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# TEST REPORT

## CHANGE RELEASE REPORT OF THE AVC EDGE DRE VOTING MACHINE (FIRMWARE RELEASE 4.1D) WITH CARD ACTIVATOR (FIRMWARE RELEASE 4.32)

For  
Sequoia Voting Systems  
7677 Oakport Street  
Suite 800  
Oakland, CA 94621

STATE OF ALABAMA }  
COUNTY OF MADISON }

AL Professional Engineer  
Registration No. 16011

Joseph T. Hazeltine, P. E. being duly sworn, deposes  
and says: The information contained in this report is the result of complete and  
carefully conducted testing and is to the best of his knowledge true and correct in  
all respects.

Joseph T. Hazeltine  
SUBSCRIBED and sworn to before me this 8th day of April 2003

Sammy Davis  
Notary Public in and for the State of Alabama at Large  
My Commission expires 22 Oct 2006

WH-1404, Rev. Feb '97

Wyle shall have no liability for damages of any kind to person or property, including  
special or consequential damages, resulting from Wyle's providing the services  
covered by this report.

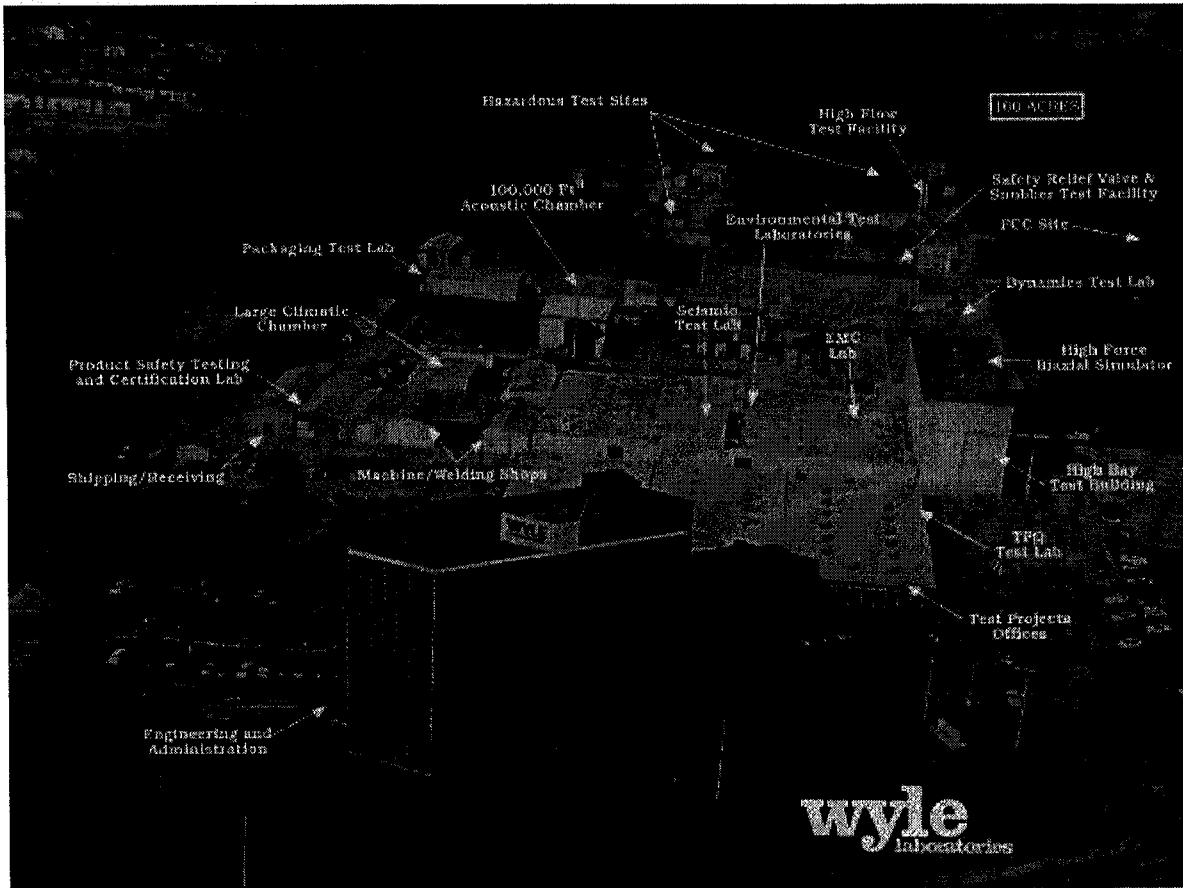
TEST BY: [Signature] 4/8/03  
J. R. Dearman, Project Engineer Date

APPROVED BY: [Signature] 4/8/03  
J. T. Hazeltine, Sr. Dir. Eastern Test Operations Date

WYLE Q.A.: [Signature] 4/8/03  
T. R. Hamilton, Q. A. Manager Date

(sh)





AERIAL VIEW OF WYLE/HUNTSVILLE

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## 1.0 INTRODUCTION

### 1.1 Scope

This report presents the test results for Qualification Testing of the Sequoia AVC Edge Direct-Record Electronic (DRE) Voting Machine, Firmware Release 4.1D and Card Activator, Firmware Release 4.32.

### 1.2 Objective

The objective of this test program was to ensure that the Edge DRE Voting Machine, using the revised firmware release 4.1D, and the optional Card Activator, using the revised firmware release 4.32, continued to comply with the guidelines of the Federal Election Commission (FEC) National Voting System Standards, January 1990, with respect to coding practices and functionality.

### 1.3 Summary

A change release to the Edge and Card Activator firmware was implemented thus requiring a review of the source code and follow-up functional regression testing to ensure continued compliance with the requirements of the Federal Election Commission Standards for Punchcard, Marksense, and Direct Recording Electronic Voting Systems, January 1990.

The regression testing (in-depth source code review and functional tests) was limited to the Edge and Card Activator resident machine firmware and hardware used at the precinct level. The test elections used for the regression testing were created by the Sequoia Technical Representative using a previously qualified WinEDS Release 2.6.220/7.18.02

It was demonstrated that the Edge using release 4.1D, and the Card Activator using release 4.32, successfully met the qualification test requirements of the Federal Election Commission Standards for Punchcard, Marksense, and Direct Recording Electronic Voting Systems, January 1990. Anomalies observed during functional testing were successfully resolved and closed out upon program completion.

**Due to the varying requirements of individual jurisdictions, it is recommended by the FEC Standards that local jurisdictions perform pre-election logic and accuracy tests on all systems prior to their use in an election within their jurisdiction.**

## 2.0 REFERENCES

- Sequoia Voting Systems Purchase Order No. 10001386.
- Sequoia Voting Systems AVC Edge Functional Specification, Release 4.1, August 18, 2002.
- Sequoia Voting Systems AVC Edge Software Technical Description, Release 4.1, Copyright 1998 - 2002.
- Sequoia Voting Systems Card Activator 4.2, Operator's Manual, Version 1.02, October 2002.
- Sequoia Voting Systems Card Activator 4.2, Poll Worker's Manual, October 2002.
- Sequoia Voting Systems Card Activator 4.2, System Software Specification, Version 1.02, October 2002.
- Sequoia Voting Systems AVC Edge Operator's Manual, Release 4.1C, Copyright 2000 - 2002.
- Sequoia Voting Systems EDGE Audio Component Poll Worker's/Operator's Manual, for AVC Edge Release 4.1, August 2002.
- Sequoia Voting Systems AVC Edge Voter Instructions Release 4.1, Copyright 1998 - 2002.
- Sequoia Voting Systems AVC Edge System Maintenance Manual, Release 4.1C, Copyright 2000-2002.
- Sequoia Voting Systems AVC Edge Coding Standards, Release 4.1, Copyright 1998 - 2002.
- Sequoia Voting Systems AVC Edge Specification for CPU Board, Release 4.1, Document Number 096050301, Copyright 1998 - 2002.
- Sequoia Voting Systems AVC Edge Data Dictionary, Release 4.1, Copyright 1999 - 2002.
- Sequoia Voting Systems AVC Edge Compliance with FEC Standards, Release 4.1, Copyright 1998 - 2002.
- Sequoia Voting Systems AVC Edge Penetration Analysis, Release 4.1, Copyright 1998 - 2002.
- Sequoia Voting Systems AVC Edge Security Overview, Release 4.1, Copyright 1998 - 2002.
- Sequoia Voting Systems AVC Edge System Hardware Description, Release 4.1, Copyright 1998 - 2002.

## 2.0 REFERENCES (Continued)

- Sequoia Voting Systems AVC Edge System Software Specification, Release 4.1, Copyright 1998 – 2002.
- Sequoia Voting Systems AVC Edge Technical Data Package, Release 4.1, Copyright 1998 – 2002.
- Wyle Laboratories Test Report, 44733-01, Qualification Testing of the AVC Edge DRE Voting Machine (Hardware Level 3.00, Firmware Release 3.00), May 30, 2001.
- Wyle Laboratories Test Report 44733-05, Change Release Report of the AVC Edge DRE Voting Machine (Hardware Revision 3.1, Firmware Release 3.1) with Card Activator (Hardware Revision D, Firmware Release 2.8).
- Wyle Laboratories Test Report 44733-04, Change Release Report of the AVC Edge DRE Voting Machine (Firmware Release 4.1B) with Card Activator (Firmware Release 4.2).
- Wyle Laboratories' Quality Assurance Program Manual, Revision 2.
- MIL-STD-45662A, "Calibration System Requirements".
- ANSI/NCSL Z540-1, "Calibration Laboratories and Measuring and Test Equipment, General Requirements".
- ISO 10012-1, "Quality Assurance Requirements for Measuring Equipment".

## 3.0 CUSTOMER

Sequoia Voting Systems  
7677 Oakport Street  
Suite 800  
Oakland, CA 94621

## 4.0 TEST HARDWARE/SOFTWARE DESCRIPTION

### 4.1 Hardware

#### 4.1.1 AVC Edge

The AVC Edge is a Direct Record Electronic (DRE) voting device that incorporates a color LCD with an integral touchscreen, a control panel for use by election poll workers, appropriate electronic circuitry and processing devices for performing specific system functions, internal memory for storing ballot data and voting records, a removable Results Cartridge with non-volatile memory, protective and public counters, and integrated voter privacy panels.

#### 4.0 TEST HARDWARE/SOFTWARE DESCRIPTION (Continued)

##### 4.1 Hardware (Continued)

##### 4.1.1 AVC Edge (Continued)

The Edge provides a large format Liquid Crystal Display and associated Touchscreen to present the ballot and allow the voter to make their selections. The presentation of the offices and issues can be set up in multiple formats allowing election administrators flexibility in the layout of ballots.

The Edge is modular in design and is available with options that allow the customer to configure it to their specific needs. The Edge is a stand-alone system, i.e.; it does not require any networking to a central system in order to function. All processing from loading the ballot to recording votes is done on individual units. Loading ballots and accumulating tallies from the machines is accomplished via a Results Cartridge.

The Results Cartridge is designed so that it can be inserted into the voting machine, record-voting results, be removed from the machine at the closing of the polls and be read by the Sequoia Voting System WinEDS election management software. The Results Cartridge stores:

- An electronic representation of the ballot.
- Ballot logic to enable the voter to make those selections to which they are lawfully entitled,
- The aggregated vote totals,
- A randomized record of all individual ballots cast, and
- A chronological log of significant machine operations, including error conditions.

