



Sequoia Voting Systems

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SEQUOIA VOTING SYSTEMS OPTECH EAGLE III-PE

STATE OF CALIFORNIA PROCEDURES

DOCUMENT VERSION 1.02

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Optech Eagle III-Pe State of California Procedures

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These Procedures establish the regulations governing the use of the Optech Eagle III-Pe (known as Optech Eagle) 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 Eagle 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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Table of Contents

| | | |
|----------|---|------------|
| 1 | THE OPTECH EAGLE | 1-1 |
| 1.1 | PURPOSE OF THIS DOCUMENT | 1-1 |
| 1.2 | DOCUMENT STRUCTURE | 1-1 |
| 1.3 | OPTECH EAGLE OVERVIEW | 1-2 |
| 1.4 | CONFIGURATIONS..... | 1-3 |
| | 1.4.1 <i>PRECINCT COUNT: COMBINED MODE</i> | 1-3 |
| | 1.4.2 <i>CENTRAL COUNT: COMBINED MODE</i> | 1-3 |
| | 1.4.3 <i>PRECINCT COUNT: SOLO MODE</i> | 1-3 |
| | 1.4.4 <i>CENTRAL COUNT: SOLO MODE</i> | 1-3 |
| | 1.4.5 <i>ABSENTEE COUNT</i> | 1-4 |
| 1.5 | OPERATING MODES | 1-4 |
| | 1.5.1 <i>INITIALIZATION</i> | 1-4 |
| | 1.5.2 <i>TESTING</i> | 1-4 |
| | 1.5.3 <i>OPENING THE POLLS</i> | 1-5 |
| | 1.5.4 <i>OFFICIAL ELECTION</i> | 1-5 |
| | 1.5.5 <i>CLOSING THE POLLS</i> | 1-5 |
| | 1.5.6 <i>ACCUMULATION</i> | 1-6 |
| | 1.5.7 <i>POST-ELECTION AUDIT</i> | 1-6 |
| 1.6 | SYSTEM COMPONENTS..... | 1-6 |
| | 1.6.1 <i>BALLOTS</i> | 1-6 |
| | 1.6.2 <i>MARKING DEVICES</i> | 1-7 |
| | 1.6.3 <i>BALLOT TABULATOR</i> | 1-7 |
| | 1.6.4 <i>BALLOT BOX</i> | 1-9 |
| | 1.6.5 <i>MEMORYPACK</i> | 1-9 |
| | 1.6.6 <i>BALLOT GUIDE BAR & KEYS</i> | 1-10 |
| | 1.6.7 <i>PRINTER AND PAPER TAPE</i> | 1-10 |
| | 1.6.8 <i>SUMMARY SYSTEM</i> | 1-11 |
| | 1.6.9 <i>OPTIONAL 12 VDC BACKUP BATTERY</i> | 1-11 |
| 1.7 | SUBSYSTEMS..... | 1-11 |
| | 1.7.1 <i>BALLOT DEFINITION SUBSYSTEM</i> | 1-12 |
| | 1.7.2 <i>CONTROL SUBSYSTEM</i> | 1-14 |
| | 1.7.3 <i>VOTE RECORDING SUBSYSTEM</i> | 1-16 |
| | 1.7.4 <i>CONVERSION SUBSYSTEM</i> | 1-16 |
| | 1.7.5 <i>PROCESSING SUBSYSTEM</i> | 1-17 |
| | 1.7.6 <i>REPORTING SUBSYSTEM</i> | 1-17 |
| | 1.7.7 <i>VOTE DATA MANAGEMENT SUBSYSTEM</i> | 1-18 |
| 1.8 | GENERAL SYSTEM SPECIFICATIONS..... | 1-18 |
| | 1.8.1 <i>BALLOT</i> | 1-18 |
| | 1.8.2 <i>AS A PRECINCT COUNT SYSTEM</i> | 1-19 |
| | 1.8.3 <i>AS A CENTRAL COUNT SYSTEM</i> | 1-19 |
| 2 | PRE-ELECTION PROCEDURES..... | 2-1 |
| 2.1 | TESTING PROCEDURES | 2-1 |
| 2.2 | OPTECH EAGLE DIAGNOSTIC TESTS..... | 2-2 |
| 2.3 | SUMMARY SYSTEM DIAGNOSTIC TESTS..... | 2-3 |
| 2.4 | BALLOT SPECIFICATIONS DIAGNOSTIC TESTING..... | 2-4 |
| 2.5 | SYSTEM PROOFING | 2-5 |
| | 2.5.1 <i>EXCEPTION PROCESSING</i> | 2-5 |
| | 2.5.2 <i>ERROR BALLOTS</i> | 2-6 |
| 2.6 | PREPARING FOR AN ELECTION..... | 2-6 |
| 2.7 | ADJUSTING BALLOT GUIDE FOR BALLOT SIZE..... | 2-6 |

2.8 INITIALIZING ELECTION..... 2-7

2.9 LOGIC AND ACCURACY TESTING..... 2-7

2.10 PREPARATION OF OPTECH EAGLE: PRECINCT COUNT 2-8

2.11 PREPARATION OF OPTECH EAGLE: CENTRAL COUNT 2-9

2.12 INSPECTION AND DELIVERY OF SUPPLIES: PRECINCT COUNT..... 2-9

2.13 PROCESSING OF ABSENTEE BALLOTS..... 2-10

 2.13.1 DISTRIBUTION OF ABSENTEE BALLOTS AND SAMPLE BALLOTS TO VOTERS 2-10

 2.13.2 APPLIED ABSENT VOTER LIST..... 2-10

 2.13.3 RETURNED ABSENTEE BALLOTS..... 2-10

2.14 RETENTION OF TEST MATERIALS AND RESULTS..... 2-10

2.15 LOGIC AND ACCURACY BOARD..... 2-11

2.16 BALLOT TALLY PROGRAMS..... 2-11

2.17 ELECTION OBSERVER PANEL..... 2-11

2.18 HARDWARE MAINTENANCE 2-11

3 ELECTION DAY PROCEDURES: PRECINCT COUNT3-1

3.1 BEFORE OPENING THE POLLS 3-1

3.2 OPENING THE POLLS..... 3-2

3.3 OFFICIAL ELECTION..... 3-3

 3.3.1 IF A BALLOT READ BEFORE POLL OPENING TIME..... 3-3

 3.3.2 VOTING PROCEDURES..... 3-3

 3.3.3 PROCEDURE FOR BALLOT RETURNED TO VOTER..... 3-4

 3.3.4 PROVISIONAL VOTING..... 3-5

 3.3.5 SURRENDER OF ABSENTEE BALLOT..... 3-5

 3.3.6 RETURN OF A VOTED ABSENTEE BALLOT..... 3-5

 3.3.7 CHANGING PAPER TAPE..... 3-6

 3.3.8 USE OF AUXILIARY BIN..... 3-6

 3.3.9 IN THE EVENT OF POWER OR UNIT FAILURE 3-6

 3.3.10 SPECIAL PROCEDURES FOR RESOLVING PROBLEMS..... 3-6

3.4 CLOSING THE POLLS 3-7

 3.4.1 PROCEDURE..... 3-7

 3.4.2 PROCEDURE FOR ABSENTEE BALLOTS 3-10

 3.4.3 PROCEDURE FOR UNUSED BALLOTS..... 3-11

 3.4.4 PROCEDURE FOR NON-OPTECH EAGLE BALLOTS..... 3-11

 3.4.5 RETURN OF VOTED BALLOTS AND SUPPLIES TO ELECTION OFFICIAL..... 3-11

 3.4.6 DISTRIBUTION OF ELECTION RETURNS TAPE..... 3-11

3.5 VOTE TALLY REPORTING: USING SUMMARY SYSTEM 3-11

 3.5.1 FOLLOWING PROCESSING OF LAST BALLOT FROM PRECINCT 3-11

 3.5.2 UPON RECEIPT OF MEMORYPACK AND REPORT..... 3-11

 3.5.3 REPORTING ELECTION RESULTS 3-12

3.6 VOTE TALLY REPORTING: WITHOUT USING SUMMARY SYSTEM 3-12

4 ELECTION DAY PROCEDURES: CENTRAL COUNT.....4-1

4.1 BEFORE OPENING THE POLLS 4-1

4.2 OPENING THE POLLS..... 4-1

4.3 OFFICIAL ELECTION..... 4-2

 4.3.1 IF A BALLOT READ BEFORE POLL OPENING TIME..... 4-2

 4.3.2 VOTING PROCEDURES..... 4-2

 4.3.3 PROCEDURE FOR BALLOT RETURNED TO VOTER..... 4-3

 4.3.4 PROVISIONAL VOTING..... 4-4

 4.3.5 SURRENDER OF ABSENTEE BALLOT..... 4-4

 4.3.6 RETURN OF A VOTED ABSENTEE BALLOT..... 4-4

 4.3.7 CHANGING PAPER TAPE..... 4-4

4.3.8 *USE OF AUXILIARY BIN*.....4-4

4.3.9 *IN THE EVENT OF POWER OR UNIT FAILURE*4-5

4.4 **CLOSING THE POLLS** 4-5

4.4.1 *PROCEDURE*.....4-5

4.4.2 *PROCEDURE FOR REGULAR BALLOTS*4-7

4.4.3 *PROCEDURE FOR ABSENTEE BALLOTS*4-7

4.4.4 *PROCEDURE FOR PROVISIONAL BALLOTS*.....4-7

4.4.5 *PROCEDURE FOR NON-OPTECH EAGLE BALLOTS*.....4-8

4.5 **VOTE TALLY REPORTING: USING SUMMARY SYSTEM** 4-8

4.5.1 *FOLLOWING PROCESSING OF LAST BALLOT FROM PRECINCT*4-8

4.5.2 *UPON RECEIPT OF MEMORYPACK AND REPORT:*.....4-8

4.5.3 *REPORTING ELECTION RESULTS*.....4-8

4.6 **VOTE TALLY REPORTING: WITHOUT USING SUMMARY SYSTEM** 4-8

5 CANVASS AND POST-ELECTION PROCEDURES.....5-1

5.1 **SEMI-OFFICIAL CANVASS: CENTRAL COUNT**..... 5-1

5.1.1 *APPOINTMENT OF BOARDS*.....5-1

5.1.2 *REPORTING OF PRELIMINARY ABSENTEE BALLOT TABULATION RESULTS TO SECRETARY OF STATE*.....5-2

5.1.3 *ESTABLISHING AUDIT TRAILS*5-2

5.1.4 *PROCESSING OF ABSENTEE AND PROVISIONAL BALLOTS*5-2

5.1.5 *LOGIC AND ACCURACY TESTING*.....5-2

5.1.6 *SEAL AND CONTAINER INSPECTION (TRACKING POINT)*5-2

5.1.7 *BALLOT INSPECTION (TRACKING POINT)*.....5-3

5.1.8 *BALLOT PROCESSING*.....5-3

5.1.9 *DUPLICATION OF DAMAGED AND UN-VOTED BALLOTS (TRACKING POINT)*.....5-3

5.1.10 *PROCESSING OF WRITE-IN BALLOTS (TRACKING POINT)*.....5-4

5.1.11 *MEMORYPACK PROCESSING*5-5

5.1.12 *SUMMARY SYSTEM PROCESSING*5-5

5.1.13 *REPORTING ELECTION RESULTS*5-5

5.1.14 *STORAGE OF BALLOTS*5-5

5.1.15 *MEMORYPACK CONTROL BOARD*.....5-6

5.1.16 *UNESCORTED PERSONNEL*.....5-7

5.2 **OFFICIAL CANVASS AT CENTRAL COUNTING LOCATION** 5-7

5.2.1 *PROCESSING OF PROVISIONAL BALLOTS*5-7

5.2.2 *EXAMINING BALLOT STATEMENT PREPARED BY PRECINCT BOARD*5-7

5.2.3 *RECONCILING TALLIES*.....5-8

5.2.4 *CANVASSING OF ABSENTEE BALLOTS*5-8

5.2.5 *CANVASSING OF WRITE-IN BALLOTS*.....5-8

5.2.6 *PROCESSING OF UNUSED BALLOTS*.....5-8

5.3 **BALLOT TABULATION REPORTING**..... 5-9

5.3.1 *FOLLOWING PROCESSING OF LAST BALLOT FROM PRECINCT:*5-9

5.3.2 *REPORTING ELECTION RESULTS*5-9

5.3.3 *IF CERTAIN PERIPHERAL DEVICES ARE AVAILABLE:*.....5-9

5.4 **UPDATE OF COMPUTER COUNTS**..... 5-9

5.5 **CHECKING UNUSED BALLOTS**..... 5-10

5.6 **RETENTION OF ELECTION MATERIALS** 5-10

5.7 **ADHERENCE TO ESTABLISHED PROCEDURES** 5-10

5.8 **CLEANING OPTECH EAGLE**..... 5-10

5.9 **CHANGING PAPER TAPE, IF REQUIRED**..... 5-10

5.10 **STORING OPTECH EAGLE**..... 5-10

6 MANUAL RECOUNT PROCEDURES.....6-1

6.1 **REQUIRED ONE PERCENT MANUAL RECOUNT** 6-1

6.2 **REQUEST FOR MANUAL RECOUNT**..... 6-1

6.3 OBSERVERS..... 6-1

6.4 HOURS OF OPERATION..... 6-2

6.5 BALLOT SUPERVISION/BREAKS..... 6-2

6.6 VOTING ARROW MARKING 6-2

6.7 TABULATION OF OVERVOTED BALLOTS..... 6-2

6.8 TABULATION OF UNDERVOTED BALLOTS..... 6-2

6.9 TABULATION OF UN-VOTED BALLOTS..... 6-2

7 CERTIFICATION AND REPORTING REQUIREMENTS.....7-1

7.1 BIENNIAL CERTIFICATION OF HARDWARE..... 7-1

7.2 HARDWARE CERTIFICATION AND NOTIFICATION 7-1

 7.2.1 CERTIFICATION..... 7-1

 7.2.2 NOTIFICATION..... 7-1

 7.2.3 SEVEN (7) DAYS BEFORE STATEWIDE ELECTION..... 7-1

 7.2.4 IF ANY EQUIPMENT IS REPAIRED: 7-1

7.3 ELECTION OBSERVER PANEL..... 7-2

7.4 LOGIC AND ACCURACY CERTIFICATION..... 7-2

7.5 LOGIC AND ACCURACY BOARD..... 7-2

7.6 SUBMITTAL OF BALLOT TABULATION PROGRAMS TO SECRETARY OF STATE..... 7-3

7.7 ELECTION NIGHT AND POST-ELECTION REPORTING..... 7-3

7.8 PREPARATION OF SPECIFIC WRITTEN PROCEDURES 7-3

8 SYSTEM SECURITY8-1

8.1 ACCESS CONTROL POLICY..... 8-2

 8.1.1 GENERAL ACCESS CONTROL POLICY..... 8-2

 8.1.2 INDIVIDUAL ACCESS PRIVILEGES..... 8-2

8.2 ACCESS CONTROL MEASURES 8-3

 8.2.1 SECURE ROOM: FOR CENTRAL COUNTING LOCATION..... 8-3

 8.2.2 PRE-ELECTION PROCESSING..... 8-4

 8.2.3 ELECTION DAY PROCESSING 8-5

 8.2.4 POST-ELECTION PROCESSING 8-6

 8.2.5 IF PC/EMS/AERO IS PART OF A NETWORK..... 8-7

8.3 EQUIPMENT AND DATA SECURITY..... 8-7

 8.3.1 GENERAL EQUIPMENT AND DATA SECURITY 8-8

 8.3.2 PHYSICAL SECURITY 8-8

 8.3.3 BALLOT BOX 8-8

 8.3.4 OPTECH EAGLE..... 8-8

 8.3.5 DESTRUCTIBLE SEALS 8-9

 8.3.6 SEAL AND CONTAINER INSPECTION..... 8-9

 8.3.7 STORAGE..... 8-9

 8.3.8 CHECKSUM SECURITY..... 8-10

 8.3.9 MEMORYPACK..... 8-10

 8.3.10 DATE/TIME STAMP..... 8-10

 8.3.11 PROPRIETARY DESIGNS..... 8-10

 8.3.12 STATUS & ERROR MESSAGES PRINTED BEFORE, DURING, AND AFTER ELECTION..... 8-10

8.4 SOFTWARE AND FIRMWARE INSTALLATION 8-11

8.5 OTHER ELEMENTS OF AN EFFECTIVE SECURITY PROGRAM..... 8-11

 8.5.1 PROTECTION AGAINST MALICIOUS SOFTWARE..... 8-12

 8.5.2 EMS DATABASE SECURITY 8-12

 8.5.3 POLL WORKERS, VOTING HOURS..... 8-12

 8.5.4 POLL WORKERS, CLOSING THE POLLS..... 8-12

 8.5.5 MAINTENANCE TECHNICIANS 8-13

 8.5.6 GUIDELINE FOR SECURITY POLICIES AND METHODS..... 8-13

APPENDIX A: GLOSSARY.....A-1

APPENDIX B: VOTING VARIATIONS.....B-1

- B.1 OPEN PRIMARY B-1
- B.2 PARTISAN OFFICES B-1
- B.3 NON-PARTISAN OFFICES..... B-1
- B.4 WRITE-IN..... B-1
 - B.4.1 CURRENT CANDIDATES ONLY..... B-1*
 - B.4.2 FREE-FOR-ALL..... B-1*
- B.5 ROTATION..... B-2
- B.6 SPLIT PRECINCT B-2
- B.7 VOTE FOR..... B-2
- B.8 RECALL VOTING..... B-2
- B.9 CUMULATIVE VOTING B-2
- B.10 PROVISIONAL VOTING B-2

APPENDIX C: BALLOT DISPOSITIONC-1

- C.1 REGULAR BALLOT..... C-1
- C.2 OVERVOTED BALLOT..... C-2
- C.3 WRITE-IN BALLOT..... C-2
- C.4 UN-VOTED BALLOT..... C-2
- C.5 UNPROCESSABLE ERROR BALLOT..... C-3
- C.6 READ ERROR BALLOT..... C-4
- C.7 OVERRIDDEN ERROR BALLOT C-5

APPENDIX D: LOGIC AND ACCURACY TESTING.....D-1

- D.1 PRE-CONDITIONS D-1
- D.2 PERFORMING PRE-ELECTION LAT..... D-1
- D.3 LOGIC TESTING..... D-2
 - D.3.1 PERFORMANCE OF LOGIC TEST.....D-2*
 - D.3.2 PREPARATION OF LOGIC TEST MATERIALS.....D-3*
 - D.3.3 CERTIFICATION OF LOGIC TEST.....D-4*
- D.4 ACCURACY TESTING..... D-4
 - D.4.1 PERFORMANCE OF ACCURACY TESTS.....D-5*
 - D.4.2 PREPARATION OF ACCURACY TESTSD-5*
 - D.4.3 REUSABLE ACCURACY TEST DECK.....D-5*
 - D.4.4 ACCURACY TEST REPORT.....D-6*
- D.5 TEST DECK TABULATION RESULTS..... D-7
 - D.5.1 BALLOT FRONTD-7*
 - D.5.2 BALLOT BACKD-8*

APPENDIX E: SPECIAL PROCEDURES FOR RESOLVING PROBLEMS..... E-1

- E.1 CENTRAL TROUBLE REVIEW BOARD.....E-1
- E.2 TECHNICIAN DISPATCH.....E-1
- E.3 TECHNICIAN REPORTING.....E-2

APPENDIX F: AUDIT RECORD DATA..... F-1

- F.1 AUDIT TRAILS F-1
 - F.1.1 SYSTEM EVENTS F-1*

F.1.2 *SPECIFIC AUDIT TRAILS*..... F-2

F.2 STATISTICAL BALLOT DATA REQUIRED F-2

F.3 DIAGNOSTIC TEST RESULTS F-3

F.4 ACCESS OK & ELECTION INITIALIZATION MESSAGES F-3

F.5 POLLS OPENING/CLOSING TIME MESSAGES (OPTION)..... F-3

F.6 IF BALLOT READ BEFORE POLL OPENING TIME..... F-3

F.7 “RETURN TO VOTER” MESSAGES F-3

F.7.1 *OVERVOTED BALLOT*..... F-3

F.7.2 *UN-VOTED BALLOT*..... F-3

F.7.3 *UNPROCESSABLE ERROR BALLOT*..... F-3

F.7.4 *READ ERROR BALLOT*..... F-3

APPENDIX G: FORMS..... **G-1**

G.1 CERTIFICATION BY LOGIC AND ACCURACY BOARD G-1

G.2 CERTIFICATE OF BIENNIAL INSPECTION G-2

Table of Figures

FIGURE 1-1: OPTECH EAGLE OVERVIEW.....1-2
FIGURE 1-2: BALLOT: 1, 2, AND 3 COLUMNS.....1-6
FIGURE 1-3: BALLOT TABULATOR (FRONT VIEW).....1-7
FIGURE 1-4: BALLOT TABULATOR (REAR VIEW).....1-8
FIGURE 1-5: MEMORYPACK1-9
FIGURE 1-6: LOCATION OF PAPER TAPE1-10
FIGURE 2-1: BALLOT: 1, 2, AND 3 COLUMNS.....2-6

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1 The Optech Eagle

This chapter defines the following general information for the Optech Eagle:

- Purpose of This Document
- Document Structure
- Optech Eagle Overview
- Configurations
- Operating Modes
- System Components
- Subsystems
- General System Specifications

1.1 PURPOSE OF THIS DOCUMENT

This document is the State of California Procedures for the Optech Eagle.

1.2 DOCUMENT STRUCTURE

Chapter 1 – The Optech Eagle: Defines the general information for the Optech Eagle.

Chapter 2 – Pre-Election Procedures: Defines the Pre-Election Procedures for the Optech Eagle.

Chapter 3 – Election Day Procedures: Precinct Count: Defines the Election Day Procedures for the Optech Eagle being used as a Precinct Count System.

Chapter 4 – Election Day Procedures: Central Count: Defines the Election Day Procedures for the Optech Eagle being used as a Central Count System.

Chapter 5 – Canvass and Post-Election Procedures: Defines the Canvass and Post-Election Procedures for the Optech Eagle.

Chapter 6 – Manual Recount Procedures: Defines the Manual Recount Procedures for the Optech Eagle.

Chapter 7 – Certification and Reporting Requirements: Defines the Certification and Reporting Requirements for the Optech Eagle.

Chapter 8 – System Security: Defines the System Security for the Optech Eagle.

Appendix A – Glossary: Provides a listing and brief definition of all terms for the Optech Eagle that may be unfamiliar to persons not trained in either voting systems or computer operation.

Appendix B – Voting Variations: Defines the Voting Variations for the Optech Eagle.

Appendix C – Ballot Disposition: Defines the Ballot Disposition requirements and processes for the Optech Eagle.

Appendix D – Logic and Accuracy Testing: Defines the Pre-Election LAT requirements and processes for the Optech Eagle.

Appendix E – Special Procedures for Resolving Problems: Discusses special procedures for resolving problems at the Polling Place.

Appendix F – Audit Record Data Defines the Audit Record Data for the Optech Eagle.

Appendix G – Forms: Provides samples of the forms described in this document.

