter Cards to be erased, and issue another activated Voter Card to the Voter.

   Erasing the Voter Card, along with the others, will allow it to be used again, after any of the following scenarios:
   - Poll Worker Forgot to Activate It.
   - Glitch

2. If after erasing the Voter Card, there is a second occurrence of it being improperly/not activated, the Voter Card is probably bad.

   Retire it (with a note indicating “Bad Card”), and issue another activated Voter Card to the Voter.
6 Absentee-Mail Ballot Procedures

This chapter defines the following Absentee-Mail Ballot Procedures, as specified by Chapter 6 of the “Voting System Use Procedures for California Template” for Polling Place Procedures:

- System Start-Up and Pre-Tabulation Report Procedures
- Tabulation Procedures
- Post-Tabulation Report and Shutdown Procedures
- Troubleshooting and Problem Resolution

NOTE: This chapter applies ONLY to the Optech 400-C.

6.1 System Start-Up and Pre-Tabulation Report Procedures

This sub-chapter discusses the following System Start-Up and Pre-Tabulation Report Procedures, as specified by sub-chapter 6.1 of the “Voting System Use Procedures for California Template” for System Start-Up and Pre-Tabulation Report Procedures:

- Preparing Absentee Ballots for Tally
- Zeroing Counters
- Setting Up Optech 400-C to Tally Absentee Ballots
- Checking Ballot Handling Options
- Inspecting Absentee Ballots

6.1.1 Preparing Absentee Ballots for Tally

Please see the Optech 400-C Operators Manual: Tabulation of Absentee Ballots, for the following procedure:

- Prepare Returned Absentee Ballots for Tabulation.

6.1.2 Zeroing Counters

WinETP is used to zero the counters, per the following File Menu procedure of the WinETP Reference Guide:

- Initialize

6.1.3 Setting Up Optech 400-C to Tally Absentee Ballots

WinETP is used to select the following type of batch, per the Optech 400-C Operators Manual: Tabulation of Absentee Ballots:

- Ballot Batch: Absentee Ballots

6.1.4 Checking Ballot Handling Options

The Ballot Handling Options should already have been selected, per appendix D.4.5: Ballot Handling Options.
6.1.5 **INSPECTING ABSENTEE BALLOTS**

Absentee Ballots must be properly prepared for Ballot Tally. Absentee Ballots improperly prepared can cause ballot jams and can damage Absentee Ballots. Follow the following steps, to properly inspect Absentee Ballots and to ensure proper functioning of the Optech 400-C.

1. Ballots must be inspected for foreign objects such as staples, tape, or paper clips. All foreign objects must be removed from the ballots. If the ballots have stubs, they must be inspected for improperly removed stubs.

2. Ballots must be inspected for damage such as torn or frayed edges. All damaged ballots must be removed from the ballot batches and remade according to your jurisdictions procedures.

3. Folded ballots must be unfolded, oriented with folds in the same direction, and folded in the opposite direction, against the crease, to flatten the ballot.

4. The readability of the ballot is questioned when the clock or marking areas on the ballot have non-acceptable marks. Listed below are a few known reasons. Please see the *Optech 400-C Maintenance Manual* for specific error messages.

   - Bad printing on the ballot
   - Voter marking the Acceptable Security ID, orientation marks, start bar, or stop bar areas of a ballot
   - Mutilation of a ballot
   - Wrong marking pen used
   - Greasy fingerprints caused from motor grease, etc
   - Read head sensor failure
   - Ballot trimmed incorrectly

6.2 **TABULATION PROCEDURES**

This sub-chapter discusses the Tabulation Procedures, as specified by sub-chapter 6.2 of the “Voting System Use Procedures for California Template” for *Tabulation Procedures*.

Please see the *Optech 400-C Operators Manual: Tabulation of Absentee Ballots*, for the following procedures:

- Loading Ballots, by Polling Place
- Tallying Ballots, by Polling Place
- Handling Outstacked Ballots
- Handling Write-In Ballots
- Clearing Ballots from Main Bin
- Ending Ballot Tally for Polling Place
- Saving and Backing Up Ballot Tally for Polling Place
- Cleaning Optech 400-C every 5000 Ballots
- Repeating Ballot Tally for Previous Polling Place, if necessary
- Recovering from Power Failure

**IMPORTANT:** Cleaning the Optech 400-C every 5000 Ballots should be performed by a Technician.
6.3 POST-TABULATION REPORT AND SHUTDOWN PROCEDURES

This sub-chapter discusses the following Post-Tabulation Report and Shutdown Procedures, as specified by sub-chapter 6.3 of the “Voting System Use Procedures for California Template” for Post-Tabulation Report and Shutdown Procedures.

- Generating Election Totals
- Generating Reports
- Ballot Tally Reporting
- Shutdown Procedures

6.3.1 GENERATING ELECTION TOTALS

Please see the Optech 400-C Operators Manual for the following Election Total procedures:

- Restoring Vote Totals, if necessary
- Merging Vote Totals, as applicable
- Zeroing Precinct Totals, if necessary
- Backing Up Final Election Results

6.3.2 GENERATING REPORTS

Please see the Optech 400-C Operators Manual for the following Report Generation procedures:

- The Report Format Options should already have been configured, per appendix D.4.6: Report Format Options.
  Select the following configuration option:
  - **Reporting Mode: Absentee**

- Printer(s) should already have been configured, per appendix D.4.7: Printers.

- Generating Precinct Report:
  Select the following configuration options:
  - **Precinct List: Select All**
  - **Show Ballot Positions**
  - **Report Destination: Printer**

- Generating Accumulated Totals Report:
  Select the following configuration options:
  - **Precinct List: Select All**
  - **Show Ballot Positions**
  - **Report Destination: Printer**

- Generating Precincts Processed Report:
  Select the following configuration option:
  - **Report Destination: Printer**

- Generating Precincts Not Processed Report:
  Select the following configuration option:
  - **Report Destination: Printer**

- Generating Canvass Report
  Normally the Canvass Report is printed after an election is completed. It usually stands as an official record of an election and is sometimes requires signatures by election officials.
6.3.3 Ballot Tally Reporting Using Summary System

Please see the Optech 400-C Operators Manual for Vote Tally Reporting procedures Using Summary System.

6.3.4 Shutdown Procedures

Please see the Optech 400-C Operators Manual for the following procedures for Exit, Ballot Return, and Storage:

- Closing Election
- Obtaining Election Log
- Exiting WinETP Tabulating Program
- Returning Voted Absentee Ballots
- Putting Optech 400-C into Storage

6.4 Troubleshooting and Problem Resolution

For the following Troubleshooting and Problem Resolution, please see the Optech 400-C Operators Manual: Troubleshooting:

- Re-Installation of WinETP Tabulation Program
- Ballot Jam
- Ballot-Reading Problems
# 7 Semi-Official Canvass Tabulation and Reporting

This chapter discusses the Semi-Official Canvass Tabulation and Reporting, as specified by Chapter 7 of the “Voting System Use Procedures for California Template” for Semi-Official Canvass tabulation and Reporting:

- System Start-Up and Pre-Tabulation Reports
- Processing Vote Reports
- Integration with County Systems and Calvoter
- Election Night and Post-Election Reporting

## 7.1 System Start-Up and Pre-Tabulation Reports

This sub-chapter discusses System Start-Up and Pre-Tabulation Reports, as specified by sub-chapter 7.1 of the “Voting System Use Procedures for California Template” for System Start-Up and Pre-Tabulation Reports.

### 7.1.1 General

The responsible Election Official shall establish procedures to account for all voted ballots during the semi-official canvass. These procedures shall record the time voted ballots were received from each precinct and shall determine from whom they were received and to whom they were submitted. In addition, each function listed in Chapter 8: Official Canvass and Post-Election Procedures, is designated as a tracking point, and the responsible Election Official must track the receipt and processing of voted ballots by boards assigned to perform these functions.

### 7.1.2 For Optech Insight:

At the time of Closing the Polls, the following Totals Reports are printed, per the Optech Insight Operators Manual: Closing the Polls:

- Results Ballot Report
- Results Vote Totals Report

And then, the following operations are performed, per the Optech Insight Operators Manual: Closing the Polls:

- Obtaining Signatures and Public Counter Number
- Distributing Vote Totals Report

### 7.1.3 For AVC Edge:

**Tally Processing:**

Please see the WinEDS 3.1 Reference Guide: Election Day to Begin the Tally.

**Election Night Statistics:**

Please see the WinEDS 3.1 Reference Guide: Election Day for the following Election Night Statistics:

- Viewing Statistics by Contest
- Viewing Tally Statistics
7.1.4 **FOR OPTECH 400-C:**

Report preliminary Absentee Ballot Tabulations, compiled pursuant to the California Elections Code, 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.

7.2 **PROCESSING VOTE REPORTS**

This sub-chapter discusses the following information about Processing Vote Reports, as specified by sub-chapter 7.2 of the “Voting System Use Procedures for California Template” for Processing Vote Reports:

- Central Tabulation
- Precinct Tabulation

7.2.1 **CENTRAL TABULATION**

This paragraph discusses Central Tabulation, as specified by paragraph 7.2.1 of the “Voting System Use Procedures for California Template” for Central Tabulation.

**General:**

Processing ballots "centrally" on election night normally will be done at a County Courthouse, County Administration Facility, City Hall or other such single facility. Nothing herein shall preclude however, the election night processing of ballots at other locations (and they may be several) such as polling places, remote public facilities, etc. When so done, the procedures presented here for "central processing" shall apply as far as is practical. At a minimum, all procedures for testing, sealing, logging, maintenance of the audit trail and subsequent transportation of ballots and election materials shall apply.

The Election Official responsible for the conduct of an election shall appoint boards to carry out the semi-official canvass functions.

Other boards may be deemed necessary by the responsible Election Official. Individuals appointed to the boards may perform more than one function or serve on more than one board.

The semi-official canvass functions 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 Counting Location shall sign the following declaration:

"To the best of my knowledge and belief, I did not tamper with any ballot, or Ballot Tabulation equipment, nor did I observe any other person in any way tamper or interfere with the Ballot Tabulation process."

**For Optech 400-C:**

Please see the *Optech 400-C Operators Manual* for the following Semi-Official Canvass procedures:

- Reporting Preliminary Absentee Ballot Tally Results
- Establishing Audit Trails
- Appointment of Boards
- Processing of Absentee and Provisional Ballots
- Logic Testing
- Seal and Container Inspection
- Ballot Inspection
- Ballot Processing
- Ballot Duplication for Damaged and Blank Ballots
- Processing of Write-In Votes
- Storage of Ballots during Processing
Using WinEDS to Process Central Vote Reports:
The Central Vote Reports are processed using WinEDS. At this time, the following Post-Election activities are also performed, per the WinEDS 3.1 Reference Guide: Post-Election:

- Resolving Write-Ins
- Declaring Winners
- Resolving Provisional Votes
- Backing Up an Election
- Certifying an Election

7.2.2 Precinct Tabulation

This paragraph discusses Precinct Tabulation, as specified by paragraph 7.2.2 of the “Voting System Use Procedures for California Template” for Precinct Tabulation.

For Optech Insight:
The following Totals Reports are generated by the Optech Insight, at the time of Closing the Polls, per the Optech Insight Operators Manual:

- Results Ballot Report
- Results Vote Totals Report

Then, signatures are obtained and Public Counter number, per the Optech Insight Operators Manual.

And,

For AVC Edge:
The Results Report is generated by the AVC Edge, at the time of Closing the Polls, per the AVC Edge Operators Manual

If the AVC Edge is set up for the optional Vote Consolidation feature, the following Consolidation Reports may be generated at this time:

- Consolidated Results Report: Prints a report in the same format as a standard Results Report, but with the totals being the sum of all the machines that have been consolidated.
- Consolidated Results Report By Precinct: Prints a report where the totals are given separately for each different “Poll ID” assigned to the consolidated AVC Edge voting machines.
- Consolidation Status Report: Prints a brief listing of each AVC Edge voting machine that has been consolidated, and its Public Counter number.

7.3 Integration with County Systems and Calvoter

This sub-chapter discusses Integration with Counting Systems and Calvoter for the Optech Insight, as specified by sub-chapter 7.3 of the “Voting System Use Procedures for California Template” for Integration with County Systems and Calvoter.

Semi-Official Canvass tabulation and Reporting is to be integrated with County Systems and Calvoter.

7.4 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 (2) hours shall be reported them by the 28th day following the election. The responsible election official may also report other delays in the processing of ballots as they deem appropriate.
8 Official Canvass and Post-Election Procedures

This chapter discusses the following Official Canvass and Post-Election Procedures, as specified by Chapter 8 of the “Voting System Use Procedures for California Template” for Official Canvass and Post-Election Procedures:

- Election Observer Panel
- Canvassing Precinct Returns
- Canvassing Absentee Ballots
- Canvassing Provisional Ballots
- Canvassing Write-In Votes
- 1 % Manual Recount Procedures
- Handling Ballot Exceptions
- Post-Election Logic and Accuracy Testing
- Final Reporting and Official Canvass
- Backup and Retention of Election Material
- Post-Election Procedures for the Optech Insight

All operations associated with the official canvass and Post-Election procedures shall be performed in accordance with the applicable control and security provisions of this document. No operation or activity which results in a revision to voting data produced by the semi-official canvass shall be performed without the presence of a properly-constituted Election Observer Panel, Logic and Accuracy Board, 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.

The Official Canvass consists of a Post-Election audit of all of the voting precincts' returns and the Absentee Ballot returns.

- 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 Absentee 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
- To verify the accuracy of the computer count by manually re-tallying the voted ballots from at least one percent of the voting precincts and comparing the manually-tabulated results to the computer-generated results

Each Official Canvass function must be performed by a minimum of three persons.

This sub-chapter presents procedures for processing ballots, at the Central Counting Location, on election night. Normally such processing will be done at a County Courthouse, County Administration Facility, City Hall or other such single facility. Nothing herein shall preclude however, the election night processing of ballots at other locations (and they may be several) such as Polling Places, remote public facilities, etc. When so done, the procedures presented here for processing ballots at the Central Counting Location shall apply as far as is practical. At a minimum, all procedures for testing, sealing, logging, maintenance of the audit trail and subsequent transportation of ballots and election materials shall apply.
### 8.1 Election Observer Panel

This sub-chapter discusses the Election Observer Panel, as specified by sub-chapter 8.1 of the “Voting System Use Procedures for California Template” for Election Observer Panel.

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

Pursuant to the California Elections Code, all proceedings at the Central Counting Location shall be open to the view of the public and no person except one employed and designated for the purpose by the Election Official or authorized deputy shall touch any ballot container, or other tabulating equipment. Access to the area where the electronic data-processing equipment is being operated may be restricted to those authorized by the Election Official.

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 the restrictions established by the responsible Election Official to ensure the efficiency and integrity of the Ballot Tally process.

### 8.2 Canvassing Precinct Returns

This sub-chapter provides the procedure for Canvassing Precinct Returns, as specified by sub-chapter 8.2 of the “Voting System Use Procedures for California Template” for Canvassing Precinct Returns.

#### 8.2.1 For Optech Insight:

1. Examine the Ballot Statement prepared by each precinct board, as follows:
   a. Compare the number of official ballots reported "received" by each precinct to the number issued by the Election Official. Resolve or explain any discrepancy.
   b. Verify that the number of ballots voted (including those cast Provisional Ballots), plus Spoiled and Unused Ballots, equals the number received by the precinct. Resolve or explain any discrepancy.
2. Reconcile tabulations, as follows:
   a. 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.
   b. Compare the number of ballots voted by Provisional and precinct Voters to the precinct's computer tabulation. Resolve or explain any discrepancy. Remake and process any ballots not tabulated on election night because of damage, invalid identification punches, or any other reason. Search election supplies and equipment, including Unused and Spoiled Ballots, ballot containers, etc., for ballots not accounted for. Process any found ballots.

#### 8.2.2 For AVC Edge:

The Local Election Official shall prepare written procedures detailing the following:

1. Assemble the Results Cartridges returned from the Polling Places.
2. Tabulate Write-In votes, when appropriate, as follows:
   a. The Results Report produced by the AVC Edge shall indicate the number of votes cast in each Write-In position for each contest. The Results Cartridge will also contain the actual Write-In candidates’ names cast by the Voter and copy them to the Central Count System.
   b. After all cartridges from all voting machines have been read, the Central Count System will produce on its printer a Write-In Report which lists all Write-In votes for each office in which a Write-In was cast.
   c. The Local Election Official will tally and record the Write-In votes cast for Write-In candidates from this Write-In Report.
   d. The reporting of Write-In votes as part of the official returns shall be required by law or by directive of the Secretary of State, or both.

3. Tabulate Provisional Ballots, when appropriate, as follows:
   a. The Results Report produced by the voting machine shall indicate the number of Provisional Ballots cast.
   b. After all cartridges from all voting machines have been read, the Central Count System will produce a status report and worksheet for all Provisional Ballots cast.
   c. The Local Election Official will tally and record the Provisional Ballots cast from this Provisional Ballot Report in accordance with California Law.
   d. The reporting of Provisional Ballots as part of the official returns shall be required by law or by directive of the Secretary of State, or both.

4. Tabulate the votes from the Results Cartridges.

5. Review, inspect, and tabulate the Absentee Ballots and the manual data entry or electronic import of the Absentee results into the Central Count System.

6. Aggregate the vote tally for the entire county, including both Polling Place and Absentee totals.

7. Secure the premises where vote tabulation and aggregation is being conducted, including definition by the Local Election Official as to who shall be admitted to the premises while vote tabulation is taking place.

8. Handle voter verified paper record copies.

8.3 **CANVASSING ABSENTEE BALLOTS**

This sub-chapter provides the procedure for Canvassing Absentee Ballots, as specified by sub-chapter 8.3 of the “Voting System Use Procedures for California Template” for *Canvassing Absentee Ballots*. 
The election official is accountable for absent voter ballots to the same extent, as nearly as practicable, as for precinct ballots.

1. Prepare a Ballot Statement for each ballot style or special absent 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.

2. 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.

3. Compare the computer count to the number of ballots to be counted, as shown on the Ballot Statement. Resolve or explain any discrepancy.


**8.4 CANVASSING PROVISIONAL BALLOTS**

This sub-chapter provides the procedure for Canvassing Provisional Ballots, as specified by sub-chapter 8.4 of the “Voting System Use Procedures for California Template” for Canvassing Provisional Ballots.

Process Provisional Ballots returned by each precinct, as follows:

1. Verify eligibility of persons who cast Provisional Ballots.

2. Open envelopes of eligible Voters and remove Provisional 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 tabulations.

3. 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.

**8.5 CANVASSING WRITE-IN VOTES**

This sub-chapter provides the procedure for Canvassing Write-In Votes, as specified by sub-chapter 8.5 of the “Voting System Use Procedures for California Template” for Canvassing Write-In Votes.

1. Examine the ballots with Write-Ins that were processed by Ballot Inspection Boards, separate Write-In Processing Boards, Absentee Ballot Processing Boards or Canvassing Boards to verify that the names written in are for valid candidates.

2. Review the tabulations of valid Write-In votes by precinct or Absentee Ballot style, and summarize by jurisdiction.

3. Prepare "Statement of Write-In Votes" for inclusion in the official "Certified Statement of Election Results."

**8.6 1 % MANUAL RECOUNT PROCEDURES**

This sub-chapter provides the 1 % Manual Recount Procedures, as specified by sub-chapter 8.6 of the “Voting System Use Procedures for California Template” for 1 % Manual Recount Procedures.

Please see sub-chapter 9.1: 1 % Manual Recount Procedures.
8.7 Handling Ballot Exceptions

This sub-chapter provides the following procedures for Handling Ballot Exceptions, as specified by sub-chapter 8.7 of the “Voting System Use Procedures for California Template” for Handling Ballot Exceptions:

- Processing of Unused Paper Ballots
- Processing of Overvoted Paper Ballots
- Processing of Damaged and Blank Paper Ballots
- Processing of Undervotes
- Processing of Blank (Non) Votes

8.7.1 Processing of Unused Paper Ballots

Unused Ballots will be processed in accordance with the California Elections Code. Precinct officers will seal or deface unused precinct ballots, and election personnel in the office of the Election Official will seal or deface Unused Absentee Ballots and un-issued ballots. The Election Official may inspect and count Unused Ballots as necessary to reconcile the Ballot Tabulation during the Official Canvass.

8.7.2 Processing of Overvoted Paper Ballots

A ballot condition which arises when the Voter votes for more candidates than the number of candidates to be elected. In an office to which one candidate can be nominated or elected, a second vote creates an overvoted condition. The result is that no vote for that office can be tabulated, 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 an overvote condition.

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

8.7.3 Processing of Damaged and Blank Paper Ballots

Damaged Ballots:
(Damaged ballots may be duplicated before processing or after rejection by the Optech 400-C, or both.)

Deliver damaged voted ballots to the appropriate location for processing. All ballots prepared as duplicates of damaged voted ballots shall be of a distinctive color, or be identifiable by other distinguishing means, clearly labeled "duplicate," and shall be given a serial number which shall also be recorded on the damaged ballot.

In creating the duplicate ballot, one board member shall vote positions marked on the damaged ballot, and shall enter a facsimile of the write-in vote(s), if any. Efforts need not, and should not, be made to match the handwriting characteristics of the voter when entering these write-in facsimiles. Particular attention must be paid to completing or not completing the arrows opposite the write-in spaces as the voter did, or failed to do. Another member shall verify that the voting position marks and write-in entries (including arrow completions or lack thereof) on the duplicate ballot match exactly those on the damaged ballot.

Duplicates of damaged ballots shall be placed with voted ballots of the appropriate precinct for further processing, tallying, and storage. The original ballot which has been duplicated shall be distinctively voided, placed in clearly identified containers for damaged ballots, and segregated in a secure location so they cannot be counted inadvertently.

Blank Ballots:

When ballots are processed centrally, the Ballot Processing Board may forward Blank Ballots for processing. Such ballots will carry voting position marks that cannot be read by the Optech 400-C usually because reflectivity of these marks is not within specifications. They are to be duplicated, following the same procedures as for Damaged Ballots.
8.7.4 **PROCESSING OF UNDERVOTES**

A ballot condition which 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.

8.7.5 **PROCESSING OF BLANK (NON) VOTES**

A ballot condition which arises when the Voter does not vote for any candidate to an office or for or against a ballot measure, per sub-chapter 9.9: Tally of Undervotes.

8.8 **POST-ELECTION LOGIC AND ACCURACY TESTING**

This sub-chapter discusses Post-Election Logic and Accuracy Testing, as specified by sub-chapter 8.8 of the “Voting System Use Procedures for California Template” for Post-Election Logic and Accuracy Testing.

8.8.1 **FOR OPTECH INSIGHT AND 400-C:**

This feature is used to verify that the Optech Insight’s logic and the ability to tally ballots accurately has not been compromised since the Pre-Election LAT. The Post-Election LAT is similar to the Pre-Election LAT.

8.8.2 **FOR AVC EDGE:**

This feature is used to verify that the AVC Edge’s logic and the ability to tally votes accurately has not been compromised since the Pre-Election LAT. The Post-Election LAT is similar to the Pre-Election LAT inasmuch as:

- A Zero Proof Report is created.
- AVC Edge Voting Machine is voted on.
- A Results Report is printed to verify the test.

8.9 **FINAL REPORTING AND OFFICIAL CANVASS**

This sub-chapter discusses the following procedures for Final Reporting and Official Canvass, as specified by sub-chapter 8.9 of the “Voting System Use Procedures for California Template” for Final Reporting of Official Canvass:

- Reporting Election Results
- Update of Computer Counts

8.9.1 **REPORTING ELECTION RESULTS**

The Election Official shall report elections results, as specified, to the Secretary of State for statewide elections and specified special elections.

8.9.2 **UPDATE OF COMPUTER COUNTS**

(This may be done as often as the Election Official deems necessary during the canvass process.)

1. During the Official Canvass, previously un-tallied validly voted ballots must be counted in compliance with provisions of this chapter. The Optech Insight may again be used. Any and all equipment and components to be used for this purpose must have Logic and Accuracy tests performed as directed herein.

2. Verify that Provisional Ballots, add-on ballots from election night or found during the canvass, and add-on Absentee Ballots have header code printing of the appropriate configuration and for the correct precinct or ballot style.
3. Process ballots, by precinct, or ballot style, through the Ballot Tabulation program. Compare new computer counts to Ballot Statements. Resolve or explain any remaining discrepancies. Original and later Logs and Reports may be examined to facilitate this resolution.

4. 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 shall be reprocessed through the Ballot Tabulation program. Compare new computer counts to Ballot Statements. Resolve or explain any remaining discrepancies. Original and later Logs and Reports may be examined to facilitate this resolution.

5. Upon completion of update session, rerun Logic and Accuracy Tests and confirm results.

8.10 Backup and Retention of Election Material

This sub-chapter discusses the Backup and Retention of Election Material, as specified by sub-chapter 8.10 of the “Voting System Use Procedures for California Template” for Backup and Retention of Election Material.

8.10.1 General

- Upon the certification of the election results, the California Elections Code applies to the handling, security and disposition of election materials. The retention period for related election materials is six months for all elections if no federal elections are involved. The federal election retention period is 22 months. Retention periods may be extended in the event of a court challenge.

8.10.2 Security of Materials Following Ballot Tally

- Either on Election night during Vote Tally, or following Vote Tally, all of the event log, ballot images and summary totals from each cartridge used in the election shall be backed up to the tabulation database.

- The Local Election Official shall provide for retention and storage of the database containing the cartridge information and of any other data processing materials related to the Vote Tally in accordance with statutory retention requirements.

- After Vote Tally, all of these materials shall be placed in locked storage in a secure location, and shall remain there until the expiration of the period for challenging elections and for as long as required by law, unless a court orders their release.

- During the period of storage, the Local Election Official or the Secretary of State may order the release of the materials for purposes of a Manual Recount or for election verification, after which they shall be returned to storage.
8.10.3 FOR OPTECH INSIGHT AND 400-C:

Following the processing of the last ballot from a precinct, the operator shall:

1. Insert a blank, formatted floppy diskette in the floppy disk drive and make a backup copy of the vote totals, including naming the file. (The election information will be copied to the diskette.)
2. Remove the diskette from the floppy disk drive and label it with the election name and current date.
3. Print a Precincts Processed Report and keep it with the backup diskette for a record of the precincts that have been backed up.
4. Set up the report format print options available for the reports. (Please see manufacturer's documentation for specific application of the options.)
5. Generate reports as required by the Election Official.
6. Sign ALL reports containing Certification Messages, as required by the Election Official.