The AVC Edge is a suitcase shaped device measuring 10" by 17" by 26" and weighing ~45 pounds. It is portable and has a handle to allow for ease in carrying. For common carrier transport a protective fiberboard shipping carton is provided. An optional nylon carrying case is also available.

The AVC Edge is powered via nominal 115VAC/60 Hz facility power.

##### 4.1.2 Card Activator

The Card Activator is an optional separate device designed to activate Voter Cards, which enables the voter to access the AVC Edge voting machine. It is required if the Edge has been programmed to first require a Voter Card before displaying a ballot. After identifying the voter, the poll worker inserts and then pushes the Voter Card into the Voter Card Holder assembly slot, at which time the Card Activator prompts the poll worker for pertinent voter information, i.e., geographic location to determine ballot type. The Card Activator then transfers the poll worker responses to the voter's Voter Card. After the transfer is complete, the Card Activator ejects the activated card. The poll worker hands the activated Voter Card to the voter, who will use the activated Voter Card to access the AVC Edge voting machine. The Card Activator is comprised of a Central Processing Unit (CPU)/Printed Circuit Board, power conditioning, keypad, and its firmware. The Card Activator uses a 486CORE Module, i.e., embedded PC.



## **4.0 TEST HARDWARE/SOFTWARE DESCRIPTION (Continued)**

### **4.1 Hardware (Continued)**

#### **4.1.2 Card Activator (Continued)**

The Card Activator measures approximately 4" by 6" by 12" and can be operated from 115VAC/60 Hz facility power or internal battery. It is transferred in a nylon canvas carrying case.

#### **4.1.3 Audio Box**

The Audio Box is an optional Audio Voting accessory used for audio voting with the AVC Edge voting machine. The Audio Box measures approximately 3.5" by 5.5" by 1.5" and is powered through a data cable attached to the Edge. The Audio Box utilizes 8-bit serial data, which is passed from the Edge to the 20-PIC microprocessor in the Audio Box. In the PIC microprocessor, a 10-bit pulse-switch modulator converts serial-audio voting data into a pulse-width modulated data stream, which is then passed through a 4 kHz low-pass filter where it is amplified and then sent to the stereo jack on the Audio Box. The Audio Box contains a 5V power supply and RS-232 serial port buffer/driver chain. While the current FEC Standards, 1990, do not address products directed for use by the disabled, the Audio Box has previously been subjected to functional testing to verify its operability while configured with the Edge.

### **4.2 Firmware**

#### **4.2.1 EDGE Firmware**

The AVC Edge uses the pSOS real-time, multi-tasking operating system at its core. pSOS runs in Protected Mode. A separate real-mode BIOS is also part of the system, which is used during power up only. In depth discussion of the Software System Concepts are documented in the Sequoia Voting Systems AVC Software Technical Description, Release 4.1.

#### **4.2.2 Card Activator Firmware**

The Card Activator uses an AMD Elan 486 processor. The software is compiled and linked as a single object module approximately 110K in size using C language. The source is compiled using Borland C/C++ compiler, and the executable is loaded into the Card Activator using a PCMCIA card. The resulting module runs on the MS-DOS operating system. In depth discussion of the Software System Concepts are documented in the Sequoia Voting Systems Card Activator Software Technical Description, Release 4.2.

### **4.3 Equipment and Test Materials**

Sequoia Pacific Voting Systems provided all the equipment required to perform the qualification testing. This included the Edge voting machine hardware, Card Activator, and the optional Audio Box.

#### **4.0 TEST HARDWARE/SOFTWARE DESCRIPTION (Continued)**

##### **4.4 Deliverable Materials**

Sequoia Pacific provided the latest versions of all user/maintenance manuals. All user manuals have an identifiable Version Number and Document Control Number or Release Date. Reference Paragraph 2.0 for a listing and version of the applicable documentation.

#### **5.0 TEST SPECIFICATIONS**

Qualification testing was performed to ensure that the AVC Edge, Release 4.1D, Card Activator, Release 4.32, remained in compliance with the design and functional requirements contained within the following paragraphs. Qualification testing was not limited to verifying just those specific changes associated with the revisions, but also included regression tests of selected system functions as well.

The AVC Edge and Card Activator was functionally tested, as it would be configured for use in an election precinct.

##### **5.1 Functional/Regression Testing**

The Edge and Card Activator was subjected to a series of tests to simulate Election Day activities at the precinct level. These tests were performed to ensure continued compatibility of voting machine functions at the precinct level.

These included activities to simulate:

- (a) verification of hardware status via diagnostic reports prior to election;
- (b) performing procedures required to prepare hardware for election operations;
- (c) obtaining 'zero' machine report printouts on all contest fields;
- (d) performing procedures to open the polling place and enable ballot counting;
- (e) casting of ballots to demonstrate proper processing, error handling, and generation of audit data;
- (f) performing hardware operations required to disable ballot counting and closing the polls;
- (g) obtaining machine reports and verifying correctness; and
- (h) obtaining machine generated audit logs and verifying correctness.

**5.0 TEST SPECIFICATIONS (Continued)**

**5.1 Functional/Regression Testing (Continued)**

**5.1.1 Source Change Specific Functional Tests**

Functional tests were performed to verify source specific changes associated with the Edge and Card Activator revised firmware including the step changes made since the previously qualified release, 4.1B. This was done to ensure proper implementation of the changes. It should be noted that some of the changes associated with the revised firmware added improvements in the overall structure, maintainability, and readability of the code. Additionally, some changes were imbedded in overall system operation and not specific to a singular functional attribute.

Source specific functional testing was performed to verify specific functional changes where feasible.

The below Sequoia Voting Systems-provided list documents the revision history from the previously tested EDGE Release, 4.1B.

- Implementation of a re-initialization of touch screen whenever activate button is held down for 3 seconds to correct for periodic freeze up of touch screen.
- Sped up touch screen initialization by first attempting to connect at 1200 baud and then at 2400, etc.
- Addressed possible buffer and recalculation of buffer size.
- Changed the handling of smart card errors upon vote saving.
- Addressed write-in screen problem where the cancel selection button was not properly disabled.
- Added clearing of provisional ID tag when polls are closed.
- Addressed start voting form initialization.
- Addressed issue with canceling manual recount report.
- Addressed issue with canceling all reports.
- Addressed issue with vote ID for reports when using 16-bit CRC.
- Addressed issue with printing reports to file.
- Addressed simulation problem with handling scripts that select candidates not in the current ballot selection code.
- Added clearing of firmware update password in edit box after entered to ensure continued privacy of password.

Notice of Anomaly Number 15 addresses a script handling error and is presented on Page 15. This anomaly was closed upon test completion.

The below Sequoia Voting Systems-provided list documents the revision history from the previously tested Edge Card Activator Release, 4.2.

- Replaced MD-DOS with ROM-DOS (MS-DOS PCMCIA drivers could not read or write PCMCIA cards formatted under Windows 2000/XP and Windows 98 when using a USB card writer).
- Removed LOG function.
- Removed Transfer Log and Clear Election from menu.
- Changed RAM disk assignment from D: to E:
- Addressed issue with UDJUSTIME and UDJUSTDATE.
- Removed auto-error display when card inserted
- Expanded minor version number to two digits.
- Print receipt when card status is SCS\_VOTE\_SV\_STRT
- Modified card status messages in StatusText.
- Replaced naked constant in AcwVersion with a #define PLACEHOLDER
- Improved carrier lost detection in MODEM.C

Additionally, continued functionality of the following selected Ballot Logic types were verified.

- General Election
- Straight Party
- Recall
- Split
- Vote N-of-M
- Blank Ballot
- Candidate Rotation
- Partisan/Non-Partisan
- Write-In Voting
- Overvotes (disallowed) and Undervotes

## 5.2 System Level Volume/Accuracy Tests

The AVC Edge was subjected to volume/accuracy tests. During the volume and accuracy testing, the Edge was subjected to the casting of a large number of ballots to verify vote recording accuracy, i.e. at least 297,589 ballot positions correctly read and recorded. All ballot positions were accurately recorded.

## 6.0 SOFTWARE STANDARDS

### 6.1 Software Design and Coding

Prior to conducting the AVC Edge regression functional testing, the firmware was subjected to a source code review. The source code was reviewed for how well it continued to follow the recommended programming guidelines as outlined in the FEC standards. This included a review for:

- Readability                      How straightforward and apparent was the design?
- Understandability              How complicated was the code to implement it?
- Modularity                        How well was the code divided into logical, functional units?
- Robustness                        How well does the code handle error conditions or unexpected inputs?
- Security                            Does the code protect the integrity of voting data at all times?
- Maintainability                  How easy would it be to extend, fix, or modify this code in the future?
- Consistency                      Was the design of the code coherent throughout?
- Documentation                  Does the code contain useful and frequent comments?
- Usability                          Does the code inform the user about progress or errors?
- Flow control                      Are control constructs and entry/exit points logical and controlled?

Attachment A contains the AVC Edge Source Review Report, Release 4.1D.  
Attachment B contains the Card Activator Source Review Report, Release 4.32.

## 7.0 QUALITY ASSURANCE

All work performed on this test program was completed in accordance with Wyle Laboratories' Quality Assurance Program.

The Wyle Laboratories, Huntsville Facility, Quality Management System is Registered in compliance with the ISO-9001 International Quality Standard. Registration has been completed by Quality Management Institute (WMI), a Division of Canadian Standards Association (CSA).

**8.0 TEST EQUIPMENT AND INSTRUMENTATION**

All instrumentation, measuring, and test equipment used in the performance of this test program were calibrated in accordance with Wyle Laboratories' Quality Assurance Program, which complies with the requirements of ANSI/NCCL Z540-1, ISO 10012-1, and Military Specification MIL-STD-45662A. Standards used in performing all calibrations are traceable to the National Institute of Standards and Technology (NIST) by report number and date. When no national standards exist, the standards are traceable to international standards of the basis for calibration is otherwise documented.



<b>ORIGINAL NOTICE OF ANOMALY</b>		DATE: 4.8.03
NOTICE NO: 15	P.O. NUMBER: 10001386	CONTRACT NO: N/A
CUSTOMER: Sequoia Voting Systems	WYLE JOB NO: 44733	
NOTIFICATION MADE TO: Paul Terwilliger	NOTIFICATION DATE: 1.23.03	
NOTIFICATION MADE BY: Jim Dearman	VIA: Verbal	
CATEGORY: <input checked="" type="checkbox"/> SPECIMEN <input type="checkbox"/> PROCEDURE <input type="checkbox"/> TEST EQUIPMENT	DATE OF ANOMALY: 1.23.03	
PART NAME: AVC Edge	PART NO.:	--
TEST: Functional Configuration Audit	I.D. NO.:	--
SPECIFICATION: FEC Performance Standards, 1.90	PARA. NO.:	7.5.2
<b>REQUIREMENTS:</b> Functional Configuration Audit encompasses an examination...conduct of additional tests, to verify that the system hardware and software perform all the functions described in the vendor's document.		
<b>DESCRIPTION OF ANOMALY:</b> The Edge was unable to perform a large volume Logic & Accuracy simulation test script.		
<b>DISPOSITION - COMMENTS - RECOMMENDATIONS:</b> The anomaly was associated with test scripts that select candidates not in the current ballot subset (selection code) The anomaly was corrected in firmware Release 4.1D, and successful implementation verified during subsequent testing.		
RESPONSIBILITY TO ANALYZE ANOMALIES AND COMPLY WITH 10 CFR PART 21: <input checked="" type="checkbox"/> CUSTOMER <input type="checkbox"/> WYLE		
<b>VERIFICATION:</b> TEST WITNESS: Paul Terwilliger REPRESENTING: Sequoia QUALITY ASSURANCE: Brenda Moore 4/8/03	<b>PROJECT ENGINEER:</b> <i>[Signature]</i> 4/8/03 <b>PROJECT MANAGER:</b> <i>[Signature]</i> J. R. Dearman 4/8/03 for J. T. Hazeltine <b>INTERDEPARTMENTAL COORDINATION:</b>	

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**ATTACHMENT A**  
**EDGE 4.1D SOURCE REPORT AND FILE LISTINGS**

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### Sequoia Edge 4.1D Software Review Summary

This review covers the Sequoia Edge 4.1D voting system software with respect to changes made since version 4.1C. The review involved evaluation of its compliance with the FEC guidelines for software quality and reliability. This evaluation included, but was not limited to, the following considerations:

Readability	How straightforward and apparent was the design?
Understandability	How complicated was the code to implement it?
Modularity	How well was the code divided into logical, functional units?
Robustness	How well does the code handle error conditions or unexpected inputs?
Security	Does the code protect the integrity of voting data at all times?
Maintainability	How easy would it be to extend, fix, or modify this code in the future?
Consistency	Was the design of the code coherent throughout?
Documentation	Does the code contain useful and frequent comments?
Usability	Does the code inform the user about progress or errors?
Flow control	Are control constructs and entry/exit points logical and controlled?