1.3 OPTECH EAGLE OVERVIEW

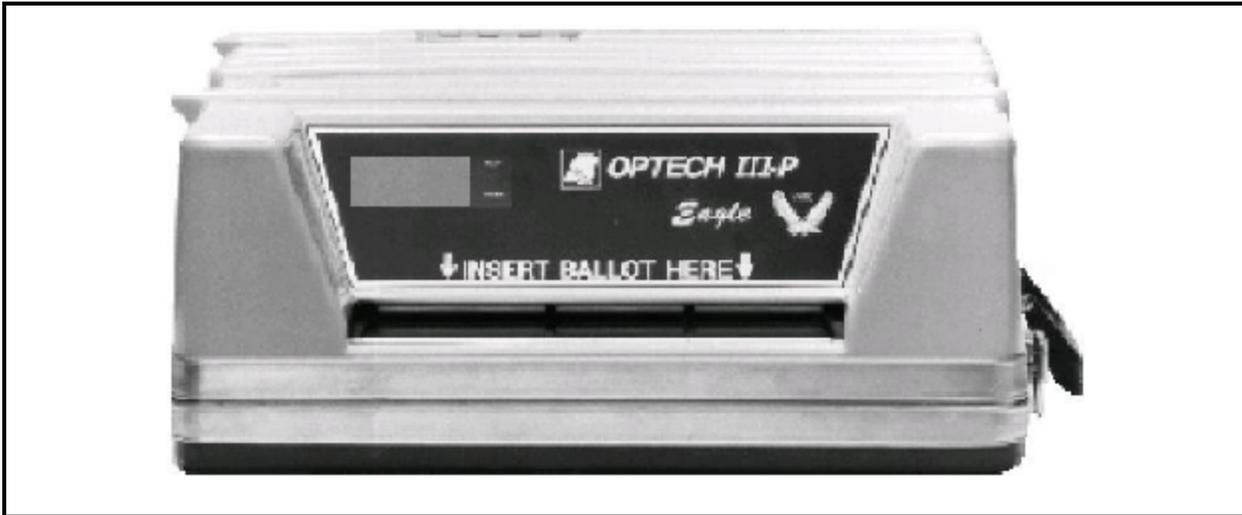


Figure 1-1: Optech Eagle Overview

The Optech Eagle, manufactured by Sequoia Voting Systems (SVS), is a portable Precinct/Central Count System that uses Optical Scan Read-Head technology to electronically read and tabulate Optical Scan ballots at the Polling Place or Central Counting Location, as a versatile and Voter-friendly ballot tabulator. The Optech Eagle 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 Eagle consists of:

- One or more electronic ballot reading devices, hereinafter referred to as Optech Eagles into which a voter or authorized election deputy inserts a ballot marked with the voter's choices for candidates and choices for or against ballot measures to be voted on.
- A marking device, issued by the Election Official.
- If required, computer equipment and programs capable of reading, interpreting, and summarizing the information which has been read by the Optech Eagle(s).

The Optech Eagle is an electronic voting system which is comprised of election definition and ballot generation software, ballots, a vote counting device and its associated firmware, and report generating software. A Summary System, providing for the accumulation and reporting of results and statistics jurisdiction-wide, can be incorporated

Dimensions:Plastic Ballot Box Dimensions when assembled and ready for use:

- Height: 30.5 inches
- Width: 24.0 inches
- Length: 40.0 inches

Metal Ballot Box Dimensions when assembled and ready for use:

- Height: 29.5 inches
- Width: 19.0 inches
- Length: 22.5 inches

The Ballot Tabulator Dimensions are:

- Height: 7.5 inches
- Width: 18.5 inches
- Length: 23.0 inches

1.4 CONFIGURATIONS

The Optech Eagle comprises the following configurations:

- Precinct Count: Combined Mode
- Central Count: Combined Mode
- Precinct Count: Solo Mode
- Central Count: Solo Mode
- Absentee Count

1.4.1 PRECINCT COUNT: COMBINED MODE

The configuration of the particular Optech Eagle unit is as follows:

- **Combined Mode:** Indicates that Optech Eagles are being used, as a combined function, for Ballot Tabulation in some precincts, as well as for Ballot Tabulation at the Central Counting Location.
- **Precinct Count:** Designates the particular unit as a Precinct Count System that operates at a Polling Place.

1.4.2 CENTRAL COUNT: COMBINED MODE

The configuration of the particular Optech Eagle unit is as follows:

- **Combined Mode:** Indicates that Optech Eagles are being used, as a combined function, for Ballot Tabulation in some precincts, as well as for Ballot Tabulation at the Central Counting Location.
- **Central Count:** Designates the particular unit as a Central Count System that operates at the Central Counting Location.

1.4.3 PRECINCT COUNT: SOLO MODE

Indicates Ballot Tabulation entirely at the Polling Places.

1.4.4 CENTRAL COUNT: SOLO MODE

Indicates Ballot Tabulation entirely at the Central Counting Location.

In this scenario, voting will take place at the Polling Places, with the ballots being transported to the Central Counting Location, at poll closing, for tabulation by Optech Eagle(s) at the Central Counting Location.

1.4.5 ABSENTEE COUNT

The Optech Eagle is used to tabulate Absentee Ballots.

1.5 OPERATING MODES

The Optech Eagle comprises the following operating modes:

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

1.5.1 INITIALIZATION

For each election, new Election Parameter data must be loaded into the MemoryPack. When the Optech Eagle 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 APS 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.

1.5.2 TESTING

After initialization has been completed, testing is performed to verify the new Election Parameter data and the Optech Eagle hardware. 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
- Un-Voted Ballots
- Overvoted Ballots
- Etc.

Total Ballot Statistics Reports are then printed and reviewed, per the *Optech Eagle III-Pe Operators Manual*. This process may be repeated until all testing requirements are satisfied.

At the end of the testing process vote totals are set to zero clearing the test ballot results and enabling official ballot reading. The Optech Eagle is then powered off, locked, sealed, and prepared for shipment to the appropriate precinct. The following message is normally left in the printer mechanism as a record that the test results were indeed cleared to zero.

```
ACCESS O.K.

10:38:24 am, 07/28/99
REQUEST TO FULL INITIALIZATION
(Everything set to zero)
Pack RAM currently has this data:
```

1.5.3 OPENING THE POLLS

After the testing process has been completed, polls are opened by powering ON the Optech Eagle. After verifying the checksums, the Optech Eagle automatically prints a Zero Ballot Statistics Report showing zero totals for all candidates and zero ballots cast followed by the following message.

```
O.K. TO READ BALLOTS
```

1.5.4 OFFICIAL ELECTION

After Opening the Polls, official Ballot Tabulation begins.

- **Rear Bin:** Regular Ballots are completely tabulated and sent to the Rear Bin. The Public Counter is incremented by one.
- **Center Bin:** Write-In Ballots are sent to the Center Bin. The Public Counter is incremented by one.
- **Return to Voter:** The following 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:
 - o Un-Voted Ballot
 - o Overvoted Ballot
 - o Read Error Ballot
 - o Unprocessable Error Ballot
- **Auxiliary Bin:** If a power failure occurs, instruct the Voters to put their ballots into the Auxiliary Bin. The Auxiliary Bin may also be used to hold exception/error ballots for review after Closing the Polls.

If an Optech Eagle unit fails because of a hardware problem and a new unit is installed in the precinct, the MemoryPack can be moved from the old to the new unit and processing will continue.

1.5.5 CLOSING THE POLLS

After all of the ballots have been processed; polls are closed by the Poll Worker. The cover to the Keypad section is unlocked and opened, and the [Print Totals] key is pressed, which generates this message.

```
10:38:24 am, 07/28/99
REQUEST TO CLOSE POLLS
(Print totals, no more ballots)

Press 0 key if this is O.K., 9 if NOT O.K.!
```

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 Total Ballot Statistics Report. You may print additional copies of the Total Ballot Statistics Report by pressing [Print Totals] again.

1.5.6 ACCUMULATION

After all reports are printed, the Optech Eagle 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.

1.5.7 POST-ELECTION AUDIT

At any time after the results have been read and accumulated, the MemoryPack may be placed in any Optech Eagle and:

- Additional Total Ballot Statistics Reports may be printed.
- The MemoryPacks may be read and accumulated again into a different PC to verify that the Election Night accumulation was proper.

1.6 SYSTEM COMPONENTS

This sub-chapter defines the following System Components for the Optech Eagle:

- Ballots
- Marking Devices
- Ballot Tabulator
- Ballot Box
- MemoryPack
- Ballot guide Bar & Keys
- Printer and Paper Tape
- Summary System
- Optional 12 VDC Backup Battery

1.6.1 BALLOTS

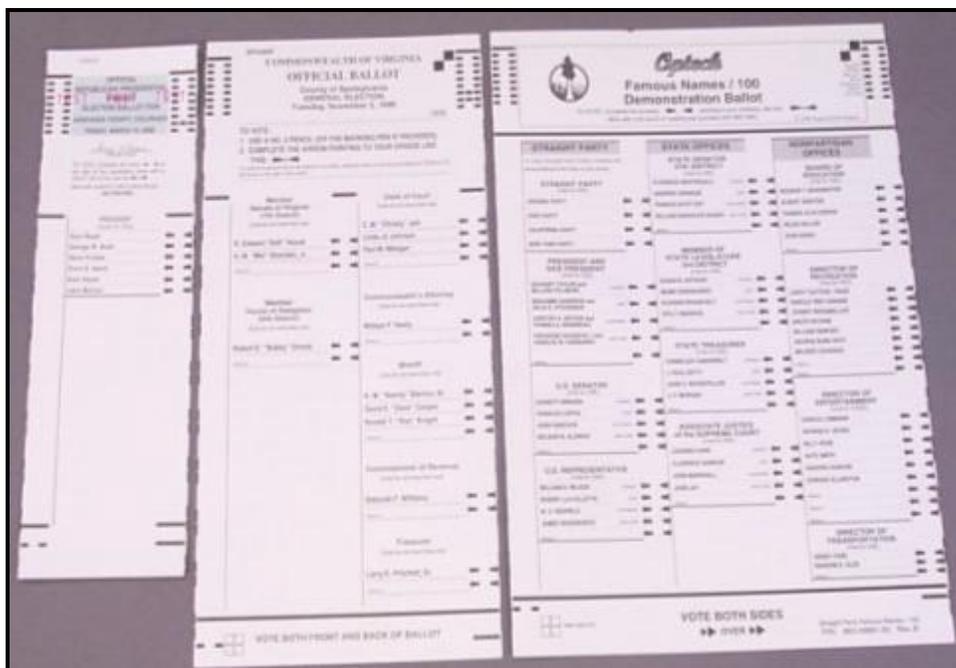


Figure 1-2: Ballot: 1, 2, and 3 Columns

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

- **1 Column:** 3.750 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.

Please see the *Optech Eagle/Insight & 400-C Ballot Specification & Printers Manual*.

1.6.2 MARKING DEVICES

The Optech Eagle 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.

1.6.3 BALLOT TABULATOR

Front View of the Ballot Tabulator

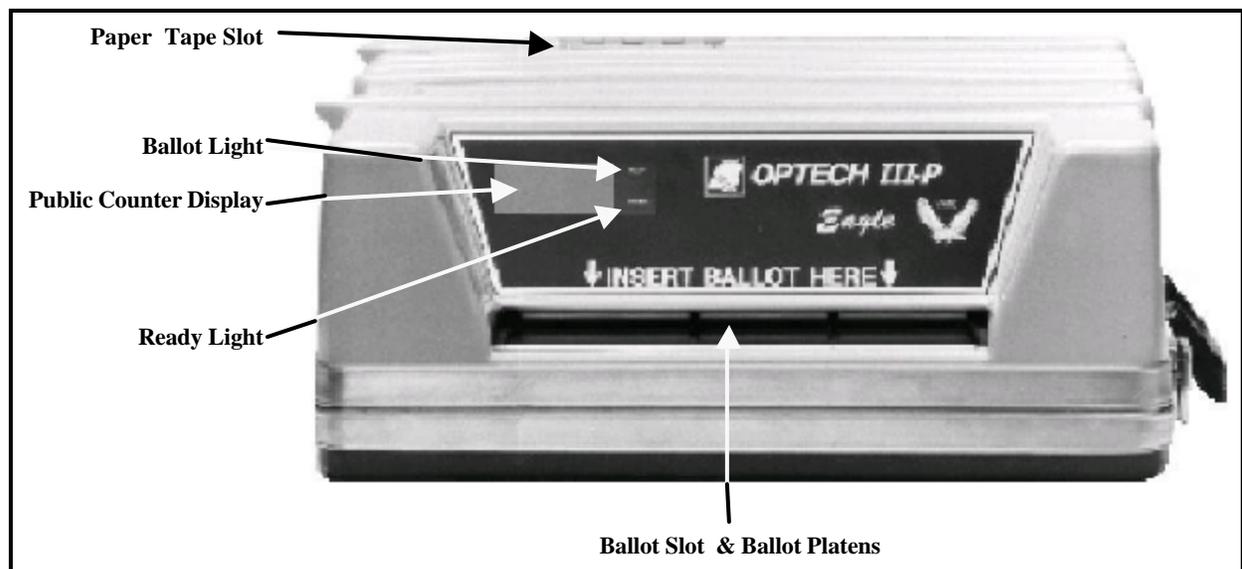


Figure 1-3: Ballot Tabulator (Front View)

Paper Tape Slot: Used to print out the Paper Tape, for reports, per the *Optech Eagle III-Pe Operators Manual*.

Ballot Light: Indicates that the Optech Eagle is ready to accept ballots.

NOTE: If this green light is not on, the Optech Eagle will not accept ballots.

Public Counter Display: Starts at zero and displays the count of all ballots fed into the Optech Eagle 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 Eagle is plugged into a live AC outlet.

Ballot Slot: Slot where the Voter feeds the ballot into the Optech Eagle.

Ballot Platens: Set by the Maintenance Technician to accommodate the width of ballots for the election.

Rear View of the Ballot Tabulator

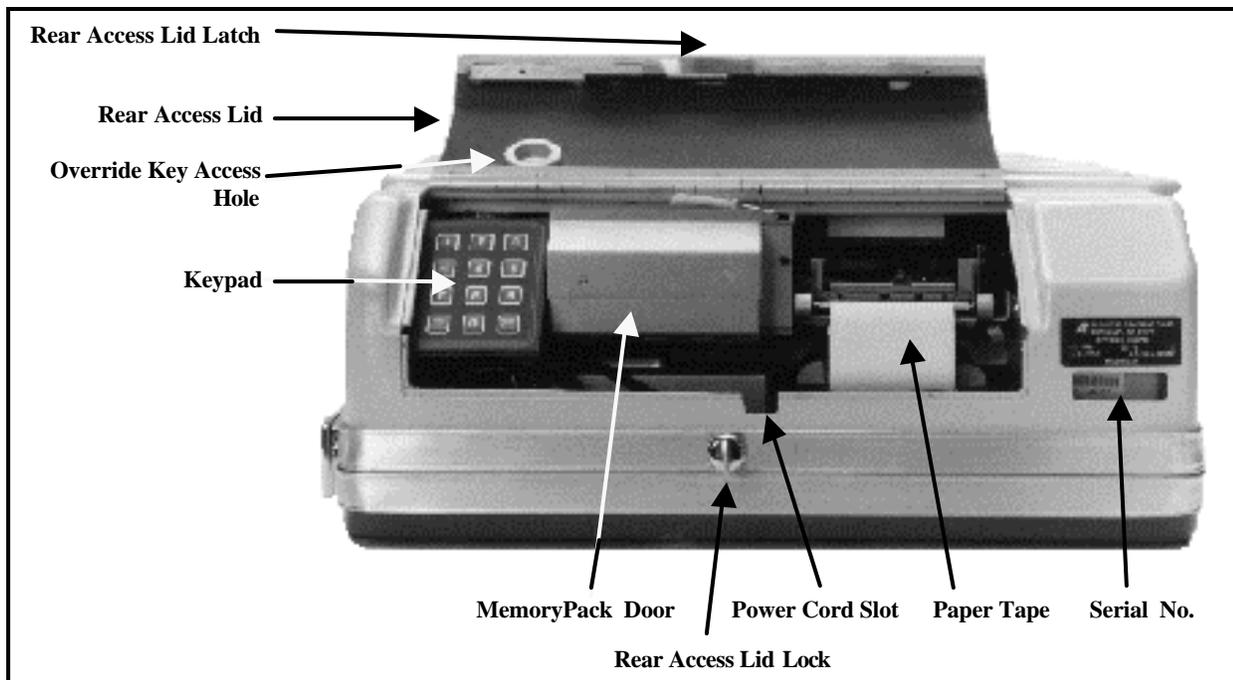


Figure 1-4: Ballot Tabulator (Rear View)

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 Eagle.

MemoryPack Door: Houses the MemoryPack.

Power Cord Slot: Slot where you will plug in the Optech Eagle.

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 Report, per the *Optech Eagle III-Pe Operators Manual*.

1.6.4 **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 Eagle 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.

NOTE: Exception Ballots are processed according to the options defined in the Election Parameter data, encoding by using the EMS election coding system.

The following 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:

- Overvoted Ballot
- Un-Voted Ballot (Blank)
- Unprocessable Error Ballot
- Read Error Ballot

1.6.5 **MEMORYPACK**



Figure 1-5: MemoryPack

A removable MemoryPack containing the following information is located at the rear of the Ballot Tabulator:

- Election Parameter data
- Precinct Totals

The Optech Eagle uses the Election Parameter data programmed into the MemoryPack, using the EMS election coding system, 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 the AERO accumulation system.

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.

1.6.6 BALLOT GUIDE BAR & KEYS

- **Ballot Guide Bar:** Inserted by you, to adjust the Optech Eagle to accept 1- or 2-column ballots. Not used for 3-column ballots.
- **Rear Lid Access Key:** Locks/unlocks the Rear Access Lid.
- **Red Key:** Opens the Rear Access Lid.
- **Green Key:** Locks/unlocks the Ballot Box.

1.6.7 PRINTER AND PAPER TAPE

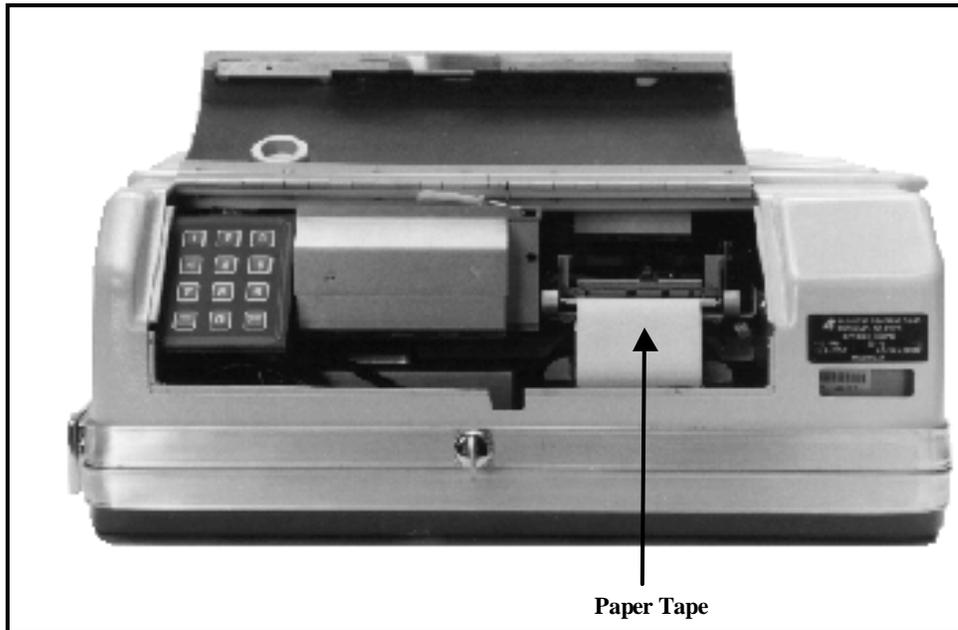


Figure 1-6: Location of Paper Tape

Printer:

The Optech Eagle uses a thermal printer that can print on either single - or two-part thermal paper, and is capable of printing at the rate of up to 15 lines per minute.

The printer is used to print the following reports, per the *Optech Eagle III-Pe Operators Manual*:

- **Diagnostic Routines:** The Diagnostic Routines are usually run before the election, to test the Optech Eagle diagnostics.
- **Before Election:** The following reports are printed during Pre-Election LAT or when Opening the Polls:
 - System Start-Up Report
 - Access OK & Election Initialization Messages
 - Zero Ballot Statistics Report
 - Allowable Header Codes Report
- **During Election:** Status and error messages are printed during the election.
- **Closing the Polls:** The Total Ballot Statistics Report is printed while Closing the Polls.

Paper Tape:

Please use the following SVS Part Number for ordering Paper Tape:

| Item | Part Number |
|-------------------|--------------|
| Paper Tape (69mm) | 960-26585-00 |

1.6.8 SUMMARY SYSTEM

While one Optech Eagle or a group of Optech Eagles 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 MemoryPack Reader, a personal computer, a printer or printers, a Floppy disk drive and/or tape drive for periodic backups, and software to affect the summary process. Input to this system is a MemoryPack from an Optech Eagle which has previously processed the ballots for an individual precinct or absentee ballot style. This is carried into the Summary System through a MemoryPack Reader.

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.

1.6.9 OPTIONAL 12 VDC BACKUP BATTERY

The optional 12 VDC Backup Battery plugs into the Ballot Tabulator, and allows for continuation of Ballot Tabulation in case of a power failure.

NOTE: The Battery Backup Cable is required to connect the optional 12 VDC Backup Battery to the Optech Eagle.

1.7 SUBSYSTEMS

This sub-chapter defines the following Subsystems for the Optech Eagle:

- Ballot Definition Subsystem
- Control Subsystem
- Vote Recording Subsystem
- Conversion Subsystem
- Processing Subsystem
- Reporting Subsystem
- Vote Data Management Subsystem

1.7.1 *BALLOT DEFINITION SUBSYSTEM*

The Optech Eagle contains all required general-purpose election logic and capabilities. However, it does not in itself have any knowledge of the specific election that is being processed. This information is obtained via the Election Parameter data passed from the EMS election coding system via the MemoryPack. The Ballot Definition Subsystem comprises the following functionality, which is discussed in the next paragraphs:

- Databases
- Ballot Generation
- Election Programming
- Ballot Printing
- Ballot Validation

1.7.1.1 *DATABASES*

The following databases are used:

- Administrative Database
- Candidate and Context Database
- Voter Registration Database

Administrative Database:

The EMS election coding system contains a ballot definition subsystem which generates and maintains an administrative database containing the definitions and descriptions of political subdivisions and jurisdictions.

The Optech Eagle receives the election database information as part of the data passed to it in the form of an "indexed" data file stored inside the MemoryPack.

Candidate and Context Database:

The EMS election coding system contains the ballot definition subsystem that generates and maintains the candidate and contest database. This database provides for the generation of properly formatted ballots and the software for each election. This database interacts with the administrative database to ensure that ballots are properly formatted for each polling place within the jurisdiction.

The Optech Eagle receives the candidate and contest database information as part of the data passed to it in the form of an "indexed" data file stored inside the MemoryPack.

Voter Database:

The Election Management System has the provisions for generating and maintaining a voter registration database. This allows interaction with the administrative database to control the selection and distribution of correctly formatted sample ballots and absentee ballots.