NOTE: If certain peripheral devices are available, the operator may use floppy diskettes or magnetic tape to create backup files throughout the process.

8.10.4 FOR AVC EDGE:

- The Voter verified paper record copy shall be retained by the Election Official for the same period of time as mandated by state and federal law for the retention of paper ballots for that election.
9 Manual Recount Procedures

This chapter discusses the following Manual Recount Procedures, as specified by Chapter 9 of the “Voting System Use Procedures for California Template” for Manual Recount Procedures:

- 1% Manual Recount Procedures
- Full Manual Recount: For AVC Edge
- Request for Manual Recount
- Observers
- Hours of Operation
- Ballot Supervision/Breaks
- Voting Arrow Marking: For Optech Insight and 400-C
- Tally of Overvotes: For Optech Insight and 400-C
- Tally of Undervotes
- Tally of Blank (Non) Votes

9.1 1% Manual Recount Procedures

For the purpose of validating the accuracy of the computer count, within fifteen days after every election at which the unit was used, a public Manual Recount of the ballots cast in at least one percent of the precincts, chosen at random except as described, below, in the event a unit fails, shall be conducted as to all candidates and ballot measures voted on. 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 and manually recounted as to any office or ballot measure not recounted in the original sample.

Pursuant to the California Elections Code precincts selected at random shall be chosen by an individual who is designated by the responsible Election Official and who is not the same person, or a relative of the person responsible for election programming. Selected precinct numbers shall not be revealed to such personnel until the Semi-Official count is complete.

In the event a unit 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 tabulated on the equipment prior to the failure shall be included in the automatic Manual Recount.

If a discrepancy is discovered between the automated tabulation and the automatic Manual Recount tabulation, 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 tabulated again.

The guidelines set forth in sub-chapter 9.7: Voting Arrow Marking: For Optech Insight and 400-C, shall be followed during the automatic Manual Recount of ballots.

9.2 Full Manual Recount: For AVC Edge

The voter verified paper record copy shall be considered the official paper audit record and shall be used for any full Manual Recount.

In the case of a difference between the electronic record and the voter verified paper record copy, the voter verified paper record copy shall govern, unless there is clear evidence that the voter verified paper record copy is inaccurate, incomplete or unreadable as defined in the system procedures.
9.3 **REQUEST FOR MANUAL RECOUNT**
A request for a Manual Recount and the conduct of the Manual Recount shall be made in accordance with the California Elections Code and the following sub-chapters herein.

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

9.5 **HOURS OF OPERATION**
Prior to the beginning of the Manual Recount, all parties will be notified of the hours of operation.

9.6 **BALLOT SUPERVISION/BREAKS**
At least two people will attend ballots at all times during the Manual Recount, including breaks and lunch periods.

Manual 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.

9.7 **VOTING ARROW MARKING: FOR OPTECH INSIGHT AND 400-C**
As determined within the law by the Election Official or court of jurisdiction, any mark or vote where Voter intent is clear and obvious shall be counted. Any mark or vote where Voter intent is not clear and obvious shall not be counted.

9.8 **TALLY OF OVERVOTES: FOR OPTECH INSIGHT AND 400-C**
A ballot condition which arises when the Voter votes for more candidates than the number of candidates to be elected. In an office to which one candidate can be nominated or elected, a second vote creates an overvoted condition. The result is that no vote for that office can be tabulated, 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 an overvote condition.

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

9.9 **TALLY OF UNDERVOTES**
A ballot condition which 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.

Tabulating the number of undervotes in a Manual Recount will add significant time to the Manual Recount process. The undervotes should be tabulated only as part of the Ballot Tabulation process.

9.10 **TALLY OF BLANK (NON) VOTES**
A ballot condition which arises when the Voter does not vote for any candidate to an office or for or against a ballot measure, per **sub-chapter 9.9: Tally of Undervotes**.
10 Security

This chapter discusses the following Security, as specified by Chapter 10 of the “Voting System Use Procedures for California Template” for Security:

- Physical Security of System and Components
- Logical Security of System and Components
- Security Procedures for Central Processing
- Security Procedures for Polling Places
- Audit Trails

10.1 Physical Security of System and Components

This sub-chapter discusses the Physical Security of System and Components, as specified by sub-chapter 10.1 of the “Voting System Use Procedures for California Template” for Physical Security of System and Components:

10.1.1 General

- If it becomes necessary to transfer control of any equipment back to SVS for repairs, operational elections activity may not be carried out on the equipment while it is under the SVS’s control.
- Controlled test elections should be run before and after each election to certify accuracy of processing.

10.1.2 Hardware and Network Setup and Configuration

- The unit should NEVER be connected to the World Wide Web.
- The unit should be dedicated to election use.
- Any networking MUST be physically isolated
- NO servers with Ballot Tally
- NO wireless is allowed. It MUST be physically disabled
10.1.3 **SOFTWARE INSTALLATION AND CONFIGURATION**

- If the Computer/PC cannot be dedicated, reload all software and data files from secured backup copies to assure an intact system. *Applies ONLY to Optech 400-C and WinEDS.*
- An approved virus-checking program must be installed on the Computer/PC. It should be updated, and a virus scan run immediately prior to each election, to protect against the introduction of viruses. *Applies ONLY to Optech 400-C and WinEDS.*
- Third-party software must NOT be installed, that has not been previously approved for use by authorized personnel, to prevent the introduction of software that may damage the software/unit. *Applies ONLY to Optech 400-C and WinEDS.*
- The election official should verify and submit a statement, to the Secretary of State, stating that no program has been installed, or resides on the unit, which is designed to work with Direct Access Objects.
- SVS shall provide the jurisdiction with a list of all software needed by the election management software. All other Third-party software must NOT be installed, that has not been previously approved for use by authorized personnel, to prevent the introduction of software that may damage the unit.
- Do not allow unauthorized software to be run on the Optech Insight, particularly "shareware."
- Optech Insight software shall be maintained under the control of the Local Election Official and not used for any other purpose. Optech Insight software shall be available for inspection by the Local Election Official.

10.1.4 **TRANSPORTATION AND STORAGE**

- House the units in an access-controlled area.
- Keep all spare parts locked up at all times.
- Limit access to the units, spare parts, etc. as much as possible.
- Perform a full inspection of each unit, including validating the firmware version, before election use.
- Care must be exercised by the jurisdiction to ensure that as precinct data is burned into MemoryPacks for each precinct, an appropriate label is affixed to each MemoryPack correctly identifying the precinct where the MemoryPack is to be used. *Applies ONLY to Optech Insight.*
- The Optech Insight units and MemoryPacks must be locked and sealed when being transported to the Polling Place. *Applies ONLY to Optech Insight.*
- Ensure that the Ballot Box and the Optech Insight door containing the Keypad and MemoryPack are locked. *Applies ONLY to Optech Insight.*
- Seal the Results Cartridge in place with a numbered seal and record the seal number. *Applies ONLY to AVC Edge.*
- Seal the POLLS OPEN/CLOSED cover with a numbered Seal and record the seal number. *Applies ONLY to AVC Edge.*
- Lock and seal Optech Insight units and MemoryPacks when transporting them to the Polling Place. *Applies ONLY to Optech Insight.*
- Keep all cartridges (Results, etc.) locked up when not being used. *Applies ONLY to AVC Edge.*
- Verivote Printer(s) will be placed in their nylon case for transport. *Applies ONLY to AVC Edge.*
10.1.5 **BALLOT BOX: FOR OPTECH INSIGHT**

- Use the two locks to secure the door.
- Use the lock and seal on the flap over the ballot entrance holes.
- Use the Optech Insight internal locking provision to secure the Optech Insight to the Ballot Box.

10.1.6 **DESTRUCTIBLE SEALS**

- 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.
- Seals must be used on ALL voting systems.
- Seals must be used on ALL voted Ballot Boxes/Bins. *Applies ONLY to Optech Insight/400-C.*
- Seals must NOT be broken except for Ballot Inspection. *Applies ONLY to Optech Insight/400-C.*
- Seals must be used on the programmed MemoryPack, once it has been inserted into the Optech Insight. *Applies ONLY to Optech Insight.*
- Seal the Results Cartridge in place with a numbered seal and record the seal number. *Applies ONLY to AVC Edge.*
- Seal the POLLS OPEN/CLOSED cover with a numbered Seal and record the seal number. *Applies ONLY to AVC Edge.*

10.1.7 **SEAL AND BALLOT BOX/BIN INSPECTION: FOR OPTECH INSIGHT AND 400-C**

1. Examine each sealed voted Ballot Box/Bin, paying particular attention to the condition of the container and seal.
2. Note and initial on a control document the precinct number of Ballot Boxes/Bins with broken or improperly secured seals.
3. Refer any defects to the appropriate board or to the Election Official as directed.
4. Forward properly sealed Ballot Boxes/Bins for ballot inspection.
10.1.8 PROTECTION AGAINST MALICIOUS SOFTWARE

The Election Official shall ensure the protection of the Ballot Tally process from intentional and/or fraudulent manipulation, malicious mischief, accidents, and errors, as follows:

- Establish procedures to identify changes to the Ballot Tally system, including dates and times that files are created, modified, or accessed, and by whom. These procedures must also include a checklist and sign-off requirement for Logic Testing.
- 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 which are dedicated discretely to elections as well as for voted and non-voted ballots and tabulated and un-tallied ballots. Such procedures shall not preclude the accessibility of the Optech Insight nor computers for purposes of testing, repair, demonstration, training or for other purposes, which are deemed justifiable by the Election Official. Applies ONLY to Optech Insight and 400-C.

- Establish contingency plans for Ballot Tally, including either backup Ballot Tally facilities under the Election Official's supervision, or the availability of such facilities from another jurisdiction, or from a vendor, or from another source. Such plans may take note of the existence of multiple units, if such is the case, citing these situations as adequate backup.
- Establish procedures for internal security, i.e., the protection of Ballot Tally hardware, firmware, and software from fraudulent manipulation by persons within the elections office.

These procedures must provide for:

- Restricted access to Ballot Tally hardware, firmware, and software
- Individual passwords which must be complex and frequently changed
- Physical protection of all non-voted precinct and Absentee Ballots, as well as of all tabulated and un-tallied ballots, by use of logs to chronicle their quantity, use, and access before and after the election. Applies ONLY to Optech Insight and 400-C.

A complete copy of each Election Official's security procedures shall be submitted to the Secretary of State for review and approval by February 1 of each even-numbered year beginning with the adoption of this set of procedures. In lieu of the annual submission of this plan, the Election Official may affirm that no change has been made to previously approved procedures, or may submit updates to the procedures on a continuing basis. If no such plan has been formulated prior to February 1, after the adoption of these procedures, it shall be submitted when completed.

10.2 LOGICAL SECURITY OF SYSTEM AND COMPONENTS

This sub-chapter discusses the following Logical Security of System and Components, as specified by sub-chapter 10.2 of the “Voting System Use Procedures for California Template” for Logical Security of System and Components:

- Essential and Non-Essential Services and Ports
- User-Level Security
- Anti-Virus Protection
- Procedures for Verifying, Checking, and Installing Essential Updates and Changes

10.2.1 ESSENTIAL AND NON-ESSENTIAL SERVICES AND PORTS

For Optech Insight:

The Optech Insight precludes the possibility of any non-essential services and ports.
For MPR:
- A Communications Port should be enabled to allow hook-up of a Communications Cable between the MPR and the PC running WinEDS.
- The MPR should never be hooked up to a network or the World Wide Web.

For AVC Edge:
The Optech Insight precludes the possibility of any non-essential services and ports.

For Optech 400-C:
- WinETP 1.12.2
- Windows
- Any approved virus-checking program
- The A drive should be enabled, in order to accept the WinEDS Disk.
- Third-party software must NOT be installed, that has not been previously approved for use by authorized personnel, to prevent the introduction of software that may damage the software/unit.
- SVS shall provide the jurisdiction with a list of all software needed by the election management software. All other Third-party software must NOT be installed, that has not been previously approved for use by authorized personnel, to prevent the introduction of software that may damage the unit.
- In the event that a new release of WinETP software comes out, only one release should reside on the computer.

For WinEDS:
- Software listed for Software Installation and Configuration, per paragraph 3.3.5: For WinEDS
- Any approved virus-checking program
- Third-party software must NOT be installed, that has not been previously approved for use by authorized personnel, to prevent the introduction of software that may damage the software/unit.
- SVS shall provide the jurisdiction with a list of all software needed by the election management software. All other Third-party software must NOT be installed, that has not been previously approved for use by authorized personnel, to prevent the introduction of software that may damage the unit.
- A Communications Port should be enabled to allow hook-up of a Communications Cable between the MPR and the PC running WinEDS.
10.2.2 USER-LEVEL SECURITY

10.2.2.1 ACCESS CONTROL

- Measures should be taken to prevent unauthorized operating system access to the unit, and to other machines on a network, if any. This is especially important if the room cannot be fully secured.
- At least two persons in the county shall have administrator level access to the unit.
- The unit should remain in a controlled, preferably locked area, with access limited to authorized staff.
- The unit should not be left unattended without first activating one or more levels of password protection.
- The unit should be locked up between elections.
- The unit should be locked to provide security against unauthorized entry. Applies ONLY to Optech Insight.
- The Access Code on the Keypad should be restricted to the Maintenance Technicians and Administrative personnel, to run internal diagnostic and maintenance routines. Applies ONLY to Optech Insight.
- The Access Code should be changed for each election. Applies ONLY to Optech Insight.
- Maintenance Technicians should have full access to the Optech Insight keys and Access Codes, and should never serve as Poll Workers. Applies ONLY to Optech Insight.
- The master installation disk should also be locked up to prevent unauthorized changes. Applies ONLY to Optech 400-C and WinEDS.
- The Optech Insight/400-C should be locked to provide security against unauthorized entry. Applies ONLY to Optech Insight/400-C.
- An official of the Central Counting Location should have keys available to use for inserting storage media during backup. Applies ONLY to Optech Insight/400-C and WinEDS.
- Operators should have controlled access to the unit, and keys that lock the unit. Applies ONLY to Optech Insight/400-C.
- The keyboard should be locked up inside the machine. Applies ONLY to Optech 400-C.

10.2.2.2 EFFECTIVE PASSWORD MANAGEMENT

- Passwords shall, to the extent practicable, meet or exceed best practices for strong passwords.
- Passwords must be changed before every election.
- Passwords and login IDs may not be used by anyone other than the individuals to whom they have been issued.
- A user should immediately change a password, if the password is suspected or known to be disclosed to an unauthorized party.
- Passwords should be used for the software, to secure the unit/computer/PC. Applies ONLY to AVC Edge, Optech 400-C, and WinEDS.
- Windows passwords should be used to protect against unauthorized entry into the system. Applies ONLY to Optech 400-C and WinEDS.
- A password should be used for WinETP software, for protection for those reports that show candidate totals. One or two passwords can be used. Applies ONLY to Optech 400-C.
10.2.3 **Anti-Virus Protection**

- If the Computer/PC cannot be dedicated, reload all software and data files from secured backup copies to assure an intact system. *Applies ONLY to Optech 400-C and WinEDS.*
- An approved virus-checking program must be installed on the Computer/PC. It should be updated, and a virus scan run immediately prior to each election, to protect against the introduction of viruses. *Applies ONLY to Optech 400-C and WinEDS.*
- Third-party software must NOT be installed, that has not been previously approved for use by authorized personnel, to prevent the introduction of software that may damage the software/unit. *Applies ONLY to Optech 400-C and WinEDS.*
- Externally supplied floppy disks, CDs or DVDs shall not be used unless they have first been checked by the anti-virus software.

10.2.4 **Procedures for Verifying, Checking, and Installing Essential Updates and Changes**

10.2.4.1 **Audit Records for Changes**

Audit Records for Changes should contain at least the following data:

- Old revision/version number
- New revision/version number
- Date and time that change was made
- Name of individual making the change

10.2.4.2 **Installation Procedures for Those Updates**

Installation Procedures for those Updates should include steps to verify the following:

- Correct version was installed
- New version works correctly
- No anomalies were encountered
- Maintenance Diagnostics should be run.
- Logic and Accuracy Tests should be performed.
- Electronic Log Report shall be retained and shall be subject to the same physical security and integrity measures as election data

10.2.4.3 **Acceptance Testing after the Installation**

Acceptance Testing shall be performed after Installation, per *sub-chapter 3.4: Acceptance Testing.*
10.3 SECURITY PROCEDURES FOR CENTRAL PROCESSING

This sub-chapter discusses the Security Procedures for Central Processing, as specified by sub-chapter 10.3 of the “Voting System Use Procedures for California Template” for Security Procedures for Central Processing.

10.3.1 GENERAL

- During the period of storage, the local elections official or the Secretary of State may order the release of the materials for purposes of a recount or for election verification, after which they shall be returned to storage.
- The local elections official has management control over all resources employed during the voting and Ballot Tally process until the control is voluntarily relinquished when no longer needed.
- The voter verified paper record copy shall be retained by the elections official for the same period of time as mandated by state and federal law for the retention of paper ballots for that election. Applies ONLY to AVC Edge.

10.3.2 TRANSPORT TO CENTRAL COUNTING LOCATION

- The MemoryPack must be removed and sent by official courier to the Central Counting Location. Applies ONLY to Optech Insight.
- Removal and transport of the Results Cartridge, to the Central Counting Location, must be done in a secure manner - the Results Cartridges must be placed in a sealed case and transported by at least two Poll Workers. Applies ONLY to AVC Edge.
- Voter verified paper record copies must be handled in the same manner. Applies ONLY to AVC Edge.

10.3.3 SECURE ROOM

The secure room should have the following attributes:

- It should be locked, with controlled access to the keys/combinations that unlock the office.
- The keys/combinations shall be kept in safe place(s).
- If using combinations, they must be changed before every election.
- The locks/combinations should be immediately changed, if they are suspected or known to be compromised or disclosed to an unauthorized party.
- An Official of the Central Counting Location should have a key for accessing the office, for election coding.
- At least two persons in the county shall have access to the office.
**10.3.4 BALLOT INSPECTION: FOR OPTECH INSIGHT AND 400-C**

Inspection of ballots received on election night shall be performed as follows:

1. Receive, break the seal, and open the inspected containers.
2. Remove the voted ballots.
3. Maintain a control log for the ballots of each precinct. This control log shall indicate the number of voted ballots reported by the precinct officials.
4. Remove any portion of the stub, such as an incompletely detached perforation, that remains attached to a ballot.
5. Forward any torn, soiled/defaced, or other obvious ballot irregularities for ballot duplication.

**10.3.5 STORAGE OF BALLOTS DURING PROCESSING: FOR OPTECH INSIGHT AND 400-C**

A Ballot Storage Board shall be designated to:

- Receive directly from the Ballot Processing Board all ballots for each precinct.
- Secure all voted ballots until any final logic and accuracy tests are completed.
- Following any final logic and accuracy tests, all voted ballots must be maintained in a locked and sealed room or containers any time the ballots are unattended.
- Any authorized entry into ballot containers must be accompanied by a record or log noting time, place, persons involved, and reasons for breaking the seal.
- Following certification of election results and the period for Manual Recount requests, the ballots may be moved to storage for the ballot retention requirements of the election, provided the ballot containers remain sealed.
- For purposes of this paragraph, all seals shall be destructible seals.
- The Election Official shall not open any ballot containers nor permit any ballot containers to be opened except as permitted pursuant to the Election Code for the jurisdiction, or in the event of a Manual Recount.

**10.3.6 STATISTICAL BALLOT DATA REQUIRED**

The following items are critical to tracking and reporting the Ballot Tally process, and must be maintained:

- For the election definition phase, diagnostic proof listings of candidates and active vote positions for each ballot style or precinct
- 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 overvotes, undervotes, and Write-Ins within each precinct for each race or issue
- Availability of the above information in summary and by precinct
**10.3.7 FOR QUESTIONS ABOUT INTEGRITY OR ACCURACY OF ELECTION NIGHT TALLY: FOR AVC EDGE**

If a question arises about the integrity or accuracy of the election night tally, several safeguards can be relied upon:

- The cryptographic signatures of the totals information can be re-validated.
- There is still a redundant copy of the vote data, and ballot, on each voting machine. A voting machine’s Results Cartridge can be returned to the voting machine, and the two copies verified to still match.
- The data that the AVC Edge software tallied from the Results Cartridge can be verified against the Results Report generated by the voting machine when polls closed.
- The WinEDS software can print data directly from a Results Cartridge.
- Additional copies of the Results Report can be printed from the voting machine’s Audit Trail memory.

**10.3.8 FOR LOST OR DAMAGED RESULTS CARTRIDGE, WHILE IN TRANSIT TO CENTRAL COUNTING LOCATION: FOR AVC EDGE**

There are four backup methods for dealing with this situation:

- Use the WinEDS software to manually enter the vote data for the voting machine, from the printed Results Report.
- Use a special “Audit Trail Transfer” Cartridge. This cartridge, in conjunction with a firmware function only available at polls closed, allows for transferring an exact copy of the voting machine’s Audit Trail memory to the cartridge. AVC Edge software can then do its tally from this cartridge.
- Additional copies of the Results Report can be printed from the voting machine’s Audit Trail memory.
- The corresponding voter verified paper record copy may be used as a backup.
10.3.9 **WINEDS AND DATABASE SECURITY**

- WinEDS should not be part of a larger networked system, or have an Internet or other outside connection. By transferring a copy of the current vote totals database to a removable disk and hand carrying the disk to another system for web display, etc., there can be no risk of outside tampering with the real database.

- Passwords must be used to prevent unauthorized users from making changes to the database.

- WinEDS should be located in a relatively secure office, and on a PC that is not connected to a network.

- The WinEDS activity system log should be periodically printed and reviewed for unauthorized access. Periodic backups should be made and saved for possible future auditing review or restoration.

- Backup copies of the WinEDS Database shall be made and secured in a location separate from the working copies by the Local Election Official after completion of Pre-Election LAT:
  - For as long after the election as required by law
  - By order of a court or directive of the Secretary of State

- Use WinEDS passwords, for Ballot Definition and generation of MemoryPacks, Results Cartridges, and WinEDS disk.

- The local election official shall provide for retention and storage of the database containing any data processing materials related to the vote counting in accordance with statutory retention requirements. After tabulation, all of these materials shall be placed in locked storage in a secure location, and shall remain there until the expiration of the period for challenging elections and for as long as required by law, unless a court orders their release.

10.4 **SECURITY PROCEDURES FOR POLLING PLACES**

This sub-chapter discusses the Security Procedures for Polling Places, as specified by sub-chapter 10.4 of the “Voting System Use Procedures for California Template” for *Security Procedures for Polling Places*.

10.4.1 **SUPPLY AND DISTRIBUTION OF VOTING MACHINES**

- Except when otherwise authorized by the Secretary of State, the distribution of the voting machines shall be no less than one per 300 active registered Voters, and an additional voting machine for every fractional part of such unit; in the case of special elections, however, the Local Election Official may exercise discretion in determining the number of voting machines to be furnished to each precinct Polling Place. *Applies ONLY to AVC Edge.*

10.4.2 **LOADING OF BALLOT DEFINITION DATA, AND PRE-ELECTION LAT**

- The ballot load and Pre-Election LAT operations should be performed by the Technician, with units still in the storage warehouse.

- A match between the physical label and the electronic identifier, for the Results Cartridge, shall be verified as part of Pre-Election LAT. *Applies ONLY to AVC Edge.*

- Following Pre-Election LAT, the test script must be maintained by the local election official and locked in sure storage until actual vote counting commences. *Applies ONLY to AVC Edge.*
10.4.3 CONDUCTING THE ELECTION

- Poll Workers should not be allowed to perform the following functions:
  - Initializing the election
  - High volume test ballot auto reading
  - Auto return of all test ballots
  - Re-opening the polls to read additional ballots
  - Zeroing vote totals
  - Hardware diagnostic functions
  - Other system test functions

- In addition to being locked, the MemoryPack must be sealed, so that to remove the MemoryPack, the Election Official must also cut the seal and record the seal number for a subsequent audit.

- During the Election, the Results Cartridge must always be inserted in the AVC Edge. If it is removed, the AVC Edge will stop its normal operations, generate an error indication and make an entry in the Event Log. Applies ONLY to AVC Edge.

- The Auxiliary Port must be kept empty. Attempting to insert ANY cartridge type into this port will also stop normal operations, generate an error condition and make an Event Log entry. Applies ONLY to AVC Edge.

- A numbered seal should be installed to physically ensure that the Results Cartridge is not removed. This seal is recorded on election paperwork, and cannot be removed without destroying it. Applies ONLY to AVC Edge.

- Seal on POLLS OPEN/CLOSED cover must NOT be cut until machine has been assembled, and Polls are Open. Then after turning the POLLS switch to OPEN, the POLLS OPEN/CLOSED cover must be sealed with a replacement Seal. Applies ONLY to AVC Edge.

- The Verivote Printer should be sealed/locked to keep the contents secure and the unit securely mounted to the Edge. Applies ONLY to AVC Edge.

- For Early Voting, the lid on the Polls Open/Closed switch must be sealed after the polls are opened on the first day of Early Voting. After each day of Early Voting, the power switch must turned off, but the Poll Open/Closed switch must remain open (and sealed). For additional security, the Results Cartridge must be removed and placed in a sealed, secure location.

10.4.4 CLOSING THE POLLS

- To access the Keypad and close the polls, the Election Official must unlock the access door to the compartment at the rear of the Optech Insight. Applies ONLY to Optech Insight.

10.5 AUDIT TRAILS

This sub-chapter discusses the Audit Trails, as specified by sub-chapter 10.5 of the “Voting System Use Procedures for California Template” for Audit Trails.

10.5.1 GENERAL

All Ballot Tally 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 Tabulation.
10.5.2 SYSTEM EVENTS

"System events" in the Ballot Tally process include:

- Initiation of the Ballot Tally program
- Initiation of Ballot Tally
- Clearing totals
- Running logic and accuracy tests
- Hardware failures, if any
- Repairing hardware (including running accuracy tests after repairs), as needed
- System crashes and restarts, if any

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.

10.5.3 SPECIFIC AUDIT TRAILS

Specific audit trails shall include where applicable:

- Exception Handling/Error messages during Ballot Tabulation, including:
  - Messages generated by the computer's exception handlers or error routines. (The exception handling/error message may be in numeric error code, English language translation, or a combination of the two.)
  - 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

- System status messages, such as:
  - Diagnostic and status messages upon start up of Ballot Tabulation
  - “Zero totals” check
  - Initialization or termination of processing by the Optech Insight

- Operator interaction with system (TIME, ACTION TAKEN)

- Ballot-related exceptions (e.g., ballots not voting machine-readable, ballots requiring special handling, aborted or deleted precincts, etc.)