Files were compared with their most recent counterparts and the differences investigated in view of the Sequoia response document. Files differing from the previous version and those otherwise noteworthy are listed below, as well as comments regarding compliance.

The recommendation is given at the end of this document.

### Evaluation

The evaluation of the code is given on the subsequent sections. This document is arranged as follows:

- 1) Source File Specific Notes
- 2) General Observations/Assessment Statements

#### 1). Revision 4.1C Assessment Statements

Version 4.1C was received on January 13, 2003. All files were compared with their 4.1B counterparts and the differences investigated with a view of how changes would affect compliance with FEC guidelines.

2). Revision 4.1.C Source File Specific Notes

/SOURCE/

version.c

/SOURCE/EDGTOOLS/

compare.c  
string16.c  
touch.c

/SOURCE/ELECTION/

audstate.c  
autoact.c  
elec.in.c  
election.c  
election.h  
menuscns.h  
voting.c  
write\_in.c

/SOURCE/INCLUDE/

bd.h  
edge.h  
keybrddf.h  
resource.h

/SOURCE/MACHINE/

prtsplr.c

/SOURCE/REPORTS/

id\_mngle.c  
reports.c

/SOURCE/RESOURCE/

rsc\_pop.c

/SOURCE/SIM/

sim.c

/SOURCE/STARTUP/

boardsup.c  
updtfirm.c

3). Revision 4.1C Final Assessment Statements

Revision 4.1C is a minor change from 4.1B with all changes having been done in full compliance with the FEC guidelines and mostly as described in the accompanying change log.

It is recommended that this release be considered substantially compliant with the FEC guidelines for coding practices as set forth within the FEC Performance and Test Standards for Punchcard, Marksense, and Direct Recording Electronic Voting Systems.

4). Revision 4.1D Assessment Statements

Version 4.1D was received on March 26, 2003. All files were compared with their 4.1C counterparts and the differences investigated with a view of how changes would affect compliance with FEC guidelines.

5). Revision 4.1.D Source File Specific Notes

/SOURCE/

version.c

/SOURCE/SIM/

sim.c

6) Revision 4.1D Final Assessment Statements

Revision 4.1D is a single-line change from 4.1C plus a version change, with all changes having been done in full compliance with the FEC guidelines and exactly as described in the accompanying change log.

There has been a recent update to the FEC guidelines that will affect most vendors. All vendors are being informed that, upon notification, all subsequent releases from them will be held to these new standards. Guidelines have been made more specific in some areas to decrease subjectivity during reviews and increase consistency across the code base. Areas of these specifics include if() nesting limits, defense against divide-by-zero, explicit delimitation of if() scopes, prohibition of a?b:c expansions and single character variable names, prohibition of do-while(false) constructs, maximum line width, and required header content. Constants other than 0 and 1 that are clearly not graphics coordinates and GUI dimensions must be meaningfully explained or replaced with meaningful #defines.

It is recommended that this release be considered substantially compliant with the FEC guidelines for coding practices as set forth within the FEC Performance and Test Standards for Punchcard, Marksense, and Direct Recording Electronic Voting Systems.

EDGE 4.1D Source Listing

4/7/03 13:33

D:\My Documents\Temp\sequoia\Edge 4\_1D Source.ZIP

Page 1

Name	Type	Modified	Size	CRC	Path
12codes.c	C File	1/22/03 20:28	7,061	2c20b094	election\
8514a.inc	INC File	1/22/03 20:28	3,701	41571854	metawin\
Adconv.c	C File	1/22/03 20:28	12,462	750bbc98	machine\
ansiapi.c	C File	1/22/03 20:28	10,603	75f65842	ertfs\
Api.c	C File	1/22/03 20:28	130,722	e4e6e73c	ertfs\
Apiutil.c	C File	1/22/03 20:28	18,421	40d7da4e	ertfs\
Arcs0.asm	ASM File	1/22/03 20:28	32,169	61c3228b	metawin\
Arcs1.asm	ASM File	1/22/03 20:28	2,045	e448d760	metawin\
Arcs2.asm	ASM File	1/22/03 20:28	2,044	ec95d5ec	metawin\
Arcs3.asm	ASM File	1/22/03 20:28	1,965	ec0ecd09	metawin\
Arcs4.asm	ASM File	1/22/03 20:28	2,046	553806e4	metawin\
Arcs8.asm	ASM File	1/22/03 20:28	19,328	20f2fc5b	metawin\
AssyMacr.h	H File	1/22/03 20:28	8,576	6604042	include\
at_rpt.c	C File	1/22/03 20:28	14,313	98ae0442	reports\
At_votes.c	C File	1/22/03 20:28	2,903	50f5dfd6	edgtools\
At_xfer.c	C File	1/22/03 20:28	18,660	62c99889	edgtools\
Atacard.h	H File	1/22/03 20:28	5,990	508436bc	include\
audfnms.c	C File	1/22/03 20:28	4,082	69afaa71	election\
audfnidx.h	H File	1/22/03 20:28	4,224	cf275c25	election\
audio.h	H File	1/22/03 20:28	9,732	5440279c	election\
audioutl.c	C File	1/22/03 20:28	38,668	8e346434	election\
audplay.c	C File	1/22/03 20:28	24,021	5490537f	election\
audstate.c	C File	1/22/03 20:28	34,848	ee18012c	election\
audWrln.c	C File	1/22/03 20:28	13,843	3652a0e1	election\
autoact.c	C File	1/22/03 20:28	41,954	2a0468db	election\
auxrpt.c	C File	1/22/03 20:28	30,396	587861a2	maint\
Bad.c	C File	1/22/03 20:28	2,467	7b9b7b29	graphics\
Bal_grob.c	C File	1/22/03 20:28	23,493	b5b4b7dc	graphics\
Balgb1.h	H File	1/22/03 20:28	10,075	70e0e8dc	include\
ballimage.c	C File	1/22/03 20:28	36,198	33785446	election\
bd.h	H File	1/22/03 20:28	2,151	6c97c2bf	include\
Bezr0.asm	ASM File	1/22/03 20:28	4,245	f44e7792	metawin\
Bezr1.asm	ASM File	1/22/03 20:28	3,484	4313fd9b	metawin\
Bezr2.asm	ASM File	1/22/03 20:28	3,792	14b4a701	metawin\
Bezr3.asm	ASM File	1/22/03 20:28	3,654	8ecae61d	metawin\
Bezr4.asm	ASM File	1/22/03 20:28	3,799	f50864e0	metawin\
Bezr5.asm	ASM File	1/22/03 20:28	3,393	23876aa6	metawin\
Bezr6.asm	ASM File	1/22/03 20:28	3,803	318a07c6	metawin\
Bezr7.asm	ASM File	1/22/03 20:28	6,365	c47d3494	metawin\
Bezr8.asm	ASM File	1/22/03 20:28	5,463	dd35e2f2	metawin\
Bezr9.asm	ASM File	1/22/03 20:28	4,912	dcde6628	metawin\
BIOS.bin	BIN File	1/22/03 20:28	4,194,304	dc76653b	
Bios.hex	HEX File	1/22/03 20:28	170,514	16fcc809	
Biosrom.bin	BIN File	1/22/03 20:28	4,194,304	13a175ca	
Bits0.asm	ASM File	1/22/03 20:28	4,507	f62e52bf	metawin\
Bits1.asm	ASM File	1/22/03 20:28	11,687	f41b6123	metawin\
Bits2.asm	ASM File	1/22/03 20:28	1,969	9090cc8f	metawin\
Bits3.asm	ASM File	1/22/03 20:28	1,884	58a1b27e	metawin\
Bits5.asm	ASM File	1/22/03 20:28	16,438	8fc95af2	metawin\
Bits7.asm	ASM File	1/22/03 20:28	19,549	e8d017b9	metawin\
Bits8.asm	ASM File	1/22/03 20:28	5,232	bd9b7dea	metawin\
Bits_5.inc	INC File	1/22/03 20:28	10,648	79bf577a	metawin\
Bld_flp.bat	MS-DOS Batch File	1/22/03 20:28	3,131	df375d73	