The Optech Eagle receives the voter registration database information as part of the data passed to it in the form of an "indexed" data file stored inside the MemoryPack and can print this information onto the event log tape.

1.7.1.2 *BALLOT GENERATION*

The Optech Eagle does not provide this function. The EMS election coding system is designed to facilitate rapid, error-free definition of elections and their associated Ballot Layouts.

The EMS coding system is capable of handling at least 500 potentially active voting positions per Ballot Style, arranged to identify the following:

- Party affiliations in primary elections
- Offices and their associated labels and instructions
- Candidate names and their associated labels
- Issues or measures and their associated text

In addition, the EMS coding system incorporates provisions for the following Voting Variations, per *Appendix B: Voting Variations*:

- Open Primary
- Partisan Offices
- Non-Partisan Offices
- Write-In
- Rotation
- Split Precinct
- Vote For
- Recall Voting
- Cumulative Voting
- Provisional Voting

For Ballot specifications, please see the *Optech Eagle/Insight & 400-C Ballot Specification & Printers Manual*.

1.7.1.3 ELECTION PROGRAMMING

The Optech Eagle does not provide this function. The EMS election coding system provides the following functionality:

- Provides the facility for the logical definition of the ballot
- Includes the definition of the number of allowable choices for each office and contest, and for the selection of various voting options in which a single selection causes a vote to be cast for more than one candidate or in more than one office.

Also, there is provision for the logical definition of political and administrative subdivisions where the list of candidates or contests may vary among Polling Places.

Separate ballot formats are generated when the activation or exclusion of any portion of the ballot, upon which the entitlement of a Voter to vote may vary by reason of place of residence or other such administrative or geographical criteria, is required.

1.7.1.4 BALLOT PRINTING

The Optech Eagle does not provide this function. The EMS coding system creates final output in the form of a hard copy of each ballot format to assist in proofing/typesetting/printing of ballots, per the *Optech Eagle/Insight & 400-C Ballot Specification & Printers Manual*.

In addition, the EMS coding system helps provide ballot allocation of space and type fonts to ensure that each of the following are uniform to ensure that no active voting position is perceived by the Voter to be preferred to any other:

- Office
- Candidate
- Contest

1.7.1.5 BALLOT VALIDATION

The EMS election coding system generates and executes automated test procedures to validate the following:

- Correctness of Election Parameter data for each Ballot and Polling Place
- Correspondence of the ballot with the Ballot Definition.

The EMS coding system provides a control report, which shows any problems encountered during Ballot Validation. A new Ballot Type and size or adjustments in the order of a ballot can be made to correct problems.

The EMS coding system provides a text-based Ballot Style layout report, which shows the appropriate layout of each column for every Ballot Style, and includes all of the Header Codes used to differentiate Ballot Styles and precinct numbers. The date and time the ballot is generated shows on the printout to allow for audit checks that ensure proper ballots are in use.

The Optech Eagle provides a Ballot Image Test selection within the Diagnostic Routines, which allows the Optech Eagle to read a test ballot and then print out all active clock positions found on the ballot plus all header information. This report can then be verified with the text-based Ballot Style layout report generated, by the EMS coding system, during Ballot Generation, for proper reading and accuracy.

NOTE: Test data is segregated from actual voting data procedurally by use of the hardware/software features contained in the Optech Eagle.

1.7.2 CONTROL SUBSYSTEM

This paragraph discusses the following operations that prepare and enable the Optech Eagle to function as a Precinct Count System:

- Diagnostic Routines
- Tests at the Polling Place
- Opening the Polls
- Enabling a Ballot
- Closing the Polls
- Polling Place Reports

1.7.2.1 DIAGNOSTIC ROUTINES

Diagnostic Tests are normally executed while preparing for an election, per the *Optech Eagle III-Pe Operators Manual*.

Further testing is initiated by pressing a single key or combination of keys, for the System Testing functions, per the *Optech Eagle III-Pe Operators Manual*.

Simulation of the actual election is the most viable indicator of actual system performance in any election system. Reading test ballots demonstrates that all the following components are working:

- Optical Read-Heads
- Optical path sensors
- Ballot path systems

Test ballots are pre-marked for a known result in each office/measure and the results are observed and verified for correct totals. Test data is segregated from actual voting data procedurally by use of the hardware/software features contained in the operating system.

1.7.2.2 TESTS AT THE POLLING PLACE

The Optech Eagle performs an automatic power-on self-test to check out system functions then initiates a checksum test to insure that all election programming is intact and that vote totals have not changed. The following version codes and dates are printed on the System Start-Up Report:

- APS (Application PROM Software)
- HPS (Hardware PROM Software)

The date and time the election was created are printed on the System Start-Up Report to allow an audit check of the correct program version date.

The Allowable Header Codes Report is printed, to show which ballot may be read.

The Zero Ballot Statistics Report is printed, to allow the following to be matched to the ballots:

- Offices
- Candidates
- Precinct Number
- Precinct Name

For the above reports, please see the *Optech Eagle III-Pe Operators Manual*.

1.7.2.3 OPENING THE POLLS

When power is applied to the Optech Eagle at the Polling Place, the following report is automatically generated, per the *Optech Eagle III-Pe Operators Manual*:

- **System Start-Up Report:** Provides the following data:
 - Identifies the system components.
 - Prints the current date and time.
 - Verifies that all checksums are OK.

Entering the Access Code, and then pressing the [5] and [7] keys simultaneously, will print the following:

- **Access OK & Election Initialization Messages**
- **Zero Ballot Statistics Report:** Shows that the registers for the following ballot counts are set to zero:
 - **Counted**
 - **Not Counted**
 - **Total Ballots Cast**
- **Allowable Header Codes Report:** Indicates the ballot security identification codes for which the MemoryPack has been programmed.

The Optech Eagle then automatically places itself open and ready to accept ballots.

1.7.2.4 ENABLING A BALLOT

Ballot Tabulation begins when Opening the Polls, which occurs automatically after the Allowable Header Codes Report has been printed.

1.7.2.5 CLOSING THE POLLS

After Closing the Polls (by unlocking and opening the Rear Lid Access key, and pressing the [Print Totals] key), the Optech Eagle prompts the Poll Worker to do one of the following two functions:

- Confirm the closing of the polls.
- Continue voting.

An acknowledgement is required before the Closing the Polls function is activated. No more ballots may be read after Closing the Polls, and the Optech Eagle has a security lockout program that prevents a return to operation.

1.7.2.6 POLLING PLACE REPORTS

Upon Closing the Polls, the Optech Eagle automatically prints the following report, per the *Optech Eagle III-Pe Operators Manual*:

- **Total Ballot Statistics Report:** Part of Closing the Polls, and provides the following ballot counts, for the Ballot Bins:
 - **Counted**
 - **Not Counted**
 - **Total Ballots Cast**

At the bottom of the report is a signature block that must be signed by the Election Official.

1.7.3 VOTE RECORDING SUBSYSTEM

The Vote Recording Subsystem consists of the equipment necessary to record Voter choices. This consists of the following system components, per the following paragraphs:

- *1.6.1: Ballots*
- *1.6.2: Marking Devices*
- *1.6.3: Ballot Tabulator*
- *1.6.4: Ballot Box*

1.7.4 CONVERSION SUBSYSTEM

The Conversion Subsystem contains all of the mechanical, electromechanical, and electronic devices required to read the ballot and translate its patterns of marks into electronic signals for later processing, as follows:

- Ballot Handling
- Ballot Disposition

The main functions of this subsystem are to handle and read the ballots.

1.7.4.1 BALLOT HANDLING

Upon entry, a Throat Detector signals the processor to start the drive motor and the ballot is then engaged by a set of drive rollers. An audio/visual confirmation of the ballots acceptance by the Optech Eagle is also provided.

Ballot Handling consists of the following devices:

- Ballot Platen adjustment for the width of the ballot
- Ballot Edge Guide
- Ballot Entrance Detector Station
- Drive Train

1.7.4.2 BALLOT DISPOSITION

A path sensor, located near the Read-Heads, checks the progress of the ballot. When the Read-Head path sensor detects the trailing edge of the ballot, the motor is dynamically braked to a stop, retaining the ballot inside the system.

While stopped, The Optech Eagle makes the determination on the disposition of the ballot, to route ballots to the following three locations:

- Rear Bin
- Center Bin
- Return to Voter

NOTE: Ballot Disposition is determined by the jurisdiction at the time of Election Coding, by using the EMS election coding system.

For more details on Ballot Disposition, please see *Appendix C: Ballot Disposition*.

1.7.5 PROCESSING SUBSYSTEM

The Processing Subsystem contains all mechanical, electromechanical, electronic devices, and software required to perform the logical and numerical functions to perform the following operations:

- Interpret the electronic image of the voted ballot.
- Assign votes to the proper memory registers.

The Optech Eagle APS and HPS application program:

- Reads the ballot image by sampling the data from the read head outputs.
- Processes the scanned data to ascertain vote positions.
- Performs numerical operations based upon the data received.
- Stores this numerical operation in the MemoryPack.
- Decides the disposition of the ballot.
- Returns the ballot to the voter or places the ballot in one of the Ballot Box slots.
- Increments the appropriate ballot counter.

1.7.6 REPORTING SUBSYSTEM

The Reporting Subsystem contains all mechanical, electromechanical, and electronic devices required to print the following reports, per the *Optech Eagle III-Pe Operators Manual*.

Diagnostic Routines:

The Diagnostic Routines are usually run before the election, to test the Optech Eagle diagnostics.

Before Election:

The following reports are printed during Pre-Election LAT or when Opening the Polls:

- System Start-Up Report
- Access OK & Election Initialization Messages
- Zero Ballot Statistics Report
- Allowable Header Codes Report

During Election:

Status and error messages are printed during the election.

Closing the Polls:

The Total Ballot Statistics Report is printed while Closing the Polls.

The report has a signature line for Election Officials to sign. It may also include a line for the Poll Worker to enter the number displayed on the Public Counter.

The tape is kept in one piece, and stands as an official record of the election at the Polling Place.

1.7.7 VOTE DATA MANAGEMENT SUBSYSTEM

The Vote Data Management Subsystem encompasses the management, processing, and reporting of voting data after it has been consolidated at the Polling Place.

The Optech Eagle does not provide this function. The AERO accumulation system provides the above functionality, at the Central Counting Location.

1.8 GENERAL SYSTEM SPECIFICATIONS

This sub-chapter defines the following General System Specifications:

- Ballot
- As a Precinct Count System
- As a Central Count System

1.8.1 BALLOT

The ballot is 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.

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.

The ballot with its two perforated stubs may be of various dimensions. After removal of all stubs, the ballot may be one of these three widths: 3.75, 6.75, 9.75 inches. The length must be a maximum of 18 inches, and a minimum of 12 inches. With the ballot held in portrait orientation, such as a letter or this typed page would normally be held for reading, the several parts are: a serialized binding stub at the top; followed by a serialized Voter's stub, and the main processable ballot section. The binding stub is the stub stitched or stapled to a pad when the ballots are gathered, and is the part remaining affixed to the pad when the Voter's ballot and attached Voter stub have been removed for voting.

All voting positions on the ballot are indicated by a partially completed arrow printed opposite the names of candidates, opposite the available Write-In spaces, and opposite the for or against (Yes/No) ballot measure indications. Such arrows shall be uniform throughout the ballot, and shall be of such a design as to suggest the necessity of a mark to "fill in" a blank space between the arrow head and tail, and thus indicate a voting choice.

The ballot may be scored horizontally for folding, but not vertically. The folding score shall not intersect a voting position.

If any voting position on the ballot is used for more than one candidate or ballot measure at the same election, each such ballot shall have a ballot style identification code printed thereon.

A party identification code shall be printed on each ballot at the statewide direct primary election.

For more detail, please see the *Optech Eagle/Insight & 400-C Ballot Specification & Printers Manual*.

For each office, immediately below the space on which the last candidate's name is printed, there shall be a space or spaces available for the Voter to cast Write-In votes when required. These spaces shall be equal in number to the number of persons to be elected to the office. Opposite each Write-In space shall be printed a voting position arrow.

For more detail, please see the *Optech Eagle/Insight & 400-C Ballot Specification & Printers Manual*.

1.8.1.1 *BALLOT DISPOSITION*

The various ballot classifications are as follows, per *Appendix C: Ballot Disposition*:

- Regular Ballot
- Overvoted Ballot
- Write-In Ballot
- Un-Voted Ballot
- Unprocessable Error Ballot
- Read Error Ballot
- Overridden Error Ballot

1.8.2 *AS A PRECINCT COUNT SYSTEM*

The Optech Eagle shall:

- Provide facilities for voting for such candidates as may be nominated and upon such questions as may be submitted.
- Permit each Voter in a presidential general election to vote by making a single selection for electors for a pair of candidates for President and Vice-President of the United States.
- Provide a method for Write-In voting and shall report the number of votes cast in each contest in Write-In voting positions.
- Permit each Voter to vote for any person, for any office, for as many persons for an office, and for or against any question for which the Voter is entitled.
- Permit and require voting in absolute secrecy, and shall be so constructed that no person can see or know for whom any other Voter has voted or is voting, except Voters receiving assistance as prescribed by law.
- Be constructed of material of good quality, in a neat and workmanlike manner.
- Be safely transported.
- The Optech Eagle must be maintained in a satisfactory manner in accordance with vendor specifications, where available.
- Individual component testing, and maintenance if necessary, shall be performed by qualified personnel within 50 days before each election. At the time of this writing, such hardware consists of The Optech Eagle as described herein.

1.8.3 *AS A CENTRAL COUNT SYSTEM*

The Optech Eagle shall:

- Be capable of accumulating and reporting by precinct the total votes cast for each candidate and for or against each question.
- Be capable of tabulating and reporting the vote cast for each candidate and for or against each question, by groups of precincts, such as legislative districts, wards and complete jurisdictions.
- The Optech Eagle must be maintained in a satisfactory manner in accordance with vendor specifications, where available.
- Individual component testing, and maintenance if necessary, shall be performed by qualified personnel within 50 days before each election. At the time of this writing, such hardware consists of The Optech Eagle as described herein.

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2 Pre-Election Procedures

This chapter defines the following Pre-Election Procedures for the Optech Eagle :

- Testing Procedures
- Optech Eagle Diagnostic Tests
- Summary System Diagnostic Tests
- Ballot Specifications Diagnostic Testing
- System Proofing
- Preparing for an Election
- Adjusting Ballot Guide for Ballot Size
- Initializing Election
- Logic and Accuracy Testing
- Preparation of Optech Eagle: Precinct Count
- Preparation of Optech Eagle: Central Count
- Inspection and Delivery of Supplies: Precinct Count
- Inspection and Delivery of Supplies: Precinct Count
- Processing of Absentee Ballots
- Retention of Test Materials and Results
- Logic and Accuracy Board
- Ballot Tally Programs
- Election Observer Panel
- Hardware Maintenance

Complete testing of the voting machines and the Central Count System 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 in the Central Counting Location.

Testing of the Optech Eagle as set forth in this chapter shall include every Optech Eagle to be used.

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 in *sub-chapter 2.14: Retention of Test Materials and Results*, herein.

2.1 TESTING PROCEDURES

Functions are outlined in these procedures in five stages or components: Diagnostic Tests, System Proofing, Accuracy Testing, Logic Testing and Final Preparation.

Optech Eagle testing set forth in this sub-chapter shall include every Optech Eagle to be used. Where MemoryPack testing is indicated, such shall be for every MemoryPack. It is not required however, that each Optech Eagle be tested with every MemoryPack.

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 in *sub-chapter 2.14: Retention of Test Materials and Results*.

2.2 OPTECH EAGLE DIAGNOSTIC TESTS

Prior to use in either the central counting mode, precinct counting mode or combined mode (combination of precinct and central counting), Diagnostic Tests shall be performed on every Optech Eagle to be used in the election. The following diagnostic tests shall be performed within 50 days prior to the election. The manufacturer of the Optech Eagle has published detailed, specific instructions for the performance of these tests, including instructions for

corrections of, or recovery from, malfunctions. If malfunctions are encountered, such corrections and recovery procedures shall be implemented. Manufacturer's instructions are on file with the office of the Secretary of State and are incorporated herein by reference.

Maintenance Diagnostics comprise the following Diagnostic Tests, per the *Optech Eagle III-Pe Operators Manual*:

Group 1 Tests: BASIC FUNCTIONAL TESTS -- No MemoryPack Required:

- 0 – Print This Message
- 1 -Toggle Beeper On and Off
- 2 - Toggle Ready Light On and Off
- 3 -Toggle Motor On and Off Forward
- 4 - Toggle Motor On and Off Reverse
- 5 - Toggle Ballot Lights On and Off
- 6 – Toggle Stripe Solenoid
- 7 – Display Current Sensor Data
- 8 - Test Public Counter Display
- 9 - Test the Printer

Group 2 Tests: BALLOT HANDLING TESTS: No MemoryPack Required:

- T0 - Ballots to Rear Bin
- T1 - Ballots to Center Bin
- T2 – Ballots to Center Bin and Stripe
- T3 - Return Ballots to Voter

Group 3 Tests: DIAGNOSTIC TEST: Require a MemoryPack:

- F2 - Set Time and Date
- F3 - Adjust Time Setting
- F4 - Print Time and Date
- F5 - Set Test Ballot Width
- F6 - Ballot Image Test

NOTE: It is important that at all times when the Optech Eagle is not in processing or testing use, the Red Striping Pen be firmly capped. It is recommended that pens be examined for a dried out condition prior to each use and that they be replaced if necessary.

2.3 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.

1. Check all cabling and connections for each hardware component to be used.
2. Implement such diagnostic tests as are available from the manufacturer(s) of the Summary System computer and peripherals.
3. Insert a floppy diskette into the floppy disk drive of the Summary System computer. The floppy diskette shall contain known results from a previous election, demonstration or test.
 - Cause the data to be read into the Summary System.
 - Cause a Precinct Report to be printed.
 - Remove the floppy diskette and repeat the entire process.
4. Cause a Cumulative report to be printed:
 - Check that the report accurately reflects the accumulation of data from two or more floppy diskettes.
 - Check for the proper functioning of the printer(s).
5. Cause the print files to be written to a disk:
 - Print two precinct reports and a cumulative report from the disk.
 - Observe that these reports match the previously printed reports.

2.4 BALLOT SPECIFICATIONS DIAGNOSTIC TESTING

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 Eagle. 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 Eagle/Insight & 400-C Ballot Specification & 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.)

2.5 SYSTEM PROOFING

System proofing is the preliminary, in-house testing of all phases of Election Coding 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
- Election night summary report format
- Optech Eagle recognition of and response to precinct Header Codes, and ballots that are damaged, or improperly marked
- Optech Eagle 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 Eagle as described variously herein
- Voter registration data for jurisdictions participating in the election
- Testing of 100% of the MemoryPacks to be used in the election. A testing log of the MemoryPacks will include, but not be limited to:
 - MemoryPack external serial number
 - Precinct Number, Absentee or New Resident Ballot Style Number
 - Date Tested
 - Results of test (e.g., GOOD, NO GOOD, etc.)
 - Printed names and signatures of testers

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

2.5.1 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-destructive¹ errors or anomalies for the Optech Eagle. The Optech Eagle 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.

¹ As opposed to destructive errors, such as a power failure, which can damage equipment.

2.5.2 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, 1-column ballot.

One extra Voting Arrow mark shall be made in an active column of the ballot. The extra Voting Arrow 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, per the *Optech Eagle/Insight & 400-C Ballot Specification & Printers Manual*.

For exception processing the ballot tabulation program(s) must be used. Program restarts or equipment resetting are allowed for this test.

2.6 PREPARING FOR AN ELECTION

Please see the *Optech Eagle III-Pe Operators Manual* for the following procedures:

- Cleaning Optech Eagle
- Preparing for Election

2.7 ADJUSTING BALLOT GUIDE FOR BALLOT SIZE

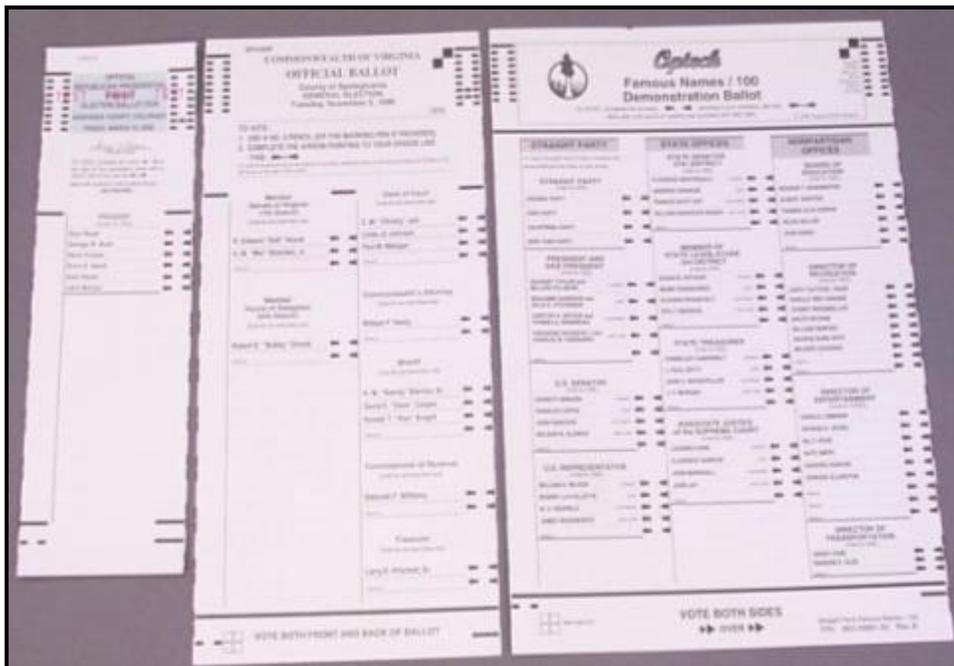


Figure 2-1: Ballot: 1, 2, and 3 Columns

The Optech Eagle can be adjusted to accept the following types of ballots:

- 1 Column
- 2 Columns
- 3 Columns

The Election Authority for the jurisdiction determines the ballot width.

For more details on adjusting the Ballot Guide for Ballot Size, please see the *Optech Eagle III-Pe Operators Manual*.

2.8 INITIALIZING ELECTION

Perform the following steps to initialize the Optech Eagle for an election:

1. A 4-digit Access Code (obtained from the Operator who coded the election in EMS) is required in order to initialize the election. The Maintenance Technician will use the Keypad to enter it.

The Optech Eagle will print the following message if access has been granted:

```
ACCESS O.K.
```

2. If access has been granted, the Maintenance Technician will press the [6] and [7] keys simultaneously, to generate the following message:

```
10:38:24 am, 07/28/99  
REQUEST TO FULL INITIALIZATION  
(Everything set to zero)  
Pack RAM currently has this data:
```

NOTE: This message is normally left in the printer mechanism as a record that the test results were indeed cleared to zero.

2.9 LOGIC AND ACCURACY TESTING

Please see *Appendix D: Logic and Accuracy Testing*, for the following discussion:

- Pre-Conditions
- Performing Pre-Election LAT
- Logic Testing
- Accuracy Testing
- Test Deck Tabulation Results

If the MemoryPack cannot be initialized, it shall not be used.