- Copies of required tests

10.5.4 EVENT LOG

With the exception of the reading and processing of a Regular Ballot, all significant events are logged in the following two ways:

- First, there is an immediate printed record of the event.
- Secondly, the event is logged in the Event Log, which may be printed out at any time, as an Event Log, to show all significant events since the election was initialized.
11 Biennial Hardware Certification and Notification

This chapter discusses the following Biennial Hardware Certification and Notification, as specified by Chapter 11 of the “Voting System Use Procedures for California Template” for Biennial Hardware Certification and Notification:

- Biennial Certification of Hardware
- Hardware Certification and Notification
- Certification of Specialized Ballot Tally Equipment
- Notification of Equipment

11.1 Biennial Certification of Hardware

The California Elections Code requires each Election Official to inspect and certify the accuracy of their voting or vote tabulating equipment at least once every two (2) years. The Election 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 K.2: Certificate of Biennial Inspection.

11.2 Hardware Certification and Notification

This sub-chapter discusses the following Hardware Certification and Notification:

- Certification
- Notification
- Seven (7) Days Before Statewide Election
- If Any Equipment is Repaired:

11.2.1 Certification

All ballot 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.

11.2.2 Notification

For each statewide election, the responsible county Election 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 canvasses.

11.2.3 Seven (7) Days Before Statewide Election

Seven (7) days before each statewide election, the Election Official shall certify to the Secretary of State the results of the logic tests as well as the accurate functioning of all Ballot Tabulation 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 Tabulation program occurring after this certification, an amended certificate shall be submitted no later than the day before the election.
11.2.4 If Any Equipment is Repaired:

In the event any equipment is repaired, altered or replaced following the certification specified in paragraph 11.2.3: Seven (7) Days Before Statewide Election, herein 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.

11.3 Certification of Specialized Ballot Tally Equipment

All specialized Ballot Tally equipment must be certified for use in elections by the Secretary of State prior to use in any election.

11.4 Notification of Equipment

For each statewide election, the responsible county Election 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.

Seven days before each statewide election, the Election Official shall certify to the Secretary of State the results of the logic tests as well as the accurate functioning of all Ballot Tally equipment. This certification shall also affirm the use of the same equipment for the Pre-Election LAT test and for semi-official and official vote canvasses. In the event of a change to the Ballot Tally program after 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 specified in this section, 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 no later than submission of official canvass.
Appendix A: Glossary

This appendix provides a listing and brief definition of all terms for the Optech Insight, AVC Edge, and Optech 400-C that may be unfamiliar to persons not trained in either voting systems or computer operation.

Absentee Ballot  
Ballot cast by a Voter unable to vote in person at their Polling Place on Election Day.

Accuracy Testing  
Consists of entering a known number of ballots with a known number of voted response positions into the product being tested.

Accuracy Tests  
Tests, which verify that the Ballot Tallying hardware is operating correctly.

Audit Trail  
The ability to trace to the original source of data any input record or process performed on a voting system. Applies ONLY to Optech Insight & 400-C.

Auxiliary Bin  
Ballot Bin where ballots will be placed, for later processing, if the Optech Insight becomes inoperable during the polling hours and will no longer accept ballots. May also be used to hold exception/error ballots for review after Closing the Polls. Applies ONLY to Optech Insight.

Auxiliary Report  
Post-Election function, which allows a voting machine to print a report from a cartridge that was generated by another voting machine. Applies ONLY to AVC Edge.

Backup  
Equipment and procedures available in the event of failure of the voting system. Backup is a critical factor in voting system integrity.

Ballot  
The printed document which provides a Voter the opportunity to vote for all appropriate candidates and ballot measures by using an appropriate Marking Device to indicate selections in available voting positions. The ballot shall have two detachable serialized stubs. Applies ONLY to Optech Insight & 400-C.

Comprises the following (Applies ONLY to AVC Edge):

- Complete set of display pages, containing the contests and candidates that will be used in an election
- Information contained in a ballot
- Set of data files which can be read by a DRE voting system, and interpreted as the information stored in a ballot
**Ballot Bin**

Re-usable Ballot Bin, where tabulated ballots are automatically deposited. May be one of the following three types (*Applies ONLY to Optech Insight.*):

- **Rear Bin**: Holds fully tabulated ballots that require no further action.
- **Center Bin**: Holds all processed ballots that have one or more offices with a Write-In position voted.
- **Auxiliary Bin**: Holds ballots, for later processing, if the Optech Insight becomes inoperable during the polling hours and will no longer accept ballots. (Ballots are manually deposited in this Ballot Bin.)

Re-usable Ballot Bin, where tabulated ballots are automatically deposited. May be one of the following three types (*Applies ONLY to Optech 400-C.*):

- **Main Bin**: Holds fully tabulated ballots that require no further action.
- **Write-In Bin**: Holds all processed ballots that have one or more offices with a Write-In position voted.
- **Outstack Tray**: Holds ballots that are mis-read, blank, or unprocessable.

**Ballot Box**

Ballot Box, where tabulated ballots are automatically deposited in the following Ballot Bins (*Applies ONLY to Optech Insight.*):

- **Rear Bin**: Holds fully tabulated ballots that require no further action.
- **Center Bin**: Holds all processed ballots that have one or more offices with a Write-In position voted.
- **Auxiliary Bin**: Holds ballots, for later processing, if the Optech Insight becomes inoperable during the polling hours and will no longer accept ballots. (Ballots are manually deposited in this Ballot Bin.)

**Ballot Classifications**

The following classifications, which classify voted ballots, as follows (*Applies ONLY to Optech Insight & 400-C.*):

- Blank Ballot
- Damaged Ballot
- Demonstration Ballot
- Error Ballot
- Regular Ballot
- Outstacked Ballot: *Applies ONLY to Optech 400-C.*
- Provisional Ballot
- Questioned Ballot
- Spoiled Ballot

**Ballot Counter**

Counter in a voting system that counts the ballots cast in a single election or election test. *Applies ONLY to Optech Insight & AVC Edge.*

A counter on the front of the Optech Insight that displays the total number of ballots cast. This number includes all ballots accepted into the Optech Insight including not only Regular Ballots that have been tabulated, but also any error ballots that have not been tabulated but have been stacked into the Optech Insight for later manual processing. This counter is set to zero at the beginning of each election. *Applies ONLY to Optech Insight.*
Ballot Definition | Data structures and text that describe the ballot. Occurs at the time that the Results Cartridges are created. *Applies ONLY to AVC Edge.*

Ballot Definition Subsystem | Includes all hardware, software, and manual procedures required to accomplish the following:

- Administrative
- Candidate and Contest
- Voter Registration Databases
- Ballot Generation
- Election Programming
- Ballot Printing/Display
- Ballot Validation

Ballot Dispositions: | Ballot dispositions, for a voting system, are as follows (*Applies ONLY to Optech Insight*):

- Regular Ballot
- Blank Ballot
- Overvoted Ballot
- Undervoted Ballot
- Write-In Ballot
- Cross-Voted Ballot
- Error Ballot
- Unprocessable Ballot

Ballot dispositions, for a voting system, are as follows (*Applies ONLY to Optech 400-C*):

- Regular Ballot
- Blank Ballot
- Overvoted Ballot
- Write-In Ballot
- Spoiled Ballot

Ballot Feed Hopper | Location where ballots are placed to begin processing through the Ballot Transport System. *Applies ONLY to Optech 400-C.*

Ballot Image | Electronically produced record of all votes cast by a single Voter. *Applies ONLY to AVC Edge.*

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

Ballot Path Sensors | Sensors along the ballot's path from the throat to one of the exit slots of the Optech 400-C, which detect the presence or absence of a ballot as well as its movement. A ballot jam or lack of movement is detected by these sensors, and an appropriate error message is generated. *Applies ONLY to Optech 400-C.*
**Ballot Statement**

Statement containing data pertinent to the ballot count that must be completed at the close of polls and is placed inside envelope #4.

A comparison of the number of ballots received from the Election Official by each precinct board with the sum of all of the following ballots from an election (*Applies ONLY to Optech Insight & 400-C.)*:

- Precinct Ballots
- Returned Absentee Ballots
- Provisional Ballots
- Spoiled and Unused Ballots

**Ballot Style**

One of any number of specific ballot configurations issued to the appropriate precinct. At minimum, Ballot Styles differ from one another in content. They may also differ in size of type, in language used, or in method of presentation (e.g.; visual or audio). *Applies ONLY to Optech Insight & AVC Edge.*

**Ballot Subset**

Portion of a ballot that a particular Voter is eligible to vote on. The subset (e.g. a precinct ID) is selected prior to the Voter making selections.

**Ballot Tabulation**

Process of totaling votes.

**Ballot Write-In Voting Position**

For each office on the ballot, immediately below the space on which the last candidate's name is printed/displayed, the space or spaces available for the Voter to cast Write-In votes when required.

**Blank Ballot**

A ballot on which there are no voting position marks that can be read by the voting system.

It may be truly blank in all voting positions, or it may have marks in these positions, which the voting system cannot read because they are of insufficient density. *Applies ONLY to Optech Insight & 400-C.*

**Candidate**

Person, question response, or Write-In selector that a Voter may select.

**Canvass**

Compilation of election returns and validation of the outcome that form the basis of the official results. *Applies ONLY to Optech 400-C.*

**Center Bin**

Ballot Bin, which holds all processed ballots that have one or more offices with a Write-In position voted. Write-In ballots are automatically segregated. *Applies ONLY to Optech Insight.*

**Central Count System**

Voting system, which tallies ballots at a Central Counting Location (or at designated regional sites). Voted ballots are typically placed into secure containers at the Polling Place. After Closing the Polls, these containers are transported to a Central Counting Location. *Applies ONLY to Optech 400-C.*
Central Counting Location  Designated center where the following operations occur, after the polls close (Applies ONLY to Optech 400-C):

- Tabulate Ballots, or accumulate the results of previously tabulated ballots at one or more Central Counting Locations.
- Merge the voting data produced by dissimilar voting systems.
- Merge ballots or voting results from manually processed ballots.
- Program or reprogram ballot-tabulating devices after Opening the Polls.
- Edit Ballot Tabulation programs or voting data.

Central System Component, which after election information is entered, automatically generates ballots. Applies ONLY to AVC Edge.

Certification Message  A message, followed by signature lines, which may be printed on reports, attesting that the statistics and results are true to the best of the Precinct Board's knowledge. Applies ONLY to Optech Insight & AVC Edge.

A message, followed by signature lines, which may be printed on reports, attesting that the statistics and results are true to the best of the Central Count Operator's, knowledge. Applies ONLY to Optech 400-C.

Closing the Polls Election Day sub-phase, which provides a means for preventing the further tabulation of ballots once the Polling Place has closed. Applies ONLY to Optech Insight.

Election Day sub-phase, which provides a means for preventing the further tally of ballots once the Polling Place has closed. Applies ONLY to AVC Edge.

Contest Decision to be made within an election, which may be a race for office or a referendum, propositions and/or questions. A single ballot may contain one or more contests.

Contest Headers Space on the displayed ballot page where the contest name is shown. Typically, the number of candidates to vote for is also displayed there. Applies ONLY to AVC Edge.

Control Subsystem Consists of the physical devices and software that accomplish and validate the following:

- Equipment Preparation
- Pre-Delivery Testing
- Polling Place Testing: Applies ONLY to Optech Insight & AVC Edge.
- Opening the Polling Place: Applies ONLY to Optech Insight & AVC Edge.
- Enabling a Ballot: Applies ONLY to Optech Insight & AVC Edge.
- Error Recovery
- Closing the Polling Place: Applies ONLY to Optech Insight & AVC Edge.
- Generating Polling Place Reports: Applies ONLY to Optech Insight & AVC Edge.
Conversion Subsystem: Contains all mechanical, electromechanical and electronic devices required to read and translate ballot card pattern marks into electronic signals for processing and performs ballot handling and ballot reading. Applies ONLY to Optech Insight & 400-C.

CPU: (Central Processing Unit): Commonly used abbreviation to describe the Central Processing Unit of a computer or computer system, as distinguished from other peripheral devices or components.

Cumulative Voting: Practice where Voters are permitted to cast as many votes as there are seats to be filled. Voters are not limited to giving only one vote to a candidate. Instead, they can put multiple votes on one or more candidates.

Damaged Ballot: A ballot, which has been torn, bent, or otherwise mutilated so that it cannot be processed through the voting system. Damaged Ballots are sent to the Ballot Duplication Board for repair or duplication. Applies ONLY to Optech Insight & 400-C.

Demonstration Ballot: Ballot, used for Demonstration purposes, which displays a mock election, as follows:

- Offices are frequently fictitious.
- Candidates are usually historical figures.
- Measures are obviously not serious.

Such ballots may be used and re-used for demonstrations from Voter to Voter and from election to election.

Destructible Seal: Any type of numbered 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.

Diagnostic Messages: Appropriate message printed by the election log, under certain conditions, which indicates a problem or condition, as well as the recovery procedure. Such messages are Tracking Points in the audit trail.

Diverter Gates: Two mechanical gates, in the ballot path of the Optech 400-C, which when activated, the outstack diverter gate opens and outstacked ballots travel through the gate to the Outstack Tray. Also when activated, the Write-In diverter gate opens and Write-In ballots travel through to the Write-In Bin. Applies ONLY to Optech 400-C.

Election: Process of creating a ballot, printing it, verifying it, and running the election, including registering the votes of the Voters. Applies ONLY to Optech Insight & 400-C.

Process of creating a ballot, downloading it into the voting machine, verifying it, and running the election applications, including the Official Election, which registers the votes of the Voters. Applies ONLY to AVC Edge.
Election Coding
Process by which Election Officials or their designees use voting system software to logically define the ballot for a specific election.

Election Cycle
Represents all activity required to conduct an election. Comprises the following election phases:

- **Pre-Election**: Includes all preparation activities occurring before Opening the Polls.
- **Election Day**: Includes all activities occurring during the election, including Opening the Polls, Official Election, and Closing the Polls.
- **Post-Election**: Includes all activities occurring after Closing the Polls.

Election Database
Database created for each election that defines the appropriate election parameters and attributes including the number issues, offices, candidates, and other election specific information.

Election Day
Election phase, which allows for official ballots to be cast, during the Official Election. Includes all activities occurring during the following sub-phases (*Applies ONLY to Optech Insight & AVC Edge*):

- Opening the Polls
- Official Election
- Closing the Polls

WinEDS subsystem, which allows Election Day functions to be performed on Election Day.

Election Log
A continuous printout of log lines, which shows all error conditions, keystrokes and functions performed. All log lines contain the time and date and provide an audit trail. *Applies ONLY to Optech Insight & 400-C.*

Election Mode
The “passes” through the voting process:

- Pre-Election LAT
- Official Election
- Post-Election LAT

Election Official
(EO): Applies to the County Clerk, the County Registrar of Voters, the City Clerk or any other person who has been properly and legally charged with the responsibility of conducting the election. They may deputize others to perform functions.

Election Programming
Process by which Election Officials or their designees use voting system software to logically define the ballot for a specific election.
Election State

Individual operational activity, which occurs within an election phase. Several election states make up an election phase. Some election states are required; others are optional.

Individual operational activity, which occurs within an election phase, such as *(Applies ONLY to AVC Edge.):*

- Ready to Open Polls
- Printing Zero Proof
- Polls Open
- Simulation
- Printing Results
- Polls Closed.

Several election states make up an election phase. Some election states are required; others are optional.

Error Ballot

Ballot which causes the voting system to determine the ballot as unreadable for any of the following reasons *(Applies ONLY to Optech Insight & 400-C.)*:

- Is missing a necessary printed element
- Contains some extraneous mark
- Is torn

“Famous Names”

Mock election ballot carrying *(Applies ONLY to Optech Insight & 400-C.)*:

- Fictitious offices, e.g., Secretary of Entertainment
- Candidates who are familiar in history, e.g., Carry Nation, Babe Ruth

This ballot is intended for use not only as a demonstration item, but also as an Accuracy Test.

Green Key

Key that is used to lock/unlock the Ballot Box. *(Applies ONLY to Optech Insight.)*

Key that is used to zero the MemoryPack. *(Applies ONLY to Optech 400-C.)*

Header Code

Bar Code used to identify the ballot as a valid ballot for the Precinct, as follows:

- Ballot Style
- Split Precinct
- Political Party
- Precinct

Header Codes are placed on the top front of the ballot. *(Applies ONLY to Optech Insight & 400-C.)*

Initialization

Process of returning a computer to its original state when a program was first run by returning all counters, i.e., memory, to zero or their starting values.

Invalid Code Printing

This can occur when the printed codes on ballots for the identification of the precinct, ballot style, or party do not match the programmed instructions in the Optech 400-C controlling software. *(Applies ONLY to Optech 400-C.)*

Local Election Official

*(LEO): The individual or officer of a local governmental unit responsible for certifying candidates and issues to be placed on the ballot.*
<table>
<thead>
<tr>
<th><strong>Log Messages</strong></th>
<th>Include the following types of messages:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Certification Message</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Diagnostic Message</strong></td>
</tr>
</tbody>
</table>

| **Logic Tests**  | Tests which must be run both before and after processing official ballots for an election. The logic test group of ballots 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. |

| **Maintenance Diagnostics** | Series of software and hardware tests and system utilities that allow for trouble shooting and setting system parameters. Operating mode, which allows the Technician to perform maintenance diagnostics. Applies ONLY to AVC Edge. |

| **Marking Device** | No. 2 lead pencil or other device, used by the Voter to mark the ballot, which will make a mark complying with reflectivity variance specifications as published by the manufacturer of the voting system. Applies ONLY to Optech Insight & 400-C. |

| **MemoryPack**    | Solid-state portable cartridge, which is used for tallying ballots Applies ONLY to Optech Insight. |

| **Mixed Precinct Mode** | Mode designed to read ballots from all precincts which may be freely intermixed. Applies ONLY to Optech Insight & 400-C. |

| **Network**       | Interconnected system of transmission lines that allows the following to communicate with each other: |
|                  | **Computers** |
|                  | **Terminals** |
|                  | **Peripheral devices** |
|                  | **Similar types of equipment** |

| **Non-Partisan Offices** | (SPEC): Elected offices for which candidates run independent of political party affiliation. |

| **Official Canvass** | Consists of a Post-Election audit of all Precinct returns and Absentee Ballot returns. Applies ONLY to Optech 400-C. |

| **Official Election** | Election Day sub-phase, when Voters cast official ballots for their candidate choices. Applies ONLY to Optech Insight & AVC Edge. Operating mode in which Voters cast official ballots for their candidate choices. There are several election modes besides the Official Election, which are used for testing of the voting machine and its ballot. Applies ONLY to AVC Edge. |
Open Primary

(OPRI): Primary Election in which Voters, regardless of political affiliation, may choose in which party’s Primary Election they will vote. Some states require Voters to publicly declare their choice of party ballot at the Polling Place, after which the Poll Worker provides or activates the appropriate ballot. Other states allow the Voters to make their choice of party ballot within the privacy of the voting booth. Voters also are permitted to vote on Non-Partisan Offices and ballot issues that are presented at the same election.

Opening the Polls

Election Day sub-phase, which allows for Opening the Polls, for the Official Election sub-phase. Applies ONLY to Optech Insight & AVC Edge.

Operating Mode

The following “passes” through the voting process:

- Pre-Election LAT
- Official Election
- Post-Election LAT

One of the following operating modes (Applies ONLY to AVC Edge.):

- Maintenance Diagnostics
- Pre-Election LAT
- Training, if configured using WinEDS
- Early Voting, if configured using WinEDS
- Official Election
- Post-Election LAT, if configured using WinEDS

Orientation Codes

Corner codes, which are printed on the ballot to indicate its orientation as it is fed into the voting system. This obviates having to enter the ballot in only one orientation. Ballots may be entered bottom first, upside down, etc., and still be read accurately. Applies ONLY to Optech Insight & 400-C.

Outstack

Function, where Outstacked Ballots are returned to the Voter (Applies ONLY to Optech Insight.), or segregated into the Outstack Tray (Applies ONLY to Optech 400-C), for the following reasons (Applies ONLY to Optech Insight & 400-C.):

- Blank
- Overvoted
- Damaged in some manner

Outstacked Ballot

A ballot which is outstacked for one of the following reasons (Applies ONLY to Optech Insight & 400-C.):

- Misread
- Blank
- Unable to be processed

Overridden Error Ballot

Unprocessable or Error Ballot, which is returned to the Voter, and then overridden. Applies ONLY to Optech Insight.

Overvote

Generally prohibited practice of voting for more than the allotted number of candidates for the office being contested.
Overvoted Ballot

Ballot, where the Voter has voted for more than the allotted number of candidates for the office being contested. These ballots are returned to the Voter (Applies ONLY to Optech Insight), or exited to the Outstack Tray (Applies ONLY to Optech 400-C). Applies ONLY to Optech Insight & 400-C.

Partisan Offices

Elected offices for which candidates run as representatives of a political party.

Polls Switch

The switch that opens and closes the polls. Applies ONLY to AVC Edge.

Switch found at the rear of the voting machine, under the Polls Open/Closed cover. This switch is used to open and close the polls. Applies ONLY to AVC Edge.

Post-Election

Election phase, which includes all activities occurring after Closing the Polls.

WinEDS subsystem, which allows for Post-Election functions to be performed. Applies ONLY to WinEDS.

Post-Election LAT

(Post-Election Logic and Accuracy Tests): Optional Post-Election function, which includes Post-Election Logic and Accuracy Tests, for ballot verification and public oversight of ballot integrity.

If configured by WinEDS, this operating mode allows Post-Election Logic and Accuracy Tests to be performed. Applies ONLY to AVC Edge.

Pre-Election

Election phase, which includes all activities occurring before Opening the Polls.

Pre-Election LAT

(Pre-Election Logic and Accuracy Tests): Pre-Election function, which includes mandatory Logic and Accuracy Test, which are performed during Pre-Election, for electronic verification and public oversight of ballot integrity.

Operating mode, which allows mandatory Logic and Accuracy Test functions to be performed, for electronic verification and public oversight of ballot integrity. Applies ONLY to AVC Edge.

Precinct Count System

Voting system, which counts ballots at the Polling Place. Is (Applies ONLY to Optech Insight & AVC Edge):

Typically used to tally ballots as they are cast.

Programmed to print the results of the Ballot Tally after Closing the Polls.

Precinct Header Mode

Mode designed to read ballots on a precinct-by-precinct basis. When this mode is selected, ballots are read one precinct at a time. Applies ONLY to Optech Insight & 400-C.

Printer

System component that is used to produce reports of the Ballot Tabulation. Applies ONLY to Optech Insight & 400-C.

System component that is used to produce reports of the Ballot Tally. Applies ONLY to AVC Edge.
**Processing Subsystem**
Contains all mechanical, electromechanical, electronic devices and software required to perform the logical and numerical functions of interpreting the electronic image of the voted ballot, and assigns votes to the proper memory registers. Also, controls the operations of the conversion and reporting subsystems. Applies ONLY to Optech Insight & 400-C.

**Protective Counter**
Optical Scan function, which includes a counter that records all of the testing and election ballots read since the device was built. Applies ONLY to Optech Insight.

DRE function, which includes a counter that records all of the testing and election ballots cast since the voting machine was built. Applies ONLY to AVC Edge.

**Provisional Ballot**
Ballot provided to individuals who claim they are eligible to vote but whose eligibility cannot be confirmed when they present themselves to vote. Once voted, such ballots are not included in the tabulation until after the Voter’s eligibility is confirmed.

**Provisional Voting**
Voting Variation, which provides a ballot to individuals who claim they are eligible to vote but whose eligibility cannot be confirmed when they present themselves to vote. Once voted, such ballots are not included in the tabulation until after the Voter’s eligibility is confirmed.

Assumes that the votes are invalid until validated at the time of Post-Election.

**Public Counter**
Counter in a voting system that counts the ballots cast in a single election or election test. Applies ONLY to Optech Insight & AVC Edge.

A counter on the front of the Optech Insight that displays the total number of ballots cast. This number includes all ballots accepted into the Optech Insight including not only Regular Ballots that have been tabulated, but also any error ballots that have not been tabulated but have been stacked into the Optech Insight for later manual processing. This counter is set to zero at the beginning of each election. Applies ONLY to Optech Insight.

**Questioned Ballot**
A ballot on which the Voter may be identified. Applies ONLY to Optech Insight & 400-C.

**Read-Heads and Sensors**
Electrical components, which detect votes and arrows and other printed ballot elements, and track movement of the ballot through a Ballot Transport System. Applies ONLY to Optech Insight & 400-C.

**Rear Bin**
Ballot Bin, which usually contains the larger quantity of ballots that have been completely counted and require no further action. Applies ONLY to Optech Insight.

**Recall Voting**
Process that allows Voters to remove their elected representatives from office prior to the expiration of their terms of office. Often, the Recall involves not only the question of whether a particular Officer should be removed from office, but also the question of naming a successor in the event that there is an affirmative vote for the Recall. There are no provisions for the Recall of federal office holders.
Red Key

Key, which opens the Rear Access Lid, allowing access to the following (Applies ONLY to Optech Insight):
- Keypad
- MemoryPack
- Printer Tape

Key, which is used to generate totals. Applies ONLY to Optech 400-C.

Regular Ballot

Ballot, which has been voted and is not distinguished by any anomaly, such as overvoted offices, damaged, blank, etc. Regular Ballots are customarily directed to the Rear Bin (Applies ONLY to Optech Insight) or Main Bin (Applies ONLY to Optech 400-C). Applies ONLY to Optech Insight & 400-C.

Reporting Subsystem

Contains all mechanical, electromechanical and electronic devices required to print audit record entries and results of tabulation and includes data storage media, and communication devices for transportation/transmission of data to other sites (Applies ONLY to Telecommunications). Applies ONLY to Software.

Results Report

A report generated by the voting system, in each of the operating modes, which displays much of the ballot information, as well as the vote totals for each candidate. Applies ONLY to AVC Edge.

Touchscreen button, on various windows, which allows the user to generate a report, which displays much of the ballot information, as well as the vote totals for each candidate. Applies ONLY to AVC Edge.