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Name	Type	Modified	Size	CRC	Path
Blit5.asm	ASM File	1/22/03 20:28	52,508	5c00a504	metawin\
Blit6.asm	ASM File	1/22/03 20:28	33,219	e99a59ae	metawin\
Blit7.asm	ASM File	1/22/03 20:28	43,559	3a80db0e	metawin\
Blit9.asm	ASM File	1/22/03 20:28	210,949	af58df46	metawin\
Blit_0.inc	INC File	1/22/03 20:28	4,075	d754fbc9	metawin\
Blit_5.inc	INC File	1/22/03 20:28	7,979	9782fb61	metawin\
Blit_6.inc	INC File	1/22/03 20:28	6,967	e386473c	metawin\
Blit_7.inc	INC File	1/22/03 20:28	6,934	c4aa734f	metawin\
Blit_8.inc	INC File	1/22/03 20:28	2,571	a5962238	metawin\
Block.c	C File	1/22/03 20:28	11,049	2842db1d	ertfs\
Blit03.asm	ASM File	1/22/03 20:28	131,656	e97d26c9	metawin\
Blit04.asm	ASM File	1/22/03 20:28	89,363	a5e4ba35	metawin\
Blit05.asm	ASM File	1/22/03 20:28	111,437	22bc542e	metawin\
Blit06.asm	ASM File	1/22/03 20:28	146,363	f9f2f730	metawin\
Blit07.asm	ASM File	1/22/03 20:28	157,361	85747946	metawin\
Blit50.asm	ASM File	1/22/03 20:28	1,164	bba40f51	metawin\
bmpload.c	C File	1/22/03 20:28	44,152	256ba5b	graphics\
boardsup.c	C File	1/22/03 20:28	8,269	f5dbaae4	startup\
boot.s	S File	1/22/03 20:28	12,734	3f30bb21	
Boot_dos.hex	HEX File	1/22/03 20:28	315,481	9661185b	
Bss.c	C File	1/22/03 20:28	3,410	84f616dd	ertfs\
Byoption.c	C File	1/22/03 20:28	18,106	7790c4d7	reports\
Byprcnt.c	C File	1/22/03 20:28	31,429	d3fd5afe	reports\
C_blos.hex	HEX File	1/22/03 20:28	98,194	53d9c6b1	
cardissu.c	C File	1/22/03 20:28	16,727	7bf15f3e	election\
castbal.c	C File	1/22/03 20:28	7,901	119cc14	election\
Centname.c	C File	1/22/03 20:28	3,176	58482bcc	reports\
cfgromrw.c	C File	1/22/03 20:28	5,992	312ed9ba	election\
Chkcart.c	C File	1/22/03 20:28	25,481	681b1b20	consolid\
Chkdsk.c	C File	1/22/03 20:28	41,851	6c0203ff	ertfs\
chkdsk.c	C File	1/22/03 20:28	41,634	18dcc1de	maint\
Chkmedia.c	C File	1/22/03 20:28	5,506	cd6168df	ertfs\
Common.h	H File	1/22/03 20:28	5,938	ab011902	include\
Compare.c	C File	1/22/03 20:28	17,296	17eb5fc9	edgtools\
Config.h	H File	1/22/03 20:28	13,403	d9f6e56c	include\
Consolid.c	C File	1/22/03 20:28	29,376	a8375eaa	consolid\
Consolid.h	H File	1/22/03 20:28	4,386	562daf30	consolid\
constat.c	C File	1/22/03 20:28	5,061	bb303e11	reports\
conttest.c	C File	1/22/03 20:28	7,824	1e75882a	maint\
Copy.c	C File	1/22/03 20:28	34,366	8bd79e39	edgtools\
Crc_calc.c	C File	1/22/03 20:28	26,358	90e8e5ca	edgtools\
Criterr.c	C File	1/22/03 20:28	1,995	7f17466b	ertfs\
Cryptsig.c	C File	1/22/03 20:28	31,751	511b90a3	edgtools\
cursor.c	C File	1/22/03 20:28	20,860	acf2debd	graphics\
curver.mak	MAK File	1/22/03 20:28	2,929	68690a2d	
Des.c	C File	1/22/03 20:28	24,193	2c95abdb	edgtools\
Devc.inc	INC File	1/22/03 20:28	2,752	2ca011ec	metawin\
Devc0.asm	ASM File	1/22/03 20:28	78,097	4d68b996	metawin\
Devc1.asm	ASM File	1/22/03 20:28	121,589	f6b37a9a	metawin\
Devc2.asm	ASM File	1/22/03 20:28	95,040	e015c870	metawin\
Devc3.asm	ASM File	1/22/03 20:28	20,553	cc61a228	metawin\
Devc4.asm	ASM File	1/22/03 20:28	9,329	556a8706	metawin\
Devio.c	C File	1/22/03 20:28	4,183	27bde3d1	ertfs\

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Name	Type	Modified	Size	CRC	Path
disk.hex	HEX File	1/22/03 20:28	44	425ea5e5	
Dispform.c	C File	1/22/03 20:28	51,254	75bcce13	graphics\
disprpt.c	C File	1/22/03 20:28	28,369	14d5a5c4	reports\
Dpen.inc	INC File	1/22/03 20:28	473	78bfeb3f	metawin\
Dpen0.asm	ASM File	1/22/03 20:28	1,790	1a2e47cd	metawin\
Dpen1.asm	ASM File	1/22/03 20:28	2,140	e800d3b9	metawin\
Dpen2.asm	ASM File	1/22/03 20:28	2,194	dce58293	metawin\
Dpen3.asm	ASM File	1/22/03 20:28	1,135	1c63e75b	metawin\
Dpen4.asm	ASM File	1/22/03 20:28	3,919	88cb59c	metawin\
Dpen5.asm	ASM File	1/22/03 20:28	4,173	a6be9a84	metawin\
Dpen6.asm	ASM File	1/22/03 20:28	3,616	aa755eae	metawin\
Drawbalt.c	C File	1/22/03 20:28	29,378	31a4b130	graphics\
Drojb.c	C File	1/22/03 20:28	66,674	16be90fe	ertfs\
Drv386.inc	INC File	1/22/03 20:28	2,604	8132d6a7	metawin\
E2pot.c	C File	1/22/03 20:28	16,199	62fdb087	edgtools\
ed_stdio.h	H File	1/22/03 20:28	5,887	f6dacfbf	include\
Ed_types.h	H File	1/22/03 20:28	3,328	40ea0e82	include\
Edge.h	H File	1/22/03 20:28	30,602	d022478b	include\
edgemap.h	H File	1/22/03 20:28	25,951	c16855c0	include\
Edgemem.h	H File	1/22/03 20:28	7,146	91ebed95	include\
Edgetime.h	H File	1/22/03 20:28	2,691	7a718ac0	include\
Edgtools.h	H File	1/22/03 20:28	46,205	b2e4a6c8	include\
Eeintegr.c	C File	1/22/03 20:28	30,042	7e9e9492	election\
elcaudio.c	C File	1/22/03 20:28	26,053	3ef0bf0a	election\
ElctStUp.c	C File	1/22/03 20:28	27,721	fd81e095	maint\
Elecglb.h	H File	1/22/03 20:28	9,273	c7f1b0c9	election\
Elecin.c	C File	1/22/03 20:28	10,018	8df592ed	election\
Elecinit.c	C File	1/22/03 20:28	22,208	9bf0a328	election\
Elecmain.c	C File	1/22/03 20:28	15,785	147112aa	election\
Elecstr.c	C File	1/22/03 20:28	3,027	70b08709	election\
Election.c	C File	1/22/03 20:28	85,768	7103c656	election\
Election.h	H File	1/22/03 20:28	18,697	5cecd5b1	election\
Elnavbal.c	C File	1/22/03 20:28	10,198	dde1e8b5	election\
Endrs.c	C File	1/22/03 20:28	10,213	9790fc31	reports\
Err_hndl.c	C File	1/22/03 20:28	12,883	6e8e8358	election\
Evnt0.asm	ASM File	1/22/03 20:28	24,943	8b200506	metawin\
evoting.c	C File	1/22/03 20:28	32,749	78067638	election\
evpickup.c	C File	1/22/03 20:28	21,221	3ca88f16	consolid\
evrpts.c	C File	1/22/03 20:28	14,271	5d521668	reports\
expand.c	C File	1/22/03 20:28	27,625	a5868d75	graphics\
F15butn.c	C File	1/22/03 20:28	8,105	962255c5	graphics\
fil0chk.c	C File	1/22/03 20:28	9,117	8aa2c0af	LdBal\
Fil10.asm	ASM File	1/22/03 20:28	22,205	27a1466f	metawin\
Fil15.asm	ASM File	1/22/03 20:28	48,824	3995687e	metawin\
Fil16.asm	ASM File	1/22/03 20:28	55,419	b7f7121b	metawin\
Fil25.asm	ASM File	1/22/03 20:28	177,626	9eccb6a5	metawin\
Fil50.asm	ASM File	1/22/03 20:28	1,162	ef2ec225	metawin\
fildfchk.c	C File	1/22/03 20:28	29,401	bc7a65e6	LdBal\
File.inc	INC File	1/22/03 20:28	2,488	ed313af5	metawin\
File0.asm	ASM File	1/22/03 20:28	6,545	dd5cf82	metawin\
File1.asm	ASM File	1/22/03 20:28	3,466	8be5ad03	metawin\
File2.asm	ASM File	1/22/03 20:28	3,788	6ea6d2ac	metawin\
File3.asm	ASM File	1/22/03 20:28	2,769	ab6de451	metawin\



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Name	Type	Modified	Size	CRC	Path
File4.asm	ASM File	1/22/03 20:28	2,287	d2eddba0	metawin\
File5.asm	ASM File	1/22/03 20:28	2,798	62199ebd	metawin\
File6.asm	ASM File	1/22/03 20:28	12,677	ae9652de	metawin\
Fill3.asm	ASM File	1/22/03 20:28	26,359	bd77433b	metawin\
fill5.asm	ASM File	1/22/03 20:28	48,477	5b531def	metawin\
Fill6.asm	ASM File	1/22/03 20:28	46,901	590c0cfa	metawin\
Fill7.asm	ASM File	1/22/03 20:28	43,213	e92ecf37	metawin\
Fill8.asm	ASM File	1/22/03 20:28	14,553	ffd642b3	metawin\
Fill9.asm	ASM File	1/22/03 20:28	47,244	dac20620	metawin\
Fill_5.inc	INC File	1/22/03 20:28	5,472	c8ad780	metawin\
Fill_6.inc	INC File	1/22/03 20:28	7,832	43b6efc6	metawin\
Fill_7.inc	INC File	1/22/03 20:28	7,652	19716409	metawin\
Fill_8.inc	INC File	1/22/03 20:28	7,736	6c50d2bc	metawin\
Fill_var.inc	INC File	1/22/03 20:28	2,255	d565ffea	metawin\
Fillarc.inc	INC File	1/22/03 20:28	5,997	b1f31833	metawin\
Fillm.inc	INC File	1/22/03 20:28	1,810	69960d10	metawin\
Finish.hex	HEX File	1/22/03 20:28	15	85b83a12	
FI_driver.c	C File	1/22/03 20:28	70,570	dbfea415	erdfs\
FI_driver.h	H File	1/22/03 20:28	7,053	15301ef	erdfs\
font.h	H File	1/22/03 20:28	3,912	f9b33e5	include\
Fontfunc.c	C File	1/22/03 20:28	27,360	1e6e6a7b	graphics\
Fontfunc.h	H File	1/22/03 20:28	8,315	ba8c9788	include\
Fopen.c	C File	1/22/03 20:28	17,896	92977ebf	edgtools\
Format.c	C File	1/22/03 20:28	31,961	16745b9c	erdfs\
Fsize.c	C File	1/22/03 20:28	11,714	1b083d65	edgtools\
Getp0.asm	ASM File	1/22/03 20:28	4,496	c20743bb	metawin\
Getp1.asm	ASM File	1/22/03 20:28	941	5a096330	metawin\
Getp2.asm	ASM File	1/22/03 20:28	3,852	a272912	metawin\
Getp3.asm	ASM File	1/22/03 20:28	4,417	26fa26ad	metawin\
Getp5.asm	ASM File	1/22/03 20:28	4,810	cb519b69	metawin\
Getputp.c	C File	1/22/03 20:28	8,190	48d96d68	edgtools\
Global.c	C File	1/22/03 20:28	4,478	128f95cc	reports\
Graf0.asm	ASM File	1/22/03 20:28	386	2d9db10e	metawin\
Graf1.asm	ASM File	1/22/03 20:28	2,038	9fe1ff4e	metawin\
Graf2.asm	ASM File	1/22/03 20:28	3,217	a91ac91a	metawin\
Grafdata.inc	INC File	1/22/03 20:28	32,325	30a6ce4c	metawin\
grstring.c	C File	1/22/03 20:28	41,509	cd49a809	graphics\
Grsupfun.c	C File	1/22/03 20:28	26,054	4e6e2fc2	election\
grtask.c	C File	1/22/03 20:28	51,751	9bc3d236	graphics\
Hardcopy.h	H File	1/22/03 20:28	3,874	edd6e13d	metawin\
Hcvp0.asm	ASM File	1/22/03 20:28	2,922	7e92b1c0	metawin\
Hcvp1.asm	ASM File	1/22/03 20:28	2,307	d0d3f25f	metawin\
Hcvp2.asm	ASM File	1/22/03 20:28	3,104	8ff904ea	metawin\
Hcvp3.asm	ASM File	1/22/03 20:28	2,486	e722721e	metawin\
Hcvp4.asm	ASM File	1/22/03 20:28	2,558	a2cd5bb	metawin\
Hcvp5.asm	ASM File	1/22/03 20:28	2,477	a087a36c	metawin\
Hcvp6.asm	ASM File	1/22/03 20:28	3,481	496646eb	metawin\
ld_mngle.c	C File	1/22/03 20:28	2,295	72775d79	reports\
ide_drv.c	C File	1/22/03 20:28	45,006	e70172a6	erdfs\
ide_drv.h	H File	1/22/03 20:28	14,871	399fe63a	erdfs\
identry.c	C File	1/22/03 20:28	13,449	18017569	election\
idev0.asm	ASM File	1/22/03 20:28	3,410	7b46c837	metawin\
idev1.asm	ASM File	1/22/03 20:28	47,498	123fe893	metawin\