If possible, initialization should be witnessed by the Logic and Accuracy Board or Election Observer Panel.

A log will be maintained providing:

- MemoryPack identification number
- Precinct(s) or absentee ballot style
- Date tested
- Optech Eagle used
- Results of test
- Signature of the tester

The log will be provided to the Logic and Accuracy Board

2.10 PREPARATION OF OPTECH EAGLE: PRECINCT COUNT

The Optech Eagle should be prepared for delivery to the Polling Place, as follows, per the *Optech Eagle III-Pe Operators Manual*:

1. The following Pre-Election Procedures should already have been performed, per the following sub-chapters:
 - 2.2: *Optech Eagle Diagnostic Tests*
 - 2.3: *Summary System Diagnostic Tests*
 - 2.4: *Ballot Specifications Diagnostic Testing*
 - 2.5: *System Proofing*
 - 2.6: *Preparing for an Election*
 - 2.7: *Adjusting Ballot Guide for Ballot Size*
 - 2.9: *Logic and Accuracy Testing*
2. The MemoryPack (programmed for the election, and carrying appropriate precinct(s) and/or Ballot Style identification) should be inserted into the Optech Eagle, and be properly identified and sealed within the MemoryPack compartment of the Optech Eagle.
3. Initialize the election, per *sub-chapter 2.8: Initializing Election*, to generate the following message:

```
ACCESS O.K.  
  
10:38:24 am, 07/28/99  
REQUEST TO FULL INITIALIZATION  
(Everything set to zero)  
Pack RAM currently has this data:
```

NOTE: This message is normally left in the printer mechanism as a record that the election was initialized.

4. The Rear Access Lid should be locked. Keys shall be labeled or otherwise identified, and placed in the custody of the Election Official, for subsequent delivery to the Precinct Board.
5. The following should also be included as a part of the delivery:
 - Rear Lid Access Key
 - Red Key
 - Green Key
 - Anti-static bag for the MemoryPack
 - Optech Eagle Power Cord

2.11 PREPARATION OF OPTECH EAGLE: CENTRAL COUNT

The Optech Eagle should be prepared for use at the Central Counting Location, as follows, per the *Optech Eagle III-Pe Operators Manual*:

1. The following Pre-Election Procedures should already have been performed, per the following sub-chapters:
 - 2.2: *Optech Eagle Diagnostic Tests*
 - 2.3: *Summary System Diagnostic Tests*
 - 2.4: *Ballot Specifications Diagnostic Testing*
 - 2.5: *System Proofing*
 - 2.6: *Preparing for an Election*
 - 2.7: *Adjusting Ballot Guide for Ballot Size*
 - 2.9: *Logic and Accuracy Testing*
2. Optech Eagles which are to be used at the Central Counting Location shall be maintained in a sealed condition or environment until they are moved to the central counting room
3. They shall not be equipped with MemoryPacks.
4. The Rear Access Lid shall NOT be locked. The hinged cover may be locked. Keys shall be under the supervision and control of the Election Official.
5. All MemoryPacks to be used at the Central Counting Location shall be suitably labeled and maintained under lock or seal until such time as they are to be employed for tabulating.

2.12 INSPECTION AND DELIVERY OF SUPPLIES: PRECINCT COUNT

Instruct the Precinct Board to make the following checks prior to Election Day:

1. Check all pads of ballots to ensure that ballot style identification numbers, serial numbers, and precinct numbers (if used) printed on the ballots are correct.
2. Report any problems to the Election Official responsible for the election.
3. Supplies necessary for the conduct of elections at Polling Places shall be delivered as follows:
 - Ballots shall be in the quantity and manner required by the California Elections Code, as well as demonstrator ballots marked for Demonstration use only.
 - In Primary Elections, ballots shall be appropriately tinted for each political party and for nonpartisan 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.
 - Two Sample ballots of each ballot style as required by the California Elections Code.
 - Seals and any other supplies and forms deemed necessary.

The Election Official shall check that the following will be delivered:

- An Optech Eagle with the correct MemoryPack installed. This can be verified by inspecting labels on the exterior of the MemoryPack compartment and on the exterior of the Optech Eagle cover. If Dual Precinct Processing is to be implemented, the Optech Eagle shall be located so that it is equally accessible to voters and precinct officers of each precinct.
- An Optech Eagle Ballot Box. This is a Ballot Box compatible with the Optech Eagle. It has three compartments or bins with slots. During operation, the Optech Eagle is placed on top of this Ballot Box, and processed ballots emerging from the Optech Eagle are fed into the slots over the rear and center bins.
- Three keys, appropriately labeled.
 - **Rear Lid Access Key:** Locks/unlocks the Rear Access Lid.
 - **Red Key:** Opens the Rear Access Lid.
 - **Green Key:** Locks/unlocks the Ballot Box.
- Anti-Static Bags, appropriate containers and seals to facilitate safe and secure transportation of MemoryPacks

2.13 PROCESSING OF ABSENTEE BALLOTS

2.13.1 DISTRIBUTION OF ABSENTEE BALLOTS AND SAMPLE BALLOTS TO VOTERS

Before distribution of Absentee Ballots to voters who request them, the ballot style numbers of the ballot and the sample ballot to be mailed shall be compared to ensure a match.

2.13.2 APPLIED ABSENT VOTER LIST

A list, or an identification on the Roster-Index, of Absentee Ballot applicants is to be supplied to each precinct.

2.13.3 RETURNED ABSENTEE BALLOTS

Not more than five (5) days prior to an election, begin preparing returned Absentee Ballots for counting, as follows:

1. Confirm that the voter's signature on the Identification Envelope has been verified.
2. Sort envelopes according to Ballot Style.
3. Open each envelope and remove the Absentee Ballot.
4. Place empty Identification Envelopes in a designated storage area.
5. Examine Absentee Ballots for cause for rejection and damage; process in the manner prescribed for Ballot Inspection Boards herein.
6. Deliver Absentee Ballots to be processed to designated official for secure storage until time for processing.

2.14 RETENTION OF TEST MATERIALS AND RESULTS

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.

2.15 LOGIC AND ACCURACY BOARD

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 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 MemoryPacks and the logic and accuracy test ballots. 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.

Please see the following:

- *Sub-chapter: 7.4: Logic and Accuracy Certification*
- *Sub-chapter 7.5: Logic and Accuracy Board*
- *Appendix G.1: Certification by Logic and Accuracy Board.*

2.16 BALLOT TALLY PROGRAMS

The Election Official shall send ballot tally programs to the Secretary of State pursuant to *sub-chapter 7.6: Submittal of Ballot Tabulation Programs to Secretary of State*, herein. These must be received by the Secretary of State no later than seven (7) days before each statewide election.

2.17 ELECTION OBSERVER PANEL

The Election Official shall establish an Election Observer Panel pursuant to *sub-chapter 7.3: Election Observer Panel*, herein.

2.18 HARDWARE MAINTENANCE

The Optech Eagle must be maintained in a satisfactory manner in accordance with vendor specifications, per the *Optech Eagle III-Pe Operators Manual*.

Individual component testing, and maintenance if necessary, shall be performed by qualified personnel within 50 days before each election. At the time of this writing, such hardware consists of Optech Eagle as described herein.

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3 Election Day Procedures: Precinct Count

This chapter defines the following Election Procedures for the Optech Eagle:

- Before Opening the Polls
- Opening the Polls
- Official Election
- Closing the Polls
- Vote Tally Reporting: Using Summary System
- Vote Tally Reporting: Without Using Summary System

3.1 BEFORE OPENING THE POLLS

The details for this procedure are described in the *Optech Eagle III-Pe Operators Manual*.

The Precinct Board shall perform the following steps:

1. Verify that the serial number on the Optech Eagle is the same number listed on the Voting Device Report.
2. Check that the number on the seal that locks the MemoryPack door in place is the same number listed on Voting Device Report.
3. Report any irregularity Election Official.
Voting may commence, but ballots are to be deposited in the Auxiliary Bin until corrective action, if any, is taken or directed by the Election Official. Such activity must be noted.
4. Complete the Oath of Office and Declaration of Intention forms pursuant to the California Elections Code.
5. Assemble voting booths and in each booth display a copy of materials required by the California Elections Code.
6. Make a pad of Demonstration Ballots, Marking Devices, and suitable Demonstration materials available.

7. Set up the Ballot Box.

IMPORTANT: USE SERIALIZED WIRE SEALS TO SEAL BALLOT BOX.

- a. Verify that no ballots remain in any of the ballot bins from testing or previous elections.
- b. Verify that the ballot slot cover on the Auxiliary Bin is closed and the bin is locked.
- c. Unlock the ballot slot tab on top of the Ballot Box and slide the ballot slot tab back, opening the center and rear ballot bins slots.
- d. Close and lock all Ballot Box doors.
- e. Lift the Optech Eagle and place it on top of the Ballot Box so that the Optech Eagle's case is aligned with the sides of the Ballot Box and ballot entry slot on the Optech Eagle faces the same direction as the front of the box.
- f. Push the Optech Eagle back against the ballot slot tab. Lower the front of the Optech Eagle down onto the two 1" alignment pins on the front corners of the Ballot Box. Maneuver the Optech Eagle slightly to firmly secure it on the Ballot Box.

For Dual Precinct Processing:

If Dual Precinct Processing is to be implemented, the functions hereafter described above shall be performed by the Precinct Board of each precinct acting jointly insofar as is practical. Where forms are to be completed, the Election Official shall provide them in such a format and so written as to facilitate notations by each precinct staff. Surrendered and delivered absentee ballots, spoiled ballots and provisional ballots shall be kept segregated by precinct.

3.2 OPENING THE POLLS

The details of Opening the Polls are described in the *Optech Eagle III-Pe Operators Manual*.

Perform the following steps for Opening the Polls:

1. The MemoryPack should already be inserted into the Optech Eagle, and sealed, and the following messages should already be on the Paper Tape, from preparing for the election.

```
ACCESS O.K.

10:38:24 am, 07/28/99
REQUEST TO FULL INITIALIZATION
(Everything set to zero)
Pack RAM currently has this data:
```

2. Power UP the Optech Eagle.
3. Initialize totals and print out the following reports:
 - System Start-Up Report
 - Access OK & Election Initialization Messages
 - Allowable Header Codes Report
 - Zero Ballot Statistics Report

The format of the Allowable Header Codes Report is relatively complex. Thus, precinct officers are not required to make an examination nor verification against ballots. It must be printed and saved nonetheless, in order to serve as a TRACKING POINT in the audit trail

To print multiple copies of the Zero Ballot Statistics Report, press the **[Print Totals]** key one time for each additional copy.

4. The following message should be displayed on the Paper Tape, indicating that the polls are open, and the Optech Eagle is ready to start tabulating ballots.

O.K. TO READ BALLOTS

3.3 OFFICIAL ELECTION

The Official Election comprises the following:

- If a Ballot Read Before Poll Opening Time
- Voting Procedures
- Procedure for Ballot Returned to Voter
- Provisional Voting
- Surrender of Absentee Ballot
- Return of a Voted Absentee Ballot
- Changing Paper Tape
- Use of Auxiliary Bin
- In the Event of POWER OR Unit Failure
- Special Procedures for Resolving Problem

The details of Official Election are described in the *Optech Eagle III-Pe Operators Manual*.

3.3.1 IF A BALLOT READ BEFORE POLL OPENING TIME

If a ballot is read before poll opening time, an error message will be generated.

At this time the Poll Worker has the following two options.

- **Option #1:** Pull the ballot out and wait until the poll opening time arrives. When the ballot is pulled out, a message will be generated indicating that it was pulled out.
When the poll opening time arrives, ballots can then be read without generating the poll opening message.
- **Option #2:** Press the [3] key rather than pulling out the ballot. This causes the ballot to be tabulated and generate s a message indicating that the ballot was tabulated.
Additional ballots may now also be tabulated without generating the poll opening message.

3.3.2 VOTING PROCEDURES

1. During the day, at least every hour, inspect each booth to ensure that there are no electioneering materials present and that the booth is otherwise suitable for voting ballots. As far as possible, defacement conditions shall be corrected.
2. Offer to instruct each Voter in the proper method of voting by completing the arrow graphic, casting Write-In votes and using the secrecy sleeve. Offer each Voter further instruction and practice time, if necessary.
3. Instructions for inserting the voted ballots into the Optech Eagle shall be provided at the time of stub removal, if necessary.
4. Write-In space is provided on the ballot. The Voter must both write the name of the candidate and complete the voting position arrow.

5. 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. There, a Poll Worker shall remove the stub and hand it to the Voter. 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. 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 empty secrecy sleeve may be re-issued to later arriving Voters.

6. Monitor Voter and machine operation. The Public Counter Display should increment for each Voter and should equal the number of ballots issued, less any currently in the hands of Voters.
7. Help Voters that require physical assistance, etc., per local statute.
8. A precinct official shall be available near the Optech Eagle device for assisting actions, as follows:
 - a. Assist voter if requested in how to insert his/her ballot. An Assisted Voter affidavit need not be completed unless the assistance requires the viewing of the voting positions on the voter's ballot.
 - b. Read and inform the voter of the text of messages displayed by the Paper Tape, if any.
 - c. Inform the voter of what corrective action, if any, may or must be taken, or inform the voter of what options, if any, may or must be chosen, per *Appendix C: Ballot Disposition*.
 - d. When assisting the voter as described above, the precinct officer shall position them self so that the voted portion of the ballot shall not be in that officer's view.
 - e. During the time when Polls are open, the Paper Tape shall not be removed, nor shall any portion of it be torn off.

For Dual Precinct Processing: This official may be on the board of either precinct. The same official need not perform these duties throughout the day; and these duties may be rotated between the two precincts.

For Dual Precinct Processing:

If Dual Precinct Processing is to be implemented, the functions hereafter described above shall be performed by the Precinct Board of each precinct acting jointly insofar as is practical. Where forms are to be completed, the Election Official shall provide them in such a format and so written as to facilitate notations by each precinct staff. Surrendered and delivered absentee ballots, spoiled ballots and provisional ballots shall be kept segregated by precinct.

3.3.3 PROCEDURE FOR BALLOT RETURNED TO VOTER

A ballot may be returned to Voter for any of the following reasons, per *Appendix C: Ballot Disposition*:

- Overvoted Ballot
- Un-Voted Ballot
- Unprocessable Error Ballot
- Read Error Ballot

Depending upon the reason for return, jurisdiction, and options encoded into the Election Parameter data (by using the EMS coding system), the following options are available for resolution:

- Trying Ballot Again
- Issuing New Ballot
- Placing Ballot in Auxiliary Bin
- Overriding Ballot

Trying Ballot Again:

In the following cases, the Poll Worker may try the ballot, again:

- Un-Voted Ballot
- Unprocessable Ballot

Issuing New Ballot:

If the Voter chooses to vote a new ballot, the Poll Worker pulls the ballot out of the Ballot Slot, and places it into a Spoiled Ballot envelope. A new ballot is issued to the Voter after a review with the Voter of how to correct the problem.

Placing Ballot in Auxiliary Bin:

The Poll Worker pulls the ballot out of the Ballot Slot, and places it in the Auxiliary Bin for review after Closing the Polls

Overriding Ballot:

Please see the *Optech Eagle III-Pe Operators Manual* for Override Instructions.

3.3.4 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 tabulating Provisional Ballots shall be those set forth in the California Elections Code and by the Election Official.

3.3.5 SURRENDER OF ABSENTEE BALLOT

- No person to whom an Absentee 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 Absentee Ballot was issued may vote a precinct Voter 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.

3.3.6 RETURN OF A VOTED ABSENTEE BALLOT

- If a Voter returns a voted Absentee Ballot, verify that the ballot is sealed into and that the signature of the Voter is on the identification envelope. Require any person who returns an Absentee Ballot in person, either to a Polling Place or Central Counting Location, to sign an envelope, log or record before depositing their voted and sealed ballot in the specially marked container.

3.3.7 CHANGING PAPER TAPE

A red stripe along the edges of the results tape indicates that the Paper Tape is almost empty and should be replaced.

Please see the *Optech Eagle III-Pe Operators Manual* for the procedure.

3.3.8 USE OF AUXILIARY BIN

The Auxiliary Bin may be used as a Ballot Box, for the temporary storage throughout Election Day of the following:

- Delivered, voted Absentee Ballots
- Surrendered Absentee Ballots
- Voted Provisional Ballots
- Voted Ballots with mismatching Header Codes
- Ballots voted during power or unit failure

3.3.9 IN THE EVENT OF POWER OR UNIT FAILURE

If for any reason the Optech Eagle becomes inoperable during the polling hours and will no longer accept ballots, the Poll Workers must use the Auxiliary Bin, per *paragraph 1.6.4: Ballot Box*. If this occurs, the Ballot Light will probably be off. The Ready Light may or may not still be on. If the Optech Eagle will no longer accept ballots, the Poll Worker should immediately call election headquarters and then proceed with the procedure listed in the *Optech Eagle III-Pe Operators Manual*.

This procedure will be in place until the Optech Eagle has been repaired, tested, and again made available for processing.

Such ballots shall be held by the Election official for inclusion in the Official Canvass.

3.3.10 SPECIAL PROCEDURES FOR RESOLVING PROBLEMS

Special Procedures for Resolving Problems comprise the following:

- Central Trouble Review Board
- Technician Dispatch
- Technician Reporting

For more details, please see the *Optech Eagle III-Pe Operators Manual*.

Central Trouble Review Board:

Trained Maintenance Technicians and Administrative personnel make up the Central Trouble Review Board.

The function of the Central Trouble Review Board is to assist Poll Workers in resolving all problems that they may have while conducting the election.

Trained Maintenance Technicians should be available to assist in diagnosing problems on the telephone. Administrative personnel should be available to answer questions of Voter registration and supplies requirements.

Technician Dispatch:

Certain problems will require that a Maintenance Technician go to the Polling Place to deliver supplies or resolve a problem.

Technician Reporting:

Maintenance Technicians will keep a log of each precinct they visit on Election Day.

3.4 CLOSING THE POLLS

Closing the Polls comprises the following activities:

- Procedure
- Procedure for Absentee Ballots
- Procedure for Unused Ballots
- Procedure for Non-Optech Eagle Ballots
- Return of Voted Ballots and Supplies to Election Official
- Distribution of Election Returns Tape

The details of Official Election are described in the *Optech Eagle Operators Manual*.

IMPORTANT: THE FOLLOWING PROCEDURES MUST BE COMPLETED IN PUBLIC VIEW.

3.4.1 PROCEDURE

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. Unlock the Rear Access Lid, and verify poll closing time.
3. Print the Total Ballot Statistics Report, per the *Optech Eagle III-Pe Operators Manual*.
 - a. Observe that the tape reads, "NO MORE BALLOT READING, (date and time), POLLS ARE NOW CLOSED.". Observe that the tape continues with ballot statistics, as well as counts of striped and un-striped ballots in both rear and center bins.
 - b. Observe that the tape prints ballot statistics and a listing of each office and measure, within which are tabulated counts of votes for each candidate and each measure (for/against).

To print multiple copies of the Total Ballot Statistics Report, press the **[Print Totals]** key one time for each additional copy.

Ballot Accounting Option:

- a. Ballot accounting for the unofficial canvass may be by reference to statistics printed on the Log/Results tape. In such case, physical counting of ballots in Ballot Boxes shall be performed as an audit trail TRACKING POINT either during the unofficial canvass or the official canvass or both.
 - b. The ballot counts for each precinct - and in a Primary Election, ballot counts for each party, including non-partisan - shall be copied from the Log/Results Tape onto the Ballot statement or other ballot accounting document.
 - c. If the Election Official directs that sub-steps a-b be implemented, it will not be mandatory to perform step 9.
4. If the Election Official has chosen to print it, observe that a certification message appears. If so, sign or otherwise complete the certification.
 5. The Paper Tape shall be torn off at this point. It shall be placed in a container designated for this purpose. A Paper Tape shall be printed by again pressing the **[Print Totals]** key. This second Paper Tape shall be torn off and included in the envelope used to mail the Certificate of Packaging and Sealing to the Election Official.

6. Power OFF the Optech Eagle.

WARNING! DO NOT REMOVE THE MEMORYPACK FROM THE OPTECH EAGLE WHILE POWER TO THE OPTECH EAGLE IS ON! YOU COULD DESTROY ELECTION DATA!

7. Break the seal, and remove the MemoryPack from the Optech Eagle.

NOTE: Some jurisdictions stipulate that the MemoryPack be left in the Optech Eagle. 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. Place this bagged MemoryPack in the container provided for the purpose
 - d. Return the MemoryPack (in its bag) to the Election Board.
8. Store the Power Cord behind the rear door of the Optech Eagle and lock this door. Observe that the Rear Access Lid is locked.
 9. If the Election Official directs that sub-steps a-b of the Ballot Accounting Option (step 3) be implemented, it will not be mandatory to this step.

Otherwise:

- a. Lift the Optech Eagle from the top of its Ballot Box; remove ballots from both Rear and Center Bins.
- b. Keep the ballots from each Bin separate and count them as to type, i.e.:
 - Rear Bin, Unstriped - (count)
 - Rear Bin, Striped - (count)
 - Center Bin, Unstriped - (count)
 - Center Bin, Striped - (count)
 - Total, both Ballot Bins - (total of above counts)

For Dual Precinct Processing: Ballots shall be further separated, and counts made, by precinct.

- c. Enter these counts on the Ballot Statement or other document provided for the purpose. Compare these counts against those printed on the Totals Tape. Note and resolve, if possible, any discrepancy. TRACKING POINT.
10. If a separate Ballot Box has been provided, or if the Auxiliary Bin has been used as a temporary storage Ballot Box, examine and count the contents for:
 - a. Absentee Ballots, if any
 - b. Provisional Ballots
 11. Deface and/or seal all Unused Ballots, as directed.

12. 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. Number of the following:
 - Spoiled Ballots
 - Unused Ballots
 - Provisional Ballots
 - Regular Ballots
 - c. The Total Ballot Cast number should equal the number of official ballots entered as received from the Election Official, herein.
 - d. An explanation of any discrepancy shall be shown.
13. Reconcile the Total Ballots Cast number to the number of signatures in the Roster-Index. Explain any discrepancy.
14. 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
15. 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, as follows:
 - Place any delivered voted Absentee Ballots in the container provided for that purpose.
 - Place any surrendered Absentee Ballots in the container provided for that purpose.
 - Place any Provisional Ballots in the container provided for that purpose.
 - Insert any Regular Ballots into the Optech Eagle, to be tabulated.
- 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.

16. Make sure of the count of all voted ballots (Ballot Statement). The count includes regularly voted ballots and questioned ballots. It does NOT include Absentee Ballots or Provisional Ballots.
17. 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).
18. Place all voted ballots in the appropriate return container. This group must include questioned ballots.
19. Close the return container and seal with a tamper-proof seal.
20. Package for return as follows:
 - a. Seal the following ballots in container(s), as directed:
 - Regular Ballots
 - Absentee Ballots
 - Provisional Ballots
 - b. Seal Roster-Index, precinct index and purged voter index as directed.
 - c. 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 Eagle III-Pe Operators Manual*.)
 - Provisional Ballots (from the Provisional Ballot envelopes)
 - d. 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.
 - e. After all entries have been completed, each member of the Precinct Board shall sign the Certificate.
 - f. 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.
 - g. A self-addressed stamped envelope shall have been provided for this specific purpose.
 - h. The copy of the Certificate of Packaging and Sealing shall accompany the ballot container to the Central Counting Location.
21. Dismantle voting booths.
22. Observe that the rear door and Rear Access Lid of the Optech Eagle are locked. Lock all Bin doors.