Rotation

Process of varying the order of the candidate names within a given contest to reduce the impact of Voter bias toward the candidate(s) listed first. States that require Rotation may do so for Primary Elections, General Elections, or both. States may rotate the names according to a number of different formulas including by political subdivision, by election district, by precinct, or by ballot displays or voting systems.

There are 2 types of Rotation:
- Standard Rotation: Standard Rotation is used by some jurisdictions to define different candidate order for different precincts for the same contest.
- California-Style Rotation: Each office may be declared as State-Level Rotation (Assembly District) or County-Level Rotation (Supervisorial District).

Secrecy Sleeve

An envelope or folder of such design and dimensions as to hide from view the Voted Ballot while it is being carried by the Voter from the voting booth to the stub removal station. Applies ONLY to Optech Insight & 400-C.

Semi-Official Canvass

The process of collecting, processing, and tabulating ballots on election night. This may include reporting of results to the Secretary of State. The semi-official canvass may include some or all of the Absentee vote totals. The semi-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 28 days following the election. Applies ONLY to Central Count.
Southco Key  Key used to unlock the Rear Access Lid, allowing access to the following
(Appplies ONLY to Optech Insight):

- Keypad
- MemoryPack
- Printer Tape

Split Precinct  Precinct containing more than one ballot format in order to accommodate a
contiguous geographic area served by the precinct that contains more than
one election district.

Spoiled Ballot  Spoiled or defaced paper ballot that the Voter returns to an Election Officer
and receives another ballot. Applies ONLY to Optech Insight & 400-C.

Stand-Alone Processing  The ability to use a unit in a stand-alone implementation without any other
units.

Statistical Counters  Counters within both the Optech 400-C and Summary System, where
statistical data is accumulated. Applies ONLY to Optech 400-C.

Summary System  Normally used for the accumulation of jurisdiction-wide results and statistics
and for the printing of reports. Consists of the PC with backup capability
(normally by floppy disk, tape and/or CD, and Report/Log printer(s), all
operating under appropriate software. Applies ONLY to Optech 400-C.

System Proofing  Procedure which verifies that all materials, files, and programs for an election
are correctly prepared. This proofing is normally done in approximately two
(2) 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.

Test Deck  Stack of vote-marked ballots which are not election-specific but which will
generate predictable, patterned results. This deck is used for Accuracy Testing.
Applies ONLY to Optech Insight & 400-C.

Testing  Purpose is to:

- Determine that the Election Coding is accurate.
- Ensure public confidence.
- Verify the Ballot Tabulation program on Election Day. Applies ONLY to
  Optech Insight & 400-C.
- Verify the Ballot Tally program on Election Day. Applies ONLY to AVC
  Edge.

Tracking Point  Point which establishes an audit trail during the canvass.

Undervote  Practice of voting for less than the total number of election contests listed on
the ballot, or of voting for less than the number of positions to be filled for a
single office. (I.e. A person would undervote if a contest required the
selection of 3 out of a given number of candidates, and the Voter chose only
two candidates)
**Undervoted Ballot**
Ballot, where the Voter has voted for less than the total number of election contests listed on the ballot, or less than the number of positions to be filled for a single office.

**Unprocessable Ballot**
Ballot which cannot be processed because of invalid security code, etc. Applies ONLY to Optech Insight.

**Unused Ballots**
Paper ballots that have not been voted. Applies ONLY to Optech Insight & 400-C.

**Vote Both Sides Notification**
The notation/instructions printed at the bottom of each side of the ballot urging the Voter to vote both front and back sides of the ballot when the ballot is printed on both sides. Such notification is mandatory. Applies ONLY to Optech Insight & 400-C.

**Vote Consolidation**
If configured using WinEDS, this feature will allow for the collection the Official Election results of several voting machines into one Consolidation Cartridge, for easier handling and for processing by the Election Officials. Applies ONLY to AVC Edge.

**Vote Data Management Subsystem**
Encompasses the management, processing, and reporting of voting data, after it has been consolidated at the Polling Place, and includes hardware (Applies ONLY to Hardware) and software (Applies ONLY to Software) required to generate all output reports in the various formats required by the using jurisdiction. Applies ONLY to Central Count Software.

**Vote For**
Ballot choice in which Voters are required to vote for a limited number of candidates for a single office from a larger field of candidates. For example, in an election for six open city council seats, Voters may be told that they can vote for six out of twelve candidates actually listed on the ballot.

**Vote Recording Subsystem**
Consists of equipment and software required to record Voter choices. Applies ONLY to Optech Insight & AVC Edge.

Consists of ballot card or sheets, Marking Devices, Ballot Boxes, and ballot transfer boxes (to the Central Counting Location). Applies ONLY to Optech Insight & 400-C.

**Voted Ballot**
Ballot on which the Voter has marked to select a candidate or measure and cast their ballot. Applies ONLY to Optech Insight & 400-C.

**Voting Variations**
The following significant variations among the election laws of the 50 states with respect to permissible ballot contests, voting options, and the associated Ballot Tally logic:

- Open Primary
- Partisan Offices
- Write-In
- California-Style Rotation
- Split Precinct
- Vote For
- Recall Voting
- Provisional Voting
WinEDS

(Windows Electronic Database System): Electronic Database System used to perform the following operations:

- Administer all phases of the election cycle.
- Create electronic ballots.
- Tally Early Voting. (If Applicable)
- Tally Official Election votes.
- Tally Absentee Ballots.

WinETP

(Windows Election Tabulation Program): Election Tabulation Program for the Optech 400-C, which is used to perform the following operations (Applies ONLY to Optech 400-C.):

- Control.
- Tabulate results.
- Generate reports.

Write-In

Means to cast a vote for an individual not listed on the ballot. Voters may do this by using a Marking Device to physically write their choice on the ballot or they may use a Keypad, touchscreen or other electronic means to indicate their choice.

Write-In Ballot

A ballot where a vote has been cast in a race for a candidate whose name does not appear on the ballot.

Write-In Candidate

Optional candidate type used to provide a means to the Voter to “Write-In” in the name of a candidate whose name does not appear on the printed/displayed ballot.

Zero Proof Report

A report generated by the voting system, in each of the operating modes, which allows the user to generate a report, that (Applies ONLY to AVC Edge):

- Displays much of the ballot information.
- Confirms that the vote total for each candidate is zero.
Appendix B: System Description and Components

This appendix defines the System Components for the Optech Insight, AVC Edge, Optech 400-C, and WinEDS.

B.1 FOR OPTECH INSIGHT:

The Optech Insight, manufactured by Sequoia Voting Systems (SVS), is a portable Precinct Count System that uses Optical Scan Read-Head technology to electronically read and tabulate Optical Scan ballots at the Polling Place. The Optech Insight complements SVS's Optech 400-C Central Count System, as a versatile and Voter-friendly ballot tabulator.
The Optech Insight is classified by the Federal Election Commission as a Marksense Voting System used to cast and tabulate ballots. It allows Local Officials to conduct efficient, timely elections, and performs the following functions on the votes recorded on ballots, which are inserted by the Voter:

- **Record Votes:** Optically reads the marks made on the ballots.
- **Tabulate Ballot:** Tabulates ballots as they are cast, allowing the results of the election to be readily available when closing the Polls.
- **Print Results:** Produces Precinct Totals.
- **Store Precinct Totals:** Stores the Precinct Totals in the removable MemoryPack, for easy transfer to the Central Counting Location, after closing the Polls.

The Optech Insight comprises the following configurations and operating modes:

- Initialization
- Testing
- Opening the Polls
- Official Election
- Closing the Polls
- Accumulation
- Post-Election Audit

The Optech Insight comprises the following system components:

- Paper Ballots
- Marking Devices
- Ballot Tabulator
- Ballot Box
- MPR, MemoryPacks, and Cables
- Ballot Guide Bar & Keys
- Printer and Paper Tape
- WinEDS 3.1, herein after referred to as WinEDS
- Insight Battery (Recommended)

For more detail, please see the *Optech Insight Operators Manual: Operational Features*. 
B.1.1 PAPER BALLOTS

The Optech Insight can be adjusted to read and tabulate ballots of the following three widths, per the above figure:

- **1 Column**: 3.690 inches
- **2 Columns**: 6.720 inches
- **3 Columns**: 9.750 inches

Ballot lengths may vary from 14 to 22 inches.

All ballots are controlled by the Secretary of State, pursuant to California Administrative 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.

For more detail, please see the *Optech Printers Manual*.

B.1.2 MARKING DEVICES

The Optech Insight requires the use of a special felt-tip pen, SVS Part Number 960-28096-00, or a soft lead pencil (#2 or softer). Many pens and pencils will read correctly while others have compositions that are highly reflective or transparent to colors and may not read. Non-approved Marking Devices should be tested before their use in an election.
B.1.3 BALLOT TABULATOR

The Ballot Tabulator performs the following functions:

- **Paper Tape Slot**: Used to print out the Paper Tape, for reports, per the *Optech Insight Operators Manual*.
- **Ballot Light**: Indicates whether or not the Optech Insight is ready to accept ballots.
- **Public Counter Display**: Starts at zero and displays the count of all ballots fed into the Optech Insight and sent to the Rear and Center Bins. It does not include ballots returned to Voter, that were pulled out of the Ballot Slot. The Public Counter Display should read 0000 when Opening the Polls.
- **Ready Light**: Indicates that the Optech Insight is plugged into a live AC outlet.
- **Ballot Slot**: Slot where the Voter feeds the ballot into the Optech Insight.
- **Ballot Platen**: Set by the Maintenance Technician to accommodate the width of ballots for the election.
- **Rear Access Lid Lock & Lid Latch**: Provides you with access to the Power Cord, MemoryPack, Keypad, Paper Tape, and other internal components. When locked, it also prevents unauthorized access to the MemoryPack, Keypad, Paper Tape, and other internal components.
- **Rear Access Lid**: Provides you with access to the Power Cord, MemoryPack, Keypad, Paper Tape, and other internal components.
- **Override Key Access Hole**: Provides you with access to the [3] Override Error Ballot key without unlocking the Rear Access Lid.
- **Keypad**: Enables you to perform the various election functions on the Optech Insight.
- **MemoryPack Door**: Houses the MemoryPack.
- **Power Cord Slot**: Slot where you will plug in the Optech Insight.
- **Paper Tape**: Used to print all election data.
- **Serial No.**: Identifies the unit. This number should be the same as the number on the Voting Device and Electronic Log Reports, per the *Optech Insight Operators Manual*. 

Figure B-3: Ballot Tabulator
B.1.4 **BALLOT BOX**

![Rear & Center Bins](image1)

**Figure B-4: Ballot Box**

- **Rear Bin**: Usually contains the larger quantity of ballots that have been completely tabulated and require no further action.
- **Center Bin**: Holds all processed ballots that have one or more offices with a Write-In position voted. Write-In Ballots are automatically segregated.
- **Auxiliary Bin**: If for any reason the Optech Insight becomes inoperable during the polling hours and will no longer accept ballots, ballots will be put into this Ballot Bin for later processing. The Auxiliary Bin may also be used to hold exception/error ballots for review after Closing the Polls.

B.1.5 **MPR, MEMORYPACKS, AND CABLES**

![MPR, MemoryPack, and Cables](image2)

**Figure B-5: MPR, MemoryPack, and Cables**
- **MPR**: Is a desktop device, which is plugged into a PC (usually at the election central site), and developed specifically to work in conjunction with WinEDS, which is installed on a PC. The MPR performs the following functions (via MemoryPack).
  - Burns election data, from WinEDS, onto MemoryPacks, to be used during the election.
  - Is used by the Optech Insight to tabulate ballots.
  - Transfers the ballot totals to WinEDS, for processing.

- **MemoryPack**: A removable MemoryPack containing the following information is inserted into the rear of the Optech Insight:
  - Election Parameter data
  - Precinct Totals

  The Optech Insight uses the Election Parameter data programmed into the MemoryPack, using WinEDS to obtain Precinct Totals, during the election.

  The MemoryPack may be removed at the end of the election and transported to the Central Counting Location for rapid transfer of Precinct Totals to the Central Counting Location for inclusion into the canvass reports, by WinEDS.

  Anti-Static Padded Bags are provided, by SVS, as packing material for MemoryPacks. These bags, or bags of similar construction and materials, shall be used to cover MemoryPacks during transportation whenever possible.

- **Power Cable**: 3-wire, plug-style power cable, which connects the MPR to the power source or wall outlet

- **Communications Cable**: Customized 25-pin RS-232 communications cable, which connects the MPR to a PC

  For more detail, please see the MPR Operators Manual: Operational Features.

### B.1.6 Ballot Guide Bar & Keys

- **Ballot Guide Bar**: Inserted by you, to adjust the Optech Insight to accept 1- or 2-column ballots. Not used for 3-column ballots.

- **Southco Key**: Locks/unlocks the Rear Access Lid.

- **Red Key**: Opens the Rear Access Lid.

- **Green Key**: Locks/unlocks the Ballot Box.
B.1.7 PRINTER AND PAPER TAPE

- **Printer:** Is used to print the following reports:
  - Verification Reports, per the *Optech Insight Operators Manual: Printing Verification Reports*.
  - Diagnostic Routines, per the *Optech Insight Maintenance Manual: Diagnostic Tests*.
  - Electronic Log Report, per the *Optech Insight Operators Manual: Closing the Polls*.
  - Totals Reports, per the *Optech Insight Operators Manual: Closing the Polls*.
  - Other, per the *Optech Insight Maintenance Manual: Status/Error Messages*.

- **Paper Tape:** For details on Paper Tape specifications, please see the *Optech Insight Maintenance Manual: Printer and Paper Tape*.

B.1.8 WINE DS 3.1

Please see appendix B.4: For WinEDS 3.1.

B.1.9 INSIGHT BATTERY (RECOMMENDED)

The Insight Battery plugs into the Optech Insight, and allows for continuation of Ballot Tabulation in case of a power failure, for up to 16 hours.

The Optech Insight may be connected in such a way that allows an Insight Battery to be connected also. When the voltage drops below that of the Insight Battery, the Insight Battery automatically is used to provide power.

For more detail, please see the *Insight Battery Operators Manual*. 
B.2 FOR AVC EDGE 5.0:

The AVC Edge 5.0, herein after referred to as AVC Edge, is a Direct-Record Electronic voting machine. It performs the following functions:

- Validate and load ballot definitions.
- Perform pre-election testing and verifications.
- Perform Election Day voting.
- Perform post-election testing and verifications.
- Print Zero Proof and Results Reports.
- Consolidate vote data from multiple machines.
- Perform maintenance diagnostic tests and functions such as Audit Trail Transfer, Set Time/Date, and print the Event Log report.

Figure B-8: AVC Edge 5.0
The AVC Edge comprises the following configurations and operating modes, per appendix C.2: For AVC Edge:

- Maintenance Diagnostics
- Pre-Election LAT
- Training (Recommended)
- Early Voting (optional)
- Official Election
- Post-Election LAT (Recommended)
- Vote Consolidation (Optional)
- Technician Functions

For more detail, please see the *AVC Edge 5.0 Operators Manual: Operating Modes*.

The AVC Edge comprises the following system components:

- AVC Edge 5.0 Voting Machine
- WinEDS 3.1, herein after referred to as WinEDS
- Cartridges
- Card Activator 5.0, herein after referred to as Card Activator, and Voter/Smart Cards
- Verivote Printer and Paper Roll
- Edge Audio Accessory 5.0, herein after referred to as Edge Audio Accessory
- Edge Aux Power Unit (Recommended)

For more detail, please see the *AVC Edge 5.0 Operators Manual: Edge Description*. 
**B.2.1 AVC EDGE 5.0 VOTING MACHINE**

The Edge incorporates a color LCD with an integral touchscreen, a control panel for use by election poll workers, appropriate electronic circuitry and processing devices for performing specified system functions, internal memory for storing ballot data and voting records, a removable Results Cartridge with non-volatile memory, protective and public counters, and integrated voter privacy panels.

**B.2.2 WinEDS 3.1**

Please see *appendix B.4: For WinEDS 3.1.*
B.2.3 CARTRIDGES

The following types of cartridges are available for the AVC Edge:

- **Results Cartridge**: Removable memory cartridge, which contains a copy of the ballot and election results in the Audit Trail memory. Identical data is stored in the Audit Trail memory.

- **Audit Trail Cartridge**: Removable memory cartridge, which contains an unalterable randomized electronic record of all votes cast during an election. Identical data is stored on the Results Cartridge for the voting system.

- **Simulation Cartridge (optional)**: Removable memory cartridge, which contains the script used for the optional Vote Simulation feature, during the Pre-Election LAT and Post-Election LAT operating modes.

- **Early Voting Cartridge (optional)**: Removable memory cartridge, which contains a copy of the ballot and election results for the optional Early Voting mode.

- **Consolidation Cartridge (Optional)**: Removable memory cartridge that contains a collection of votes from numerous voting machines, for the optional Vote Consolidation feature.
B.2.4 Card Activator 5.0 and Voter/Smart Cards

The Card Activator 5.0, herein after referred to as Card Activator, comprises the following system components:

- **Card Activator 5.0**: Serves as the Voter’s access to the AVC Edge voting machine:
  - After establishing the Voter’s identity and party affiliation the Poll Worker inserts a Voter Card into the Activation Slot, presses the appropriate number on the Card Activator keypad that designates the Voter’s party.
  - After the Voter Card is activated, the Poll Worker hands the activated Voter Card to the Voter who then uses the Voter Card to access the AVC Edge voting machine.

- **Voter/Smart Cards**: The following types of Voter/Smart Cards are available for the AVC Edge:
  - **Voter Card**: The Poll Worker issues this card, to the Voter, to be used as a key to access the ballot on the AVC Edge, for voting purposes.
  - **Smart Card**: Depending upon configuration, the optional Early Voting mode may require the use of a specially-coded Smart Card to authorize locking/unlocking of Early Voting for each session.

For more detail, please see the Card Activator 5.0 Operators & Maintenance Manual: Getting Started.
B.2.5 Verivote Printer and Paper Roll

Verivote Printer: Incorporates a side-mounted printer to an AVC Edge voting machine, to produce a paper record that can be reviewed by the Voter as they vote. Also provides the following features, per the Verivote Printer Operators Manual: Operational Features:

- Privacy panels make the printout viewable only to the Voter.
- There is provision for seals/locks to keep the contents secure and the unit securely mounted to the voting machines.
- The paper record also serves as verification to the electronic record of vote selections.

B.2.6 Edge Audio Accessory 5.0

The Edge Audio Accessory 5.0, herein after referred to as Edge Audio Accessory, comprises the following system components:

- **Audio Scripts**: The Edge Audio Accessory is plugged into the AVC Edge, to provide the following Audio Scripts, for the Audio Ballot, allowing independent voting capability for blind or other non-reading voters:
  - **Introduction**: Upon Activation of the AVC Edge for a Voter:
  - **Contest**: When entering each contest, to make selections
  - **Write-In**: When entering the Write-In Editor
  - **Help**: Context-sensitive Help within the ballot, available via the Square HELP button:
  - **Fully Voted Contest**: When a contest becomes fully voted
  - **Overvote Attempt**: If the Voter attempts to overvote a contest
  - **Review Your Selections**: At the end of the ballot review function
  - **Cast Ballot**: When the Voter is finished, and desires to cast their ballot:

- **Buttons**: The following buttons access the above scripts:
  Round SELECT button:
  - Exit Introductory message and begin voting
  - Select a candidate or deselect a candidate for each contest
  - Review selections
  - Exit contests
  Up-Arrow button:
  - Access the “Review Selections” option for a contest.
  - Access the “Exit Contest” to skip a contest.
  - Access the “Exit Contest” at the end of the audio ballot to review the entire ballot.
Down-Arrow button:
- Move backward through the list of candidates for each contest.
- Move backward through the contests on the ballot.

Square HELP button:
- Contest Help
- Candidate Select/De-Select Help
- Write-In Help

Volume Control buttons:
- Left side, with the indent, lowers the volume.
- Right side, with the protruding bump, raises the volume.
- Note that volume resets for each Voter.

For more detail, please see the *Edge Audio Accessory 5.0 Poll Workers & Operators Manual: The Audio Voting Process*.

B.2.7 **EDGE AUX POWER UNIT (RECOMMENDED)**

The Edge Aux Power Unit is an optional Auxiliary Backup Power Unit that provides emergency power for two AVC Edge’s for an extended period of time.

For more detail, please see the *Edge Aux Power Unit Operators & Maintenance Manual: Introduction*. 
The Optech 400-C is a central count mark-sense ballot tabulator, which performs the following functions:

- Reads mark-sense ballots.
- Tabulates the results.
- Prepares output reports.

The Optech 400-C uses an automatic Ballot Feed Hopper to process the ballots at a high speed. A built-in sorting system diverts the tabulated ballots into the following three Ballot Bins:

- **Main Bin**: Contains all fully tabulated ballots.
- **Write-In Bin**: Holds all tabulated ballots that have one or more offices with a Write-In position marked.
- **Outstack Tray**: Holds ballots that are mis-read, blank, overvoted, or unprocessable.

A Roll-Around Cart holds the Main Bin.
The Optech 400-C comprises the following configurations and operating modes, per *appendix C.3: For Optech 400-C*:

- Ballot Definition and Preparation
- Election Setup
- Polling Place Procedures
- Tabulation of Absentee Ballots
- Tabulation of Regular Ballots
- Election Totals
- Report Generation
- Ballot Tally Reporting
- Exit, Ballot Return, and Storage

The Optech 400-C comprises the following system components:

- Paper Ballots
- Power Switch and Cord
- Computer Running WinETP 1.12.2
- WinETP 1.12.2, herein after referred to as WinETP
- Ballot Feed Hopper
- Ballot Transport System
- Ballot Bins
- Printer(s) and Paper
- Marking Devices
- Summary System (Recommended)
- WinEDS 3.1, herein after referred to as WinEDS

For more detail, please see the *Optech 400-C Operators Manual: Operational Features*.

### B.3.1 Paper Ballots

Please see *appendix B.1.1: Paper Ballots*.

### B.3.2 Power Switch and Cord

Line current enters the Optech 400-C at the connector panel (rear of machine) through a power cord connector. A combination switch/circuit breaker provides a power switch and overload protection for the Optech 400-C.
B.3.3 COMPUTER RUNNING WinETP 1.12.2

Figure B-16: Computer Running WinETP 1.12.2
All control and tabulation functions of the Optech 400-C are performed by the computer. The computer comprises the following:

- **System Unit**: PC computer (behind the cover). The minimum configuration of this computer is:
  - A Pentium II processor
  - 32MB of memory
  - A hard drive controller
  - A 3-1/2-inch disk drive (A drive)
  - A 2GB hard drive (C drive)

- **Computer Monitor**: Used to:
  - Display on-line processing statistics.
  - Display system menus.
  - View information and/or commands that are being entered into the computer.
  - View displays or reports.

The Computer Monitor is secured on an adjustable support arm with a canvass strap. The strap must be in place at all times to prevent the Computer Monitor from falling.

- **Keyboard and Trackball**:

  The keyboard is very similar to a typewriter keyboard and is used to enter data and commands into the computer. The keyboard is attached to the computer with a coiled extender cable and is operable when the computer is turned on.

  The keyboard can be placed below the Computer Monitor on the support arm or may be locked inside the rear door of the Optech 400-C chassis whenever the tabulator is unattended.

  The trackball may be used as a mouse to make selections in the WinETP tabulation program, per the *Optech 400-C Operators Manual*.

- **WinETP 1.12.2**: (Election Tabulation Program), herein after referred to as WinETP, runs the computer for the Optech 400-C.

### B.3.4 WinETP 1.12.2

WinETP 1.12.2 (Election Tabulation Program), herein after referred to as WinETP, enables the Optech 400-C to:

- Tabulate ballots.
- Report results.

WinETP interfaces with the WinEDS, which is used to define the election coding information for a specific election, by describing the following for a specific election:

- Offices
- Candidates
- Precincts

During the tabulation of ballots, WinETP uses the WinEDS database system to accurately read stacks of ballots from various precincts and tabulate results.
WinETP comprises the following subsystems:

- **File Menu**: Allows the user to perform file-related functions, per the *WinETP Reference Guide: File Menu*.

- **Precinct/Batch/Polling Place Menu**: Allows the user to perform functions for starting, ending, and canceling a running precinct/batch/Polling Place, per the *WinETP Reference Guide: Precinct/Batch/Polling Place Menu*.

- **Ballots Menu**: Allows the user to perform the functions for processing ballots, per the *WinETP Reference Guide: Ballot Menu*.

- **Report Menu**: Allows the user to perform the report-related functions, per the *WinETP Reference Guide: Report Menu*.

### B.3.5 BALLOT FEED HOPPER

![Figure B-17: Ballot Feed Hopper](image)

The ballots start the Ballot Transport process at the Ballot Feed Hopper. The Ballot Feed Hopper sends ballots through the Ballot Transport System one at a time.

Adjustments can be made in the Ballot Feed Hopper for different ballot widths using the Ballot Feed Hopper side panel that is nearest the front of the machine. The side panel may be inserted into grooves that align the panel for either one-, two-, or three-column operation.

### B.3.6 BALLOT TRANSPORT SYSTEM

The Ballot Transport System propels the ballots through the Optech 400-C, after they have been read by the Read Heads in the Ballot Feed Hopper, and diverts them into the proper Ballot Bins, as follows:

- **Main Bin**: Contains all fully tabulated ballots.
- **Write-In Bin**: Holds all tabulated ballots that have one or more offices with a Write-In position marked.
- **Outstack Tray**: Holds ballots that are misread, blank, overvoted, or unprocessable.

Ballots enter the Ballot Transport System as they leave the Read Heads of the Ballot Feed Hopper. The Ballot Transport System moves the ballots to one of the above three Ballot Bins.
The Ballot Transport System is synchronized to the speed of the Ballot Feed Hopper/Read Heads by a system of timing belts and pulleys. As the ballot progresses through the Ballot Transport System, it passes through the Ballot Path Sensors that send signals to the computer through the Breakout Board and Adapter Board. This allows the computer to determine the position of the ballot. The computer activates Diverter Gates that are used to route the ballots to the intended Ballot Bin:

The Ballot Transport System comprises the following:

- **Feed Motor**: Runs the Ballot Feed Hopper and Ballot Transport System along with the following:
  - Ballot Path Sensors
  - Read Heads
  - Diverter Gates

- **Ballot Path Sensors**: Track the movement of ballots through the Ballot Transport System, and send signals to the computer, to determine the position of each ballot.

- **Diverter Gates**: Divert a ballot to a Ballot Bin other than the Main Bin, as follows:
  - Write-In Diverter Gate: Diverts ballots to Write-In Bin.
  - Outstack Diverter Gate: Diverts ballots to Outstack Tray.