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Name	Type	Modified	Size	CRC	Path
Img01.asm	ASM File	1/22/03 20:28	19,905	19367530	metawin\
Img02.asm	ASM File	1/22/03 20:28	83,320	38ab2285	metawin\
Img03.asm	ASM File	1/22/03 20:28	75,240	438adc1a	metawin\
Img04.asm	ASM File	1/22/03 20:28	31,322	14c88713	metawin\
Img05.asm	ASM File	1/22/03 20:28	43,940	648f7998	metawin\
IncRvNum.h	H File	1/22/03 20:28	904	b3482324	
Inon0.asm	ASM File	1/22/03 20:28	2,888	e1a220da	metawin\
Inon1.asm	ASM File	1/22/03 20:28	2,144	f6d4c87a	metawin\
Inon2.asm	ASM File	1/22/03 20:28	2,277	582aa373	metawin\
Inon3.asm	ASM File	1/22/03 20:28	2,249	8a69a467	metawin\
Inon4.asm	ASM File	1/22/03 20:28	2,322	2c79c203	metawin\
Inon5.asm	ASM File	1/22/03 20:28	2,959	e8026623	metawin\
Inon6.asm	ASM File	1/22/03 20:28	2,067	5b35fd78	metawin\
Inon7.asm	ASM File	1/22/03 20:28	2,067	d9106463	metawin\
Inon8.asm	ASM File	1/22/03 20:28	2,152	4728ad9c	metawin\
Inon9.asm	ASM File	1/22/03 20:28	2,200	1268ac8e	metawin\
Inon_0.inc	INC File	1/22/03 20:28	5,243	4fc03e30	metawin\
inthewst.c	C File	1/22/03 20:28	29,420	ee0a3cba	maint\
isinst.c	C File	1/22/03 20:28	3,295	6d13f838	edgtools\
Jmpvctr.hex	HEX File	1/22/03 20:28	40	558736c5	
k10cbios.hex	HEX File	1/22/03 20:28	98,194	53d9c8b1	
K15cbios.hex	HEX File	1/22/03 20:28	98,577	1854c9ff	
Keybrddf.h	H File	1/22/03 20:28	6,403	53372689	include\
Kvir0.asm	ASM File	1/22/03 20:28	2,592	b6e04550	metawin\
Kvir1.asm	ASM File	1/22/03 20:28	1,732	fd702cb	metawin\
Kvir2.asm	ASM File	1/22/03 20:28	1,892	d0e35ed2	metawin\
Kvir3.asm	ASM File	1/22/03 20:28	1,563	2fcca8be	metawin\
Kvir6.asm	ASM File	1/22/03 20:28	2,354	2568ce5d	metawin\
Kvir8.asm	ASM File	1/22/03 20:28	866	80b33b13	metawin\
Kvir9.asm	ASM File	1/22/03 20:28	4,277	b6db6b5c	metawin\
Lcd_adj.c	C File	1/22/03 20:28	21,603	52456f2e	maint\
Lcd_drv.c	C File	1/22/03 20:28	10,104	c490de9d	edgtools\
Lcd_drv.h	H File	1/22/03 20:28	3,843	a10b6bd6	include\
LCDCALfm.c	C File	1/22/03 20:28	5,719	712bdc27	maint\
Lcdctfm.c	C File	1/22/03 20:28	5,040	69d7529c	maint\
Ldbal.c	C File	1/22/03 20:28	37,714	ec98005b	LdBall
ldbal.h	H File	1/22/03 20:28	3,023	76e1a8fb	LdBall
LdCache.c	C File	1/22/03 20:28	2,481	ac214ce8	
ldimaged.c	C File	1/22/03 20:28	31,042	6af9b81	LdBall
Lin00.asm	ASM File	1/22/03 20:28	2,260	a9149673	metawin\
Lin02.asm	ASM File	1/22/03 20:28	97,589	71c10e2a	metawin\
Lin03.asm	ASM File	1/22/03 20:28	30,315	9c456772	metawin\
Lin04.asm	ASM File	1/22/03 20:28	38,519	a9c83abc	metawin\
Lin05.asm	ASM File	1/22/03 20:28	85,292	68d01601	metawin\
Lin06.asm	ASM File	1/22/03 20:28	941	5a095330	metawin\
Lin07.asm	ASM File	1/22/03 20:28	97,644	8ebb9b23	metawin\
Line0.asm	ASM File	1/22/03 20:28	3,281	b0a5209	metawin\
Line1.asm	ASM File	1/22/03 20:28	3,846	89756b40	metawin\
Line2.asm	ASM File	1/22/03 20:28	2,406	ceac3b89	metawin\
Line8.asm	ASM File	1/22/03 20:28	8,498	bc12d89a	metawin\
Line9.asm	ASM File	1/22/03 20:28	7,608	47ed8ca0	metawin\
Line_0.inc	INC File	1/22/03 20:28	2,311	698f6af2	metawin\
Line_2.inc	INC File	1/22/03 20:28	5,129	8073c3dd	metawin\

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Name	Type	Modified	Size	CRC	Path
Lineclip.inc	INC File	1/22/03 20:28	45,259	1af1959	metawin\
List0.asm	ASM File	1/22/03 20:28	3,620	990982c2	metawin\
Lnk_ad1l.inc	INC File	1/22/03 20:28	2,953	17839366	metawin\
Lnk_ah3l.inc	INC File	1/22/03 20:28	3,208	c049c138	metawin\
Lnk_ah3l.inc	INC File	1/22/03 20:28	3,122	d27ab033	metawin\
Lnk_ar3l.inc	INC File	1/22/03 20:28	3,148	22553ff1	metawin\
Lnk_ar3l.inc	INC File	1/22/03 20:28	3,226	9fb62886	metawin\
Lnk_aw3l.inc	INC File	1/22/03 20:28	3,160	49fb9b47	metawin\
Lnk_aw3l.inc	INC File	1/22/03 20:28	3,134	c074c883	metawin\
Lnk_bh3l.inc	INC File	1/22/03 20:28	3,145	b9acc8c9	metawin\
Lnk_bh3l.inc	INC File	1/22/03 20:28	3,116	5e3dc56a	metawin\
Lnk_br3l.inc	INC File	1/22/03 20:28	3,144	c0fd018f	metawin\
Lnk_br3l.inc	INC File	1/22/03 20:28	3,128	6abd827c	metawin\
Lnk_bw3l.inc	INC File	1/22/03 20:28	3,155	3178fb17	metawin\
Lnk_bw3l.inc	INC File	1/22/03 20:28	3,125	52c9e4d4	metawin\
Lnk_ch3l.inc	INC File	1/22/03 20:28	3,106	eb879ce2	metawin\
Lnk_ch3l.inc	INC File	1/22/03 20:28	3,077	6897f80f	metawin\
Lnk_cr3l.inc	INC File	1/22/03 20:28	3,104	c91dc527	metawin\
Lnk_cr3l.inc	INC File	1/22/03 20:28	3,092	a8a563d9	metawin\
Lnk_cw3l.inc	INC File	1/22/03 20:28	3,117	43dca4	metawin\
Lnk_cw3l.inc	INC File	1/22/03 20:28	3,144	dbc7f2cd	metawin\
Lnk_vd1d.inc	INC File	1/22/03 20:28	2,805	b8a4781f	metawin\
Lnk_vd1o.inc	INC File	1/22/03 20:28	2,837	2d0faab3	metawin\
Lnk_vh3l.inc	INC File	1/22/03 20:28	3,176	c16e6ec3	metawin\
Lnk_vh3l.inc	INC File	1/22/03 20:28	3,151	a7af3850	metawin\
Lnk_vp2d.inc	INC File	1/22/03 20:28	2,787	251d8757	metawin\
Lnk_vp2o.inc	INC File	1/22/03 20:28	2,876	3acfb0cb	metawin\
Lnk_vr2d.inc	INC File	1/22/03 20:28	2,788	e1409d26	metawin\
Lnk_vr2o.inc	INC File	1/22/03 20:28	2,816	bef167fa	metawin\
Lnk_vr3l.inc	INC File	1/22/03 20:28	3,178	2446226c	metawin\
Lnk_vr3l.inc	INC File	1/22/03 20:28	3,166	c887d864	metawin\
Lnk_vw3l.inc	INC File	1/22/03 20:28	3,187	a163b7c7	metawin\
Lnk_vw3l.inc	INC File	1/22/03 20:28	3,161	ac3f50a4	metawin\
Lnk_xb3d.inc	INC File	1/22/03 20:28	3,192	516ecf13	metawin\
Lnk_xb3o.inc	INC File	1/22/03 20:28	3,226	347459cb	metawin\
Lnk_xd1d.inc	INC File	1/22/03 20:28	2,798	257e67ef	metawin\
Lnk_xd1l.inc	INC File	1/22/03 20:28	2,952	59bb97c8	metawin\
Lnk_xd1o.inc	INC File	1/22/03 20:28	2,835	9fc5cfa0	metawin\
Lnk_xd2d.inc	INC File	1/22/03 20:28	2,780	dd1ee8ee	metawin\
Lnk_xd2o.inc	INC File	1/22/03 20:28	2,815	ce2b26de	metawin\
Lnk_xh3l.inc	INC File	1/22/03 20:28	3,184	d2a2cd11	metawin\
Lnk_xh3l.inc	INC File	1/22/03 20:28	3,155	99b3e8d7	metawin\
Lnk_xp2d.inc	INC File	1/22/03 20:28	2,791	479fd191	metawin\
Lnk_xp2o.inc	INC File	1/22/03 20:28	2,823	d5ec86a2	metawin\
Lnk_xr2d.inc	INC File	1/22/03 20:28	2,790	9f317089	metawin\
Lnk_xr2o.inc	INC File	1/22/03 20:28	2,818	7ccb6e67	metawin\
Lnk_xr3l.inc	INC File	1/22/03 20:28	3,180	ed3ff469	metawin\
Lnk_xr3l.inc	INC File	1/22/03 20:28	3,191	c2f528e3	metawin\
Lnk_xt2d.inc	INC File	1/22/03 20:28	3,021	f7d999b5	metawin\
Lnk_xt3d.inc	INC File	1/22/03 20:28	3,165	ede99ff4	metawin\
Lnk_xt3o.inc	INC File	1/22/03 20:28	3,199	ca5b3451	metawin\
Lnk_xtpd.inc	INC File	1/22/03 20:28	3,029	a914a4ef	metawin\
Lnk_xw3l.inc	INC File	1/22/03 20:28	3,193	131d9997	metawin\