3.4.2 PROCEDURE FOR 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.

3.4.3 PROCEDURE FOR UNUSED BALLOTS

1. When all ballots have been examined, place non-voted ballots in a designated container for delivery to the counting center.

3.4.4 PROCEDURE FOR NON-OPTTECH EAGLE BALLOTS

1. Process non-Optech Eagle Ballots by tabulating the number of ballots other than Optech Eagle ballots that might be used in the election in the manner prescribed by the California Elections Code. Seal voted ballots as directed.

3.4.5 RETURN OF VOTED BALLOTS AND SUPPLIES TO ELECTION OFFICIAL

1. Return all ballots, MemoryPacks, supplies, and other materials, as directed by the Election Official.
2. 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.

3.4.6 DISTRIBUTION OF ELECTION RETURNS TAPE

1. Return the first Total Ballot Statistics Report, complete with the Election Officials' signatures, to the Election Board. This is the Official Election Returns Tape.
2. Generate additional Total Ballot Statistics Report printouts by pressing the **[Print Totals]** key (quantity is set per instructions from your jurisdiction).
3. Have an Election Official sign each of these printouts in the place indicated, if required by your jurisdiction.
4. Distribute additional Total Ballot Statistics Reports per instructions from your jurisdiction.

3.5 VOTE TALLY REPORTING: USING SUMMARY SYSTEM

3.5.1 FOLLOWING PROCESSING OF LAST BALLOT FROM PRECINCT

1. Return the first Total Ballot Statistics Report, complete with the Election Officials' signatures, to the Summary System Operator. This is the Official Election Returns Tape.
2. Generate additional Total Ballot Statistics Report printouts by pressing the **[Print Totals]** key (quantity is set per instructions from your jurisdiction).
3. Have an Election Official sign each of these printouts in the place indicated, if required by your jurisdiction.
4. Distribute additional Total Ballot Statistics Reports per instructions from your jurisdiction.

3.5.2 UPON RECEIPT OF MEMORYPACK AND REPORT

Upon receipt of the MemoryPack and report, the Summary System operator shall:

1. Make an entry of this on a log designed for the audit purpose.
2. Cause the data to be read into the Summary System.
3. Produce election results bulletins as required.

3.5.3 REPORTING ELECTION RESULTS

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

3.6 VOTE TALLY REPORTING: WITHOUT USING SUMMARY SYSTEM

Following the processing of the last ballot from a precinct (or absentee ballot style), the Optech 400-C operator shall:

1. Print a Precincts Processed Report and keep it with the MemoryPack for a record of the precincts that have been backed up.
2. Set up the report format print options available for the reports. (See manufacturer's documentation for specific application of the options.)
3. Generate reports as required by the Election Official.

Sign ALL reports containing Certification Messages, as required by the Election Official.

The Election Official shall report as specified in *paragraph 3.5.3: Reporting Election Results*.

4 Election Day Procedures: Central Count

This chapter defines the following Election Procedures for the Optech Eagle:

- Before Opening the Polls
- Opening the Polls
- Official Election
- Closing the Polls
- Vote Tally Reporting: Using Summary System
- Vote Tally Reporting: Without Using Summary System

4.1 BEFORE OPENING THE POLLS

The details for this procedure are described in the *Optech Eagle III-Pe Operators Manual*.

The Precinct Board shall perform the following steps:

1. Complete the Oath of Office and Declaration of Intention forms pursuant to the California Elections Code.
2. Assemble voting booths and in each booth display a copy of materials required by the California Elections Code.
3. Make a pad of Demonstration Ballots, Marking Devices, and suitable Demonstration materials available.

4.2 OPENING THE POLLS

The details of Opening the Polls are described in the *Optech Eagle III-Pe Operators Manual*.

Perform the following steps for Opening the Polls:

1. Insert MemoryPack into the Optech Eagle.

ACCESS O.K.
 10:38:24 am, 07/28/99
REQUEST TO FULL INITIALIZATION
 (Everything set to zero)
 Pack RAM currently has this data:

2. Power UP the Optech Eagle.
3. Initialize totals and print out the following reports:
 - System Start-Up Report
 - Access OK & Election Initialization Messages
 - Zero Ballot Statistics Report
 - Allowable Header Codes Report

The format of the Allowable Header Codes Report is relatively complex. Thus, precinct officers are not required to make an examination nor verification against ballots. It must be printed and saved nonetheless, in order to serve as a TRACKING POINT in the audit trail

4. The following message should be displayed on the Paper Tape, indicating that the polls are open, and the Optech Eagle is ready to start tabulating ballots.

O.K. TO READ BALLOTS

4.3 OFFICIAL ELECTION

The Official Election comprises the following:

- If a Ballot Read Before Poll Opening Time
- Voting Procedures
- Procedure for Ballot Returned to Voter
- Provisional Voting
- Surrender of Absentee Ballot
- Return of a Voted Absentee Ballot
- Changing Paper Tape
- Use of Auxiliary Bin
- In the Event of POWER OR Unit Failure

The details of Official Election are described in the *Optech Eagle III-Pe Operators Manual*.

4.3.1 IF A BALLOT READ BEFORE POLL OPENING TIME

If a ballot is read before poll opening time, an error message will be generated.

At this time the Poll Worker has the following two options.

- **Option #1:** Pull the ballot out and wait until the poll opening time arrives. When the ballot is pulled out, a message will be generated indicating that it was pulled out. When the poll opening time arrives, ballots can then be read without generating the poll opening message.
- **Option #2:** Press the [3] key rather than pulling out the ballot. This causes the ballot to be tabulated and generates a message indicating that the ballot was tabulated.

Additional ballots may now also be tabulated without generating the poll opening message.

4.3.2 VOTING PROCEDURES

1. During the day, at least every hour, inspect each booth to ensure that there are no electioneering materials present and that the booth is otherwise suitable for voting ballots. As far as possible, defacement conditions shall be corrected.
2. Offer to instruct each Voter in the proper method of voting by completing the arrow graphic, casting Write-In votes and using the secrecy sleeve. Offer each Voter further instruction and practice time, if necessary.
3. Instructions for inserting the voted ballots into the Optech Eagle shall be provided at the time of stub removal, if necessary.
4. Write-In space is provided on the ballot. The Voter must both write the name of the candidate and complete the voting position arrow.

5. 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. There, a Poll Worker shall remove the stub and hand it to the Voter. 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. 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 empty secrecy sleeve may be re-issued to later arriving Voters.

6. Monitor Voter and machine operation. The Public Counter Display should increment for each Voter and should equal the number of ballots issued, less any currently in the hands of Voters.
7. Help Voters that require physical assistance, etc., per local statute.

4.3.3 PROCEDURE FOR BALLOT RETURNED TO VOTER

A ballot may be returned to Voter for any of the following reasons, per *Appendix C: Ballot Disposition*:

- Overvoted Ballot
- Un-Voted Ballot
- Unprocessable Error Ballot
- Read Error Ballot

Depending upon the reason for return, jurisdiction, and options encoded into the Election Parameter data (by using the EMS coding system), the following options are available for resolution:

- Trying Ballot Again
- Issuing New Ballot
- Placing Ballot in Auxiliary Bin
- Overriding Ballot

Trying Ballot Again:

In the following cases, the Poll Worker may try the ballot, again:

- Un-Voted Ballot
- Unprocessable Ballot

Issuing New Ballot:

If the Voter chooses to vote a new ballot, the Poll Worker pulls the ballot out of the Ballot Slot, and places it into a Spoiled Ballot envelope. A new ballot is issued to the Voter after a review with the Voter of how to correct the problem.

Placing Ballot in Auxiliary Bin:

The Poll Worker pulls the ballot out of the Ballot Slot, and places it in the Auxiliary Bin for review after Closing the Polls

Overriding Ballot:

Please see the *Optech Eagle III-Pe Operators Manual* for Override Instructions.

4.3.4 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 tabulating Provisional Ballots shall be those set forth in the California Elections Code and by the Election Official.

4.3.5 SURRENDER OF ABSENTEE BALLOT

- No person to whom an Absentee 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 Absentee Ballot was issued may vote a precinct Voter 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.

4.3.6 RETURN OF A VOTED ABSENTEE BALLOT

- If a Voter returns a voted Absentee Ballot, verify that the ballot is sealed into and that the signature of the Voter is on the identification envelope. Require any person who returns an Absentee Ballot in person, either to a Polling Place or Central Counting Location, to sign an envelope, log or record before depositing their voted and sealed ballot in the specially marked container.

4.3.7 CHANGING PAPER TAPE

A red stripe along the edges of the results tape indicates that the Paper Tape is almost empty and should be replaced.

Please see the *Optech Eagle III-Pe Operators Manual* for the procedure.

4.3.8 USE OF AUXILIARY BIN

The Auxiliary Bin may be used as a Ballot Box, for the temporary storage throughout Election Day of the following:

- Delivered, voted Absentee Ballots
- Surrendered Absentee Ballots
- Voted Provisional Ballots
- Voted Ballots with mismatching Header Codes
- Ballots voted during power or unit failure

4.3.9 IN THE EVENT OF POWER OR UNIT FAILURE

If for any reason the Optech Eagle becomes inoperable during the polling hours and will no longer accept ballots, the Poll Workers must use the Auxiliary Bin, per *paragraph 1.6.4: Ballot Box*. If this occurs, the Ballot Light will probably be off. The Ready Light may or may not still be on. If the Optech Eagle will no longer accept ballots, the Poll Worker should immediately call election headquarters and then proceed with the procedure listed in the *Optech Eagle III-Pe Operators Manual*.

This procedure will be in place until the Optech Eagle has been repaired, tested, and again made available for processing.

Such ballots shall be held by the Election official for inclusion in the Official Canvass.

4.4 CLOSING THE POLLS

Closing the Polls comprises the following activities:

- Procedure
- Procedure for Regular Ballots
- Procedure for Absentee Ballots
- Procedure for Provisional Ballots
- Procedure for Non-Optech Eagle Ballots

The details of Official Election are described in the *Optech Eagle Operators Manual*.

IMPORTANT: THE FOLLOWING PROCEDURES MUST BE COMPLETED IN PUBLIC VIEW.

4.4.1 PROCEDURE

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. Deface and/or seal all Unused Ballots, as directed.
3. Count the contents of the Ballot Box:
 - Absentee Ballots
 - Provisional Ballots
 - Regular Ballots
4. Complete the Ballot Statement, showing the number of the following:
 - Spoiled Ballots
 - Unused Ballots
 - Provisional Ballots
 - Regular Ballots

The Total Ballot Cast number should equal the number of official ballots entered as received from the Election Official, herein.

An explanation of any discrepancy shall be shown.

5. Reconcile the Total Ballots Cast number to the number of signatures in the Roster-Index. Explain any discrepancy.

6. 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

7. 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 Center Bin, and stack them on top of the Ballot Box or a table. Keep these ballots separate from other ballots.
- c. 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.

- d. Carefully pack the ballots in the separate cases and return these cases to the Election Board.
8. Package for return as follows:
 - a. Seal the following ballots in container(s), as directed:
 - Regular Ballots
 - Absentee Ballots
 - Provisional Ballots
 - b. Seal Roster-Index, precinct index and purged voter index as directed.
 - c. 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 Eagle III-Pe Operators Manual*.)
 - Provisional Ballots (from the Provisional Ballot envelopes)
- d. 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.
 - e. After all entries have been completed, each member of the Precinct Board shall sign the Certificate.
 - f. 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.
 - g. A self-addressed stamped envelope shall have been provided for this specific purpose.
 - h. The copy of the Certificate of Packaging and Sealing shall accompany the ballot container to the Central Counting Location.
9. Package or seal all other supplies, as directed.
 10. Dismantle voting booths.

4.4.2 PROCEDURE FOR REGULAR BALLOTS

1. When all ballots have been examined, place non-voted ballots in a designated container for delivery to the counting center.
2. Count all voted ballots to be accounted for on election night. The count includes regularly voted ballots and questioned ballots. It does NOT include Absentee Ballots or Provisional Ballots.
3. 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).
4. Place all voted ballots to be processed on election night in the appropriate return container. This group must include questioned ballots.
5. Close the return container and seal with a tamper-proof seal.

4.4.3 PROCEDURE FOR 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.

4.4.4 PROCEDURE FOR PROVISIONAL BALLOTS

1. 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.

4.4.5 PROCEDURE FOR NON-OPTECH EAGLE BALLOTS

1. Process non-Optech Eagle Ballots by tabulating the number of ballots other than Optech Eagle ballots that might be used in the election in the manner prescribed by the California Elections Code. Seal voted ballots as directed.

4.5 VOTE TALLY REPORTING: USING SUMMARY SYSTEM

4.5.1 FOLLOWING PROCESSING OF LAST BALLOT FROM PRECINCT

1. Return the first Total Ballot Statistics Report, complete with the Election Officials' signatures, to the Summary System Operator. This is the Official Election Returns Tape.
2. Generate additional Total Ballot Statistics Report printouts by pressing the **[Print Totals]** key (quantity is set per instructions from your jurisdiction).
3. Have an Election Official sign each of these printouts in the place indicated, if required by your jurisdiction.
4. Distribute additional Total Ballot Statistics Reports per instructions from your jurisdiction.

4.5.2 UPON RECEIPT OF MEMORYPACK AND REPORT:

Upon receipt of the MemoryPack and report, the Summary System operator shall:

1. Make an entry of this on a log designed for the audit purpose.
2. Cause the data to be read into the Summary System.
3. Produce election results bulletins as required.

4.5.3 REPORTING ELECTION RESULTS

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

4.6 VOTE TALLY REPORTING: WITHOUT USING SUMMARY SYSTEM

Following the processing of the last ballot from a precinct (or absentee ballot style), the Optech 400-C operator shall:

1. Print a Precincts Processed Report and keep it with the MemoryPack for a record of the precincts that have been backed up.
2. Set up the report format print options available for the reports. (See manufacturer's documentation for specific application of the options.)
3. Generate reports as required by the Election Official.

Sign ALL reports containing Certification Messages, as required by the Election Official.

The Election Official shall report as specified in *paragraph 3.5.3: Reporting Election Results*.

5 Canvass and Post-Election Procedures

This chapter defines the following Canvass and Post-Election Procedures for Optech Eagle:

- Semi-Official Canvass: Central Count
- Official Canvass at Central Counting Location
- Ballot Tabulation Reporting
- Update of Computer Counts
- Checking Unused Ballots
- Retention of Election Materials
- Adherence to Established Procedures
- Cleaning Optech Eagle
- Changing Paper Tape, If Required
- Storing Optech Eagle

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.

5.1 SEMI-OFFICIAL CANVASS: CENTRAL COUNT

This sub-chapter presents procedures for processing ballots "centrally" 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 "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.

5.1.1 APPOINTMENT OF BOARDS

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

- Absent Voter and Provisional Voter Ballot Processing
- Logic and Accuracy Testing
- Seal and Container Inspection
- Ballot Inspection
- Ballot Processing
- Ballot Duplication
- Write-In Ballot Processing
- Ballot Storage
- MemoryPack Control
- Elections Observer Panel
- Other boards deemed necessary by the responsible Election Official

Individuals appointed may perform more than one function or serve on more than one board.

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 listed above must be performed by a minimum of three persons. Each board member shall be appointed to perform the function designated.

Each person who handles ballots at the central or remote counting location shall sign the following declaration:

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

5.1.2 REPORTING OF PRELIMINARY ABSENTEE BALLOT TABULATION RESULTS TO SECRETARY OF STATE

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.

5.1.3 ESTABLISHING AUDIT TRAILS

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 under *Chapter 5: 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.

5.1.4 PROCESSING OF ABSENTEE AND PROVISIONAL BALLOTS

Absentee and Provisional Ballots returned from Polling Places on Election Day are sealed in envelopes by precinct boards for return to the designated Central Counting Location. These envelopes shall be removed from the precinct supply kits on election night. The condition of the seals shall be inspected, and any defects shall be noted and reported as required by the Election Official.

Absentee and Provisional Ballots received on election night shall be handled by one of the following two options:

- Processed in accordance with these Procedures and the California Elections Code
- Maintained in a secure location accessible only to designated persons under controlled conditions before being processed pursuant to *paragraphs 3.3.4, 4.3.4, and 5.2.4: Provisional Voting, and Canvassing of Absentee Ballots*, herein

5.1.5 LOGIC AND ACCURACY TESTING

IMPORTANT: LOGIC AND ACCURACY TESTING SHALL BE OR SHALL HAVE BEEN PERFORMED PURSUANT TO THE PROVISIONS OF SUB-CHAPTER 2.9: LOGIC AND ACCURACY TESTING, HEREIN

5.1.6 SEAL AND CONTAINER INSPECTION (TRACKING POINT)

1. Examine each sealed voted ballot container, paying particular attention to the condition of the container and seal.
2. Note and initial on a control document the precinct number of ballot containers 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 containers for ballot inspection.

5.1.7 BALLOT INSPECTION (TRACKING POINT)

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. Attach a control document to the ballots of each precinct. This control document shall indicate the number of voted ballots reported by the precinct officials and shall accompany the ballots of that precinct as they are delivered for write-in manual tally (if any) and storage.
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.

5.1.8 BALLOT PROCESSING

Ballot processing through the Optech Eagle shall:

- Be done in the presence of at least two people, one of whom will be the system operator who is responsible for managing and monitoring system operation and reporting. Changes in system operators shall be logged, with time of change indicated.
- Utilize one operator assigned to each Optech Eagle. If an Optech Eagle is idle, the operator can be assigned to another. The movement of operators shall be tracked and logged.
All Optech Eagle operators shall be supervised. If using Precinct Mode, the Election Official shall provide the Optech Eagle operator with either precinct header cards or the precinct numbers to simulate a precinct header card.
- Maintain an audit trail that links operators and ballots to specific Optech Eagle's.
- Maintain a record or log of the sequence in which precincts were processed along with a recording of system irregularities in processing.
- Separate ballots that cannot be read by Optech Eagles. These ballots must be identifiable to the precinct from which they are separated and delivered to the proper board for resolution. This includes such items as damaged ballots or ballots in the incorrect precinct.
- Maintain ballots together by precinct for delivery to the Storage Board, per *paragraph 5.1.14: Storage of Ballots*.

5.1.9 DUPLICATION OF DAMAGED AND UN-VOTED BALLOTS (TRACKING POINT)

5.1.9.1 DAMAGED BALLOTS

(Damaged Ballots may be duplicated before processing or after rejection by the Optech Eagle, or both.)

Deliver Damaged Ballots to the appropriate location for processing. All ballots prepared as duplicates of Damaged 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 duplicate voting 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, tabulation, 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 tabulated inadvertently.

5.1.9.2 UN-VOTED BALLOTS

When ballots are processed at the Central Counting Location, the Ballot Processing Board may forward Un-Voted Ballots for processing. Such ballots will carry voting position marks that cannot be read by the Optech Eagle usually because reflectivity of these marks is not within specifications. They are to be duplicated, following the same procedures specified in *paragraph 5.1.9: Duplication of Damaged and Un-Voted Ballots (Tracking Point)*, herein.

5.1.10 PROCESSING OF WRITE-IN BALLOTS (TRACKING POINT)

Ballots having Write-In votes will be identified automatically under program control as they are processed through the Optech Eagle. Write-In votes processing shall be performed AFTER Regular Ballots are processed through the Optech Eagle.

If ballots containing Write-In votes are found in the Ballot Bin designated for this purpose, the Ballot Processing Board, or a separate Write-In Processing Board, shall prepare the ballots for manual Ballot Tabulation, as follows:

1. Check the ballot for the precinct to determine the number of candidates to be elected to the office for which there was a Write-In.
2. Examine the voting positions on the ballot for the office where the Write-In vote occurs. If any of the voting positions for that office are marked and if the number of voting position marks plus the number of Write-In votes (with voting position arrows filled in opposite the Write-In) exceeds the number of candidates to be elected, an overvote exists and none of the votes for the office may be tabulated.
3. If an overvote is found, invalidate all votes for the overvoted office by writing "VOID" across the Write-In name(s).
4. Refer to the list of qualified Write-In candidates provided by the Election Official:
 - If the name written in is not on the list, write "VOID" across the name and place the Write-In ballot in the designated container.
 - If the name is on the list but the Write-In is not made in the space(s) provided for the office for which the candidate is qualified, write "VOID" across the name and place the ballot in the designated container.
 - If the Write-In vote is for a qualified candidate in the precinct, place the Write-In ballot in the container designated for valid Write-In votes, if such ballots are to be tabulated by a separate board. If the board examining the ballots with Write-Ins is assigned to tabulate them, they shall do so, using the result sheets and other control documents provided.

5.1.11 MEMORYPACK PROCESSING

When Optech Eagles are installed in the polling places, the Ballot Processing Board has the function of processing MemoryPacks through the Summary System. (Ballots have already been processed.) MemoryPack processing shall be done in the presence of at least two people, one of whom will be the system operator who is responsible for managing and monitoring system operation and reporting.

Changes in system operators shall be logged, including time of change.

The Board shall maintain a record or log of the sequence in which precincts were processed along with a recording of system irregularities in processing.

5.1.12 SUMMARY SYSTEM PROCESSING

The Ballot Processing Board shall receive MemoryPacks, properly identified and logged from the MemoryPack Control Board.

Upon receipt of the MemoryPack the Summary System operator shall:

1. Make entry of this receipt on a log designed for the purpose.
2. Cause the MemoryPack data to be read into the Summary System.
3. Upon completion of reading, deliver the MemoryPack to the MemoryPack Control Board.
4. Produce election results bulletins as required.

If such devices are available, the Summary System operator shall use floppy disks or magnetic tape to back up files created in the Summary System process.

5.1.13 REPORTING ELECTION RESULTS

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

5.1.14 STORAGE OF BALLOTS

A Ballot Storage Board shall:

- Receive directly from the Ballot Processing Board all ballots for each precinct.
- Secure all voted ballots until the final logic and accuracy tests are completed following the semi-official canvass.
- Following the final logic and accuracy test for the semi-official canvass and during the official canvass, 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 as defined in *Appendix A: Glossary*, for *Destructible Seal*, herein.
- The Election Official shall not open any ballot containers nor permit any ballot containers to be opened except as permitted pursuant to the California Elections Code, or in the event of a Manual Recount.