### B.3.7 BALLOT BINS

![Figure B-18: Ballot Bins](image)

Outstack Tray

To Main Bin (On Roll-Around Cart)

Write-In Bin
The Optech 400-C has the following three re-usable Ballot Bins into which ballots are transported by the Ballot Transport System:

- **Main Bin:** Contains all fully tabulated ballots. This Ballot Bin is located at the left side of the Ballot Transport System. In typical operation, the Main Bin will receive the majority of the ballots.

- **Write-In Bin:** Contains all tabulated ballots that have one or more offices with a Write-In position marked. A cardboard ballot storage box may be used (with the flaps cut off) to collect the ballots, or they may be stacked on the floor of the Write-In Bin. Ballots from the Write-In Bin can be removed for processing by Election Officials.

- **Outstack Tray:** Holds ballots that are Misread, Blank, Overvoted, Unprocessable. The stainless steel Outstack Tray extends from the top left side of the Optech 400-C, allowing for quick access. The Ballot Count must be reviewed by the election officials for the final determination and disposition.

**Figure B-19: Main Bin (On Roll-Around Cart)**

**B.3.8 Printer(s) and Paper**

- **Printer(s):** Up to two printers can be attached to the Optech 400-C, as follows:
  - **Report Printer:** A high-speed dot matrix or laser printer can print precinct or accumulated totals reports. Laser printers may be set up in landscape mode to obtain reports with more columns.
  - **Log Printer:** A low speed dot matrix printer may be used for the Log Printer, which prints the Election Log.

- **Paper:** The paper will depend upon the above printer type selected by the jurisdiction’s requirements.
B.3.9 MARKING DEVICES

Several types of marking devices are suitable for use with the Optech 400-C. A felt marking pen is preferred which produces a mark of adequate reflective variance from the substrate (paper base). A No. 2 lead pencil can also be used. Pursuant to the California Elections Code, issue of suitable marking devices at Polling Places by the election official is mandated.

B.3.10 SUMMARY SYSTEM (RECOMMENDED)

While one Optech 400-C or a group of them is sufficient for processing ballots, it is preferable to accumulate summary data and print reports through the use of a Summary System. Such a system consists of:

- A personal computer
- A printer or printers
- A floppy disk drive
- CDs and/or tape drive for periodic backups
- Software to effect the summary process

Input to this system is carried into the Summary System through a floppy diskette, or other media.

As an option, the Summary System may include a MemoryPack Receiver connected to the personal computer. This enables the Summary System to accumulate summary data from both the Optech Insight at the precinct level and the Optech 400-C at the central count level. In this scenario, input into this system is carried through both a MemoryPack from an Optech Insight and a floppy diskette from an Optech 400-C.

When used in an election, the Summary System is considered as an integral part of the overall system, and is subject to the diagnostic testing, system proofing, logic testing and accuracy testing described herein.

B.3.11 WinEDS 3.1

Please see appendix B.4: For WinEDS 3.1.
WinEDS 3.1 (Windows Electronic Database System), herein after referred to as WinEDS, is used to perform the following operations:

- Administer all phases of the election cycle.
- Create electronic ballots.
- Tally Early Voting (if applicable).
- Tally Official Election votes.
- Tally Absentee votes.

WinEDS comprises the following subsystems:

- Security Management
- Profile Management
- Election Setup
- Candidate Management
- Ballot Management
- Insight/Edge/400-C Management
- Election Results Management
B.4.1 Security Management

Allows WinEDS users the ability to accomplish tasks they are authorized to perform, per the WinEDS 3.1 Reference Guide: System Configuration: Setting Up Security.

B.4.2 Profile Management

Allow the election office to maintain jurisdictional parameters such as, per the WinEDS 3.1 Reference Guide: System Configuration: Profile: Overview:

- Political districts
- Precincts
- Polling places
- Offices
- Parties

B.4.3 Election Setup

Provides functions to perform the following functions, per the WinEDS 3.1 Reference Guide: Election Setup:

- Initialize an election.
- Define the following:
  - Political parties
  - Offices and party positions
  - Political subdivisions
  - Types of elections
  - Other global election variables

B.4.4 Candidate Management

Allows the election office to identify the following for an election, per the WinEDS 3.1 Reference Guide: Election Data:

- Contests
- Candidates

B.4.5 Ballot Management


B.4.6 Insight/Edge/400-C Management

Provides functions that help manage the following for the Optech Insight, AVC Edge, and Optech 400-C, per the WinEDS 3.1 Reference Guide: System Setup and Election Day:

- Testing
- Maintenance
- Election preparation
B.4.7 **ELECTION RESULTS MANAGEMENT**

Provides the functions for the following activities, per the *WinEDS 3.1 Reference Guide: Post Election*:

- Election night tally of Results and optional Consolidation Cartridges and paper ballots (Absentee Ballots)
- The re-canvas of the election
- Certification of all contests to the political parties and state election reporting agencies.
Appendix C: Configurations and Operating Modes

This appendix defines the Configurations and Operating Modes for the Optech Insight, AVC Edge, and Optech 400-C.

C.1 For Optech Insight:

The Optech Insight comprises the following configurations and operating modes:

- Initialization
- Testing
- Opening the Polls
- Official Election
- Closing the Polls
- Accumulation
- Post-Election Audit

C.1.1 Initialization

Performed for each new election, per the Optech Insight Operators Manual: Pre-Election:

- New Election Parameter data must be loaded into the MemoryPack.
- When the Optech Insight is powered on a number of validity checks are made including the verification of the checksum for the Election Parameter data.
- When the Election Parameter data is new, then the old checksum will not match. The APX program informs the operator that the Election Parameter data and checksum do not match and requires that the MemoryPack be initialized before processing may proceed.
- All counters are set to zero, all options set to their default value, and all checksums recalculated.
- The Electronic Log is cleared and reset to include only the date and time of initialization (Initialization may also be requested at any time through the Keypad after entering the Access Code.).

C.1.2 Testing

After initialization has been completed, testing is performed to verify the new Election Parameter data and the Optech Insight hardware, per the Optech Insight Operators Manual: Pre-Election:

- Test ballots are read that have been prepared to generate predictable and verifiable results.
- The optimum criteria are a unique number of votes for every candidate in each office.
- In practice, offices with large numbers of candidates may be given a predictable pattern of votes like “1, 2, 3, 4, 1, 2, 3, 4, 1, 2”.
- Test ballots also include a selection of error and exception ballots such as torn Ballots, Ballots with incorrect Security ID Header Codes, Blank Ballots, Overvoted Ballots, Etc.
C.1.3 OPENING THE POLLS

After the testing process has been completed, the following activities are performed at the time of Opening the Polls, per the Optech Insight Operators Manual: Opening the Polls:

- Polls are opened by powering ON the Optech Insight.
- After verifying the checksums, the Optech Insight automatically prints a full vote totals report showing zero totals for all candidates and zero ballots cast followed by the ‘ready to read ballots’ message.

C.1.4 OFFICIAL ELECTION

After Opening the Polls, official Ballot Tally begins, per the Optech Insight Operators Manual: Official Election:

- **Rear Bin:** Regular Ballots are completely tabulated and sent to the Rear Bin.
- **Center Bin:** Write-In Ballots are sent to the Center Bin.
- **Return to Voter:** Exception/Error ballots may be returned to Voter, and may then be pulled out for review or replacement, or may be overridden using the [3] Override Error Ballot key and processed appropriately and stacked in the appropriate Ballot Bin:
  - **Auxiliary Bin:** If a power failure occurs and power is subsequently restored, then a process similar to Opening the Polls occurs. The Auxiliary Bin may also be used to hold exception/error ballots for review after Closing the Polls.
- After verifying the checksums, the Optech Insight automatically prints the Power ON Report, per the Optech Insight Operators Manual.
- But if one or more ballots have been cast, the Power ON Report is not printed. The message ‘O.K. to read ballots’ is printed and Ballot Tabulation then continues exactly as if the power failure had not occurred.

C.1.5 CLOSING THE POLLS

After all of the ballots have been processed; polls are closed by the Poll Worker, per the Optech Insight Operators Manual: Closing the Polls:

- The cover to the Keypad section is unlocked and opened, and the [Print Totals] key is pressed, which generates a “Polls Closed” message.
- After confirming the action by pressing the [0] yes key, the polls are closed and the messages ‘polls are now closed’ and ‘no more ballot reading’ are printed followed by the full ballot statistical and vote totals reports.

C.1.6 ACCUMULATION

After all reports are printed, the Optech Insight is powered off and the MemoryPack is unsealed and removed and transported to the Central Counting Location where the contents of the MemoryPack are read and accumulated, per the Optech Insight Operators Manual: Closing the Polls.
**C.1.7 Post-Election Audit**

At any time after the results have been read and accumulated, the MemoryPack may be placed in any Optech Insight and the following activities may be performed, per the *Optech Insight Operators Manual: Post-Election*:

- Additional Totals Reports may be printed.
- The Electronic Log Report may be printed, which includes a date and time stamped log entry for all significant events that have occurred since initialization.
- The MemoryPacks may be read and accumulated again into a different PC to verify that the Election Night accumulation was proper.

**C.2 For AVC Edge:**

The AVC Edge comprises the following configurations and operating modes:

- Maintenance Diagnostics
- Pre-Election LAT
- Training (Recommended)
- Early Voting (Optional)
- Official Election
- Post-Election LAT (Recommended)
- Vote Consolidation (Optional)
- Technician Functions

**C.2.1 Maintenance Diagnostics**

This is the mode when no ballot is loaded on the system. It allows the technician to perform the following diagnostics, per the *AVC Edge 5.0 Maintenance Manual: Maintenance Diagnostics*:

- **LCD:** This function allows the contrast of the main screen to be adjusted (only for screens that have a contrast adjustment available), and the touchscreen to be calibrated. The LCD contrast is adjusted by touching the left and right arrows. As they are touched, the screen will get lighter or darker.
- **Printer Test:** All AVC Edge displays except for those seen by the voter will have a “Printer Test” button in the upper right corner. Pressing this button will enter a screen where printer operation can be tested.
- **Set Date and Time:** This function allows the AVC Edge’s date and time to be set. Note that the date and time are shown in the lower right of the Maintenance Diagnostics screen. To adjust the year, month, day, hour, minute, or second, simply touch the up and down arrows. There is also a button to change time style from military (24-hour) to standard (AM/PM) or vice versa.
- **System Reset:** This function clears the AVC Edge’s internal memories and counters. When the System Reset button is touched, the operator is prompted for whether or not they are sure.
- **Event Log Report:** This function allows the Event Log Report to be printed. This report lists all significant machine operations and their date/time.
• **Aux Cartridge Reports:** This function allows the operator to generate the reports from the following cartridges inserted in the Auxiliary Port, as applicable:
  - Results Cartridge
  - Audit Trail Cartridge
  - Consolidation Cartridge (Optional)
  - Early Voting Cartridge (Optional)

If this option is chosen, the operator will be prompted to insert a cartridge into the Auxiliary Port.

• **Hardware Tests:** This function accesses a sub-menu from which the following Hardware Tests can be run.
  - **Internal RAM Test:** This is a non-destructive read/write test of the System DRAM.
  - **Audit Trail Memory Test:** This will be a test of the Audit Trail’s Flash ROM.
  - **Aux Cartridge Memory Test:** This will be a test of the Auxiliary Port Cartridge’s Flash ROM.
  - **Smart Card Memory Test:** This will be a read/write test of the memory on a smart card.
  - **EEPROM Memory Test:** This will be a non-destructive read/write test of the CPU board’s non-volatile EEPROM memory.
  - **Continuous Test Mode:** When this button is pressed, the AVC Edge will start an endless loop of the tests that are manually accessible from the “Test Menu” screen.

### C.2.2 Pre-Election LAT

The AVC Edge enters this mode when a ballot is loaded. It allows the ballot and system to be test voted prior to the election.

Pre-Election LAT provides the following functionality, per the *AVC Edge 5.0 Operators Manual: Pre-Election LAT Voting*:

• **Zero Proof Report:** Is generated when Pre-Election LAT polls are opened, to indicate totals of zero, for purposes of testing.

• **View Election Information:** Allows the operator to view the following information regarding the current election, for purposes of testing:
  - Date and Time (when ballot was loaded)
  - Machine Serial Number
  - Protective Counter
  - Public Counter
  - Poll Site
  - Polling Place ID
  - Ballot Version (or Style)
  - Election Name.

• **Start Vote Simulation:** Is an optional feature, which allows for volume testing of the AVC Edge and ballot, to verify that both are correct. As the Vote Simulation is run, the AVC Edge responds as if a person were operating it.

• **Start Voting:** Allows the operator to start voting, for purposes of testing.
- **Activating the AVC Edge for a Voter:** The AVC Edge can be activated for a Voter in either of the following 2 ways, depending upon Ballot Definition:
  - **Auto Activation:** Primary method, where each Voter, upon signing in at the Polling Place, is given a Voter Card programmed with the correct precinct. In this case, the Voter Card is inserted into the Activation Slot on the left front of the AVC Edge; the machine is automatically activated.
  - **Manual Activation:** This is an alternative method of activating the AVC Edge. Pressing the Activate button on the back of the unit will activate the Edge for voting, if there is only one ballot style and no parties.

- **The Voting Process:** The Voter performs the following functions:
  - Inserts Voter Card into the AVC Edge’s Activation Slot. The first page of the Touchscreen Ballot is displayed by the AVC Edge.
  - Makes a selection, from the Touchscreen Ballot, by touching the circle to the right of their choice.
  - After finishing making and reviewing all of the choices on the first page of the Touchscreen Ballot, the Voter moves to the next page, repeating the process for every page of the Touchscreen Ballot.
  - The Voter casts their ballot, from a Cast Ballot screen displayed by the AVC Edge. (At this point, they may review the ballot choices that they have made, and make changes, as needed.)
  - The AVC Edge displays a ‘Vote Recorded’ message, and the Voter Card automatically pop out of the AVC Edge’s Activation Slot.

- **Casting Write-In Votes:** The AVC Edge provides an on-screen keyboard, which is used for entering Write-In Candidates.

- **The Poll Worker Display:** Is a 2-line display on the back of the AVC Edge voting machine, which displays the following:
  - whether the AVC Edge is at Voter Active or Inactive
  - Current Public and Protective Counter values

- **Closing the Polls:** Allows the Poll Worker to close the polls.

- **Results Report:** Is generated after Pre-Election LAT polls are closed, to indicate results, for purposes of testing.

- **Technician Functions:** Additional Polls Closed functions are available from the Technician Functions screen, per appendix C.2.8: Technician Functions.

### C.2.3 **Training (Recommended)**

Poll Worker Training Mode is a method to allow multiple passes through the Official Election mode, from ready to open polls to polls closed, to facilitate poll Worker training sessions. This mode is enabled by a special WinEDS machine setting, and is loaded with the ballot.

For more detail, please see the *AVC Edge 5.0 Operators Manual: Poll Worker Training Mode*.

### C.2.4 **Early Voting (Optional)**

Early Voting is an optional mode that provides the following functionality, per the *AVC Edge 5.0 Operators Manual: Early Voting on the AVC Edge*:

- Opening the First Session:
- Closing a Session:
- Unlocking for a Session:
- Closing the Polls:
Early Voting allows the AVC Edge to be used in multiple Early Voting “sessions,” with a secure “voting lock” mode in between sessions. There is a configuration setting for whether the vote data for each session is stored separately, or as one conglomeration.

**C.2.5 OFFICIAL ELECTION**

This is the mode the AVC Edge operates in on Election Day, to provide the following functionality, per the *AVC Edge 5.0 Operators Manual: Election Day*:

- **Set Up the AVC Edges**: The Poll Worker unpacks and sets up the AVC Edge.
- **Opening the Polls**: The Poll Worker opens the polls.
- **Zero Proof Report**: Is generated when Official Election polls are opened, to indicate totals of zero, for verification.
- **Card Activator**: Each Polling Place is provided with a Card Activator, which is set up at this time.
- **Demonstrating the Voting Procedures**: When the Voter enters the Polling Place, a poll Worker, using a sample ballot, should demonstrate the voting procedure.
- **Activating the AVC Edge**: After the Voter's name is checked off the list of Voters, the Poll Worker activates the AVC Edge.
- **Closing the Polls**: After the last Voter has exited the Polling Place, the Poll Worker may close the polls.
- **Results Report**: Is generated after Official Election polls are closed, to indicate results.

**C.2.6 POST-ELECTION LAT (RECOMMENDED)**

Post Election LAT is an optional mode where the AVC Edge is placed in this mode after completion of the election.

It allows the AVC Edge voting machine to be test voted once again to verify continued correct functioning.

Post-Election Logic and Accuracy Testing is performed at this time, per the *AVC Edge 5.0 Operators Manual: Post-Election Testing*.

**C.2.7 VOTE CONSOLIDATION (OPTIONAL)**

Vote Consolidation is an optional mode which allows vote data from each Polling Place to be consolidated, into the following reports, after Closing the Polls, per the *AVC Edge 5.0 Operators Manual: Vote Consolidation*:

- **Consolidated Results Report**: Prints a report in the same format as a standard Results Report, but with the totals being the sum of all the machines that have been consolidated.
- **Consolidated Results Report By Precinct**: Prints a report where the totals are given separately for each different “Poll ID” assigned to the consolidated AVC Edge voting machines.
- **Consolidation Status Report**: Prints a brief listing of each AVC Edge voting machine that has been consolidated, and its Public Counter number.
- **Turnout Report**: Prints a “by selection code” report of Voter turnout.
C.2.8 Technician Functions

The Technician Functions screen allows the following functions to be performed, and the following reports to be generated:

- **Ballot Image Detail Report**: Prints the machine information, counter ballot version, poll site, ballot version, and a randomized detailed Audit Trail record of the votes cast on the machine.
- **Full Ballot Image Report**: Prints the machine information, counter ballot version, poll site, ballot version, a randomized detailed Audit Trail record of the votes cast on the machine, and a summary report, where the summary totals are from a recount of the ballot images.
- **Audit Trail Report**: Prints the Audit Trail Report, which is a compilation of the standard Results Report and the Full Ballot Image Report.
- **Audit Trail Transfer**: Performs an Audit Trail Transfer function, which is a special Polls Closed function that allows making a copy of the contents of the Audit Trail memory, of an Edge2plus, to an Audit Trail Cartridge.
  
The primary reason for using this function is in the case that on election night, a Results Cartridge is misplaced or in some way damaged or unreadable by WinEDS.
- **Event Log Report**: Prints out the Event Log Report. This report lists all significant machine operations and their date/time since the last system reset.

  NOTE: The ballot images are presented in the randomized storage order, not the order of voting.

- **System Reset**: Resets the system. System Reset is the final step in the post-election handling of the Edge2plus. Executing the System Reset function erases all ballot and vote data from the Edge2plus, and returns to the Maintenance Diagnostics mode.

  IMPORTANT! THIS STEP IS NOT REVERSIBLE, SO BE SURE!

  NOTE: The Results Cartridge is NOT erased during a System Reset.

C.3 For Optech 400-C:

The Optech 400-C comprises the following configurations and operating modes:

- Ballot Definition and Preparation
- Election Setup
- Polling Place Procedures
- Tabulation of Absentee Ballots
- Tabulation of Regular Ballots
- Election Totals
- Report Generation
- Ballot Tally Reporting
- Exit, Ballot Return, and Storage
C.3.1 BALLOT DEFINITION AND PREPARATION

Allows the Technician to perform the following Pre-Election activities that are related to preparing the Optech 400-C, per the 400-C Operators Manual: Ballot Definition and Preparation:

- Ballot Definition
- Distribute Absentee and Sample Ballots to Voters.
- Inspect Delivered Precinct Supplies.
- Check Optech 400-C Hardware.
- Check WinETP.
- Prepare Optech 400-C.
- Clean Optech 400-C.
- Start WinETP.
- Set Up Standalone/Network Configuration.
- Configure Hardware Interface.

C.3.2 ELECTION SETUP

Allows the Technician to perform the following Pre-Election activities for setting up the election, per the Optech 400-C Operators Manual: Election Setup:

- Install WinEDS Files for New Election.
- Perform Logic and Accuracy Test.
- Open Election.
- Initialize New Election.
- Set Up Election Passwords, if required.

C.3.3 POLLING PLACE PROCEDURES

Allows the Poll Worker to perform the following Polling Place procedures, per the Optech 400-C Operators Manual: Polling Place Procedures:

- Opening the Polls
- Official Election
- Closing the Polls
- Procedure for Regular Ballots
- Procedure for Absentee Ballots
- Procedure for Provisional Voters
- Procedure for Surrender of Absentee Ballot
- Procedure for Non-Optech 400-C Ballots.
C.3.4 **TABULATION OF ABSENTEE BALLOTS**

Allows the Poll Worker to perform the following activities for tallying Absentee Ballots, per the *Optech 400-C Operators Manual: Tabulation of Absentee Ballots*:

- Prepare Returned Absentee Ballots for Tabulation.
- Select Absentee, if Required.
  This is only used if both Election Day and absentee ballots are counted on the 400-C. More typically, only absentees are counted on the 400-C, and the election is not initialized for separate regular and absentee ballots.
- Select Ballot Handling Options.
- Load Ballots for Precinct/Batch/Polling Place.
- Tabulate Ballots for Precinct/Batch/Polling Place.
- Handle Outstacked Ballots.
- Handle Write-In Ballots.
- Clear Ballots from Main Bin.
- End Ballots for Precinct/Batch/Polling Place.
- Save and Back Up Precinct/Batch/Polling Place.
- Cleaning Optech 400-C during Election

**IMPORTANT: THIS PROCEDURE SHOULD BE PERFORMED BY A TECHNICIAN.**

- Repeating a Previous Precinct/Batch/Polling Place, if Necessary
- Recovering from Power Failure
C.3.5 TABULATION OF REGULAR BALLOTS

Allows the Poll Worker to perform the following activities for tabulating Regular Ballots, per the Optech 400-C Operators Manual: Tabulation of Regular Ballots:

- Select Regular, if Required.
  This is only used if both Election Day and absentee ballots are counted on the 400-C. More typically, only absentees are counted on the 400-C, and the election is not initialized for separate regular and absentee ballots.
- Select Ballot Handling Options.
- Inspect Ballots for Precinct/Batch/Polling Place.
- Load Ballots for Precinct/Batch/Polling Place.
- Tabulate Ballots for Precinct/Batch/Polling Place.
- Handle Outstacked Ballots.
- Handle Write-In Ballots.
- Clear Ballots from Main Bin.
- End Ballots for Precinct/Batch/Polling Place.
- Save and Back Up Precinct/Batch/Polling Place.
- Cleaning Optech 400-C during Election

IMPORTANT: THIS PROCEDURE SHOULD BE PERFORMED BY A TECHNICIAN.

- Repeating a Previous Precinct/Batch/Polling Place, if Necessary
- Recovering from Power Failure

C.3.6 ELECTION TOTALS

Allows the Technician to perform the following activities for generating Election Totals, per the Optech 400-C Operators Manual: Election Totals:

- Restore Vote Totals, If Required.
- Merge Vote Totals, If Required.
- Zero Precinct Totals, If Required.
- Back Up Final Election Results.

C.3.7 REPORT GENERATION

Allows the Technician to perform the following activities for Report Generation, per the Optech 400-C Operators Manual: Report Generation:

- Select Report Format Options.
- Set Up Printer(s).
- Generate Precinct Report.
- Generate Accumulated Totals Report.
- Generate Precincts Processed Report.
- Generate Precincts Not Processed Report.
- Generate Canvass Report.
C.3.8 **BALLOT TALLY REPORTING**

Allows the Technician to perform the activities for Vote Tally Reporting, using the Summary System, per the *Optech 400-C Operators Manual: Vote Tally Reporting*.

C.3.9 **EXIT, BALLOT RETURN, AND STORAGE**

Allows the Technician to perform the following Post-Election activities, per the *Optech 400-C Operators Manual: Exit, Ballot Return, and Storage*:

- Close Election.
- Obtain Election Log.
- Exit WinETP.
- Return Voted Ballots.
- Put Optech 400-C into Storage.
Appendix D: Software Installation and Configuration

This appendix discusses the Software Installation and Configuration for the Optech Insight, AVC Edge, Optech 400-C, and WinEDS.

D.1 Voting Variations

At the time of Ballot Definition, WinEDS is used to set up the following Voting Variations, for California, as applicable to the particular election, precinct, and jurisdiction, per the WinEDS 3.1 Reference Guide: Election: Create Election: Overview: Entering Election Parameters:

- **Open Primary:** Is a Primary Election in which Voters, regardless of political affiliation, may choose in which party’s primary they will vote. Some states require Voters to publicly declare their choice of party ballot at the Polling Place, after which the Poll Worker provides or activates the appropriate ballot. Other states allow the Voters to make their choice of party ballot within the privacy of the voting booth. Voters also are permitted to vote on Non-Partisan Offices and ballot issues that are presented at the same election.

- **Partisan Offices:** Are elected offices for which candidates run as representatives of a political party.

- **Write-In:** Provides a means to cast a vote for an individual not listed on the ballot. Voters may do this by using a keypad, touchscreen, or other electronic means to indicate their choice.

- **California-Style Rotation:** The process of varying the order of the candidate names within a given contest to reduce the impact of Voter bias toward the candidate(s) listed first. States that require Rotation may do so for Primary Elections, General Elections, or both. States may rotate the names according to a number of different formulas including by political subdivision, by election district, by precinct, or by ballot displays or voting machines. Each office may be declared as:
  - State-Level Rotation (Assembly District)
  - County-Level Rotation (Supervisorial District)

  These different localities have different Rotation rules in California.

- **Split Precinct:** Is a precinct containing more than one ballot form in order to accommodate a contiguous geographical area served by a precinct that contains more than one election district.

- **Vote For:** Provides a ballot choice in which Voters are required to vote for a limited number of candidates for a single office from a larger field of candidates. For example, in an election for six open city council seats, Voters may be told that they can vote for six out of twelve candidates actually listed on the ballot.

- **Recall Voting:** Is the process that allows Voters to remove their elected representatives from office prior to the expiration of their terms of office. Often, the Recall involves not only the question of whether a particular officer should be removed from office, but also the question of naming a successor in the event that there is an affirmative vote for the Recall. There are no provisions for the Recall of federal office holders.