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Name	Type	Modified	Size	CRC	Path
Lnk_xw3l.inc	INC File	1/22/03 20:28	3,165	ff39529c	metawin\
Lowl.c	C File	1/22/03 20:28	58,150	39aec823	erffs\
Mach.c	C File	1/22/03 20:28	16,209	88afa359	machine\
Mach.h	H File	1/22/03 20:28	1,629	bbb66dc9	machine\
Maint.c	C File	1/22/03 20:28	18,897	34845230	maint\
maintprt.c	C File	1/22/03 20:28	5,154	ec33fbc9	reports\
Makefile.mak	MAK File	1/22/03 20:28	1,384	b6ed002b	consolid\
Makefile.mak	MAK File	1/22/03 20:28	2,512	1c081a66	edgtools\
Makefile.mak	MAK File	1/22/03 20:28	3,730	7c695236	election\
Makefile.mak	MAK File	1/22/03 20:28	1,440	bb02b10e	erffs\
makefile.mak	MAK File	1/22/03 20:28	3,693	fc241784	graphics\
Makefile.mak	MAK File	1/22/03 20:28	3,276	e5e700ce	include\
Makefile.mak	MAK File	1/22/03 20:28	1,448	3769f320	LdBall\
Makefile.mak	MAK File	1/22/03 20:28	1,268	8ae3464d	machine\
Makefile.mak	MAK File	1/22/03 20:28	2,722	226eba67	maint\
Makefile.mak	MAK File	1/22/03 20:28	11,185	291cf892	
Makefile.mak	MAK File	1/22/03 20:28	1,755	744b01bf	menuet\
makefile.mak	MAK File	1/22/03 20:28	6,278	8ce64fa5	metawin\
makefile.mak	MAK File	1/22/03 20:28	1,290	dc9cb754	portrait\
Makefile.mak	MAK File	1/22/03 20:28	2,639	a9e44f6b	reports\
makefile.mak	MAK File	1/22/03 20:28	1,423	baef6dcf	Resource\
Makefile.mak	MAK File	1/22/03 20:28	1,230	894505a1	sim\
Makefile.mak	MAK File	1/22/03 20:28	1,244	e2f90e39	startup\
Makefile.mak	MAK File	1/22/03 20:28	1,987	3c2e173b	system\
Malloc.c	C File	1/22/03 20:28	40,964	7396ee41	edgtools\
ManRcnt.c	C File	1/22/03 20:28	45,899	535506	reports\
Markers.inc	INC File	1/22/03 20:28	3,763	78071151	metawin\
menuet.fnt	FNT File	1/22/03 20:28	5,018	2735906a	graphics\
Menuet.h	H File	1/22/03 20:28	6,387	ac92a3f5	menuet\
Menuscns.h	H File	1/22/03 20:28	2,933	c3a57616	election\
menuscns.h	H File	1/22/03 20:28	3,755	6862e239	graphics\
menuscns.h	H File	1/22/03 20:28	4,975	46012a24	maint\
met_pd1l.lib	LIB File	1/22/03 20:28	8,259	4fd174f	metawin\
met_xd1d.lib	LIB File	1/22/03 20:28	164,367	cf50958d	metawin\
Metalibs.inc	INC File	1/22/03 20:28	1,895	45e5f44b	metawin\
Metaproc.inc	INC File	1/22/03 20:28	13,236	2eca0ae0	metawin\
Metawndo.h	H File	1/22/03 20:28	2,766	4fb40519	metawin\
Metawndo.inc	INC File	1/22/03 20:28	1,785	62104ac9	metawin\
Metconst.h	H File	1/22/03 20:28	28,440	cdf1ca3a	metawin\
Metconst.inc	INC File	1/22/03 20:28	9,255	532fc39c	metawin\
Metextrn.h	H File	1/22/03 20:28	13,230	dc4adb61	metawin\
Metfonts.h	H File	1/22/03 20:28	5,069	38bae2d5	metawin\
Metfonts.inc	INC File	1/22/03 20:28	6,473	477d264e	metawin\
Metlinks.inc	INC File	1/22/03 20:28	3,155	99b3e8d7	metawin\
Metmacs1.inc	INC File	1/22/03 20:28	23,748	dca90531	metawin\
Metmacs2.inc	INC File	1/22/03 20:28	29,449	4f519141	metawin\
Metmacs3.inc	INC File	1/22/03 20:28	6,050	81ec309c	metawin\
Metmath1.inc	INC File	1/22/03 20:28	4,846	49e9fbb3	metawin\
Metmath2.inc	INC File	1/22/03 20:28	4,711	996ac21d	metawin\
Metmath3.inc	INC File	1/22/03 20:28	5,382	53b1daf1	metawin\
Metmath4.inc	INC File	1/22/03 20:28	4,377	931940b1	metawin\
Metports.h	H File	1/22/03 20:28	9,801	cdf33f1c	metawin\
Metports.inc	INC File	1/22/03 20:28	7,297	d8d9e686	metawin\

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Name	Type	Modified	Size	CRC	Path
metwnd05.drv	Device driver	1/22/03 20:28	63,158	c1647610	metawin\
Mkfillinc.mak	MAK File	1/22/03 20:28	22,581	b71c19a1	
Mnattr.c	C File	1/22/03 20:28	16,442	8bc1522a	menuet\
mnattr.h	H File	1/22/03 20:28	10,207	cf79437d	menuet\
mnbmp.c	C File	1/22/03 20:28	5,032	81bd81a3	menuet\
mnbmp.h	H File	1/22/03 20:28	1,649	50c8b6fa	menuet\
Mnenv.h	H File	1/22/03 20:28	3,952	34cbb410	menuet\
Mnforms.c	C File	1/22/03 20:28	14,482	35b74826	menuet\
Mnforms.h	H File	1/22/03 20:28	2,492	22eabe32	menuet\
Mngraf.c	C File	1/22/03 20:28	11,520	27f6eb04	menuet\
Mngraf.h	H File	1/22/03 20:28	3,551	30a8e527	menuet\
Mnobjs.c	C File	1/22/03 20:28	57,743	774e6c9f	menuet\
Mnobjs.h	H File	1/22/03 20:28	5,362	b3bdd2b0	menuet\
Mnrect.c	C File	1/22/03 20:28	2,435	d7fdcf56	menuet\
Mnrect.h	H File	1/22/03 20:28	1,568	eb20df3	menuet\
Mntoken.c	C File	1/22/03 20:28	4,670	2241e1f1	menuet\
Mntoken.h	H File	1/22/03 20:28	2,441	f9a10b78	menuet\
Mntypes.c	C File	1/22/03 20:28	4,817	aac7ebf4	menuet\
Mntypes.h	H File	1/22/03 20:28	12,232	942189f6	menuet\
mnxtags.c	C File	1/22/03 20:28	10,119	853af00b	menuet\
Mnxtags.h	H File	1/22/03 20:28	2,044	5cbf957c	menuet\
Msg_base.h	H File	1/22/03 20:28	5,055	5d0fb351	include\
N_wrtins.c	C File	1/22/03 20:28	12,792	57ae237b	reports\
Norm_rpt.c	C File	1/22/03 20:28	21,447	cbed37f	reports\
Npen0.asm	ASM File	1/22/03 20:28	4,657	8b803583	metawin\
Npen1.asm	ASM File	1/22/03 20:28	2,648	46bf2ee	metawin\
Npen2.asm	ASM File	1/22/03 20:28	1,754	5cd2afc	metawin\
Npen3.asm	ASM File	1/22/03 20:28	1,701	38a5734e	metawin\
Npen4.asm	ASM File	1/22/03 20:28	1,956	6a127e9a	metawin\
Npen5.asm	ASM File	1/22/03 20:28	1,223	55cd0bd4	metawin\
Npen6.asm	ASM File	1/22/03 20:28	1,242	c4b062cb	metawin\
Npen7.asm	ASM File	1/22/03 20:28	2,010	c38989e6	metawin\
Npen8.asm	ASM File	1/22/03 20:28	1,156	79b50d84	metawin\
Npen9.asm	ASM File	1/22/03 20:28	2,133	e6d59436	metawin\
Oval0.asm	ASM File	1/22/03 20:28	15,097	64d827c0	metawin\
Oval1.asm	ASM File	1/22/03 20:28	7,454	bf6b1d0a	metawin\
Oval2.asm	ASM File	1/22/03 20:28	2,032	f6301b31	metawin\
Oval3.asm	ASM File	1/22/03 20:28	1,876	3ed54639	metawin\
Oval4.asm	ASM File	1/22/03 20:28	1,751	f9db6a52	metawin\
Oval8.asm	ASM File	1/22/03 20:28	10,143	a4d95e3b	metawin\
Oval9.asm	ASM File	1/22/03 20:28	7,016	283419cb	metawin\
Parser.c	C File	1/22/03 20:28	40,667	c2765b6b	edgtools\
Pc_memry.c	C File	1/22/03 20:28	9,990	774af283	ertfs\
Pcconf.h	H File	1/22/03 20:28	6,696	6dfba462	ertfs\
Pconst.c	C File	1/22/03 20:28	6,321	238f587b	ertfs\
Pcdisk.h	H File	1/22/03 20:28	34,924	3b5b97f0	ertfs\
pcl.c	C File	1/22/03 20:28	25,404	d9ce3dc6	startup\
Pcmcia.c	C File	1/22/03 20:28	30,440	6b160404	ertfs\
Pcmcia.h	H File	1/22/03 20:28	3,563	854aa3c2	ertfs\
Pcmctrl.c	C File	1/22/03 20:28	46,551	9e9e0ae	ertfs\
Pcmsram.c	C File	1/22/03 20:28	4,393	6ba99b66	ertfs\
Pcxiab.h	H File	1/22/03 20:28	3,924	4baf6a06	metawin\
pollwork.c	C File	1/22/03 20:28	6,570	c53dfb1c	election\