5.1.15 MEMORYPACK CONTROL BOARD

A MemoryPack Control Board shall:

1. Receive from the Election Official all MemoryPacks to be used in the election, except for those which the Election Official may have set aside for delivery to Precinct Boards and Absentee Processing Boards. A list of such MemoryPacks (received and not received shall be delivered to the MemoryPack Control Board for logging and control.
2. Following closing of the polls, receive from each precinct where Optech Eagles were installed, the MemoryPack for that precinct. This shall be logged, and a receipt issued.
3. If the processing of Absentee ballots is to be done by the Absentee Board at times during Election Day as permitted by the Elections Code, the MemoryPack Control Board may receive Absentee Ballot Style MemoryPacks from the Absentee Board as directed by the Election Official. This shall be logged.
4. Deliver to the Ballot Processing Board the MemoryPack for a specified precinct or absentee ballot style (if absentee ballots are to be processed by that Board). This procedure shall be logged. At a minimum this log shall carry a precinct I.D. entry made by a runner or Ballot Processing Board member, with a corresponding entry on the same line showing an indication by initials of a MemoryPack Board member that the MemoryPack issued was the MemoryPack requested. There shall be an indication whether the requested MemoryPack is to be used for Optech Eagle AND Summary System processing, or for Summary System processing only. Color coded MemoryPack identifying labels should be used to designate which of these two types of processing is to be employed.
5. Receive from the Ballot Processing Board those MemoryPacks which have been processed through the Summary System.
6. Issue to, and thereafter receive from, the Logic and Accuracy Board, the MemoryPacks requested for the performance of Logic and Accuracy tests.

It is the duty of the MemoryPack Control Board to exercise strict supervision of the identification, receipt, issue, movement and storage of MemoryPacks. All such activity is to be logged or otherwise documented. Segregated groupings are to be maintained for each of the following types of MemoryPacks.

- Those which have been received from precincts where Optech Eagles were installed (Processed through Optech Eagles; yet to be processed through the Summary System)
- Those which have been received from Absentee Boards (Processed through Optech Eagles; yet to be processed through the Summary System)
- Those which are to be delivered for Summary System processing only
- Those which are to be delivered for processing through Optech Eagles and the Summary System
- Those which have been returned from Optech Eagles/Summary System processing
- Those which are to be issued for Accuracy Tests
- Those which have been returned after Accuracy Test use

MemoryPacks are media used for the transfer of election results from Optech Eagles to Summary Systems. Inasmuch as ballots themselves are sufficient for the long term retention of election data, and inasmuch as Log/Results tapes are available for comparison against Summary System reports, and inasmuch as MemoryPacks may be needed for elections which may occur prior to the expiration of a mandated period for retention of election materials, certain requirements of Election shall be deemed not to apply to MemoryPacks.

5.1.16 UNESCORTED PERSONNEL

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

5.2 OFFICIAL CANVASS AT CENTRAL COUNTING LOCATION

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-tabulating 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.

5.2.1 PROCESSING OF 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.

5.2.2 EXAMINING BALLOT STATEMENT PREPARED BY PRECINCT BOARD

Examine the Ballot Statement prepared by each precinct board, as follows:

1. Compare the number of official ballots reported "received" by each precinct to the number issued by the Election Official. Resolve or explain any discrepancy.
2. 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.

5.2.3 RECONCILING TALLIES

Reconcile tabulations, as follows:

1. 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.
2. Compare the number of ballots voted by Provisional and precinct Voters to the precinct's computer tabulation. Resolve or explain any discrepancy.
3. Remake and process any ballots not tabulated on election night because of damage, invalid identification punches, or any other reason.
4. Search election supplies and equipment, including Unused and Spoiled Ballots, ballot containers, etc., for ballots not accounted for.
5. Process any found ballots.

5.2.4 CANVASSING OF ABSENTEE BALLOTS

The Election Official is accountable for Absentee Ballots to the same extent, as nearly as practicable, as for precinct ballots, as follows:

1. Prepare a Ballot Statement for each ballot style or special Absentee "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 tabulated.
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 tabulated, as shown on the Ballot Statement. Resolve or explain any discrepancy.
4. Process any outstanding ballots not tabulated in the Semi-Official count.

5.2.5 CANVASSING OF WRITE-IN BALLOTS

1. Examine the Write-In Ballots 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."

5.2.6 PROCESSING OF UNUSED 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.

5.3 BALLOT TABULATION REPORTING

5.3.1 FOLLOWING PROCESSING OF LAST BALLOT FROM PRECINCT:

Following the processing of the last ballot from a precinct (or Absentee Ballot style), the Optech Eagle 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.

5.3.2 REPORTING ELECTION RESULTS

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

5.3.3 IF CERTAIN PERIPHERAL DEVICES ARE AVAILABLE:

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

5.4 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-tabulated validly voted ballots must be counted in compliance with provisions of this chapter. The Optech Eagle 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.

5.5 CHECKING UNUSED 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 count during the official canvass.

5.6 RETENTION OF ELECTION MATERIALS

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.

5.7 ADHERENCE TO ESTABLISHED PROCEDURES

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.

5.8 CLEANING OPTECH EAGLE

Please see the *Optech Eagle III-Pe Operators Manual*.

5.9 CHANGING PAPER TAPE, IF REQUIRED

If required, change the Paper Tape, per the *Optech Eagle III-Pe Operators Manual*.

5.10 STORING OPTECH EAGLE

The Optech Eagle should be stored as follows:

1. Fold the Power Cord and store it in its bag.
2. To store the Optech Eagle, put it in its Mylar anti-static plastic bag and place it in the shipping container; store in a clean, dry storage area.
3. Store the keys in a safe place or tape them to each unit.

6 Manual Recount Procedures

This chapter defines the following Manual Recount Procedures for the Optech Eagle:

- Required One Percent Manual Recount
- Request for Recount
- Observers
- Hours of Operation
- Ballot Supervision/Breaks
- Voting Arrow Marking
- Tabulation of Overvoted Ballots
- Tabulation of Undervoted Ballots
- Tabulation of Un-Voted Ballots

6.1 REQUIRED ONE PERCENT MANUAL RECOUNT

For the purpose of validating the accuracy of the computer count, within fifteen days after every election at which Optech Eagle 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 an Optech Eagle 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 an Optech Eagle fails after the semi-official or official Ballot Tabulation 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 6.6: Voting Arrow Marking*, shall be followed during the automatic Manual Recount of ballots.

6.2 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.

6.3 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, nor 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.

6.4 HOURS OF OPERATION

Prior to the beginning of the Manual Recount, all parties will be notified of the hours of operation.

6.5 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.

6.6 VOTING ARROW MARKING

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.

6.7 TABULATION OF OVERVOTED 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.

6.8 TABULATION OF UNDERVOTED BALLOTS

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.

6.9 TABULATION OF UN-VOTED BALLOTS

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 6.8: Tabulation of Undervoted Ballots*.

7 Certification and Reporting Requirements

This chapter defines the following Certification and Reporting Requirements for the Optech Eagle:

- Biennial Certification of Hardware
- Hardware Certification and Notification
- Election Observer Panel
- Logic and Accuracy Certification
- Logic and Accuracy Board
- Submittal of Ballot Tabulation Programs to Secretary of State
- Election Night and Post-Election Reporting
- Preparation of Specific Written Procedures

7.1 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 G.2: Certificate of Biennial Inspection*.

7.2 HARDWARE CERTIFICATION AND NOTIFICATION

7.2.1 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.

7.2.2 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.

7.2.3 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.

7.2.4 IF ANY EQUIPMENT IS REPAIRED:

In the event any equipment is repaired, altered or replaced following the certification specified in *paragraph 7.2.3: 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.

7.3 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 Tabulation process.

7.4 LOGIC AND ACCURACY CERTIFICATION

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

- 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 these duties as well as those otherwise established by the procedures; provided that all members of the Board shall sign the appropriate certificate or certificates.

Final Pre-Election certification shall be made to the Secretary of State no less than seven days before each statewide election. This certification shall be made by the responsible Election Official based on the Logic and Accuracy Board's certification of successful testing. In the event an amendment to the Ballot Tabulation program is required following this certification, the Election Official must immediately re-certify to the Secretary of State.

Please see *appendix G.1: Certification by Logic and Accuracy Board*.

7.5 LOGIC AND ACCURACY BOARD

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.

7.6 SUBMITTAL OF BALLOT TABULATION PROGRAMS TO SECRETARY OF STATE

Ballot tabulation 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 tabulation 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 Eagle 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.

7.7 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 to her or him by the 28th day following the election. The responsible Election Official may also report other delays in the processing of ballots as he or she deems appropriate.

7.8 PREPARATION OF SPECIFIC WRITTEN PROCEDURES

Each Election Official shall prepare specific written procedures for each phase, step and procedure in the preparation, operation of Polling Places, Ballot Tabulation and Official Canvasses of elections. Written procedures must also include instructions to precinct officials regarding proper handling of Absentee and Provisional Ballots as well as a description of procedures used to manually recount ballots pursuant to the California Elections Code.

These procedures must be prepared and submitted to the Elections Division of the Secretary of State's Office. Upon submission, the election jurisdiction's procedures shall be reviewed for compliance with state procedures, and the Election Official shall be advised of any necessary revisions.

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8 System Security

This chapter defines the following System Security for the Optech Eagle:

- Access Control Policy
- Access Control Measures
- Equipment and Data Security
- Software and Firmware Installation
- Other Elements of an Effective Security Program

The Election Official shall ensure the protection of the tabulation process from intentional and/or fraudulent manipulation, malicious mischief, accidents, and errors.

Within one year following the adoption of these procedures, each jurisdiction shall:

- Establish procedures to identify changes to the Ballot Tabulation 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; 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-tabulated ballots. Such procedures shall not preclude the accessibility of the Optech Eagle nor computers for purposes of testing, repair, demonstration, training or for other purposes, which are deemed justifiable by the Election Official.

- Establish contingency plans for Ballot Tabulation, including either backup Ballot Tabulation 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 Optech Eagle's, if such is the case, citing these situations as adequate backup.

In addition to the Ballot Tabulation program sent to the Secretary of State, each Election Official shall store another copy of the Ballot Tabulation program in an off site secure-but-readily-accessible location.

- Establish procedures for internal security, i.e., the protection of Ballot Tabulation hardware, firmware, and software from fraudulent manipulation by persons within the elections office.

These procedures must provide for:

- Restricted access to Ballot Tabulation 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-tabulated ballots, by use of logs to chronicle their quantity, use, and access before and after the election

A complete copy of each Election Official's security procedures shall be submitted to the Secretary of State for review 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.

8.1 ACCESS CONTROL POLICY

8.1.1 GENERAL ACCESS CONTROL POLICY

This sub-chapter defines the General Access Control Policy.

Security is a blanket term which involves a variety of elements designed to mitigate potential risks and threats. In general, secure systems will control, through use of specific features, access to information such that only properly authorized individuals, or processes operating on their behalf, will have access to read, write, create, or delete information.

The design of a secure environment involves the use of three types of *controls*:

- Preventive Controls
- Detective Controls
- Corrective Controls

The security of any system, organization, or environment is NOT the result of merely one or two system components. It is the result of a variety of features, controls, architectural decisions, and procedures combining and building upon each other to produce a *security infrastructure*.

Security is fundamental to the election process. Security implies that the system must be reliable, it must accurately record votes and it must maintain the integrity of those votes. Security is achieved through features and controls which are inherent in the system design and through administrative controls. The acceptable level of security cannot be achieved with just one. Both types of controls must be present. This document is an overview of the security features and controls in the design of the Optech Eagle.

Preventive Controls:

The purpose of this type of control is to PREVENT the occurrence of one or more specific risks or threats. These controls can be use as a means of restricting or limiting access to data, functionality, or components. They may also be used to directly interdict potential threats or outside attack.

Detective Controls:

ALL risks, threats, or attacks cannot be prevented — e.g., a system which permits outside dial-up access can use preventative control to stop unauthorized access, but it cannot prevent recurring attempts. In these cases, it is important to at least detect or record that such an event occurred. Detective controls are intended to identify real, potential, or attempted breaches in security. They are also often used to record an audit trail of activity which can be subsequently examined to identify potential problems or risks.

Corrective Controls:

Even with preventative and detective controls in place, it is possible that damage or loss could occur (e.g., an authorized person uses such authorization to damage the system). Corrective controls are procedures or mechanisms which enable recovery from the loss or damage.

8.1.2 INDIVIDUAL ACCESS PRIVILEGES

This sub-chapter defines the Individual Access Privileges.

Controlled Access:

- Optech Eagle operators should have controlled access to the keys that lock the Optech Eagle.
- An official of the Central Counting Location should have keys available to use for inserting storage media during backup.
- Measures should be taken to prevent unauthorized operating system access to the Optech Eagle, and to other machines on an Optech Eagle 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 Optech Eagle.

Passwords:

- Windows passwords should be used to protect against unauthorized entry into the system.
- Passwords shall, to the extent practicable, meet or exceed best practices for strong passwords.
- Passwords should be used for Optech Eagle software, to secure the Optech Eagle.
- 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.

8.2 ACCESS CONTROL MEASURES

This sub-chapter provides the following Access Control Measures for the Optech Eagle.

- Optech Eagle operators should have controlled access to the Optech Eagle. In some cases, this may include controlled access to the keys that lock the Optech Eagle.
- Measures should be taken to prevent unauthorized operating system access to the Optech Eagle. 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 Optech Eagle.

The Optech Eagle is constructed with locks to prevent unauthorized access to the following:

- Ballot Tabulator
- Ballot Bins
- Interface electronics

The Optech Eagle also has controls to ensure that accidents, inadvertent mistakes, and errors are minimized. This control sequence provides protection against intentional, fraudulent manipulation, and malicious mischief by supplying a means to identify fraudulent or erroneous changes to the system. Access protection schemes, validation routines, self-diagnostics, and error recovery routines, and restart and logging capabilities are incorporated to protect vital parts and operating states.

Unauthorized operations by users will be detected and show on the event log tape. This should be maintained in one continuous roll from the start of the election setup process until the final audit.

8.2.1 SECURE ROOM: FOR CENTRAL COUNTING LOCATION

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.

8.2.2 PRE-ELECTION PROCESSING

1. The EMS database (precincts, districts, contests, candidates, Ballot Styles, etc.) is prepared by using the EMS election coding system. The EMS database includes Election Parameter data for configuring individual Optech Eagle units and also an accumulation and reporting database for use by the AERO accumulation system (once the Precinct Totals have been transported to the Central Counting Location).

The EMS election coding system has a nominal password protection system to prevent unauthorized users from making changes to the EMS database. However, since the Election Coding process usually occurs over a period of weeks, and the EMS election coding system with password enable can be left unattended, more conventional security procedures should be utilized. It is recommended that the EMS election coding system be located in a secure room, per *paragraph 8.2.1: Secure Room: For Central Counting Location*, and on a PC that is not connected to a network. The various EMS reports should be generated and reviewed. The reports for Contests & Candidates and Ballot Styles are especially recommended. For greater security, the EMS activity system log can be periodically printed and reviewed for unauthorized access. Periodic backups should be made and saved for possible future auditing review or restoration

If connected to a network, please see *paragraph 8.2.5: If PC/EMS/AERO Is Part of a Network*.

2. The individual Optech Eagle MemoryPacks are loaded (“burned”) with the appropriate precinct Election Parameter data using the MPR (MemoryPack Receiver).

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.

3. The MemoryPacks are inserted into Optech Eagle units and initialized.

The variable RAM portion of MemoryPacks contain a number of checksums for the various data sections. When the MPR is used to new precinct Election Parameter data is programmed (burned) into the flash RAM portion of the MemoryPack, the checksum for the Election Parameter data is no longer compatible. Therefore, when a MemoryPack with newly burned Election Parameter data is inserted into an Optech Eagle unit and the unit powered on, the result will be a message ‘checksum error in EMS parameter data, do you wish to initialize?’ The usual response will be ‘yes’ which will cause the old vote totals to be cleared to zero and new checksums to be generated for all data sections including the new precinct Election Parameter data. Ballot processing can then proceed. An alternate response is to power off the unit, remove the MemoryPack and re-burn the MemoryPack with the old original Election Parameter data, thereby making the checksum valid again. In any case, there is no way to process ballots, print reports, or transmit results with the combination of the old vote totals and the new Election Parameter data.

4. Test ballot decks are read into the units and vote total reports generated and reviewed to verify the accuracy of the Election Parameter data in the MemoryPacks and the accuracy of the units to properly read ballots.

This is a very critical procedure to assure accurate ballot processing. The test decks must include votes for every candidate position and should result in a recognizable pattern of votes that is different for adjacent positions in each contest.

5. The MemoryPacks are removed from the units, and the vote totals in the MemoryPacks are read into the AERO accumulation system using the MPR. Reports are generated and reviewed for the accumulated test results.

This is a very critical procedure to assure accurate ballot processing. This step is absolutely critical for those jurisdictions that do not perform the previous review step with appropriate thoroughness.

6. The MemoryPacks are returned to the units, the vote totals are cleared to zero, and the zero ballots cast report is left in the unit showing the precinct number in the MemoryPack and the fact that the MemoryPack vote results are zero.

The label on the MemoryPack is not visible when the MemoryPack is inside the unit. Therefore, the presence of the 'zeroed' report showing the precinct number as well as zero ballots is very important in verifying that the appropriate unit is delivered to the appropriate precinct.

7. The Optech Eagle units and MemoryPacks are locked and sealed, and are transported to the Polling Places.

Locks are implemented for the Ballot Box, and the Optech Eagle door containing the Keypad and the MemoryPack. Various seal options exist including (and especially recommended) one for the MemoryPack.

8.2.3 ELECTION DAY PROCESSING

1. On election morning the Poll Workers plug in the unit and a full zero report is automatically printed.

The contest and candidate report will be automatically generated only if ballots cast is zero.

2. The Poll Workers verify that the precinct number on the report is correct for their precinct, and that the offices and candidates on the report match the ballots provided to them.

The report should be reviewed to verify that the precinct number is correct and that the contests and candidates match the ballots provided to the precinct. If not, or if an error message prints or if ballots cast is not zero, then the Central Counting Location must be notified. (Again, the contest and candidate report will be automatically generated only if ballots cast is zero.)

3. After the official poll opening time, voters are allowed to vote (mark their ballots) and insert their ballots into the Optech Eagle unit where they are tabulated and the Precinct Totals in the MemoryPack updated.

The vote totals are check summed immediately before and immediately after each ballot is read and processed. Any error condition generates the immediate printing of an error message and the insertion of a corresponding entry in the Electronic Log. If AC power is lost and then restored, all checksums are verified and a ballot report is printed showing the number of ballots cast, but no vote totals. Ballot processing can then continue.

4. After the official poll closing time, and when all Voters have voted, the Poll Workers close the polls and generate the Totals Reports, per the *Optech Eagle III-Pe Operators Manual*.

To close the polls and print the Totals Reports, the Poll Worker must press the [**Print Totals**] key on the Keypad, and then confirm the operation by pressing another key.

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 Eagle.

5. The Poll Workers then remove the MemoryPack and send it by official courier to the Central Counting Location.

The locked compartment with the Keypad also contains the MemoryPack®. In addition to being locked, the MemoryPack may be 'sealed', an option that is strongly recommended so that to remove the MemoryPack the Election Official must also cut the seal and (hopefully) record the seal number for a subsequent audit.

6. At the accumulation site the MemoryPack vote totals are read into the AERO accumulation and system using the MPR.

The AERO accumulation system reads the vote totals from the MemoryPack and verifies the checksum, that the creation date & time of the precinct Election Parameter data is appropriate, and that the MemoryPack data has not been processed before.

7. As the AERO database is updated with MemoryPack results, via the MPR, vote total reports are generated.

In addition to vote total summary reports, other reports may be generated such as precincts counted and not counted reports.

8. In addition, a copy of the vote totals database can be copied onto diskette or ZIP disk. The copy is in a flat ASCII file format that can be read and processed by the customer's software to produce customized reports, web pages, and auditorium video displays.

It is recommended that the accumulation system 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.

Like the EMS election coding system, the AERO accumulation system has a nominal password protection system to prevent unauthorized users from making changes to the database. However, it is recommended that the AERO system be located in a secure room, per *paragraph 8.2.1: Secure Room: For Central Counting Location*, and on a PC that is not connected to a network. The various AERO reports should be reviewed as they are generated. For greater security, the AERO activity system log can be periodically printed and reviewed for unauthorized access. Periodic backups should be made and saved for possible future auditing review or restoration.

If connected to a network, please see *paragraph 8.2.5: If PC/EMS/AERO Is Part of a Network*.

8.2.4 POST-ELECTION PROCESSING

Once the ballot container and required data have been transported to the Central Counting Location, the AERO accumulation system is used to perform the following Post-Election Processing,

1. In the days following the election, the remaining absentee ballots are processed, as are any provisional and un-tabulated ballots.

During this period various audit reviews should also be performed. Manual recounts should be made of a portion of the precincts for a portion of the contests.

2. When all ballots have been processed, the final reports are generated including the summary report, individual precinct reports, and the canvass report.

Review the audit reports again. Recount some more precincts. Review the Optech Eagle 'ballot statistics' report for variations from precinct to precinct on error ballots, returned ballots, overridden ballots, Blank Ballots, etc. Some marginal Optech Eagle units may need servicing, some Poll Workers may need special training, some ballots may have been marginal. Review all procedures while the election is still recent.

8.2.5 IF PC/EMS/AERO IS PART OF A NETWORK

If the PC/EMS/AERO is part of a network, the following shall apply:

- The network should not be connected to any component or network resource or nexus that has a connection to the external Internet.
- All network connections must be local.
- Assign a Network Administrator and a backup Network Administrator and outlining duties and responsibilities.
- Use unique User password for Network logon.
- Determine password length and format (recommend a minimum of 6 characters, 8 preferred).
- Determine which network protocols should be running. (Recommend that only the minimum required should be running.)
- Evaluate network configuration to ensure that only authorized PC/EMS users can gain access to PC/EMS network resources.
- Evaluate hub, router and firewall configurations to ensure appropriate levels of access and security.
- Develop a security test plan that can be periodically conducted to monitor the current security level.
- Monitor security logs to determine unauthorized access to shared resources. Jurisdictions may deploy automated monitoring tools for this purpose.

8.3 EQUIPMENT AND DATA SECURITY

This sub-chapter defines the following Equipment and Data Security for the Optech Eagle:

- General Equipment and Data Security
- Physical Security
- Ballot Box
- Optech Eagle
- Destructible Seals
- Seal and Container Inspection
- Storage
- Checksum Security
- MemoryPack
- Date/Time Stamp
- Proprietary Designs
- Status& Error Messages Printed Before, During, and After Election

The Local Election Official has management control over all resources employed during the voting and Ballot Tabulation/Vote Tally process until the control is voluntarily relinquished when no longer needed.

If it becomes necessary to transfer control of any equipment back to the vendor for repairs, operational elections activity may not be carried out on the equipment while it is under the vendor's control.

The Optech Eagle cannot operate as a Precinct Tabulator without a MemoryPack.

MemoryPack removal is protected by the rear door lock and by an election seal. An interlock switch allows the system to detect and log the opening of the MemoryPack compartment on the Electronic Log Report, per the *Optech Eagle III-Pe Operators Manual*. This audit log prints continuously to record all activity other than casting a ballot. All error and major events are noted with the date and time from the real-time clock.

8.3.1 GENERAL EQUIPMENT AND DATA SECURITY

- The Optech Eagle should NEVER be connected to the World Wide Web.
- If the CPU cannot be dedicated, reload all software and data files from secured backup copies to assure an intact system.
- Do not allow unauthorized software to be run on the system, particularly "shareware".
- An approved virus-checking program must be installed on the PC. It should be updated, and a virus scan run immediately prior to each election, to protect against the introduction of viruses.
- 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 Optech 400-C, which is designed to work with Direct Access Objects.
- 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 Optech 400-C.