- **Provisional Voting:** Refers to the method of recording votes from Voters whose eligibility is in question. When this happens, the saved votes must be identified so that post-election resolution of the Voter’s status will allow for accepting or rejecting the vote. Provisional assumes that the votes are invalid until validated at the time of Post-Election.
And then these configuration options are loaded into the Optech Insight, AVC Edge, or Optech 400-C, at the time of Election Setup and Definition, per sub-chapter 4.1: Programming and Configuration of Election Management System/Software.

### D.2 For Optech Insight:

This appendix discusses the following Software Installation and Configuration for the Optech Insight:

- Ballot Disposition

#### D.2.1 Ballot Disposition

At the Time of Ballot Definition, WinEDS is used to set up the following Ballot Disposition, as applicable to the particular election, precinct, and jurisdiction, per the WinEDS 3.1 Reference Guide: Election: Create Election: Overview: Entering Election Parameters:

- **Regular Ballot**: Completely tally and send to the Rear Bin.
- **Blank Ballot**: Return to Voter, along with a “Return to Voter” message, with the following choices available:
  - Try Ballot Again
  - Issue New Ballot
  - Auxiliary Bin
- **Overvoted Ballot**: Return to Voter, along with a “Return to Voter” message, with the following choices available:
  - Issue New Ballot
  - Auxiliary Bin
- **Undervoted Ballot**: Return to Voter, along with a “Return to Voter” message, with the following choices available:
  - Issue New Ballot
  - Auxiliary Bin
- **Error Ballot**: Return to Voter, along with a “Return to Voter” message, with the following choices available:
  - Issue New Ballot
  - Auxiliary Bin
- **Unprocessable Ballot**: Return to Voter, along with a “Return to Voter” message, with the following choices available:
  - Try Ballot Again
  - Issue New Ballot
  - Auxiliary Bin

And then the above Ballot Disposition options are loaded into Optech Insight, at the time of Election Setup and Definition, per sub-chapter 4.1: Programming and Configuration of Election Management System/Software.
D.3 **For AVC Edge:**

At the Time of Ballot Definition, WinEDS is used to set up the following AVC Edge configuration, as applicable to the particular election, precinct, and jurisdiction, per the *WinEDS 3.1 Reference Guide: Election*:

- Configurations and Operating Modes
- Features
- Auto/Manual Activation
- Review and Casting the Ballot
- Voting Disposition
- Reports
- Maintenance Diagnostics

And then the above configuration options are loaded into AVC Edge, at the time of Election Setup and Definition, per *sub-chapter 4.1: Programming and Configuration of Election Management System/Software*.

**D.3.1 Configurations and Operating Modes**

- **Training -- Enabled**: Provide a special mode for Poll Worker training classes. It allows multiple passes through the Official Election mode without the normal procedure of resetting the machine and reloading a ballot.

- **Early Voting (Optional)**: If enabled, this setting controls which mode Early Voting operates in,

  - Lock mode, single set of totals
  - By-session totals, session start and end reports
  - Adds pickup of session data to #2

  If enabled, the default setting is recommended, as follows:

  - Smart Card

- **Post-Election LAT Vote Simulation**: Allows the ability to perform Post-Election Vote Simulation for Post-Election LAT testing of the AVC Edge.

- **Vote Consolidation (Optional)**: If enabled, this setting allows Vote Consolidation.

  If enabled, the following configuration options are available:

  - Print Consolidated Write-In Names
  - Number of Consolidation Report Copies
  - Consolidate Voter Blocks

**D.3.2 Features**

- **Audio Voting -- Enabled**
- **Write-In Voting -- Enabled**
- **Multiple Languages -- Enabled -- Log of Language Changes**
- **Vote Simulation -- Enabled**: Allows for volume testing of the AVC Edge and ballot (to verify that both are correct), during Pre-Election LAT and Post-Election LAT.

  Vote Simulation uses a special simulation script that is created using WinEDS. As the simulation is run, the AVC Edge responds as if a person were operating it.

- **Zoom -- 3X Zoom Factor**: Enables the ballot magnification (Zoom) function to 3X zoom on all voting screens.
**D.3.3 AUTO/MANUAL ACTIVATION**

- Auto Activation, with Manual Override Available
- Auto Activation Time-Out -- Always Valid
- Auto Activation Security Level -- Normal
- Manual Activation Selection Code Display -- One-to-One; Location Based on Selection Code Value

**D.3.4 REVIEW AND CASTING THE BALLOT**

- **Review on Ballot – Enabled:** Makes the “Please Review Your Selections” screen available from each ballot page.
- **Mandatory Review – Enabled:** Makes the “Please Review Your Selections” screen mandatory before going to the case ballot page.
- **Review on Cast Ballot – Enabled:** Makes the “Please Review Your Selections” screen available from the cast ballot page.
- **Are You Sure? – Enabled:** When casting the ballot, requires the Voter to respond to an “Are You Sure?” pop-up window, first

**D.3.5 VOTING DISPOSITION**

- **Blank Ballot -- Yes after a “Confirmation” Pop-Up Window**
- **Fleeing Voter -- Cast Ballot As Is**
- **Undervote Warning – Enabled:** Provides for a warning prompt to the Voter, if they attempt to cast a ballot without making all the candidate/issue selections they are entitled to. The Voter can still cast the ballot; it is not required that all possible selections be made.

**D.3.6 REPORTS**

- **Print Reports -- By Selection Code:** Prints a separate report section for each Selection Code/ballot subset/precinct in the ballot definition.
- **Send Reports -- To Printer:** Sends the reports to the printer
- **Number of Results Report Copies -- 1 Copy:** Tells the AVC Edge to automatically print 1 copy of the Official Election Results Report.

**D.3.7 MAINTENANCE DIAGNOSTICS**

- **Log Each Activate and Cast Ballot in Event Log – Yes:** Tells the AVC Edge to make an event log entry each time it is activated for a Voter, and each time a Voter touches the “Cast Ballot” button.
- **Save Event Log Across System Resets – Save:** Tells the AVC Edge not to erase the Event Log, providing the ability to keep a much longer history of machine operations.
D.4 FOR OPTECH 400-C:

WinETP is used to set up the following Optech 400-C configuration, as applicable to the particular election, precinct, and jurisdiction, per the WinETP Reference Guide:

- Election Files
- Passwords
- Running Standalone in a Non-Networked Configuration (Recommended)
- Hardware
- Ballot Handling Options
- Report Format Options
- Printers

D.4.1 ELECTION FILES

For the following recommended configuration, please see the WinETP Reference Guide: File Menu: New:

- **Source:** A/<Election Filename>: Used to enter the data disk location (where the data files will be copied from) on the computer’s disk drive (A drive).
- **Destination:** C:elecdata: Used to enter the location (where the data files will be copied to) on the computer’s hard drive (C drive).
- **WinEDS Files (.ofc, .rpt, .pre):** Used to indicate that the files being copied over will be WinEDS files.

D.4.2 PASSWORDS

The recommendation is to set up the Optech 400-C to use 2 passwords, per the WinETP Reference Guide: File Menu: Passwords.

D.4.3 RUNNING STANDALONE IN A NON-NETWORKED CONFIGURATION (RECOMMENDED)

The recommended default is for the Optech 400-C to operate as a standalone machine in a non-networked configuration.

D.4.4 HARDWARE

For the following configuration, please see the WinETP Reference Guide: File Menu: Configuration: Hardware:

- **Hardware Interface: PCI Interface Board:** Is required for most newer PC’s, since they do not have ISA slots.
D.4.5 BALLOT HANDLING OPTIONS

For the following recommended configuration, please see the WinETP Reference Guide: Ballots Menu: Options:

- **Outstack Blank Ballots**: Sends Blank Ballots (unvoted) to the Outstack Tray for review.
- **Outstack Overvoted Ballots**: Sends overvoted ballots to the Outstack Tray.
- **Outstack Undervote Warning Ballots**: Sends undervoted ballots to the Outstack Tray.
- **Stop on Error Ballot**: Stops processing whenever a ballot reaches the Outstack Tray so it can be reviewed and re-made if necessary.
- **Bin Destination – Regular Ballots: Left**: Sends Regular tallied ballots to the Main Bin (Left). This is the default setting.
- **Bin Destination – Write-In Ballots: Right**: Sends Write-In Ballots to the Write-In Bin. This is the default setting.
- **Permanent Outstack Handling: Normal**: Default mode on start-up. This mode should always be used the first time a precinct is run.
- **Display Ballot Path Cleaning Message Every**: Use default of 5000 Ballots. Displays the Ballot Path Cleaning reminder message every 5000 Ballots.

D.4.6 REPORT FORMAT OPTIONS

For the following recommended configuration, please see the WinETP Reference Guide: Report Menu: Options:

- **Show Overvote/Undervote Percentages**: Includes overvote/undervote counts in the calculation of race percentages.
- **Include Overvotes/Undervotes in Total Votes**: Puts the total line at the bottom and includes over and under votes in the total.
- **Show Total Votes Per Race**: Prints the total votes per race.
- **Over and Undervote Reporting – Both**: Prints separate total for overvotes and undervotes.
- **Automatic Precinct Reports -- All**: Precinct reports will print automatically after each precinct has been processed.

D.4.7 Printers

For the following recommended configuration, please see the WinETP Reference Guide: Report Menu: Printers:

- **Report Printer -- Default**: Default Windows printer setting
- **Log Printer -- Default**: Default Windows printer setting

If you do not need to print a continuous Election Log, one printer can be used to print reports during the election and then print the Election Log in its entirety at the end of election night processing.

**IMPORTANT: IF YOU WISH TO PRINT THE ELECTION LOG, LINE-BY-LINE DURING THE ELECTION, IT REQUIRES A LINE PRINTER.**
D.5 FOR WinEDS:

WinEDS Election Database and Management System Configuration

Figure D-1: WinEDS: System Configuration

WinEDS is configured as follows:
- WinEDS Workstation
- WinEDS Server

D.5.1 WinEDS WORKSTATION

The WinEDS Workstation should be installed on each workstation that runs WinEDS, per the WinEDS 3.1 Installation Guide: Installing the WinEDS Workstation.

D.5.2 WinEDS SERVER

The WinEDS Server should be installed on the database server, per the WinEDS 3.1 Installation Guide: Installing the WinEDS Server and Database.

Although server patches can generally be performed from any workstation, initial server installation MUST be performed locally to allow the installation program to place necessary DLLs in the server system path.
Appendix E: System Diagnostic Testing Procedures

This appendix defines the System Diagnostic Testing Procedures for the Optech Insight, AVC Edge 5.0, and Optech 400-C.

E.1 FOR OPTECH INSIGHT:

This appendix defines the following System Diagnostic Testing Procedures for the Optech Insight, per the Optech Insight Maintenance Manual: Diagnostic Tests:

- Entering Diagnostic Monitor
- Group 1 Tests
- Group 2 Tests
- Group 3 Tests

E.1.1 ENTERING DIAGNOSTIC MONITOR

Before performing any group of tests, the operator needs to enter the Diagnostic Monitor.

E.1.2 GROUP 1 TESTS

- 0 – Print This Message: Ensures that the Printer is working properly
- 1 – Toggle Beeper On and Off: Ensures that the processor is capable of generating a signal to drive the Beeper.
- 2 - Toggle Ready Light On and Off: Ensure that the processor is capable of generating a signal to drive the Ready Light.
- 3 - Toggle Motor On and Off Forward: Verifies forward motor control. This test lets you easily isolate any fault.
- 4 - Toggle Motor On and Off Reverse: Verifies reverse motor control. This test lets you easily isolate any fault.
- 5 - Toggle Ballot Lights On and Off: Ensures that the Ballot Lights are working properly.
- 7A - Path Sensor Clear Check: Ensures that the Ballot Path is clear.
- 7B - Path Sensor Functional Check: Tests the capability of the sensor stations to detect a ballot in the proper sequence.
- 8 - Test Public Counter Display: Ensures that the Public Counter and Display are working properly.
- 9 - Test the Printer: Tests the Printer.

E.1.3 GROUP 2 TESTS

- T0 - Ballots to Rear Bin: Tests the ability of the Optech Insight to send Ballots to the Rear Bin.
- T1 - Ballots to Center Bin: Tests the ability of the Optech Insight to send Ballots to the Center Bin.
- T3 - Return Ballots to Voter: Tests the ability of the Optech Insight to return the Ballot to the Voter.
### E.1.4  GROUP 3 TESTS

- **F0 - MemoryPack RAM Test**: Is an exerciser that tests the All-RAM memory in the MemoryPack. Four test passes with different test patterns are executed whenever you run the F0 test. If a memory error occurs, the following will print.

- **F1 - Burn-In Mode W/Power Failure Recover**: Is an automatic system exerciser used for factory testing and is not normally needed for warehouse testing. This test begins a series of operations, each running in six-minute cycles. Each series of operations tests all system functions, except for actual ballot handling and processing. As the test progresses, the Optech Insight prints a time and date stamp at the conclusion of each cycle.

- **F2 - Set Time and Date**: Is used to verify/set the Optech Insight’s Time and Date.

- **F3 - Adjust Time Setting**: Is used to quickly make minor clock adjustment; for example, daylight savings time.

- **F4 - Print Time and Date**: Is used to quickly display and verify the time and date settings.

- **F5 - Set Test Ballot Width**: Is used to set the Optech Insight to read the correct number of columns on test ballots. This setting only affects the **F6 – Ballot Image Test**. It has no effect on Election Parameter data. The default is three columns.

- **F6 - Ballot Image Test**: Is used to print each detectable clock (voting target arrow) and data mark (mark in the voting portion of the target arrow) printed/marked on a ballot. Election Parameter data is not required or used. This test enables you to take a quick look at ballots, diagnose Read-Head problems, and determine clock counts (arrow target positions) in each column of the ballot.

### E.2  FOR AVC EDGE:

At the Warehouse, the Technician performs the following Maintenance Diagnostics, per the *AVC Edge 5.0 System Maintenance Manual: Maintenance Diagnostics*:

- **LCD**
- **Printer Test**
- **Set Date and Time**
- **System Reset**
- **Event Log Report**
- **Aux Cartridge Reports**
- **Hardware Tests**

#### E.2.1 LCD

This function allows the contrast of the main screen to be adjusted (only for screens that have a contrast adjustment available), and the touchscreen to be calibrated. The LCD contrast is adjusted by touching the left and right arrows. As they are touched, the screen will get lighter or darker.

#### E.2.2 PRINTER TEST

All AVC Edge displays except for those seen by the voter will have a “Printer Test” button in the upper right corner. Pressing this button will enter a screen where printer operation can be tested.

#### E.2.3 SET DATE AND TIME

This function allows the AVC Edge’s date and time to be set. Note that the date and time are shown in the lower right of the Maintenance Diagnostics screen.
To adjust the year, month, day, hour, minute, or second, simply touch the up and down arrows. There is also a button to change time style from military (24-hour) to standard (AM/PM) or vice versa.

**E.2.4 SYSTEM RESET**

This function clears the AVC Edge’s internal memories and counters. When the System Reset button is touched, the operator is prompted for whether or not they are sure.

**E.2.5 EVENT LOG REPORT**

This function allows the Event Log Report to be printed. This report lists all significant machine operations and their date/time.

**E.2.6 AUX CARTRIDGE REPORTS**

This function allows the operator to generate the reports from the following cartridges inserted in the Auxiliary Port, as applicable:

- Results Cartridge:
- Audit Trail Cartridge:
- Consolidation Cartridge:
- Early Voting Cartridge:

If this option is chosen, the operator will be prompted to insert a cartridge into the Auxiliary Port.

**E.2.7 HARDWARE TESTS**

This function accesses a sub-menu from which the following Hardware Tests can be run.

- **Internal RAM Test:** This is a non-destructive read/write test of the System DRAM.
- **Audit Trail Memory Test:** This will be a test of the Audit Trail’s Flash ROM.
- **Aux Cartridge Memory Test:** This will be a test of the Auxiliary Port Cartridge’s Flash ROM.
- **Smart Card Memory Test:** This will be a read/write test of the memory on a smart card.
- **EEPROM Memory Test:** This will be a non-destructive read/write test of the CPU board’s non-volatile EEPROM memory.
- **Continuous Test Mode:** When this button is pressed, the AVC Edge will start an endless loop of the tests that are manually accessible from the “Test Menu” screen.

**E.3 FOR OPTECH 400-C:**

At the Central Counting Location, the Technician performs the following Diagnostic Tests, per the *Optech 400-C Maintenance Manual: Diagnostic Tests*:

- Optech 400-C Diagnostic Tests
- Summary System Diagnostic Tests

The Technician may also perform the following Diagnostic Tests, per the *Optech 400-C Maintenance Manual: Diagnostic Tests*:

- Read Head Alignment
- Read Head Sensitivity
- Cleaning Procedure
- Revitalization of Feeder Drum
**E.3.1 OPTECH 400-C DIAGNOSTIC TESTS**

Starts the diagnostics program, and views the sensors in the Machine Control display.

The small circles that represent the sensors are empty if the sensor is read as clear, and filled in if the sensor is read as blocked.

**E.3.2 SUMMARY SYSTEM DIAGNOSTIC TESTS**

Prior to use, diagnostic tests shall be performed on the Summary System. These tests shall be performed within 50 days prior to the election. If malfunctions are encountered, corrections shall be made and recovery procedures implemented.

**E.3.3 READ HEAD ALIGNMENT**

Aligns the top and bottom Read Heads across the ballot path to ensure accurate ballot reading and tabulation.

- Top Read Head Alignment
- Bottom Read Head Alignment

**E.3.4 READ HEAD SENSITIVITY**

Checks the Read Heads for sensitivity.

**E.3.5 CLEANING PROCEDURE**

Cleans the Optech 400-C.

**E.3.6 REVITALIZATION OF FEEDER DRUM**

Cleans and revitalizes the Feeder Drum in the Optech 400-C.

- Cleaning with Solvent
- Talcum Powder Treatment
E.4 **Ballot Specifications Diagnostic Testing: For Optech Insight and 400-C**

Upon receipt of official ballots from the printer, the Election Official shall refer to the Ballot Inspection Procedure which is available from the Secretary of State, having been filed by the manufacturer of the Optech Insight Voting System. Said Procedure is incorporated herein by reference. The election official shall inspect ballots according to said Procedure to be sure that they meet certain minimum criteria for the following, per the *Optech Printers Manual*:

- **Ballot Format**: With respect to number of columns, front and back printing, the inclusion of all ballot styles, precinct identifications if expected, and within each ballot style the listing in proper order of offices, measures, candidates and response positions.

- **Ballot Paper Stock**: Use an appropriate measuring device, or accept the Printer's written declaration.

- **Ballot width Accuracy**: Measure according to specifications.

- **Printing Registration**: Relative to edges of ballot. Observe that cut marks appear consistently along each edge.

- **Ink density for readable marks**

- **Voids in Readable Areas**: There shall be no extraneous printing, such as dots, splashes, etc., in the empty area between voting position arrow head and tail, nor in the header coding area.

- **Readable mark size**
- **Ink offset**
- **Ink bleed-through and smears**
- **Slits or perforations**
- **Positioning of Fold Scores**: These shall not intersect voting positions.
Appendix F: Logic and Accuracy Testing of System and Components

This appendix defines the following Logic and Accuracy Testing of System and Components for the Optech Insight, AVC Edge 5.0, and 400-C:

- Pre-Conditions for Performance of Tests
- Accuracy Test Procedures
- Logic Test Procedures
- Retention of Test Materials
- Logic and Accuracy Board and Certification of Testing
- Test Deck Tabulation Results
- Performing Pre-Election LAT

The test procedures described herein are a required MINIMUM and do not preclude additional testing performed at the option of the Election Official.

In addition to the following test procedures, those counties which provide election night results on-line to the Secretary of State must conduct tests required by that office to ensure accurate and timely submission of semi-official canvass results, and must include hardware and telephone lines used for that purpose in all tests required.

All tests will be conducted using test materials specified herein in such a manner as to meet these guidelines. All tests shall result in reporting that matches predetermined results. Reports and test materials must be retained as specified by appendix F.4: Retention of Test Materials.

The Local Election Official shall have the entire system tested to ascertain that it will properly tally the ballots cast for all offices and all questions.

- The test shall be conducted by test-processing pre-determined set of at least one vote for each possible selection within an office of question.
- If a voting machine does not accurately tally the test ballot, the cause for the error shall be ascertained and corrected and an errorless tally shall be made before the system is approved for use of tallying ballots.

Complete testing of the machines shall be conducted before the use of this equipment in an election. This testing is required for equipment to be used in Polling Places and the Central Counting Location.
F.1 PRE-CONDITIONS FOR PERFORMANCE OF TESTS

F.1.1 FOR OPTECH INSIGHT AND 400-C:

- Diagnostic tests on all equipment shall have been performed, per the following documents:
  - For Optech Insight: Optech Insight Maintenance Manual: Maintenance Diagnostics
  - For Optech 400-C: Optech 400-C Maintenance Manual: Diagnostic Tests
- Test decks of ballots shall have been prepared as specified per appendix F.7: Test Deck: For Optech Insight and 400-C.
- All election parameter data to be used for Accuracy testing shall have been coded using the "Famous Names" election or with a similar fictitious election that will provide compliance with appendix F.7: Test Deck: For Optech Insight and 400-C.
  The deck is made by removing certain ballots from the manufacturer's 169 ballot test deck. Remove each of the four ballots labeled "Straight Party." Note that on none of the ballots in the deck is the Straight Party office voted; such voting is not permitted in the State of California.
  The test decks may be substituted with other test decks, provided that they meet the specifications for test decks set forth herein and by the Secretary of State.
- Documentation must be prepared to show the known and expected voting and statistical results, said documentation is to be compared against that produced as a result of the tests, per appendix F.7: Test Deck: For Optech Insight and 400-C.

F.1.2 FOR AVC EDGE:

- Diagnostic tests on all equipment shall have been performed, per the AVC Edge 5.0 System Maintenance Manual: Maintenance Diagnostics.
- Test Script shall have been prepared as specified per appendix F.8: Test Script: For AVC Edge.
- Ballot must already be loaded, per the AVC Edge 5.0 Operators Manual: Loading the Ballot.

F.2 ACCURACY TEST PROCEDURES

This appendix defines the following Accuracy Test Procedures for the Optech Insight and 400-C:

- Performance of Accuracy Tests
- Preparation of Accuracy Tests
- Reusable Accuracy Test Deck
- Accuracy Test Report

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 the Optech Insight and 400-C can read every permissible mark on the ballot, 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 to be used in the Ballot Tabulation process.
F.2.1 PERFORMANCE OF ACCURACY TESTS

Accuracy tests shall be performed prior to Logic and Accuracy Certification (including amendments and recertification, if necessary). 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 tabulated on equipment which failed shall be recounted.

In the event the Optech Insight 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 Election Official to require retesting for accuracy), provided the component is to be returned to service.

Diagnostic tests of hardware on election night are permitted.

A loss of power is not to be considered a failure for purposes of this paragraph. Upon recovery from a power loss, the last batch of ballots tabulated will have to be recounted if their totals have not already been added to the backup file.

F.2.2 PREPARATION OF ACCURACY TESTS

F.2.2.1 FOR OPTECH INSIGHT AND 400-C:

The responsible Election Official shall cause the accuracy test deck to be prepared and tested. Predetermined results of accuracy test must be available for inspection and sign off by the Logic and Accuracy Board.

F.2.2.2 FOR AVC EDGE:

The responsible Election Official shall cause the Test Script to be prepared and tested. Predetermined results of accuracy test must be available for inspection and sign off by the Logic and Accuracy Board.

F.3 LOGIC TEST PROCEDURES

This appendix defines the following Logic Test Procedures for the Optech Insight:

- Performance of Logic Test
- Certification of Logic Test

Logic testing consists of those processes and procedures necessary to ensure that the Ballot Tabulation programs and hardware correctly interpret, summarize and report Voters' marks for a specific election. This is normally a series of tests utilizing test ballots which are made from actual printed ballots, and accumulation of results from individual Optech Insight.

For Optech 400-C: Results are backed up to floppy diskettes and data is transferred to the Summary System. Successful testing will demonstrate that:

- Each candidate and ballot measure receives the proper predetermined number of votes.
- The system reports the proper number of over and under votes.
- The system accepts only the proper ballot styles and rejects improper ones.
- The system is capable of tabulating the maximum number of ballots possible for a precinct.

Logic tests will be conducted using test materials 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 paragraph 4.5.4: Retention of Test Materials, herein.
F.3.1 PERFORMANCE OF LOGIC TEST

This appendix discusses following Performance of the Logic Test:

- Pre-Election Night Tests
- Election Night Testing
- Post-Election Testing

F.3.1.1 PRE-ELECTION NIGHT TESTS:

An election-specific Logic Test shall be performed on 100% of the Optech Insight to be used. This Logic Test may begin within 50 days of the election and can be of sufficient duration to assure its adequacy.

For Optech 400-C: The Summary System Logic Test shall employ a coded test election and one or more test decks of the existing election. Also, enough floppy diskettes or CDs shall be used in the Optech 400-C to back up the results.

F.3.1.2 ELECTION NIGHT TESTING:

Before and following election night Ballot Tabulation, Logic Tests shall be performed.

F.3.1.3 POST-ELECTION TESTING:

Following the Official Canvass, conduct Accuracy Test for 100% of the Optech Insight.

Following the Official Canvass, conduct Accuracy Test for 100% of the Optech 400-C Voting Systems and a Logic and Accuracy Test for the Summary System (for Optech 400-C).

The predetermined results for balancing of election processing must be available for inspection and sign off by the Logic and Accuracy Board described in appendix F.5: Logic and Accuracy Board and Certification of Testing, herein.

The official Logic test must be completed, certified, and received by the Secretary of State seven (7) days before each statewide election. It must accompany official copies of the Ballot Tabulation programs and files.

All Ballot Tabulation 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 condition which requires the Optech Insight to be re-initialized shall require a new set of logic testing and shall require that all ballots and floppy diskettes processed since the last successfully completed logic test be rerun. A power failure normally does not necessitate re-initialization. At the time power is re-applied, the last batch of ballots tabulated will have to be re-tabulated if their totals have not already been added to the backup file.

The logic test ballots shall be tabulated using the Optech Insight. The resulting logic Ballot Tabulation shall be compared in detail with the predetermined logic Ballot Tabulation. Any differences between the two logic Ballot Tabulations shall be resolved, and logic testing shall be performed as many times as may be necessary to achieve a logic Ballot Tabulation which is identical to the predetermined logic Ballot Tabulation. This process shall also be done for any Absentee Test Ballots that are subject to separate logic and accuracy testing. After balancing the two logic Ballot Tabulations, the logic test ballots and the run-time documentation shall be locked in a facility with restricted access or sealed. Logs or records shall be maintained, recording each performance of the logic test and by whom.