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Name	Type	Modified	Size	CRC	Path
Poly.inc	INC File	1/22/03 20:28	310	a334553d	metawin\
Poly0.asm	ASM File	1/22/03 20:28	1,489	ade29c6c	metawin\
Poly1.asm	ASM File	1/22/03 20:28	1,292	45f08534	metawin\
Poly2.asm	ASM File	1/22/03 20:28	1,605	378aa045	metawin\
Poly3.asm	ASM File	1/22/03 20:28	1,503	61329d0b	metawin\
Poly4.asm	ASM File	1/22/03 20:28	5,105	d248864e	metawin\
Poly5.asm	ASM File	1/22/03 20:28	1,507	96d92eee	metawin\
Poly6.asm	ASM File	1/22/03 20:28	1,531	60eb9fbb	metawin\
Poly7.asm	ASM File	1/22/03 20:28	1,267	f37c4f14	metawin\
Poly_4.inc	INC File	1/22/03 20:28	462	a7ad6e54	metawin\
popup.c	C File	1/22/03 20:28	4,026	40fbdaa9	graphics\
Portio.c	C File	1/22/03 20:28	3,329	1936930d	erdfs\
Portio.h	H File	1/22/03 20:28	3,255	cb1ef8b4	erdfs\
Portisr.c	C File	1/22/03 20:28	17,067	62e4d68c	erdfs\
Portkern.c	C File	1/22/03 20:28	26,084	d2185a25	erdfs\
Portkern.h	H File	1/22/03 20:28	12,422	3b808867	erdfs\
Portterm.h	H File	1/22/03 20:28	1,734	3015887c	erdfs\
pr_log.c	C File	1/22/03 20:28	12,997	d82216a3	reports\
PrgBeg.c	C File	1/22/03 20:28	3,488	914983b1	
PrgEnd.c	C File	1/22/03 20:28	7,431	4a0c826c	
Pmnlst.c	C File	1/22/03 20:28	2,543	860a0d0f	reports\
Procnt.c	C File	1/22/03 20:28	4,820	e3e0e289	election\
ProvCNT.C	C File	1/22/03 20:28	10,792	486fbdcd	election\
Prsupport.c	C File	1/22/03 20:28	8,960	52bd3df6	election\
Prt_blok.c	C File	1/22/03 20:28	4,635	ec9fb741	reports\
Prt_cand.c	C File	1/22/03 20:28	5,549	ad2339a	reports\
Prt_cnds.c	C File	1/22/03 20:28	6,203	60ac86bc	reports\
Prt_cont.c	C File	1/22/03 20:28	3,507	ea57a839	reports\
Prt_opt.c	C File	1/22/03 20:28	19,127	715f55da	reports\
prt_plat.c	C File	1/22/03 20:28	10,665	adb12eba	reports\
Prt_wi.c	C File	1/22/03 20:28	12,681	87a6c4c0	reports\
Prtsetup.c	C File	1/22/03 20:28	5,378	18199f11	election\
prtsplr.c	C File	1/22/03 20:28	35,059	32fe6aca	machine\
prtutil.c	C File	1/22/03 20:28	8,076	2835450f	reports\
Ptin0.asm	ASM File	1/22/03 20:28	2,306	fe848905	metawin\
Ptin1.asm	ASM File	1/22/03 20:28	2,397	b51bc0b2	metawin\
Pubcnt.c	C File	1/22/03 20:28	12,734	ed31f1bd	election\
Put_addr.c	C File	1/22/03 20:28	10,708	b139c320	reports\
Pwrdwn.c	C File	1/22/03 20:28	11,913	7516a136	edgtools\
Queue.c	C File	1/22/03 20:28	3,743	e87741bc	edgtools\
Qury0.asm	ASM File	1/22/03 20:28	931	b151f84e	metawin\
Qury1.asm	ASM File	1/22/03 20:28	640	2cbc9869	metawin\
Qury2.asm	ASM File	1/22/03 20:28	709	94458b02	metawin\
Qury3.asm	ASM File	1/22/03 20:28	2,304	e759be01	metawin\
Qury4.asm	ASM File	1/22/03 20:28	1,932	640be2af	metawin\
Qury6.asm	ASM File	1/22/03 20:28	2,143	55ac62be	metawin\
ram.bat	MS-DOS Batch File	1/22/03 20:28	424	b8b403bb	
Ram.bld	BLD File	1/22/03 20:28	1,957	9fef46a8	
Ramdbg.bld	BLD File	1/22/03 20:28	2,002	42ea90af	
Ramdisk.c	C File	1/22/03 20:28	4,029	cd58afcd	erdfs\
RAMTest.c	C File	1/22/03 20:28	25,112	300c5819	maint\
Rand_blk.c	C File	1/22/03 20:28	9,846	37e8df1d	election\
Random.c	C File	1/22/03 20:28	2,589	e1bbc661	edgtools\

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Name	Type	Modified	Size	CRC	Path
readcart.c	Readme Document	1/22/03 20:28	5,521	598e8a2d	edgtools\
recorded.c	C File	1/22/03 20:28	2,266	f9a0d517	election\
Rect0.asm	ASM File	1/22/03 20:28	6,533	bee88e06	metawin\
Rect1.asm	ASM File	1/22/03 20:28	2,184	d11f6f3d	metawin\
Rect2.asm	ASM File	1/22/03 20:28	2,491	6dba445b	metawin\
Rect3.asm	ASM File	1/22/03 20:28	2,383	7b07d3ca	metawin\
Rect4.asm	ASM File	1/22/03 20:28	3,219	220f457d	metawin\
Rect5.asm	ASM File	1/22/03 20:28	18,868	c5a744c1	metawin\
Rect6.asm	ASM File	1/22/03 20:28	9,362	fd123cf6	metawin\
Rect7.asm	ASM File	1/22/03 20:28	1,366	133c8398	metawin\
Rect8.asm	ASM File	1/22/03 20:28	2,925	6dcb4d20	metawin\
Rect9.asm	ASM File	1/22/03 20:28	2,507	81d89a7c	metawin\
Reg00.asm	ASM File	1/22/03 20:28	4,640	3d783225	metawin\
Reg01.asm	ASM File	1/22/03 20:28	8,973	a76ce097	metawin\
Reg02.asm	ASM File	1/22/03 20:28	6,132	ba995f87	metawin\
Reg03.asm	ASM File	1/22/03 20:28	2,928	6d12d36f	metawin\
Reg04.asm	ASM File	1/22/03 20:28	4,886	12bd67ce	metawin\
Reg05.asm	ASM File	1/22/03 20:28	4,944	b4e2e311	metawin\
Reg06.asm	ASM File	1/22/03 20:28	4,889	79222ad1	metawin\
Reg07.asm	ASM File	1/22/03 20:28	4,943	caeab5d0	metawin\
Reg08.asm	ASM File	1/22/03 20:28	3,873	77640dd0	metawin\
Reg09.asm	ASM File	1/22/03 20:28	60,410	816bd20c	metawin\
Reg10.asm	ASM File	1/22/03 20:28	8,036	ea32291a	metawin\
Reg11.asm	ASM File	1/22/03 20:28	2,396	b634809c	metawin\
Reg12.asm	ASM File	1/22/03 20:28	2,614	75c2aece	metawin\
Reg13.asm	ASM File	1/22/03 20:28	2,518	7ac865b5	metawin\
Reg14.asm	ASM File	1/22/03 20:28	2,831	a6fd1f43	metawin\
Reg15.asm	ASM File	1/22/03 20:28	3,107	10eb6d1c	metawin\
Reg16.asm	ASM File	1/22/03 20:28	3,052	97a2c3a2	metawin\
Reg17.asm	ASM File	1/22/03 20:28	2,942	4b0dd024	metawin\
Reg18.asm	ASM File	1/22/03 20:28	5,728	713914e	metawin\
Reg19.asm	ASM File	1/22/03 20:28	2,059	2c94063f	metawin\
Reg20.asm	ASM File	1/22/03 20:28	5,459	9ec17c43	metawin\
Regclip.inc	INC File	1/22/03 20:28	52,002	2c806b47	metawin\
Regclipv.inc	INC File	1/22/03 20:28	2,235	41fdc8e	metawin\
Registry.c	C File	1/22/03 20:28	6,032	56d07737	election\
Rep_ext.h	H File	1/22/03 20:28	11,945	11c8e5c9	include\
Rep_pro.h	H File	1/22/03 20:28	7,811	bfa442b4	reports\
report.h	H File	1/22/03 20:28	5,983	e08b137	reports\
Reports.c	C File	1/22/03 20:28	39,509	a952b2db	reports\
resource.c	C File	1/22/03 20:28	38,720	aa55c2cb	Resource\
Resource.h	H File	1/22/03 20:28	55,323	8b725a14	include\
Rom.bld	BLD File	1/22/03 20:28	2,223	4da8d863	
Romdisk.c	C File	1/22/03 20:28	2,292	dd764ba8	ertfs\
Romdisk.h	H File	1/22/03 20:28	227,818	2f6c6645	ertfs\
romend.bld	BLD File	1/22/03 20:28	1,574	f3624c62	
romr.bld	BLD File	1/22/03 20:28	1,608	4a2f147b	
root.c	C File	1/22/03 20:28	31,665	f3c524c3	startup\
Rota.inc	INC File	1/22/03 20:28	1,395	92732f80	metawin\
RotFont.c	C File	1/22/03 20:28	12,272	300eaca9	graphics\
Roth.inc	INC File	1/22/03 20:28	2,844	50160c7c	metawin\
Roth8.asm	ASM File	1/22/03 20:28	18,080	c23e6aa5	metawin\
Rotr8.asm	ASM File	1/22/03 20:28	17,431	e38f8b65	metawin\

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Name	Type	Modified	Size	CRC	Path
Rpt_sel.c	C File	1/22/03 20:28	22,973	aef198a3	election\
Rpthead.c	C File	1/22/03 20:28	22,575	d26027e5	reports\
rsc.h	H File	1/22/03 20:28	3,411	d264456f	Resource\
rsc_evt.c	C File	1/22/03 20:28	12,029	4f0b3d3a	Resource\
Rsc_lcd.c	C File	1/22/03 20:28	13,655	c861251e	Resource\
RSC_MISC.c	C File	1/22/03 20:28	18,165	ec463d52	Resource\
Rsc_pop.c	C File	1/22/03 20:28	31,456	fa1377f4	Resource\
Rsc_rpt.c	C File	1/22/03 20:28	13,073	b085d89a	Resource\
Rtfsapi.h	H File	1/22/03 20:28	10,234	6e128d95	ertfs\
Rtfsinit.c	C File	1/22/03 20:28	25,085	b526ec60	ertfs\
SCrdTest.c	C File	1/22/03 20:28	11,764	3a3fb4fd	maint\
Seed1.asm	ASM File	1/22/03 20:28	44,790	e4d30925	metawin\
Seep.c	C File	1/22/03 20:28	21,428	37800d90	edgtools\
Selbal.c	C File	1/22/03 20:28	7,470	8319d11	election\
Set_blok.c	C File	1/22/03 20:28	27,013	ae5eae8	reports\
Setp0.asm	ASM File	1/22/03 20:28	8,445	581468c	metawin\
Setp1.asm	ASM File	1/22/03 20:28	941	5a095330	metawin\
Setp2.asm	ASM File	1/22/03 20:28	6,506	9e7faa5b	metawin\
Setp3.asm	ASM File	1/22/03 20:28	7,038	d7a70e3b	metawin\
Setp5.asm	ASM File	1/22/03 20:28	7,553	18621bd5	metawin\
Setupenv.bat	MS-DOS Batch File	1/22/03 20:28	5,507	c8aa5209	
SetUpRom.bat	MS-DOS Batch File	1/22/03 20:28	1,966	31c3e922	
Sim.c	C File	1/22/03 20:28	73,362	35bd0078	sim\
Sincos.inc	INC File	1/22/03 20:28	1,105	fd924c57	metawin\
Sintbl.inc	INC File	1/22/03 20:28	1,187	cf43e55	metawin\
slctlang.c	C File	1/22/03 20:28	17,161	eb1ba9c5	election\
Smrtcard.c	C File	1/22/03 20:28	9,766	72e44b64	edgtools\
Sound.c	C File	1/22/03 20:28	17,672	f3ef75ab	edgtools\
sram00.c	C File	1/22/03 20:28	3,737	d84ff06a	edgtools\
sram00.h	H File	1/22/03 20:28	5,588	9462a4bb	edgtools\
sram01.c	C File	1/22/03 20:28	4,205	df0888f2	edgtools\
sram01.h	H File	1/22/03 20:28	6,118	41c587a1	edgtools\
sramcv.c	C File	1/22/03 20:28	8,678	e2ce6eee	edgtools\
sramcv.h	H File	1/22/03 20:28	3,052	84098932	include\
sramload.c	C File	1/22/03 20:28	5,912	ddb1d997	edgtools\
Str_fmt.c	C File	1/22/03 20:28	55,647	820c3a16	edgtools\
string16.c	C File	1/22/03 20:28	19,884	9d6c14a7	edgtools\
string16.h	H File	1/22/03 20:28	2,613	79ac9279	include\
Strk0.asm	ASM File	1/22/03 20:28	18,298	eb447fcd	metawin\
Strk1.asm	ASM File	1/22/03 20:28	9,344	41792926	metawin\
Strk2.asm	ASM File	1/22/03 20:28	1,280	b1cf879f	metawin\
Strk3.asm	ASM File	1/22/03 20:28	3,314	edda7b20	metawin\
Strk4.asm	ASM File	1/22/03 20:28	1,271	6942d1c5	metawin\
Strk5.asm	ASM File	1/22/03 20:28	846	de0293a7	metawin\
Strk6.asm	ASM File	1/22/03 20:28	1,048	8c3b909e	metawin\
Strk7.asm	ASM File	1/22/03 20:28	2,620	6378d2a6	metawin\
Strk8.asm	ASM File	1/22/03 20:28	3,466	5dd8c3b6	metawin\
strtupfm.c	C File	1/22/03 20:28	2,751	cf7da0cf	graphics\
Struct.h	H File	1/22/03 20:28	42,074	fecaf0f9	include\
Sumcomp.c	C File	1/22/03 20:28	13,373	dc8b0072	election\
sumscrn.c	C File	1/22/03 20:28	67,838	ea9cbbcd	election\
sv_opt.c	C File	1/22/03 20:28	10,441	fa88d3eb	election\
Swscan.c	C File	1/22/03 20:28	12,922	55e7d545	machine\