8.3.2 PHYSICAL SECURITY

Physical security is stressed in each installation, as follows:

- The Optech Eagle should remain in a controlled, preferably locked area, with access limited to authorized staff.
- The Optech Eagle should not be left unattended without first activating one or more levels of password protection.
- The Optech Eagle should be locked up between elections.
- The Optech Eagle should be dedicated to election use.
- The Optech Eagle should be locked to provide security against unauthorized entry.
- The master installation disk should also be locked up to prevent unauthorized changes.
- Controlled test elections should be run before and after each election to certify accuracy of processing.

8.3.3 BALLOT BOX

Restricting access to the Ballot Box is accomplished by two locks to secure the door. The flap over the ballot entrance holes has a lock and provision for a seal. The Optech Eagle may be secured to the Ballot Box with locking provision internally in the Optech Eagle.

8.3.4 OPTECH EAGLE

The Optech Eagle has two locks that are keyed differently. Keys for accessing the door cannot be easily "duplicated."

The Rear Access Lid Lock prevents opening of the case, which allows access to the circuitry inside the machine. The Key to this lock is intended to be under the control of the election administrative officials.

The Maintenance Technician can enter a four-digit Access Code on the Keypad to run internal diagnostic and maintenance routines. These are not needed by the Poll Worker and should be restricted to just Maintenance Technicians and Administrative personnel. The Access Code may be changed for each election. Maintenance Technicians will have full access to the Optech Eagle keys and Access Codes, and should never serve as Poll Workers.

The second lock prevents opening of the rear door, which controls access to the Keypad, Power Cord, printer paper roll, and (by breaking a seal) the MemoryPack. The key to this lock is intended to be part of the Poll Worker kit. While the rear door is locked, access to the Keypad is limited to one button, which allows the Poll Worker to override the ballot rejection feature. For Closing the Polls or performing any other Keypad-controlled function, the Keypad must be accessed by opening the rear door with a key.

For the Poll Worker:

- Only the **[Print Totals]** and the **[Paper Feed]** keys are needed to initiate actions during the election.
- The **[0]** or **[9]** keys are used to confirm the closing of the polls.
- If the Overridden Error Ballot option is selected, during Election Coding (by using the EMS election coding system), The **[3]** Override Error Ballot key can be pressed with the cover closed, through a narrow hole that restricts access to other Keypad numbers.

No other Keypad control sequences use combinations near the **[3]** key.

8.3.5 DESTRUCTIBLE SEALS

A Destructible Seal is 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

- Seals must be used on the programmed MemoryPack, once it has been inserted into the Optech Eagle.
- Seals must be used on ALL voted Ballot Bins, per *paragraph 8.3.6: Seal and Container Inspection*.
- 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.

Audit trail logs must be maintained recording the sealing, as follows:

- Sealing:
 - Seal Number
 - Date and Time
 - Person's Name
- Unsealing:
 - Seal number
 - Data and Time
 - Person's Name

8.3.6 SEAL AND CONTAINER INSPECTION

1. Examine each sealed voted Ballot 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 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 Bins for ballot inspection.

8.3.7 STORAGE

- House units in an access-controlled area.
- Keep all spare parts locked up at all times.
- Limit access to units, spare parts, etc. as much as possible.
- Perform a full inspection of each unit, including validating the firmware version, before election use.

8.3.8 CHECKSUM SECURITY

There are several sections of memory in the Optech Eagle that are check summed including the following:

- APS and HPS programs
- Election Parameter data
- Vote and statistical totals

The primary purpose for the implementation of these checksums is to verify that the data contained in them is not corrupted by hardware or software errors.

8.3.9 MEMORYPACK

If the MemoryPack door is opened while the Optech Eagle is still powered ON:

- Standard Optech Eagle operation is immediately halted.
- An error sound is generated.
- A message is displayed directing the Operator to close the door.
- If the door is closed, the Optech Eagle returns to its normal operating mode.

If the MemoryPack is removed:

- Optech Eagle operation halts.
- The unit has to be restarted from power-on to ensure no illegal tampering was done to the MemoryPack or its contents.

The above conditions are also logged in the Electronic Log for future review.

Since the MemoryPack memory is maintained by battery, in the event of a hardware failure of an Optech Eagle unit, the unit can be replaced, the MemoryPack moved from the old to the new unit, and ballot processing continued with no loss of data or continuity.

When AC power is removed from the Optech Eagle, either deliberately or in the event of a power failure, a power fail interrupt occurs and all CPU register contents are saved so that processing may be properly resumed when power is subsequently restored. This precise resumption process is only implemented if power was lost in the middle of processing a ballot. Power loss at other times is not critical and standard start-up procedures are used.

8.3.10 DATE/TIME STAMP

The Election Parameter data in the MemoryPack contain the date and time when the system database was created by using the EMS election coding system. This date-time stamp is printed on the System Start-Up Report.

It is posted to the AERO accumulation system reading the results, so that it can verify that the MemoryPack contains the final official Election Parameter data and not, for example, an earlier test version.

8.3.11 PROPRIETARY DESIGNS

The Optech Eagle uses a proprietary CPU board, based on an 8 Megahertz Z-80 microprocessor and standard peripheral devices.

8.3.12 STATUS& ERROR MESSAGES PRINTED BEFORE, DURING, AND AFTER ELECTION

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 Electronic Log, which may be printed out at any time, as an Electronic Log Report, to show all significant events since the election was initialized.

8.4 SOFTWARE AND FIRMWARE INSTALLATION

This sub-chapter defines the security requirements for Software Installation for the Optech Eagle.

Physical security is stressed in each installation, as follows:

- The Optech Eagle should remain in a controlled, preferably locked area, with access limited to authorized staff.
- The Optech Eagle should not be left unattended without first activating one or more levels of password protection.
- The Optech Eagle should be locked up between elections.
- The Optech Eagle should be dedicated to election use.
- The Optech Eagle should be locked to provide security against unauthorized entry.
- The master installation disk should also be locked up to prevent unauthorized changes.
- Controlled test elections should be run before and after each election to certify accuracy of processing.

All Optech Eagle Software and Firmware are installed at the factory except for election-specific information that is programmable using EMS/AERO for use with each election and loaded onto the non-volatile memory in the MemoryPack.

The Optech Eagle provides data and code checks at start-up to verify that the correct versions of programs and data are in use. The firmware tests the match between the tabulator and MemoryPack halves of the control program and shuts down if they do not match. The version number and date of each is printed on the following reports:

- Zero Ballot Statistics Report
- Total Ballot Statistics Report

8.5 OTHER ELEMENTS OF AN EFFECTIVE SECURITY PROGRAM

This sub-chapter describes the following Other Elements of an Effective Security Program for the Optech Eagle:

- Protection Against Malicious Software
- EMS Database Security
- Poll Workers, Voting Hours
- Poll Workers, Closing the Polls
- Maintenance Technicians
- Guideline for Security Policies and Methods

8.5.1 PROTECTION AGAINST MALICIOUS SOFTWARE

This paragraph provides a description of Protection Against Malicious Software for the Optech Eagle.

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

- Establish procedures to identify changes to the Ballot Tabulation/Vote 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-tabulated ballots. Such procedures shall not preclude the accessibility of the Optech Eagle nor computers for purposes of testing, repair, demonstration, training or for other purposes, which are deemed justifiable by the Election Official.

- Establish contingency plans for Ballot Tabulation/Vote Tally, including either backup Ballot Tabulation/Vote 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 Tabulation/Vote Tally hardware, firmware, and software from fraudulent manipulation by persons within the elections office.

These procedures must provide for:

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

8.5.2 EMS DATABASE SECURITY

- Backup copies of the EMS 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:
 - o For as long after the election as required by law
 - o By order of a court or directive of the Secretary of State

8.5.3 POLL WORKERS, VOTING HOURS

During voting hours, the Keypad keys are not accessible to the Poll Workers or voters because they are in a locked compartment. The only exception to this is the [3] Override Error Ballot key, which is accessible at the rear of the unit. The function of the [3] Override Error Ballot key is to override (accept) ballots that have been returned to the voter due to read errors, over voting, etc. The [3] Override Error Ballot key is also used to override the optional time check and force acceptance of the ballots before the official poll opening time. All uses of the [3] Override Error Ballot key are logged for audit trail review.

8.5.4 POLL WORKERS, CLOSING THE POLLS

When the decision is made to close the polls, the following operations are performed by the Poll Worker:

1. Use the Southco Key to unlock the Rear Access Lid Lock.
2. Use the Red Key to open the Rear Access Lid.

3. Unseal the compartment containing the Keypad, thus making all 12 Keypad keys accessible.
4. Press the **[Print Totals]** key to initiate the Closing the Polls function.
5. Press the **[0]** and **[9]** keys to confirm or not confirm the decision to close the polls.

If confirmed, the following occurs:

- The polls are closed.
- The Total Ballot Statistics Report is printed, per the *Optech Eagle III-Pe Operators Manual*.
- Further ballot reading is disabled.
- The Optech Eagle has a security lockout program that prevents a return to operation.

8.5.5 MAINTENANCE TECHNICIANS

There are number of functions that technical personnel have to perform that Poll Workers should not be allowed to perform. These functions may include:

- 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.

The special functions above can only be initiated after using the Keypad to enter a 4-digit Access Code. The standard Access Code for SVS test elections is **[5], [6], [5], [7]** entered sequentially. The selection of the specific Access Code for an election is done via EMS during Election Coding. Therefore, each jurisdiction can select its own private Access Code from election to election in order to more effectively restrict the knowledge of the specific code.

8.5.6 GUIDELINE FOR SECURITY POLICIES AND METHODS

Each jurisdiction must analyze the potential threats to their election security. The following is only a guideline.

8.5.6.1 SECURITY POLICY

- What constitutes a breach of security?
- How could that security be breached?
- If collusion is involved, how many individuals would be required?
- Would it be detected?
- Could the Election Totals be recovered without error?
- How much is your jurisdiction willing to spend to improve security?
- What needs to be protected?
 - Un-voted ballots
 - Registration records
 - Equipment
 - Election seals
 - Data transmission equipment
 - Election Coding system
 - Central Counting Location
 - Voted ballots
 - Other

8.5.6.2 SECURITY METHODS

Personnel Security:

- Screening personnel
- Identification of personnel
- Badges

Equipment Security:

- MemoryPacks
- Optech Eagles

Ballot Security:

- Printing
- Storage
- Transport
- Ballot-issuing procedures

Physical Security:

- Access Limits
- Access Codes
- Key Control

Election Testing:

- Test records
- Test ballots

Election Audit:

- Procedures
- Ballot accountability
- Automatic recounts

Prosecution:

- Irregularities are reported to the proper authorities
- Security versus the public right to know

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Appendix A: Glossary

This appendix provides a listing and brief definition of all terms for the Optech Eagle that may be unfamiliar to persons not trained in either voting systems or computer operation.

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| Absentee Ballot | FEC definition: 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 Vote Tallying hardware is operating correctly |
| Anti-Static Padded Bag | Bag, provided by SVS, as packing material for MemoryPacks. |
| Audit Trail | The ability to trace to the original source of data any input record or process performed on a voting system. |
| Auto Read Test | In testing, allows the Operator to enter a single ballot repeatedly. |
| Auxiliary Bin | Ballot Bin where ballots will be placed, for later processing, if the Optech Eagle 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. |
| 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. |
| Ballot Box | Ballot Box, where tabulated ballots are automatically deposited in the following Ballot Bins: <u>Rear Bin</u> : Holds fully tabulated ballots that require no further action. <u>Center Bin</u> : Holds all processed ballots that have one or more offices with a Write-In position voted. <u>Auxiliary Bin</u> : Holds ballots, for later processing, if the Optech Eagle 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: <u>Blank Ballot</u> <u>Damaged Ballot</u> <u>Demonstration Ballot</u> <u>Error Ballot</u> <u>Regular Ballot</u> <u>Provisional Ballot</u> <u>Questioned Ballot</u> <u>Spoiled Ballot</u> |

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| Ballot Definition | Data structures and text that describe the ballot. |
| Ballot Guide Bar | Guide Bar, at the throat area of the Optech Eagle, which is set in place to accommodate the specific width of ballots used in a particular election. |
| 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 Statement | <p>Statement containing data pertinent to the ballot count that must be completed at the close of polls and is placed inside envelope #4.</p> <p>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:</p> <ul style="list-style-type: none"><u>Precinct Ballots</u><u>Returned Absentee Ballots</u><u>Provisional Ballots</u><u>Spoiled and Unused Ballots</u> |
| Ballot Style | FEC definition: 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). |
| 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. |
| Beeper | Device which emits an audible signal when a condition is encountered requiring Voter or Operator intervention, or to confirm a processing action. |
| Candidate | Person, question response, or Write-In selector that a Voter may select. |
| Canvass | FEC definition: Compilation of election returns and validation of the outcome that form the basis of the official results. |
| 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. |
| Central Count System | Voting system, which tabulates ballot cards at a Central Counting Location (or at designated regional sites). Voted ballot cards are typically placed into secure containers at the Polling Place. After Closing the Polls, these containers are transported to a Central Counting Location. |

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| Central Counting Location | <p>The place where the following operations occur, after the polls close:</p> <p><u>Tabulate Ballots, or accumulate the results of previously tabulated ballots at one or more Central Counting Locations.</u></p> <p><u>Merge the voting data produced by dissimilar voting systems.</u></p> <p><u>Merge ballots or voting results from manually processed ballots.</u></p> <p><u>Program or reprogram ballot-tabulating devices after Opening the Polls.</u></p> <p><u>Edit Ballot Tabulation programs or voting data.</u></p> |
| Certification Message | <p>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.</p> <p>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.</p> |
| Closing the Polls | Election Day sub-phase, which provides a means for preventing the further tabulation of ballots once the Polling Place has closed. |
| Combined Mode | <p>Indicates that Optech Eagles are being used, as a combined function, for Ballot Tabulation in some precincts, as well as for Ballot Tabulation at the Central Counting Location. In this mode, a particular unit may be designated as either of the following configurations:</p> <p><u>Precinct Count: Combined Mode</u></p> <p><u>Central Count: Combined Mode</u></p> |
| Contest | Race for elected office between candidates or parties. Question, proposal, or amendment. |
| 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. |
| 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. |
| Demonstration Ballot | <p>Ballot, used for Demonstration purposes, which displays a mock election, as follows:</p> <p><u>Offices are frequently fictitious.</u></p> <p><u>Candidates are usually historical figures.</u></p> <p><u>Measures are obviously not serious.</u></p> <p>Such ballots may be used and re-used for demonstrations from Voter to Voter and from election to election.</p> |

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| 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. |
| Device Report | Report which lists the serial number or other identification indicator of an Optech Eagle unit and of the MemoryPack installed therein. |
| Dual Precinct Processing | Capability of processing two precincts simultaneously. |
| Election | Process of creating a ballot, printing it, verifying it, and running the election, including registering the votes of the Voters. |
| Election Coding | FEC definition: Process by which Election Officials or their designees use voting system software to logically define the ballot for a specific election. |
| 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: <u>Opening the Polls</u> <u>Official Election</u> <u>Closing the Polls</u> |
| 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. |
| “Famous Names” | Mock election ballot carrying: <u>Fictitious offices, e.g., Secretary of Entertainment</u> <u>Candidates who are familiar in history, e.g. Carry Nation, Babe Ruth</u> This ballot is intended for use not only as a demonstration item, but also as an Accuracy Test. |
| Header Code | Bar Code used to identify the ballot as a valid ballot for the Precinct, as follows: <u>Ballot Style</u> <u>Split Precinct</u> <u>Political Party</u> <u>Precinct</u> Header Codes are placed on the top front of the ballot. |
| 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. |

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| Keypad | <p>Card Activator component, which includes the following buttons:</p> <ul style="list-style-type: none"><u>Numeric Buttons (1-0)</u><u>Status Button</u><u>Eject Button</u><u>Up-Arrow Button</u><u>Yes Button</u><u>No Button</u><u>Down-Arrow Button</u><u>Menu Button</u><u>Enter Button</u> <p>A 12 - key pad located under the rear door of the Optech Eagle, used for entering selected utility codes, such as controlling a repetition count, printing totals, override, etc.</p> |
| Local Election Official | <p>(LEO): The individual or officer of a local governmental unit responsible for certifying candidates and issues to be placed on the ballot.</p> |
| Logic Tests | <p>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.</p> <p>The output from the logic test can be in the form of a press release bulletin, signed by the Logic and Accuracy Board prior to certification and submission of vote tally programs and files to the Secretary of State not less than seven days before the election. Each time a logic test is produced, a Logic and Accuracy Board Member, if available, should verify and sign the output.</p> |
| Maintenance Diagnostics | <p>Series of software and hardware tests and system utilities that allow for trouble shooting and setting system parameters.</p> |
| Marking Device | <p>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.</p> |
| MemoryPack | <p>Solid-state portable cartridge, which is used as follows:</p> <ul style="list-style-type: none"><u>By the MPR: To burn election data onto it, from WinEDS/EMS (Election Management Software), to be used during the election</u><u>By an Optech Eagle: For tabulating ballots</u> |
| MemoryPack Receiver | <p>(MPR): SVS device used to:</p> <ul style="list-style-type: none"><u>Burn election data, from WinEDS/EMS, onto MemoryPacks, to be used during the election.</u><u>Be used by the Optech Eagle/Insight for tabulating ballots.</u><u>Read ballot totals from MemoryPacks, to transfer them to AERO, for processing.</u> |

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| Object Code | Binary code produced by a compiler or assembler that can be executed directly by a computer without further simplification. A machine language program is written in object code. |
| Official Canvass | Consists of a Post-Election audit of all Precinct returns and Absentee Ballot returns. |
| Official Election | Election Day sub-phase, when Voters cast official ballots for their candidate choices. |
| Opening the Polls | Election Day sub-phase, which allows for Opening the Polls, for the Official Election sub-phase. |
| Operating Mode | The following “passes” through the voting process: <u>Pre-Election LAT</u> <u>Official Election,</u> <u>Post-Election LAT</u> |
| 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. |
| Outstacked Ballot | A ballot which is outstacked for one of the following reasons: <u>Misread</u> <u>Blank</u> <u>Unable to be processed</u> |
| Overridden Error Ballot | Unprocessable or Error Ballot, which is returned to the Voter, and then overridden. |
| Overvote | Generally prohibited practice of voting for more than the allotted number of candidates for the office being contested. |
| Post-Election | Election phase, which includes all activities occurring after Closing the Polls. |
| 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. |
| 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. |

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| Precinct Count System | Voting system, which tabulates/tallies ballots/votes at the Polling Place. Is: <u>Typically used to tabulate/tally ballots/votes as they are cast.</u> <u>Programmed to print the results of the ballot tabulation / vote tally after Closing the Polls.</u> |
| 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. |
| Protective Counter | Optical Scan function, which includes a counter that records all of the testing and election ballots read since the device was built. |
| Provisional Ballot | FEC definition: 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. |
| Questioned Ballot | A ballot on which the Voter may be identified. |
| Read Error Ballot | Ballot which causes the voting system to determine the ballot as unreadable for any of the following reasons: <u>Is missing a necessary printed element</u> <u>Contains some extraneous mark</u> <u>Is torn</u> |
| Rear Bin | Ballot Bin, which usually contains the larger quantity of ballots that have been completely counted and require no further action. |
| Red-Striping | Since more than one Classification of ballot may be deposited in a Ballot Bin; red-striping establishes another level of differentiation for purposes of audit or further action, by causing the Optech Eagle to mark certain classifications of ballots with a stripe. |
| 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. |
| 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. |
| 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. |
| Solo Mode | Indicates Ballot Tabulation entirely at one of the following two levels: <u>ONLY at the Polling Places</u> <u>ONLY at the Central Counting Location</u> |

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| Source Code | <p>A programmer codes a program in a specific language called source code. The source code of the computer language is then:</p> <p><u>Compiled</u> <u>Interpreted</u> <u>Or assembled</u></p> <p>Into object code by the computer. The result is a machine language program in binary form, which can be run by the computer.</p> |
| Spoiled Ballot | <p>Spoiled or defaced paper ballot that the Voter returns to an Election Officer and receives another ballot.</p> |
| Striping | <p>Please see Red-Striping.</p> |
| Summary System | <p>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.</p> |
| System Proofing | <p>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.</p> |
| Test Deck | <p>Stack of vote-marked ballots which are not election-specific but which will generate predictable, patterned results. This deck is used for Accuracy Testing.</p> |
| Testing | <p>Purpose is to:</p> <p><u>Determine that the election coding is accurate.</u> <u>Ensure public confidence.</u> <u>Verify the Ballot Tabulation program on Election Day.</u></p> |
| Tracking Point | <p>Point which establishes an audit trail during the canvass.</p> |
| Un-Voted Ballot | <p>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.</p> |
| Undervote | <p>FEC definition: 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)</p> |
| Unused Ballots | <p>Paper ballots that have not been voted.</p> |
| Voted Ballot | <p>Ballot on which the Voter has marked to select a candidate or measure and cast their ballot.</p> |

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.

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Appendix B: Voting Variations

This appendix identifies the following Voting Variations, which are supported by the Optech Eagle:

- Open Primary
- Partisan Offices
- Non-Partisan Offices
- Write-In
- Rotation
- Split Precinct
- Vote For
- Recall Voting
- Cumulative Voting
- Provisional Voting

B.1 OPEN PRIMARY

An 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.

B.2 PARTISAN OFFICES

Partisan Offices are elected offices for which candidates run as representatives of a political party.

B.3 NON-PARTISAN OFFICES

Non-Partisan Offices are elected offices for which candidates run independent of political party affiliation.

NOTE: These are also known as Special Elections.

B.4 WRITE-IN

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.

B.4.1 CURRENT CANDIDATES ONLY

Only candidates who run in the contest can get a Write-In vote.

B.4.2 FREE-FOR-ALL

Any Write-In vote counts.

B.5 ROTATION

Rotation is 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.

NOTE: This is also known as Ballot Rotation.

Each office may be declared as:

- State-Level Rotation (Assembly District)
- County-Level Rotation (Supervisory District)

These different localities have different Rotation rules in California.

B.6 SPLIT PRECINCT

A 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.

B.7 VOTE FOR

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.

NOTE: This is also known as Vote for N of M.

B.8 RECALL VOTING

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.

NOTE: This is also known as Recall Issues (with Options).

B.9 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.

B.10 PROVISIONAL VOTING

Provisional Voting 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.

NOTE: This is also known as Challenged Ballots.

Appendix C: Ballot Disposition

The following are the default options used for ballot disposition. The disposition of a ballot depends upon the Election Authority Requirements in your jurisdiction. These options may be overridden by codes in your precinct election PROM. See your election authority for these requirements. The eight default disposition codes of the Optech Eagle are listed below:

- Regular Ballot
- Overvoted Ballot
- Write-In Ballot
- Un-Voted Ballot
- Unprocessable Error Ballot
- Read Error Ballot
- Overridden Error Ballot (Option)

A ballot can be returned to the voter because it is overvoted, unvoted (blank), or unreadable (misread). If the voter insists that the ballot be accepted as is, the override button may be activated to accept the ballot.