F.3.2 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.
F.4 Retention of Test Materials

F.4.1 For Optech Insight and 400-C:

The successful logic and accuracy tests, conducted at the time of certification (or recertification, 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.

F.4.2 For AVC Edge:

The successful logic and accuracy tests, conducted at the time of certification (or recertification, if necessary) to the Secretary of State, storage logs or records, if any, and balancing reports, if any, shall be retained per the following paragraph.

Upon the certification of the election results, the California Elections Code applies to the handling, security and disposition of Unused Ballots 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 22 months. Retention periods may be extended in the event of a court challenge.

F.5 Logic and Accuracy Board and Certification of Testing

The Election Official shall establish a Logic and Accuracy Board to complete certification of testing. Not later than seven (7) days before each statewide election, the Secretary of State must receive a copy of the Logic and Accuracy Board's certification. For local and district elections, the Logic and Accuracy Board members shall submit their copy of the Logic and Accuracy Board's certification to the Local Election Official conducting the election.

The Logic and Accuracy Board shall be comprised of the same persons prior to, during, and after the election. The Logic and Accuracy Board shall have the following duties.

- Receive from the Election 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 Election Officials as required by these procedures.
- Verify the correctness of the logic and accuracy test materials and results. This verification shall also be required for any of such material which 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 Election 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; provide that all members of the Board shall sign the appropriate certificate or certificates.

A copy of a sample certificate is attached to these procedures as appendix K.1: Certification by Logic and Accuracy Board.

F.6 Performance of Pre-Election and Post-Election LAT

The Accuracy and Logic Test procedures are combined into Logic and Accuracy Tests, which are performed as follows:

- Before the Election: Pre-Election LAT
- After the Election: Post-Election LAT
**F.6.1 FOR OPTECH INSIGHT:**

The Pre-Election LAT is a short simulation of an election, using official test ballots (with “known” results). The purpose of the test is to check the accuracy of each Optech Insight being sent to Polling Place, both the physical unit itself and the logical elements in the MemoryPack. The operator will do the following:

- Feed a stack of official test ballots through the Optech Insight being tested.
- Then compare the results printed out on the Vote Totals Report tape with the tape of known results included with the test ballots.

The results must be identical.

**F.6.2 FOR AVC EDGE:**

Please see the *AVC Edge 5.0 Operators Manual: Pre-Election Voting*, for the following procedures:

- The Pre-Election LAT begins by moving the polls switch to the open position. The Edge automatically verifies that the system parameters residing in internal memory are the same as in the results cartridge. When verification is complete, a Pre-Election LAT Zero Proof Report is printed to show that all candidate and measure counters are at zero when the Pre-Election LAT begins.
- The technician activates the Edge, enters simulated voter selections, and casts votes in a predetermined voting pattern. The voting pattern must insure each candidate receives at least one vote, must test over-voting in each contest, and must test complex ballot features such as recall elections, and primary elections.
- After the Pre-Election LAT data is entered, polls are closed by moving the polls switch to the closed position. The Edge prints the Pre-Election LAT results report. The results report shall be compared to the controlled test data to verify the Edge is correctly counting votes.
- When verification is complete, the technician signs the verification section on the results report indicating successful completion.

**F.6.3 FOR OPTECH 400-C:**

The Pre-Election LAT is performed before starting to tally ballots. It tests that the WinEDS database system for this election and the ballots designed for this election are computing accurately.

- This test is normally required by all jurisdictions. It demonstrates that the system is tabulating ballots and votes correctly by using a test deck of ballots with predetermined results. The test deck, reports and documentation, and where appropriate, the tabulation program must be sealed and preserved following the public test. Consult with election officials for details about this requirement.
- Local jurisdictions and states laws normally require tests for logic and accuracy for any public election. Test the election by using a set of ballots that includes each type and check the results to see that they are accurate. Follow the guidelines prescribed in the documentation for this test.
- The “Famous Names” sample election files are already installed on the Optech 400-C, which also comes with a set of sample “Famous Names” ballots for running a sample election. This is important to test the Optech 400-C and to practice using the WinETP tabulation program before an actual election.

**F.7 TEST DECK: FOR OPTECH INSIGHT AND 400-C**

This appendix discusses the Test Deck, as follows:

- Preparation of Test Deck
- Test Deck Tabulation Results
- Accuracy Test Report
A reusable test deck consisting of 165 pre-printed ballots conforming to a "Famous Names" election is used to test the accuracy of each Optech Insight in order to meet the requirements for ANNUAL testing. The test deck specifications and/or the test deck itself is available from the manufacturer of the Optech Insight. A proper test deck consists of ballots of different colored paper stocks with pre-printed ballot information as well as pre-printed vote marks. The ballots are printed on both sides with a Demonstration election. The pre-printed vote marks are printed intentionally thin to represent the minimum specified acceptable line width. A standard test deck’s contents are as follows:

<table>
<thead>
<tr>
<th>Ballot Style</th>
<th>Description</th>
<th>Quantity</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1</td>
<td>1st Position</td>
<td>10</td>
<td>Blue</td>
</tr>
<tr>
<td>F2</td>
<td>2nd Position</td>
<td>20</td>
<td>Green</td>
</tr>
<tr>
<td>F3</td>
<td>3rd Position</td>
<td>30</td>
<td>Buff</td>
</tr>
<tr>
<td>F4</td>
<td>4th Position</td>
<td>40</td>
<td>Canary</td>
</tr>
<tr>
<td>F5</td>
<td>5th Position</td>
<td>50</td>
<td>Cherry</td>
</tr>
<tr>
<td>F6</td>
<td>Write-In #1</td>
<td>3</td>
<td>White</td>
</tr>
<tr>
<td>F7</td>
<td>Write-In #2</td>
<td>3</td>
<td>White</td>
</tr>
<tr>
<td>F8</td>
<td>Over Voted</td>
<td>3</td>
<td>White</td>
</tr>
<tr>
<td>F9</td>
<td>Error</td>
<td>3</td>
<td>White</td>
</tr>
<tr>
<td>F0</td>
<td>Blank</td>
<td>3</td>
<td>White</td>
</tr>
</tbody>
</table>

The deck is made by removing certain ballots from the manufacturer's 169 ballot test deck. Remove each of the four ballots labeled "Straight Party.” Note that on none of the ballots in the deck is the Straight Party office voted; such voting is not permitted in the State of California.

The test decks described above for performance of the annual and Pre-Election Accuracy tests may be substituted with other test decks, provided that they meet the specifications for test decks set forth herein and by the Secretary of State.

**F.7.1 Preparation of Test Deck**

The responsible Election Official shall cause the accuracy test deck to be prepared and tested. Predetermined results of accuracy test must be available for inspection and sign off by the Logic and Accuracy Board.

**F.7.1.1 All Ballot Styles**

A logic test deck of ballots will be prepared for all ballot styles to be used in the election. This logic test deck is composed of Regular Ballots which shall be marked "TEST."

**F.7.1.2 Logic Test Data**

Two identical sets of test ballots shall be created for each ballot style used in the election. For purposes of testing, the Election Official may use either the primary or back-up logic test deck, but the backup logic test deck must be subject to the same security provisions as is the primary logic test deck. The logic test ballots shall be distinctively marked "TEST," and shall include the following test ballots, as described in the following paragraphs:

- Voted Test Ballots
- Overvoted Test Ballots
- No Votes Test Ballots
- Recall Measure and Candidates Contest Test Ballots
Voted Test Ballots:
A group of test ballots shall be voted. They shall be marked and be of sufficient quantity so that each candidate for every office on the ballot will receive a predetermined number of votes which 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 be different from the number of "no" votes. In the case of offices for which the Voter is allowed to vote for more than one candidate, at least one ballot of the group shall be voted with the maximum allowed number of choices.

For purposes of this test, Write-In positions shall be treated as declared candidates.

No office or ballot measure shall be voted in more positions (overvoted) than are allowed for the office or measure.

Overvoted Test Ballots:
One test ballot shall be an Overvoted Test Ballot, on which every contested office and ballot measure has received exactly one more vote than is allowed. Tests for "overvoted" test ballots will comply with the ballot processing regulations presented herein.

No Votes Test Ballots:
One No Votes Test Ballot shall not contain any marks other than those needed for precinct or ballot style identification. This test should result in undervotes being cast for each contest in every occurrence in the test. Tests for "no votes" test ballots will comply with the ballot processing regulations presented herein.

Recall Measure and Candidates Contest Test Ballots: If Applicable
Recall elections, conducted in accordance with California state recall rules and laws (as of the date of this publication) and which include two official candidates, shall consist of a series of at least fifteen test ballots shall be prepared as follows:

1. Marked "Yes" only
2. Marked "No" only
3. Marked "Yes" and for the first candidate
4. Marked "No" and for the first candidate
5. Marked "Yes" and for the second candidate
6. Marked "No" and for the second candidate
7. Marked "Yes" and for both the first and second candidate
8. Marked "No" and for both the first and second candidate
9. Marked both "Yes" and "No" and for the first candidate
10. Marked both "Yes" and "No" and for the second candidate
11. Marked both "Yes" and "No" and for both first and second candidates
12. Marked both "Yes" and "No" only
13. Marked for first and second candidate only
14. Marked for first candidate only
15. Marked for second candidate only

When the recall election has more than two candidates, additional test ballots shall be marked 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.
### Test Deck Tabulation Results

#### Ballot Front:

<table>
<thead>
<tr>
<th>Party</th>
<th>Straight Party</th>
<th>State Senator 37th District</th>
<th>Board of Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virginia Party</td>
<td>0</td>
<td>Nightingale 10</td>
<td>Washington 10</td>
</tr>
<tr>
<td>Ohio Party</td>
<td>0</td>
<td>Carnegie 20</td>
<td>Einstein 20</td>
</tr>
<tr>
<td>California Party</td>
<td>0</td>
<td>Key 30</td>
<td>Edison 30</td>
</tr>
<tr>
<td>New York Party</td>
<td>0</td>
<td>Hearst 40</td>
<td>Keller 40</td>
</tr>
<tr>
<td>Overvotes</td>
<td>0</td>
<td>Write-In 3</td>
<td>Dewey 50</td>
</tr>
<tr>
<td>Undervotes</td>
<td>0</td>
<td>Overvotes 0</td>
<td>Write-In 0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Undervotes 59</td>
<td>Overvotes 0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Undervotes 12</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Party</th>
<th>Straight Party</th>
<th>State Legislature 37th District</th>
<th>Director of Recreation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zachary Taylor</td>
<td>10</td>
<td>Anthony 10</td>
<td>Paige 10</td>
</tr>
<tr>
<td>and Millard Fillmore</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harrison/Stevenson</td>
<td>20</td>
<td>Eisenhower 20</td>
<td>Grange 10</td>
</tr>
<tr>
<td>Arthur/Hendricks</td>
<td>30</td>
<td>Roosevelt 30</td>
<td>Weismuller 20</td>
</tr>
<tr>
<td>Roosevelt/Fairbanks</td>
<td>40</td>
<td>Madison 40</td>
<td>Rockne 20</td>
</tr>
<tr>
<td>Write-In</td>
<td>3</td>
<td>Write-In 0</td>
<td>Dempsey 30</td>
</tr>
<tr>
<td>Overvotes</td>
<td>0</td>
<td>Overvotes 0</td>
<td>Ruth 30</td>
</tr>
<tr>
<td>Undervotes</td>
<td>59</td>
<td>Undervotes 62</td>
<td>Zaharias 40</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Write-In 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Write-In 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Overvotes 0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Undervotes 158</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Party</th>
<th>Straight Party</th>
<th>State Treasurer</th>
<th>Director of Entertainment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dirksen</td>
<td>10</td>
<td>Vanderbilt 10</td>
<td>Lombard 10</td>
</tr>
<tr>
<td>Curtis</td>
<td>20</td>
<td>Getty 20</td>
<td>Jessel 10</td>
</tr>
<tr>
<td>Hancock</td>
<td>30</td>
<td>Rockefeller 30</td>
<td>Rose 10</td>
</tr>
<tr>
<td>Aldrich</td>
<td>40</td>
<td>Morgan 40</td>
<td>Smith 20</td>
</tr>
<tr>
<td>Write-In</td>
<td>0</td>
<td>Write-In 0</td>
<td>Duncan 20</td>
</tr>
<tr>
<td>Overvotes</td>
<td>0</td>
<td>Overvotes 0</td>
<td>Ellington 20</td>
</tr>
<tr>
<td>Undervotes</td>
<td>62</td>
<td>Undervotes 62</td>
<td>Write-In 0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Write-In 0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Write-In 0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Overvotes 0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Undervotes 396</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Party</th>
<th>Straight Party</th>
<th>U.S. Representative</th>
<th>Associate Justice</th>
<th>Director of Transportation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wilson</td>
<td>10</td>
<td>Hand 10</td>
<td>Ford 10</td>
<td></td>
</tr>
<tr>
<td>LaFollette</td>
<td>20</td>
<td>Darrow 20</td>
<td>Olds 20</td>
<td></td>
</tr>
<tr>
<td>Redfield</td>
<td>30</td>
<td>Marshall 30</td>
<td>Write-In 0</td>
<td></td>
</tr>
<tr>
<td>Wadsworth</td>
<td>40</td>
<td>Jay 40</td>
<td>Overvotes 0</td>
<td></td>
</tr>
<tr>
<td>Write-In</td>
<td>0</td>
<td>Write-In 0</td>
<td>Undervotes 132</td>
<td></td>
</tr>
<tr>
<td>Overvotes</td>
<td>0</td>
<td>Overvotes 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undervotes</td>
<td>62</td>
<td>Undervotes 62</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Ballot Back:

<table>
<thead>
<tr>
<th>OFFICES</th>
<th>PROPOSITIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Judge – 2nd District</strong></td>
<td>1. Closing Polling Places</td>
</tr>
<tr>
<td>Douglas</td>
<td>YES</td>
</tr>
<tr>
<td>Moore</td>
<td>NO</td>
</tr>
<tr>
<td>Warren</td>
<td>Overvotes</td>
</tr>
<tr>
<td>Solomon</td>
<td>Undervotes</td>
</tr>
<tr>
<td>Write-In</td>
<td>Overvotes</td>
</tr>
<tr>
<td></td>
<td>Undervotes</td>
</tr>
<tr>
<td>Holmes</td>
<td>YES</td>
</tr>
<tr>
<td>Baer</td>
<td>NO</td>
</tr>
<tr>
<td>Nation</td>
<td>Overvotes</td>
</tr>
<tr>
<td>Taney</td>
<td>Undervotes</td>
</tr>
<tr>
<td>Write-In</td>
<td>Undervotes</td>
</tr>
<tr>
<td></td>
<td>Undervotes</td>
</tr>
<tr>
<td><strong>Judge – 4th District</strong></td>
<td>3. Waterway – Atlantic/Pacific</td>
</tr>
<tr>
<td>McAdoo</td>
<td>YES</td>
</tr>
<tr>
<td>Armstrong</td>
<td>NO</td>
</tr>
<tr>
<td>Todd</td>
<td>Overvotes</td>
</tr>
<tr>
<td>Write-In</td>
<td>Undervotes</td>
</tr>
<tr>
<td></td>
<td>Undervotes</td>
</tr>
<tr>
<td><strong>Judge – 5th District</strong></td>
<td>4. Louisiana Territory</td>
</tr>
<tr>
<td>Truth</td>
<td>YES</td>
</tr>
<tr>
<td>Moran</td>
<td>NO</td>
</tr>
<tr>
<td>Kent</td>
<td>Overvotes</td>
</tr>
<tr>
<td>Write-In</td>
<td>Undervotes</td>
</tr>
<tr>
<td></td>
<td>Undervotes</td>
</tr>
</tbody>
</table>

### F.7.3 Accuracy Test Report

When the Reusable Test Deck is processed utilizing the unit it will produce a report showing votes per voting position as shown in *appendix F.7.2: Test Deck Tabulation Results*. This test verifies the ability of the unit to read ballots, correctly process the data and print out the results. Within 40 days before each election, the Reusable Test Deck shall be run at least twice through each Optech Insight.

### F.8 Test Script: For AVC Edge

This appendix discusses the Test Script, as follows:

- Preparation of Test Script
- Accuracy Test Report
- Storage of Test Script
F.8.1 Preparation of Test Script

The test script used for testing each voting machine shall be a test script that properly tests all contests and questions for that ballot style for that precinct in which the voting machine is used on Election Day.

F.8.1.1 All Ballot Styles

A Test Script will be prepared to exercise all ballot styles to be used in the election.

F.8.1.2 Logic Test Data

The Test Script will exercise the following types of ballots:

- Voted Ballots
- No Votes Ballots
- Recall Measure and Candidates Contest Ballots

Voted Ballots:

The Test Script will exercise Voted Ballots of sufficient quantity so that each candidate for every office on the ballot will receive a predetermined number of votes which 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 be different from the number of "no" votes. In the case of offices for which the Voter is allowed to vote for more than one candidate, at least one ballot of the group shall be voted with the maximum allowed number of choices.

For purposes of this test, Write-In positions shall be treated as declared candidates.

No office or ballot measure shall be voted in more positions (overvoted) than are allowed for the office or measure.

No Votes Ballots:

One No Votes Ballot shall not contain any marks other than those needed for precinct or ballot style identification. This test should result in undervotes being cast for each contest in every occurrence in the test. Tests for "no votes" test ballots will comply with the ballot processing regulations presented herein.

Recall Measure and Candidates Contest Test Ballots: If Applicable:
Recall elections, conducted in accordance with the recall rules and laws for the jurisdiction, and which include two official candidates, shall consist of a series of at least fifteen test ballots shall be prepared as follows:

1. Marked "Yes" only
2. Marked "No" only
3. Marked "Yes" and for the first candidate
4. Marked "No" and for the first candidate
5. Marked "Yes" and for the second candidate
6. Marked "No" and for the second candidate
7. Marked "Yes" and for both the first and second candidate
8. Marked "No" and for both the first and second candidate
9. Marked both "Yes" and "No" and for the first candidate
10. Marked both "Yes" and "No" and for the second candidate
11. Marked both "Yes" and "No" and for both first and second candidates
12. Marked both "Yes" and "No" only
13. Marked for first and second candidate only
14. Marked for first candidate only
15. Marked for second candidate only

When the recall election has more than two candidates, additional test ballots shall be marked 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 cases, numbered 1, 2, 3, 4, 9, 12, and 14 only shall be prepared.

**F.8.2 Accuracy Test Report**

When the Test Script is run on the AVC Edge it will produce a report showing test results. This test verifies the ability of the AVC Edge to correctly tally the ballots and print out the results. Within 40 days before each election, the Test Script shall be run at least twice through each AVC Edge.

**F.8.3 Storage of Test Script**

Following the Pre-Election LAT, the test script must be maintained by the Local Election Official and locked in sure storage until actual Ballot Tally commences.
Appendix G: Opening the Polls

This appendix discusses the Opening the Polls procedures for the Optech Insight and AVC Edge.

NOTE: This appendix applies ONLY to the Optech Insight and AVC Edge.

G.1 General

- Complete Oath of Office and Declaration of Intention forms pursuant to the California Elections Code.
- Assemble voting booths and in each booth display a copy of materials required by the California Elections Code.
- Make a pad of Demonstration Ballots, markers and suitable Demonstration materials available.

G.2 For Optech Insight:

For the following procedures, please see the Optech Insight Operators Manual: Opening the Polls:

- Powering ON Optech Insight
- Printing Verification Reports
  - System Start-Up Report
  - Zero Ballot Report
  - Allowable Header Codes Report
  - Zero Vote Totals Report
- Verifying System Readiness

G.3 For AVC Edge:

At least 15 minutes before the polls open, Poll Workers shall do the following:

1. Determine the proper location of the AVC Edges.
2. Place the unit on a table so that the bottom storage side is facing up.
3. Remove bottom storage cover.
4. Remove legs
5. Remove power cord.
6. Replace bottom storage cover.
7. Assemble legs:
   a. Turn each inside leg 90 degrees to make 2 “X’s”.
   b. Insert the 4 black button ends into the holes on the bottom storage case by pressing the leg retention pins. Insert each of the 4 legs into corresponding sockets on bottom of unit. Make sure the leg brace assembly is at the rear of the unit.
   c. Insert bottom legs and turn until silver button snaps into place. This will lock the leg assembly securely.
8. Rotate unit onto its side.
9. Turn the unit right side up and set on the floor.
10. Unlock the 4 latches (2 are located next to the handle, 2 are on the other side of the unit.)
11. Remove the top cover.
12. Stand in the front of the unit and gently raise the screen assembly. The black bar behind the screen assembly will automatically slide into the first groove. You may adjust the screen assembly to any of 5 positions by repositioning this bar.
14. Mount the Verivote Printer onto the Edge, and connect it, per the Verivote Printer Operators Manual. Then, seal/lock it to keep it securely mounted to the Edge.
15. Plug the power cord into the AC power receptacle in the back of the Edge, and an AC outlet.
16. Raise the cover on the main power on/off unit.
17. Turn the power switch to the “ON” position.
18. Cut the seal on the Polls Switch Cover and raise the cover. Turn polls switch to “Open, The Official Election Zero Proof Report will be displayed on the screen or printer in a few seconds.
19. If applicable, review the "Official Zero Proof Report". Check to ensure that each candidate is at zero votes.
20. Close the Polls Switch Cover and seal the cover.
21. Place the sample ballot where the voters can easily see it.
Appendix H: Polling Place Procedures

This appendix discusses the Polling Place Procedures for the Optech Insight and AVC Edge.

NOTE: This appendix applies ONLY to the Optech Insight and AVC Edge.

H.1 General

- During the day, at least every hour, inspect each booth to ensure that there are no electioneering materials present and that the booth/voting machine is otherwise suitable for voting. As far as possible, defacement conditions shall be corrected.
- Offer to instruct each Voter in the proper method of voting. Offer each voter further instruction and practice time, if necessary, as applicable.

H.2 For Optech Insight:

This appendix discusses the following Polling Place Procedures for the Optech Insight:
- General Procedures
- For Regular Ballot:
- For Blank Ballot:
- For Overvoted Ballot:
- For Undervoted Ballot:
- For Write-In Ballot:
- For Cross-Voted Ballot:
- For Error Ballot:
- For Unprocessable Ballot:
- For Voted Absentee Ballot:
- For Surrender of Unvoted Absentee Ballot:
- Provisional Voting

H.2.1 General Procedures

For the following Official Election procedures, please see the Optech Insight Operators Manual:
- If a Ballot Read Before Poll Opening Time
- First Ballot
- Assisting the Voter
- Monitoring Voter and Machine Operation
- Assisting Voters that Require Physical Assistance
- In the Event of Power or Unit Failure
- Changing Paper Tape
- For Problems that Cannot Be Resolved at Precinct:
**H.2.2 FOR REGULAR BALLOT:**

1. The voter, upon leaving the voting booth, shall place their voted ballot in the secrecy sleeve with stub exposed and proceed to the ballot box station.
2. There, a Poll Worker shall remove the stub and hand it to the voter.
3. This same Poll Worker shall next deposit the ballot in the ballot box, keeping the voted ballot hidden from view, but holding the secrecy sleeve so that it is not deposited in the ballot box along with the voted ballot.
4. The empty secrecy sleeve may be reissued to later arriving voters. If the ballot is printed on only one side, use of a secrecy sleeve is optional.

The Regular Ballot is completely tabulated and sent to the Rear Bin. The Public Counter Display is updated to show how many ballots have been sent to the Rear Bin.

**H.2.3 FOR BLANK BALLOT:**

A ballot on which there are no voting position marks that can be read by the voting system. It may be truly blank in all voting positions, or it may have marks in these positions, which the voting system cannot read because they are of insufficient density. Blank Ballot is returned to Voter, along with a “Return to Voter” message:

The following choices are available:

- **Try Ballot Again:** If a Voter does not mark their ballot properly by filling in the Voting Arrows, but instead circles the candidate names, the ballot is returned to Voter, and the above message is printed. In this case the ballot can be pulled out and the Voter instructed on the proper manner of marking candidate votes and can even use the same ballot.
- **Issue New Ballot:** If a Voter fills in the Voting Arrows but uses a non-standard Marking Device, the Optech Insight may not be able to read the vote marks and the above “Return to Voter” message will be repeated. In this case the Voter should be issued a new ballot.
  
  The problem ballot is placed in a Spoiled Ballot envelope.
- **Auxiliary Bin:** Pull the ballot out of the Ballot Slot, and place it in the Auxiliary Bin for review after Closing the Polls.

**H.2.4 FOR OVERVOTED BALLOT:**

Ballot, where the Voter has voted for more than the allotted number of candidates for the office being contested. Overvoted Ballot is returned to Voter, along with a “Return to Voter” message:

The following choices are available:

- **Issue New Ballot:** If the option to pull the ballot out of the Optech Insight is selected, the Voter can be issued a new ballot and instructed on the proper number of votes allowed per office. Note that the title of the overvoted office is printed as part of this “Return to Voter” message in order to allow the Poll Worker to specifically instruct the Voter in regard to the number of votes allowed for that specific office.
  
  The problem ballot is placed in a Spoiled Ballot envelope.
- **Auxiliary Bin:** Pull the ballot out of the Ballot Slot, and place it in the Auxiliary Bin for review after Closing the Polls.

**H.2.5 FOR UNDERVOTED BALLOT:**

Ballot, where the Voter has voted for less than the total number of election contests listed on the ballot, or less than the number of positions to be filled for a single office:
The following choices are available:

- **Issue New Ballot**: If the option to pull the ballot out of the Optech Insight is selected, the Voter can be issued a new ballot and instructed on the proper number of votes allowed per office. Note that the title of the overvoted office is printed as part of this “Return to Voter” message in order to allow the Poll Worker to specifically instruct the Voter in regard to the number of votes allowed for that specific office.

  The problem ballot is placed in a Spoiled Ballot envelope.

- **Auxiliary Bin**: Pull the ballot out of the Ballot Slot, and place it in the Auxiliary Bin for review after Closing the Polls.

### H.2.6 FOR WRITE-IN BALLOT:

A Write-In Ballot is a ballot where a vote has been cast in a race for a candidate whose name does not appear on the ballot.

The Write-In Ballot is tallied (except for Write-In) and sent to the Center Bin, for review after Closing the Polls.

### H.2.7 FOR CROSS-VOTED BALLOT:

A Cross-Voted Ballot is Ballot with votes for more than one party in an Open Primary election.

The following choices are available:

- **Try Ballot Again**: The ballot may be tried again.

- **Issue New Ballot**: A new ballot may be issued to the Voter.

  The problem ballot is placed in a Spoiled Ballot envelope.

- **Auxiliary Bin**: Pull the ballot out of the Ballot Slot, and place it in the Auxiliary Bin for review after Closing the Polls.

### H.2.8 FOR ERROR BALLOT:

The election jurisdiction has tested the Optech Insight voting machine with samples of the actual ballots. However, either ballot printing or ballot trimming problems could have occurred with the batch of ballots in the precinct which could cause ballots to be returned to Voter with error messages. In addition, while the Optech Insight is a very robust “industrial strength” unit, the possibility always exists for an electro-mechanical failure to occur which would cause false ballot error messages to occur:

The following choices are available:

- **Issue New Ballot**: If the option to pull the ballot out of the Optech Insight is selected, the Voter can be issued a new ballot and instructed on the proper number of votes allowed per office. Note that the title of the overvoted office is printed as part of this “Return to Voter” message in order to allow the Poll Worker to specifically instruct the Voter in regard to the number of votes allowed for that specific office.

  The problem ballot is placed in a Spoiled Ballot envelope.

- **Auxiliary Bin**: Pull the ballot out of the Ballot Slot, and place it in the Auxiliary Bin for review after Closing the Polls.

### H.2.9 FOR UNPROCESSABLE BALLOT:

Ballot which cannot be processed because of invalid Security ID Header Code, etc. Unprocessable Ballot is returned to the Voter:
The following choices are available:

- **Try Ballot Again**: The ballot may be tried again.
- **Issue New Ballot**: A new ballot may be issued to the Voter. The problem ballot is placed in a Spoiled Ballot envelope.
- **Auxiliary Bin**: Pull the ballot out of the Ballot Slot, and place it in the Auxiliary Bin for review after Closing the Polls.

### H.2.10 FOR VOTED ABSENTEE BALLOT:

If a voter returns a voted Absentee Ballot, the Poll Worker shall:

1. Verify that the Absentee Ballot is sealed and that the signature of the Voter is on the identification envelope.
2. Require any person who returns an Absentee Ballot in person, to sign an envelope, and log or record before depositing their voted and sealed ballot in the specially marked container.

### H.2.11 FOR SURRENDER OF UNVOTED ABSENTEE BALLOT:

- No person to whom an absent voter ballot was issued is permitted to vote at the polling place unless he/she surrenders the ballot. The ballot is to be marked "SURRENDERED" and placed in the appropriate container as specified by the election official. The voter is then permitted to vote in the normal method for the precinct.
- Any person to whom an absent voter ballot was issued may vote a Regular Ballot provisionally without surrendering the original ballot by providing precinct officials with a statement, signed under penalty of perjury, that the voter has not voted and will not vote any other ballot in that election.

### H.2.12 PROVISIONAL VOTING

- Provisional Ballots are in substantially the form of Absentee Ballots and are to be used at all elections by Voters who claim to be registered but who’s right to vote cannot be immediately established.
- Provisional Ballot envelopes shall be printed in substantially the same form as Absentee Ballot envelopes, but shall be distinguished by a different color or other means of discrete identification.
- Procedures for tallying Provisional Ballots shall be those set forth in the California Elections Code and by the Election Official.

### H.3 FOR AVC EDGE: REGULAR VOTING

This appendix discusses the following AVC Edge procedures for Regular Voting:

- General Procedures
- If Voter Wishes to Change a Selection:
- Entering Write-In Candidate
- For Blank Ballot:
- For Fleeing Voter:
- For Undervote:
- Overvote is Not Allowed:
- Provisional Voting
**H.3.1 GENERAL PROCEDURES**

For the following Election Day procedures, please see the *Optech Insight Operators Manual*:
- Demonstrating the Voting Procedures
- Activating the Voting Machine

For the following Advanced Topics, please see the *Optech Insight Operators Manual*:
- Operating the AVC Edge on Battery Power
- Verivote Printer

For the following voting instructions, please see the *AVC Edge 5.0 Voter Instructions*:
- **Getting Started**: Insert the Voter Card into the AVC Edge to start voting.
- **To Make Selection**: Simply touch the screen to make selection(s).
- **To Change/Cancel Choice**: Touch the circle/green checkmark, and choose another option.
- **To Go to Next Page**: Touch the Next arrow at the bottom of the screen.
- **To Review Previous Page**: Touch the Back arrow at the bottom of the screen.
- **To Enter Write-In Candidate**: Utilize the Write-In screen that automatically pops up, and touch the OK button.
- **To Cancel Write-In Entry**: From Write-In screen, touch the Cancel button.
- **To Record Vote**: Touch the Cast Your Ballot button.
- **To Confirm that Vote Has Been Processed**: A “Your Vote Is Being Recorded, Thank You” message will be displayed by the AVC Edge.

**H.3.2 IF VOTER WISHES TO CHANGE A SELECTION:**

If the Voter has made a mistake, and wishes to change a selection, they may return to the Ballot Page, and change the selection, per the *AVC Edge Voter Instructions*.

**H.2.3 ENTERING WRITE-IN CANDIDATE**

Please see the *AVC Edge 5.0 Operators Manual: Casting Write-In Votes*.

**H.3.4 FOR BLANK BALLOT:**

If the voter has not made any candidate selections, or if all selections have been unvoted, the “Blank Ballot?” screen will be displayed by the AVC Edge. This allows for returning to Voter Inactive, and for casting a blank ballot.

A “Confirmation” pop-up window will be displayed, with “Yes” and “No” options, per *appendix D.3.5: Voting Disposition*.

The ability for the Poll Worker to assist the voter in casting a blank ballot is always available.

**H.3.5 FOR FLEEING VOTER:**

If the voter has made candidate selections, the “Voter Fled?” screen will be displayed by the AVC Edge. The Cancel Activation selection is not available at this point. This allows for easy recovery in the case that a voter leaves before going through the entire ballot and pressing the Cast Ballot button.

The ballot will be cast as is, per *appendix D.3.5: Voting Disposition*.

**H.3.6 FOR UNDERSHARE:**

A warning prompt will be displayed by the AVC Edge. The Voter can still cast the ballot; it is not required that all possible selections be made.
Please see appendix D.3.5: Voting Disposition.

**H.3.7 OVERVOTE IS NOT ALLOWED:**

The AVC Edge is set up such that it will not allow the Voter to overvote.
The AVC Edge notifies the Voter when the selection of candidates and measures is completed, by:
- Disallowing additional voting for the completed contest; and
- Moving to the next contest

**H.3.8 PROVISIONAL VOTING**

Provisional Voting refers to a method of recording votes from voters whose eligibility is in question. When this happens, the saved votes must be identified so that post-election resolution of the voter’s status will allow for accepting or rejecting the vote.

Provisional Votes are segregated from the normal vote storage, and include an ID tag.

Provisional Voting assumes that the votes are invalid until validated at Post-Election. Hence, votes cast as Provisional Votes are included separately on the machine’s Results Reports.

The ID tag is generated by the Card Activator when in Auto Activate mode, and by the Edge otherwise.

For more detail, please see the *AVC Edge 5.0 Operators Manual: Advanced Topics*.

**H.4 FOR AVC EDGE: AUDIO VOTING**

This appendix discusses the following AVC Edge procedures for Audio Voting:
- General Procedures
- If Voter Wishes to Change a Selection:
- Entering Write-In Candidate
- For Blank Ballot:
- For Fleeing Voter:
- For Undervote:
- Overvote is Not Allowed:
- Provisional Voting

**H.4.1 GENERAL PROCEDURES**

For the following overview of the Audio Voting process, please see the *AVC Edge 5.0 Operators Manual: Advanced Topics*:
- Audio Voting Usage
- Audio Voting Capacity

For the following information on the Audio Voting Process, please see the *Edge Audio Accessory 5.0 Poll Workers & Operators Manual*:
- Overview of the Audio Voting Process
- Audio Ballot Layout
- Assisting the Audio Voter
- Audio Ballot HELP
- Standard Sequences Used in the Audio Ballot
For the following information on Preparing the AVC Edge for Audio or Regular Voting, please see the *Edge Audio Accessory 5.0 Poll Workers & Operators Manual*:
- Connecting the Edge Audio Accessory to the AVC Edge
- Switching the AVC Edge to Audio Voting Mode
- Returning the AVC Edge to Regular Voting Mode

**H.4.2 IF VOTER WISHES TO CHANGE A SELECTION:**

If the Voter has made a mistake, and wishes to change a selection, they may return to the Ballot Page Audio Script (by pressing a sequence of Keypad Buttons) and change the selection, per the *Edge Audio Accessory 5.0 Poll Workers & Operators Manual*.

**H.2.3 ENTERING WRITE-IN CANDIDATE:**

Please see the *Edge Audio Accessory 5.0 Poll Workers & Operators Manual: Standard Sequences Used in the Audio Ballot*.

**H.4.4 FOR BLANK BALLOT:**

The Undervoted Audio Script is used for the Blank Ballot, per *appendix H.4.6: For Undervote*.

**H.4.5 FOR FLEEING VOTER:**

The Undervoted Audio Script is used for the Fleeing Voter, per *appendix H.4.6: For Undervote*. The Cancel Activation selection is not available at this point. This allows for easy recovery in the case that a voter leaves before going through the entire ballot and pressing the Cast Ballot button. The ballot will be cast as is, per *appendix D.3.5: Voting Disposition*.

**H.4.6 FOR UNDERVOTE:**

If the voter has not made any candidate selections, or if all selections have been unvoted, a warning Undervoted Audio Script will be played by the Edge Audio Accessory. The Voter can still cast the ballot; it is not required that all possible selections be made.

**H.4.7 OVERVOTE IS NOT ALLOWED:**

The AVC Edge is set up such that it will not allow the Voter to overvote. The AVC Edge notifies the Voter, with an Overvote Audio Script, when the selection of candidates and measures is completed, by:
- Disallowing additional voting for the completed contest; and
- Moving to the next contest

**H.4.8 PROVISIONAL VOTING**

Please see the *AVC Edge 5.0 Operators Manual: Advanced Topics*. 
Appendix I: Closing the Polls

This appendix discusses the Closing the Polls procedures for the Optech Insight and AVC Edge.

NOTE: This appendix applies ONLY to the Optech Insight and AVC Edge.

I.1 FOR OPTECH INSIGHT:

This appendix discusses the following Closing the Polls procedures for the Optech Insight:
- General Procedures
- Obtaining Regular Ballots from Rear Bin
- Checking Center Bin for Write-In Ballots
- Checking Auxiliary Bin for Blank, Overvoted, Undervoted, Cross-Voted, Error, and Unprocessable Ballots
- For Voted Absentee Ballots:
- For Provisional Ballots:

I.1.1 GENERAL PROCEDURES

The following procedures must be completed in public view:

1. 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.
2. Print the Totals Reports, per the Optech Insight Operators Manual: Closing the Polls.
3. Unlock the Rear Access Lid, and power OFF the Optech Insight.

WARNING! DO NOT REMOVE THE MEMORYPACK FROM THE OPTECH INSIGHT WHILE POWER TO THE OPTECH INSIGHT IS ON! YOU COULD DESTROY ELECTION DATA!

4. Break the seal, and remove the MemoryPack from the Optech Insight.

   NOTE: Some jurisdictions stipulate that the MemoryPack be left in the Optech Insight. Check your election procedures.

   a. Place the broken seal in the plastic bag marked Seals and return this bag to the Election Board. If required, record the Seal number in the appropriate column on your Poll workers log sheet.
   b. Place the MemoryPack in its anti-static padded bag.

   NOTE: The anti-static bag ensures that the Precinct Totals stored in the MemoryPack are not damaged by static electricity or mishandling.

   c. Return the MemoryPack (in its bag) to the Election Board.
5. Deface and/or seal all Unused Ballots, as directed.
6. Complete the Ballot Statement, using the Ballot Totals Report to provide the following information:
   a. Total number of official ballots received from the Election Official
      - Counted
      - Not Counted
      - Total Ballots Cast
   b. The Total Ballot Cast number should equal the number of official ballots entered as received from the Election Official, herein.
   c. An explanation of any discrepancy shall be shown.
7. Reconcile the Total Ballots Cast number to the number of signatures in the Roster-Index. Explain any discrepancy.
8. Complete the "Certificate to Roster" showing:
   - The name(s) of person(s) who, after signing the Roster, failed to vote because of challenge, or other reason
   - The number of persons who voted in the precinct
   - A certification to the accuracy of the Ballot Statement
   - The signatures of all Board Members
9. Remove ballots from Ballot Box:
   WARNING! CHECK WITH YOUR ELECTION HEADQUARTERS BEFORE REMOVING ANY BALLOTS FROM THE BALLOT BOX. SOME JURISDICTIONS LEAVE BALLOTS LOCKED IN THE BALLOT BOX.
   a. Unlock the Ballot Box door, and open.
   b. Remove the ballots from the Auxiliary Bin, and stack them on top of the Ballot Box or a table.
   c. Remove the ballots from the Center Bin, and stack them on top of the Ballot Box or a table. Keep these ballots separate from other ballots.
   d. Remove the ballots from the Rear Bin, and stack them on top of the Ballot Box or a table. Keep these ballots separate from the other ballots.
   WARNING! KEEP THE BALLOTS FROM EACH BIN SEPARATED AND LABELED WITH THE NAME OF THE BIN THEY CAME FROM. THIS IS MANDATORY IN CASE OF A RECOUNT AND AS AN AUDIT TRAIL.
   e. Carefully pack the ballots in the separate cases and return these cases to the Election Board.
10. Package for return as follows:

Verify that the following numbers have been correctly entered on the Certificate of Packaging and Sealing:

- Rear Bin (from the Ballot Totals Report)
- Center Bin (from the Ballot Totals Report)
- Ballots in Auxiliary Bin (Check Auxiliary Bin Ballots, per the *Optech Insight Poll Workers Manual*.)
- Provisional Ballots (from the Provisional Ballot envelopes)

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 Precinct Board shall sign the Certificate. After the polls close, the original Certificate of Packaging and Sealing shall be mailed to the Election Official by a member of the Precinct Board other than the members who return the ballot container. A self-addressed stamped envelope shall have been provided for this specific purpose. The copy of the Certificate of Packaging and Sealing shall accompany the ballot container to the Central Counting Location.

11. Return all ballots and supplies as directed by the Election Official.

12. At least two precinct board members must accompany all ballots until they are in the custody of the Election Official and a properly-executed receipt has been provided.

**IMPORTANT: DO NOT RELEASE BALLOTS TO CUSTODY OF ANY OTHER PERSON WITHOUT FIRST OBTAINING A RECEIPT.**

For more detail, please see the following Closing the Polls procedures of the *Optech Insight Operators Manual*:

- If Poll Closing Operation Started Before Poll Closing Time
- Checking Auxiliary Bin for Ballots
- Printing Totals Reports
- Obtaining Signatures and Public Counter Number
- Distributing Vote Totals Report
- Printing Electronic Log Report
- Powering OFF Optech Insight
- Removing MemoryPack from Optech Insight
- Transporting Precinct Totals to Central Counting Location

**I.1.2 Obtaining Regular Ballots from Rear Bin**

1. When all ballots have been examined, place non-voted ballots in a designated container for delivery to the counting center.

2. Enter the total in the proper box on the Certificate(s) of Packaging and Sealing and elsewhere as directed. This total should agree with Item 5 on the Ballot Statement (i.e., the number of precinct voter voted ballots).

3. Place all voted ballots to be processed on election night in the appropriate return container. This group must include questioned ballots.

4. Close the return container and seal with a tamper-proof seal.
I.1.3 **CHECKING CENTER BIN FOR WRITE-IN BALLOTS**

The Write-Ins are reviewed at this time.

I.1.4 **CHECKING AUXILIARY BIN FOR BLANK, OVERVOTED, UNDervoted, CROSS-VOTED, ERROR, AND UNPROCESSABLE BALLOTS**

1. Check the Auxiliary Bin for ballots deposited during the polling hours.
2. Remove all ballots that were deposited in this bin and insert them one-at-a-time into the Optech Insight for tabulating. Each ballot will increase the Public Counter Display by one.

I.1.5 **FOR VOTED ABSENTEE BALLOTS:**

If voted Absentee Ballots were placed in the ballot box:

1. Leave Identification Envelopes sealed.
2. Enter the number of such ballots in the appropriate space on the Certificate of Packaging and Sealing.
3. Place the ballots in the designated container for return to the election official.

I.1.6 **FOR PROVISIONAL BALLOTS:**

- When Closing the Polls, the Poll Worker will enter the number of Provisional Ballots removed from the ballot box in the appropriate space on the Certificate of Packaging and Sealing, and place the ballots in the designated container.

I.2 **FOR AVC EDGE:**

This appendix discusses the following Closing the Polls procedures for the AVC Edge:

- General Procedures
- Vote Consolidation (Optional)
- For Provisional Votes:
- Audit Trail Transfer: If Results Cartridge Damaged or Unreadable

I.2.1 **GENERAL PROCEDURES**

For Closing the Polls, please see the *AVC Edge 5.0 Operators Manual: Election Day.*

I.2.2 **VOTE CONSOLIDATION (OPTIONAL)**

Please see the *AVC Edge 5.0 Operators Manual: Advanced Topics.*

I.2.3 **FOR PROVISIONAL VOTES:**

Provisional Votes are segregated form the normal vote storage, and include an ID tag.
Votes cast as Provisional Votes are included separately on the machine’s Results Reports.

I.2.4 **AUDIT TRAIL TRANSFER: IF RESULTS CARTRIDGE DAMAGED OR UNREADABLE**

Please see the *AVC Edge 5.0 Operators Manual: Advanced Topics.*
Appendix J: Using HAAT as Alternate to Card Activator: For AVC Edge

This appendix discusses the Using the HAAT as an alternate to the Card Activator, as follows:

- Overview
- Pre-Election Activities
- Election Day Activities
- Post-Election Activities
- Diagnosis and Repair

J.1 Overview

The HAAT (Hybrid Activator, Accumulator & Transmitter) serves as the voter’s access to the AVC Edge voting machines through activation of a Smart Card interface.
The HAAT includes the following System Components:

- **HAAT Unit Insertion Slot**: Place for inserting Smart Card for activation
- **HAAT Unit Display**: Allows viewing of the different menu options as well as of status information while using the HAAT Unit
- **HAAT Unit Thermal Printer**: Reports and consolidated results may be printed through this thermal printer. This printer is only available in HAAT100 Units

It is recommended that the HAAT be operated in Prepared Mode, per the *HAAT Operators & Maintenance Manual*, as follows:

<table>
<thead>
<tr>
<th>Function</th>
<th>Performed by</th>
<th>During</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CARD ACTIVATION</strong></td>
<td>Poll Worker</td>
<td>Election Day</td>
</tr>
<tr>
<td></td>
<td>Warehouse Technician</td>
<td>Acceptance Testing</td>
</tr>
<tr>
<td><strong>RESULTS CONSOLIDATION</strong></td>
<td>Poll Worker</td>
<td>Election Day</td>
</tr>
<tr>
<td></td>
<td>Warehouse Technician</td>
<td>Acceptance Testing</td>
</tr>
<tr>
<td><strong>REPORTS PRINTING</strong></td>
<td>Poll Worker</td>
<td>Election Day</td>
</tr>
<tr>
<td></td>
<td>Warehouse Technician</td>
<td>Acceptance Testing</td>
</tr>
<tr>
<td><strong>RESULTS TRANSMISSION</strong></td>
<td>Poll Worker</td>
<td>Election Day</td>
</tr>
<tr>
<td></td>
<td>Warehouse Technician</td>
<td>Acceptance Testing</td>
</tr>
<tr>
<td><strong>DATE AND TIME SETTING</strong></td>
<td>Warehouse Technician</td>
<td>Pre-election</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acceptance Testing</td>
</tr>
<tr>
<td><strong>UNIT TESTING</strong></td>
<td>Poll Worker</td>
<td>Election Day</td>
</tr>
<tr>
<td></td>
<td>Warehouse Technician</td>
<td>Pre-election</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acceptance Testing</td>
</tr>
<tr>
<td><strong>FIRMWARE UPGRADE</strong></td>
<td>Warehouse Technician</td>
<td>Pre-election (if needed)</td>
</tr>
</tbody>
</table>

### J.2 Pre-Election Activities

Pre-Election comprises the following activities, which are performed by the Technician per the *HAAT Operators & Maintenance Manual*:

- **Charging the Internal Battery before the Election**: To ensure that the HAAT unit will remain operational even in the event of energy disruption at the polling place.
- **Preparing the HAAT**: This operation needs to be performed so the HAAT can be operational for a specific polling place or precinct.
- **Checking the Precinct ID**: To ensure that the HAAT unit has been prepared for the correct polling place.
- **Setting the HAAT Unit Date and Time Clock**.
J.3 **Election Day Activities**

Election Day comprises the following activities, which are performed by the Poll Worker per the *HAAT Operators & Maintenance Manual*:

- **Card activation**: This activity is performed by the Poll Worker during an Election Day and consists of voter cards programming so voters can access the Edge2 voting machines and cast their votes.

- **Handling cards returned with problems**: When voters cannot access a voting machine using the card they have been handed by the Poll Worker, the Poll Worker will perform the proper operation to solve the problem the card is presenting.

- **Handling common problems**: When the HAAT presents a common problem, like printer or transmission failure, the Poll Worker will perform the proper procedure to solve the problem the HAAT is presenting.

J.4 **Post-Election Activities**

Post-Election comprises the following activities, which are performed by the Poll Worker per the *HAAT Operators & Maintenance Manual*:

- **Consolidation: Reading data cartridges**: This operation is performed by inserting data cartridges one by one into the unit. This generates a consolidated results report.

- **Printing Reports and Transmitting**: These printed reports are the results reports for all precincts or a specific precinct.

- **Printing/Viewing the audit trail**.

Once the Election Day is over, the HAAT Unit must be reset to its original state, so it can be used in another Election Day. This activity MUST be performed by qualified technicians only:

- **Resetting the HAAT Unit**: Per the *HAAT Operators & Maintenance Manual*.

J.5 **Diagnosis and Repair**

- **Diagnosis of Faulty Hardware**: This activity comprises identification of problem and consequent solution regarding the HAAT hardware components.

- **Diagnosis of Faulty Software**: These personnel are maintenance technicians whose primary function is to diagnose faulty software and consequent solution. These technicians are normally supplied by SVS because of the expertise requirements of security, source code confidentiality, and special requirements that may be imposed by state level statute changes.
Appendix K: Forms

This appendix provides the following forms:

- Certification by Logic and Accuracy Board
- Certificate of Biennial Inspection
- Resolution of Verivote Printer Jam on Election Day Form: For AVC Edge
- Vote Save Failure – Used Backup Procedure Form: For AVC Edge

K.1 Certification by Logic and Accuracy Board

Please see page J-2 for this form.

K.2 Certificate of Biennial Inspection

Please see page J-3 for this form.

K.3 Resolution of Verivote Printer Jam on Election Day Form: For AVC Edge

Please see page K-4 for this form.

K.4 Vote Save Failure – Used Backup Procedure Form: For AVC Edge

Please see page K-5 for this form.
Sequoia Voting Systems
Certification by Logic and Accuracy Board

State of California       
(City and) County of (name) 

We, the undersigned members of the Accuracy and Program Verification Board, having been duly appointed by (name) , the Registrar of Voters/County Clerk of the (City and) County of (name) , for the (name) election to be held on (date) , to verify the logic and accuracy test ballots as required by the Procedures for the use of the (fill in name of system) System, adopted pursuant to the California Elections Code, do hereby certify through the Registrar of Voters/County Clerk 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 predetermined correct totals for each office and ballot measure
- THAT the cause of any discrepancy was found and corrected
- THAT the logic and accuracy test programs, the logic and accuracy test ballots, and the logic and accuracy test printed output which were certified as correct by the Accuracy and Program Verification Board were delivered into the custody of the Registrar of Voters/County Clerk

We declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

SIGNATURE of First Board Member ___________________________ Date ___________

PRINTED Name of First Board Member ___________________________

SIGNATURE of Second Board Member ___________________________ Date ___________

PRINTED Name of Second Board Member ___________________________

SIGNATURE of Third Board Member ___________________________ Date ___________

PRINTED Name of Third Board Member ___________________________

(Use as many signature blocks as there are board members)
State of California          )
(City and) County of (name) )

I, (name) , Registrar of Voters/County Clerk of the (City and) County of (name) , do hereby certify that in the normal course of Pre-Election hardware maintenance and testing of our voting (or, and vote tabulating) equipment for the forth-coming election on (date), I find that the voting (or, and vote tabulating) equipment used in the (City and) County of (name) is tabulating ballots accurately. This Certificate is issued pursuant to the California Elections Code.

Dated: (date)

Signed: (name and title)

[Seal]
Sequoia Voting Systems
Resolution of Verivote Printer Jam on Election Day

<table>
<thead>
<tr>
<th>Time of Occurrence</th>
<th>Date</th>
</tr>
</thead>
</table>

**ACTIVITY at Time of Occurrence:**
- [ ] While Printing Zero Proof Report
- [ ] While Voter Was Reviewing Ballot
- [ ] While Voter Was Making Changes to Ballot
- [ ] After Voter Cast Ballot
- [ ] While Printing Results Report(s)

---

**Serial Number of Affected AVC Edge Voting Machine**

---

**Serial Number of Verivote Printer Being Replaced**

---

**Serial Number of Replacement Verivote Printer**

---

**SIGNATURE of Technician Performing Replacement**

Date

---

**SIGNATURE of Poll Worker**

Date

---

**SIGNATURE of Election Official**

Date

---

IMPORTANT: Completed Form MUST Accompany Election Results, to Central Counting Location, along with Replaced Verivote Printer, at the End of the Election.
<table>
<thead>
<tr>
<th><strong>Method of Backup Voting:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Voter voted on another AVC Edge Voting Machine.</td>
</tr>
<tr>
<td>☐ Voter voted on a Paper Ballot.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Serial Number of Affected AVC Edge Voting Machine</strong></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>SIGNATURE of Election Official Shutting Down Machine</strong></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>SIGNATURE of Poll Worker</strong></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>SIGNATURE of Election Official</strong></th>
</tr>
</thead>
</table>

**IMPORTANT:** Completed Form MUST Accompany Election Results, to Central Counting Location, along with Results Cartridge from affected voting machine, and Paper Ballot (in a sealed envelope) (if used).