Ballot Disposition Report:

| BALLOT | C | R | S |
|---------------------|---|---|---|
| DISPOSITION | C | E | E |
| SETTINGS | O | R | N |
| | U | E | T |
| | N | A | E |
| | T | R | R |
| 1. REGULAR | Y | Y | - |
| 2. OVERVOTED | N | - | - |
| 3. WRITE-IN | Y | - | Y |
| 4. UN-VOTED | Y | Y | - |
| 5. UNPROC. ERROR | N | - | - |
| 6. READ ERROR | N | - | - |
| 7. OVERRIDDEN ERROR | N | - | Y |

Returned Error Ballots:

These ballots have not been counted. They are read error ballots or ballots that cannot be processed and have been overridden. These ballots have been red striped and are stacked in the center bin for review and disposition after the polls have closed.

Ballot Path and Striping Regulations:

The intent of the ballot path and striping regulations is to treat all voters in the same manner while conforming to the requirements of the Elections Code. Should an Election Official desire a change in these path and striping regulations, such may be granted by the Secretary of State following a review of the official's written request.

C.1 REGULAR BALLOT

Ballot, which has been voted and is not distinguished by any anomaly, such as overvoted offices, damaged, blank, etc.

Regular Ballot is completely tabulated and sent to the Rear Bin.

C.2 OVERVOTED BALLOT

Ballot, where the Voter has voted for more than the allotted number of candidates for the office being contested.

OVERVOTED BALLOT!

DO EITHER OF THE FOLLOWING #1 OR #2

1. Pull ballot out, then try again, remake, or place in auxiliary bin.
2. Press "3" to read and accept ballot.

The ballot disposition is as follows:

| Configuration | Ballot Disposition |
|--------------------------------------|--|
| Precinct Count: Combined Mode | Sent to Rear Bin. |
| Central Count: Combined Mode | Sent to Rear Bin. |
| Precinct Count: Solo Mode | <ul style="list-style-type: none"> • Return to Voter. • Allow Re-Issue. • Override: Sent to Rear Bin. |
| Central Count: Solo Mode | Sent to Rear Bin. |
| Absentee Count | Sent to Rear Bin. |

C.3 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 Ballot is tabulated (except for Write-In) and sent to the Center Bin, for review after Closing the Polls.

All Write-In Ballots are sent to the Center Bin to be reviewed by the Write-In Board.

C.4 UN-VOTED 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.

UN-VOTED BLANK BALLOT!

DO EITHER OF THE FOLLOWING #1 OR #2

1. Pull ballot out, then try again, remake, or place in auxiliary bin.
2. Press "3" to read and accept ballot.

The ballot disposition is as follows:

| Configuration | Ballot Disposition |
|--------------------------------------|--|
| Precinct Count: Combined Mode | Sent to Rear Bin and Red-Striped. |
| Central Count: Combined Mode | <ul style="list-style-type: none"> • Return to Operator for duplication. • Override: Sent to Rear Bin. |
| Precinct Count: Solo Mode | <ul style="list-style-type: none"> • Return to Voter. • Override: Sent to Rear Bin. |
| Central Count: Solo Mode | <ul style="list-style-type: none"> • Return to Operator for duplication. • Override: Sent to Rear Bin. |
| Absentee Count | <ul style="list-style-type: none"> • Return to Operator for duplication. • Override: Sent to Rear Bin. |

C.5 UNPROCESSABLE ERROR BALLOT

Ballot which cannot be processed because of invalid Security ID Header Code, etc.

SECURITY ID DOES NOT MATCH!
 WRONG BALLOT TYPE FOR THIS PRECINCT

DO EITHER OF THE FOLLOWING #1 OR #2

1. Pull ballot out, then try again, remake, or place in auxiliary bin.
2. Press "3" to read and accept ballot.

12:54:33, 04/19/94
LAST POSITION MISMATCH!
 BALLOT IS (N-NNN)
 BALLOT SHOULD BE (N-NNN)
 READ ERROR, OR
 SMUDGED BALLOT, OR
 WRONG BALLOT TYPE FOR THIS PRECINCT

DO EITHER OF THE FOLLOWING #1 OR #2

1. Pull ballot out, then try again, remake, or place in auxiliary bin.
2. Press "3" to read and accept ballot.

The ballot disposition is as follows:

| Configuration | Ballot Disposition |
|--------------------------------------|---|
| Precinct Count: Combined Mode | <ul style="list-style-type: none"> • Return to Voter. • Ballot Re-Make. • Then to Ballot Duplication Board. |
| Central Count: Combined Mode | <ul style="list-style-type: none"> • Return to Operator. • Ballot Re-Make. • Then to Ballot Duplication Board. |
| Precinct Count: Solo Mode | <ul style="list-style-type: none"> • Return to Voter. • Ballot Re-Make. • Then to Ballot Duplication Board. |
| Central Count: Solo Mode | <ul style="list-style-type: none"> • Return to Operator. • Ballot Re-Make. • Then to Ballot Duplication Board. |
| Absentee Count | <ul style="list-style-type: none"> • Return to Operator. • Ballot Re-Make. • Then to Ballot Duplication Board. |

C.6 READ ERROR BALLOT

Your election jurisdiction has tested your Optech Eagle unit with samples of the actual ballots. However, either ballot printing or ballot trimming problems could have occurred with the batch of ballots in your precinct which could cause ballots to be returned to Voter with error messages. In addition, while the Optech Eagle 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.

ERROR READING BALLOT (START BAR DETECT)

DO EITHER OF THE FOLLOWING #1 OR #2

1. Pull ballot out, then try again, remake, or place in auxiliary bin.
2. Press “3” to read and accept ballot.

The ballot disposition is as follows:

| Configuration | Ballot Disposition |
|--------------------------------------|---|
| Precinct Count: Combined Mode | <ul style="list-style-type: none"> • Return to Voter. • To PRC Board. • Hold for Decision. |
| Central Count: Combined Mode | <ul style="list-style-type: none"> • Return to Operator. • To Election Official for Decision. |
| Precinct Count: Solo Mode | <ul style="list-style-type: none"> • Return to Voter. • To PRC Board. • Hold for Decision. |
| Central Count: Solo Mode | <ul style="list-style-type: none"> • Return to Operator. • To Election Official for Decision. |
| Absentee Count | <ul style="list-style-type: none"> • Return to Operator. • To Election Official for Decision. |

C.7 OVERRIDDEN ERROR BALLOT

The disposition of a ballot depends upon the election authority requirements in your jurisdiction. A ballot can be returned to the voter because it is overvoted, unvoted (blank), or unreadable (misread). If the voter insists that the ballot be accepted as is, the override button may be activated to accept the ballot.

The term "override" refers to the situation where an uncounted ballot is returned to the Voter/Operator for corrective action (usually remake and replacement); but the Voter/Operator opts instead to have ballot processed as is. When such a ballot is encountered, it is not fully discharged from the throat of the Eagle. The option to "override" the return action is exercised by the precinct official or the central count operator pressing the #3 button on the keypad. When this is done, ballot movement is reversed once more and it is passed along a selected path for striping (optional), processing and deposit into a bin. The [3] key is the only button available to the precinct official or operator during processing. The override option is not permitted with respect to damaged ballots.

For Override Instructions, please see the *Optech Eagle III-Pe Operators Manual*.

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Appendix D: Logic and Accuracy Testing

This appendix defines the Pre-Election LAT, as follows:

- Pre-Conditions
- Performing Pre-Election LAT
- Logic Testing
- Accuracy Testing
- Test Deck Tabulation Results

Complete testing of the voting 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.

Testing of the Optech Eagle as set forth in this appendix shall include every unit to be used.

The test procedures described herein are a required MINIMUM and do not preclude additional testing performed at the option of the Election Official.

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 in *sub-chapter 2.14: Retention of Test Materials and Results*, herein.

D.1 PRE-CONDITIONS

Prior to Logic and Accuracy tests, the following must be assured:

1. Diagnostic Tests on all equipment shall have been performed, per the *Optech Eagle Maintenance Manual*.
2. Test decks of ballots shall have been prepared as specified per *appendix D.5: Test Deck Tabulation Results*.
3. 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 D.4: Accuracy Testing*.
4. 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.

D.2 PERFORMING PRE-ELECTION LAT

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 Eagle being sent to a Polling Place, both the physical unit itself and the logical elements in the MemoryPack. You will do the following:

- Feed a stack of official test ballots through the Optech Eagle being tested.
- Then compare the results printed out on the Total Ballot Statistics Report tape with the tape of known results included with the test ballots.

The results must be identical.

Note that both of these conditions will be true during Pre-Election LAT.

D.3 LOGIC TESTING

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 units.

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 undervotes.
- 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 below in such a manner as to meet these guidelines. All tests shall result in reporting that matches predetermined results. All reports and test materials must be retained as specified in *sub-chapter 2.14: Retention of Test Materials and Results*, herein.

D.3.1 PERFORMANCE OF LOGIC TEST

Pre-Election Night Testing:

An election-specific Logic Test shall be performed on 100% of the units to be used. This Logic Test may begin within 50 days of the election and can be of sufficient duration to assure its adequacy.

Election Night Testing:

Before and following election night Ballot Tabulation, Logic Tests shall be performed.

Post-Election Testing:

For the Official Canvass conduct a Logic Test prior to processing.

Following the Official Canvass, conduct Accuracy Test for 100% of the units.

It is suggested that zeroing of MemoryPacks not be implemented until the Eagle results tape for each precinct is compared against Summary System Precinct reports to assure that they match.

The predetermined results for balancing of election processing must be available for inspection and sign off per the requirements of the jurisdiction.

The official Logic test must be completed, certified, and received, per the requirements of the jurisdiction. 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 Eagle 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 recounted if their totals have not already been added to the backup file.

The logic test ballots shall be tabulated using the Optech Eagle. The resulting logic Ballot Tabulation shall be compared in detail with the predetermined logic Ballot Tabulation. Any differences between the two logic Ballot Tabulation 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 Tabulation, 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.

D.3.2 PREPARATION OF LOGIC TEST MATERIALS

The responsible Election Official shall cause the following logic test materials to be prepared and tested.

D.3.2.1 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."

Within 50 days of the election, 100% of MemoryPacks shall have a Logic Test performed on them.

Logic Tests for the Summary System shall be for a minimum of one MemoryPack per ballot style.

D.3.2.2 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:

- Regular Test Ballots
- Overvoted Test Ballots
- Un-Voted Test Ballots
- Recall Measure and Candidates Contest Test Ballots

Regular 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.

Un-Voted 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 Offices, conducted in accordance with the Recall Voting 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
1. Marked "No" only
2. Marked "Yes" and for the first candidate
3. Marked "No" and for the first candidate
4. Marked "Yes" and for the second candidate
5. Marked "No" and for the second candidate
6. Marked "Yes" and for both the first and second candidate
7. Marked "No" and for both the first and second candidate
8. Marked both "Yes" and "No" and for the first candidate
9. Marked both "Yes" and "No" and for the second candidate
10. Marked both "Yes" and "No" and for both first and second candidates
11. Marked both "Yes" and "No" only
12. Marked for first and second candidate only
13. Marked for first candidate only
14. Marked for second candidate only

When the Recall Office 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 Recall Voting, and only one official candidate, test ballot card sets, numbered 1, 2, 3, 4, 9, 12, and 14 only shall be prepared.

D.3.3 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.

D.4 ACCURACY TESTING

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 Eagle 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.

D.4.1 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 Eagle 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, unless there is no recovery. Upon recovery from a power loss, all counters are restored to previous levels and a confirmation prints.

D.4.2 PREPARATION OF ACCURACY TESTS

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 per the requirements of the jurisdiction.

D.4.3 REUSABLE ACCURACY TEST DECK

A reusable test deck consisting of 165 pre-printed ballots conforming to a "Famous Names" election is used to test the accuracy of each unit 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 Eagle. 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:

| Ballot Style | Description | Quantity | Color |
|--------------|--------------|----------|--------|
| F1 | 1st Position | 10 | Blue |
| F2 | 2nd Position | 20 | Green |
| F3 | 3rd Position | 30 | Buff |
| F4 | 4th Position | 40 | Canary |
| F5 | 5th Position | 50 | Cherry |
| F6 | Write-In #1 | 3 | White |
| F7 | Write-In #2 | 3 | White |
| F8 | Over Voted | 3 | White |
| F9 | Error | 3 | White |
| F0 | Blank | 3 | White |

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."

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 per the rules of the jurisdiction.

D.4.4 ACCURACY TEST REPORT

When the Reusable Test Deck is processed utilizing the Optech Eagle it will produce a report showing votes per voting position as shown in *Appendix D.5: Test Deck Tabulation Results*. This test verifies the ability of the Optech Eagle 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 unit.

D.5 TEST DECK TABULATION RESULTS

D.5.1 BALLOT FRONT

| Straight Party | | State Senator 37 th District | | Board of Education | |
|-------------------------------------|----|---|----|----------------------------|-----|
| Virginia Party | 0 | Nightingale | 10 | Washington | 10 |
| Ohio Party | 0 | Carnegie | 20 | Einstein | 20 |
| California Party | 0 | Key | 30 | Edison | 30 |
| New York Party | 0 | Hearst | 40 | Keller | 40 |
| Overvotes | 0 | Write-In | 3 | Dewey | 50 |
| Undervotes | 0 | Overvotes | 0 | Write-In | 0 |
| | | Undervotes | 59 | Overvotes | 0 |
| | | | | Undervotes | 12 |
| President and Vice President | | State Legislature 37 th District | | Director of Recreation | |
| Zachary Taylor and Millard Fillmore | 10 | Anthony | 10 | Paige | 10 |
| Harrison/Steven | 20 | Eisenhower | 20 | Grange | 10 |
| Arthur/Hendricks | 30 | Roosevelt | 30 | Weismuller | 20 |
| Roosevelt/Fairbanks | 40 | Madison | 40 | Rockne | 20 |
| Write-In | 3 | Write-In | 0 | Dempsey | 30 |
| Overvotes | 0 | Overvotes | 0 | Ruth | 30 |
| Undervotes | 59 | Undervotes | 62 | Zaharias | 40 |
| | | | | Write-In | 3 |
| | | | | Write-In | 3 |
| | | | | Overvotes | 0 |
| | | | | Undervotes | 158 |
| U.S. Senator | | State Treasurer | | Director of Entertainment | |
| Dirksen | 10 | Vanderbilt | 10 | Lombard | 10 |
| Curtis | 20 | Getty | 20 | Jessel | 10 |
| Hancock | 30 | Rockefeller | 30 | Rose | 10 |
| Aldrich | 40 | Morgan | 40 | Smith | 20 |
| Write-In | 0 | Write-In | 0 | Duncan | 20 |
| Overvotes | 0 | Overvotes | 0 | Ellington | 20 |
| Undervotes | 62 | Undervotes | 62 | Write-In | 0 |
| | | | | Write-In | 0 |
| | | | | Write-In | 0 |
| | | | | Overvotes | 0 |
| | | | | Undervotes | 396 |
| U.S. Representative | | Associate Justice | | Director of Transportation | |
| Wilson | 10 | Hand | 10 | Ford | 10 |
| LaFollette | 20 | Darrow | 20 | Olds | 20 |
| Redfield | 30 | Marshall | 30 | Write-In | 0 |
| Wadsworth | 40 | Jay | 40 | Overvotes | 0 |
| Write-In | 0 | Write-In | 0 | Undervotes | 132 |
| Overvotes | 0 | Overvotes | 0 | | |
| Undervotes | 62 | Undervotes | 62 | | |

D.5.2 BALLOT BACK

| OFFICES | | PROPOSITIONS | | | |
|--|-----|---------------------------------------|-----|----------------------------------|-----|
| Judge – 2nd District | | 1. Closing Polling Places | | 5. Gold to Treasury | |
| Douglas | 50 | YES | 50 | YES | 50 |
| Moore | 100 | NO | 100 | NO | 100 |
| Warren | 0 | Overvotes | 0 | Overvotes | 0 |
| Solomon | 0 | Undervotes | 12 | Undervotes | 12 |
| Write-In | 0 | | | | |
| Overvotes | 0 | | | | |
| Undervotes | 12 | | | | |
| Judge – 3rd District | | 2. Federal Reserve Act | | 6. Mississippi Navigation | |
| Holmes | 50 | YES | 50 | YES | 50 |
| Baer | 100 | NO | 100 | NO | 100 |
| Nation | 0 | Overvotes | 0 | Overvotes | 0 |
| Taney | 0 | Undervotes | 12 | Undervotes | 12 |
| Write-In | 0 | | | | |
| Overvotes | 0 | | | | |
| Undervotes | 12 | | | | |
| Judge – 4th District | | 3. Waterway – Atlantic/Pacific | | 7. Abolishing IRS | |
| McAdoo | 50 | YES | 50 | YES | 50 |
| Armstrong | 100 | NO | 100 | NO | 100 |
| Todd | 0 | Overvotes | 0 | Overvotes | 0 |
| Write-In | 0 | Undervotes | 12 | Undervotes | 12 |
| Overvotes | 0 | | | | |
| Undervotes | 12 | | | | |
| Judge – 5th District | | 4. Louisiana Territory | | 8. Presidential Election | |
| Truth | 50 | YES | 50 | YES | 50 |
| Moran | 100 | NO | 100 | NO | 100 |
| Kent | 0 | Overvotes | 0 | Overvotes | 0 |
| Write-In | 0 | Undervotes | 12 | Undervotes | 12 |
| Overvotes | 0 | | | | |
| Undervotes | 12 | | | | |

Appendix E: Special Procedures for Resolving Problems

This appendix provides the following Special Procedures for Resolving Problems:

- Central Trouble Review Board
- Technician Dispatch
- Technician Reporting

E.1 CENTRAL TROUBLE REVIEW BOARD

Trained Maintenance Technicians and Administrative personnel make up the Central Trouble Review Board.

The function of the Central Trouble Review Board is to assist Poll Workers in resolving all problems that they may have while conducting the election.

Trained Maintenance Technicians should be available to assist in diagnosing problems on the telephone. Administrative personnel should be available to answer questions of Voter registration and supplies requirements.

It is imperative that a problem-tracking system is used and that each call is logged. Log the following information:

- Precinct ID
- Precinct
- Location
- Person calling
- Nature of problem
- Time of call
- Name or ID of technician dispatched
- Time of day dispatched
- Time of day trouble reported, cleared

E.2 TECHNICIAN DISPATCH

Certain problems will require that a Maintenance Technician go to the Polling Place to deliver supplies or resolve a problem.

Following are recommendations to improve the response time and minimize the number of technicians needed:

- Determine precinct locations where Maintenance Technicians will be needed and assign accordingly.
- Have each Maintenance Technician call in after each problem is resolved.
- Provide maps that identify precinct locations and base locations of Maintenance Technicians.
- Provide two-way-radio communication or cellular telephones for the Maintenance Technicians.
- Provide spare machines and supplies for each Maintenance Technician.

E.3 TECHNICIAN REPORTING

Maintenance Technicians should keep a log of each precinct they visit on Election Day.

The following information should be included:

- Report of trouble found
- Corrective action
- Parts, supplies, or equipment used
- Time arrived at trouble site
- Time departed from trouble site

Appendix F: Audit Record Data

This chapter defines the following System Management and Security for the Optech Eagle:

- Audit Trails
- Statistical Ballot Data Required
- Diagnostic Test Results
- Access OK & Election Initialization Messages
- Polls Opening/Closing Time Messages (Option)
- If Ballot Read Before Poll Opening Time
- "Return to Voter" Messages

The Local Election Official has management control over all resources employed during the voting and Ballot Tabulation process until the control is voluntarily relinquished when no longer needed.

If it becomes necessary to transfer control of any equipment back to the vendor for repairs, operational elections activity may not be carried out on the equipment while it is under the vendor's control.

F.1 AUDIT TRAILS

All Ballot Tabulation operations, including mandated Pre- and Post-Election testing, are documented in sequential order in the event log tape, along with an automated log which records the time and date of "system events" related to Ballot Tabulation. This event log tape comprises the following information:

- Diagnostic Routines run during preparation for the election
- Access OK & Election Initialization Messages
- Zero Ballot Statistics Report
- Allowable Header Codes Report
- Status and error messages printed before, during, and after the election
- Total Ballot Statistics Report

The event log tape is continued until final certification of results.

The event log tape is printed while Closing the Polls.

It shall be:

- Retained for the same time period as ballots for that election
- Subject to the same physical security and integrity measures

F.1.1 SYSTEM EVENTS

"System events" in the Ballot Tabulation process include:

- Initiation of the Ballot Tabulation program
- Initiation of Ballot Tabulation
- 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, on the event log tape, 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.

F.1.2 SPECIFIC AUDIT TRAILS

The event log tape includes the following Audit Trail information:

- 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 Eagle
- 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

F.2 STATISTICAL BALLOT DATA REQUIRED

The following data is critical to tracking and reporting the ballot counting process, and is maintained by the Optech Eagle, per the *Optech Eagle III-Pe Operators Manual*:

- For the election definition phase, diagnostic proof listings of candidates and active vote positions for each ballot style or precinct is reported by the EMS election coding system (during Election Coding and Ballot Definition), and by the following reports, which are printed during Pre-Election LAT and while Opening the Polls:
 - Zero Ballot Statistics Report
 - Allowable Header Codes Report
- The number of ballots read within each precinct, by type, including totals for each party in primary elections are reported in the Total Ballot Statistics Report, which is printed while Closing the Polls.
- The total number of ballots processed is reported in the Total Ballot Statistics Report, which is printed while Closing the Polls.
- Separate accumulations and reporting of the quantity of overvotes, undervotes, and write-ins within each precinct for each race or issue, is reported by the Total Ballot Statistics Report, which is printed while Closing the Polls.
- Availability of the above information in summary and by precinct is included in the Total Ballot Statistics Report, which is printed while Closing the Polls.

F.3 DIAGNOSTIC TEST RESULTS

Diagnostic Test Results are listed by the Diagnostic Routines (reports), per the *Optech Eagle III-Pe Operators Manual*.

Both pass and fail results will be reported by the Optech Eagle.

F.4 ACCESS OK & ELECTION INITIALIZATION MESSAGES

The following Access OK & Election Initialization Messages are reported by the Optech Eagle.

```
ACCESS O.K.  
2:33:15 PM, 07/28/99  
REQUEST TO INITIALIZE VOTE TOTALS  
(All totals set to zero!)  
  
Press 0 key if this is O.K., 9 is NOT O.K.  
  
VOTE TOTALS ARE ZERO  
THU, APRIL 13, 1995 9:51:09 AM  
Pack RAM currently has this date
```

If access is not granted, that will also be reported by the Optech Eagle.

F.5 POLLS OPENING/CLOSING TIME MESSAGES (OPTION)

If this option is encoded into the Election Parameter data, using the EMS election coding system, Polls Opening/Closing Time Messages will be displayed.

F.6 IF BALLOT READ BEFORE POLL OPENING TIME

If a ballot is read before the poll opening time, a message will be generated.

F.7 "RETURN TO VOTER" MESSAGES

F.7.1 OVERVOTED BALLOT

Please see *appendix C.2: Overvoted Ballot*.

F.7.2 UN-VOTED BALLOT

Please see *appendix C.4: Un-Voted Ballot*.

F.7.3 UNPROCESSABLE ERROR BALLOT

Please see *appendix C.5: Unprocessable Error Ballot*.

F.7.4 READ ERROR BALLOT

Please see *appendix C.6: Read Error Ballot*.

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Appendix G: Forms

G.1 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)

G.2 CERTIFICATE OF BIENNIAL INSPECTION

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]