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Name	Type	Modified	Size	CRC	Path
syserr31.c	C File	1/22/03 20:28	2,552	7ac11571	election\
Sysevent.c	C File	1/22/03 20:28	21,243	d0040b43	system\
Sysevent.h	H File	1/22/03 20:28	8,407	aa8169ec	include\
Syst0.asm	ASM File	1/22/03 20:28	34,208	75f499bd	metawin\
System.c	C File	1/22/03 20:28	3,805	d35b8135	system\
System08.inc	INC File	1/22/03 20:28	14,986	757dbe35	metawin\
Testfm.c	C File	1/22/03 20:28	7,186	ff07425	maint\
Text3.asm	ASM File	1/22/03 20:28	2,716	f7f68726	metawin\
TmDtfm.c	C File	1/22/03 20:28	22,903	db5051b	maint\
Touch.c	C File	1/22/03 20:28	82,176	9b6c1884	edgtools\
trans.c	C File	1/22/03 20:28	19,690	9c7fcb58	portrait\
Trueide.c	C File	1/22/03 20:28	1,062	3f791b78	ertfs\
Tstsh.c	C File	1/22/03 20:28	45,716	941d09e9	ertfs\
Turnout.c	C File	1/22/03 20:28	24,172	ba3d0edc	reports\
Unixtime.c	C File	1/22/03 20:28	12,260	53599e5f	edgtools\
Unpack.c	C File	1/22/03 20:28	2,851	74e86de0	edgtools\
UpdtFirm.c	C File	1/22/03 20:28	41,994	590490e3	startup\
Util.c	C File	1/22/03 20:28	34,367	fee5fb86	ertfs\
Util0.asm	ASM File	1/22/03 20:28	1,983	41ead823	metawin\
Util1.asm	ASM File	1/22/03 20:28	2,042	71fde039	metawin\
Util2.asm	ASM File	1/22/03 20:28	507	cdaa24fc	metawin\
Util3.asm	ASM File	1/22/03 20:28	501	b9c9b5d0	metawin\
Util4.asm	ASM File	1/22/03 20:28	610	40e478a8	metawin\
Util5.asm	ASM File	1/22/03 20:28	529	2333722a	metawin\
Util6.asm	ASM File	1/22/03 20:28	523	514722a5	metawin\
Util7.asm	ASM File	1/22/03 20:28	617	e05f7720	metawin\
Util8.asm	ASM File	1/22/03 20:28	5,738	6ba5f18	metawin\
Util9.asm	ASM File	1/22/03 20:28	25,020	26204081	metawin\
Utility.c	C File	1/22/03 20:28	30,273	9eae280	election\
Val_ball.c	C File	1/22/03 20:28	10,920	cc841abf	election\
Validate.c	C File	1/22/03 20:28	29,857	b9549398	consolid\
Version.c	C File	1/22/03 20:28	3,889	be4ecc9f	
View0.asm	ASM File	1/22/03 20:28	6,013	71e784d7	metawin\
View1.asm	ASM File	1/22/03 20:28	3,793	2f1ebc84	metawin\
View2.asm	ASM File	1/22/03 20:28	934	f7e91c3b	metawin\
View3.asm	ASM File	1/22/03 20:28	2,460	931b347c	metawin\
View4.asm	ASM File	1/22/03 20:28	3,701	7108e1b2	metawin\
View5.asm	ASM File	1/22/03 20:28	2,911	2fd739c1	metawin\
View6.asm	ASM File	1/22/03 20:28	4,123	2f08ef11	metawin\
View7.asm	ASM File	1/22/03 20:28	2,533	45a15bb8	metawin\
View8.asm	ASM File	1/22/03 20:28	2,547	5978394e	metawin\
View9.asm	ASM File	1/22/03 20:28	18,786	5cb940c0	metawin\
Vote.c	C File	1/22/03 20:28	31,247	89dc3a58	election\
votelang.c	C File	1/22/03 20:28	67,956	6c49728f	election\
Voteok.c	C File	1/22/03 20:28	18,126	c16951ee	election\
Voter.c	C File	1/22/03 20:28	33,813	f3b82ff5	election\
Votesave.c	C File	1/22/03 20:28	38,615	e3304ef6	election\
Voting.c	C File	1/22/03 20:28	85,154	cc2e9d6c	election\
Vtsvenum.h	H File	1/22/03 20:28	12,113	136b1cf3	include\
Wait.c	C File	1/22/03 20:28	2,953	236cb807	edgtools\
WI_blk.c	C File	1/22/03 20:28	6,256	fa2f6c93	election\
Wikybd.c	C File	1/22/03 20:28	17,431	18457a26	election\
Wndo.inc	INC File	1/22/03 20:28	13,974	cc2d5526	metawin\

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Name	Type	Modified	Size	CRC	Path
Wndo0.asm	ASM File	1/22/03 20:28	9,208	f9c9d02f	metawin\
Wndo1.asm	ASM File	1/22/03 20:28	5,426	730498c7	metawin\
Wndo2.asm	ASM File	1/22/03 20:28	40,612	1a40e914	metawin\
Wndo3.asm	ASM File	1/22/03 20:28	4,499	926ffc1	metawin\
Wndo4.asm	ASM File	1/22/03 20:28	958	f3b1f756	metawin\
Wndo5.asm	ASM File	1/22/03 20:28	1,916	bccbfec7	metawin\
Wndo6.asm	ASM File	1/22/03 20:28	14,741	b4e01c2b	metawin\
Wndo7.asm	ASM File	1/22/03 20:28	2,759	506d3450	metawin\
Wndo8.asm	ASM File	1/22/03 20:28	1,101	b7e1cb90	metawin\
Wndo9.asm	ASM File	1/22/03 20:28	1,685	1b2568e3	metawin\
Write_in.c	C File	1/22/03 20:28	16,680	d8a80ece	election\
Wrtlog.c	C File	1/22/03 20:28	8,176	83c307be	edgtools\
xlatstrs.c	C File	1/22/03 20:28	45,392	debb2b66	LdBafl
Xpol4.asm	ASM File	1/22/03 20:28	22,297	cd334223	metawin\
Xpol5.asm	ASM File	1/22/03 20:28	68,300	9d78dbd7	metawin\
Xpol6.asm	ASM File	1/22/03 20:28	65,920	65430d2f	metawin\
Xpol7.asm	ASM File	1/22/03 20:28	49,968	8695c034	metawin\
Xpol_4.inc	INC File	1/22/03 20:28	4,199	6b58125d	metawin\
Xpol_5.inc	INC File	1/22/03 20:28	3,960	b1b169b1	metawin\
Xypt0.asm	ASM File	1/22/03 20:28	710	53b714ef	metawin\
Xypt1.asm	ASM File	1/22/03 20:28	717	e6f0ca8e	metawin\
Xypt2.asm	ASM File	1/22/03 20:28	1,154	c2da51f8	metawin\
Xypt3.asm	ASM File	1/22/03 20:28	866	b80e3302	metawin\
Xypt4.asm	ASM File	1/22/03 20:28	2,526	a3581cab	metawin\
Xypt5.asm	ASM File	1/22/03 20:28	2,762	b9fb5c22	metawin\
Xypt6.asm	ASM File	1/22/03 20:28	5,069	f0209ab9	metawin\
Xypt7.asm	ASM File	1/22/03 20:28	2,457	c3a2ba1c	metawin\
Yore3.asm	ASM File	1/22/03 20:28	4,869	65a4ac55	metawin\
Yore4.asm	ASM File	1/22/03 20:28	2,353	18d26b8a	metawin\
Yore5.asm	ASM File	1/22/03 20:28	3,222	1df4683b	metawin\
Zect0.asm	ASM File	1/22/03 20:28	3,663	baad4749	metawin\
Zect1.asm	ASM File	1/22/03 20:28	940	49e8021b	metawin\
Zect2.asm	ASM File	1/22/03 20:28	894	17defe2c	metawin\
Zect3.asm	ASM File	1/22/03 20:28	3,731	4c9364ea	metawin\
Zect4.asm	ASM File	1/22/03 20:28	1,108	c74922c0	metawin\
Zect5.asm	ASM File	1/22/03 20:28	3,212	7b053f9b	metawin\
Zect6.asm	ASM File	1/22/03 20:28	2,453	610a0087	metawin\
Zect7.asm	ASM File	1/22/03 20:28	1,462	e6bb29d5	metawin\
Zect8.asm	ASM File	1/22/03 20:28	2,321	f3f1398a	metawin\
Zect9.asm	ASM File	1/22/03 20:28	6,477	b9dd7a04	metawin\
zstr.c	C File	1/22/03 20:28	62,021	df9e83e3	graphics\
677 file(s)			19,042,434		

**ATTACHMENT B**  
**CARD ACTIVATOR SOURCE REVIEW REPORT**  
**RELEASE 4.32**

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### Sequoia Card Activator 4.32 Software Review Summary

This review covers the Sequoia Card Activator 4.32 software received January 27<sup>th</sup>, 2003 with respect to changes made since the version 4.2. The review involved evaluation of its compliance with the FEC guidelines for software quality and reliability. This evaluation included, but was not limited to, the following considerations:

Readability	How straightforward and apparent was the design?
Understandability	How complicated was the code to implement it?
Modularity	How well was the code divided into logical, functional units?
Robustness	How well does the code handle error conditions or unexpected inputs?
Security	Does the code protect the integrity of voting data at all times?
Maintainability	How easy would it be to extend, fix, or modify this code in the future?
Consistency	Was the design of the code coherent throughout?
Documentation	Does the code contain useful and frequent comments?
Usability	Does the code inform the user about progress or errors?
Flow control	Are control constructs and entry/exit points logical and controlled?

The review report details specific instances where it was felt that the code fell short in some areas being reviewed, and lists file names, line numbers, and suggestions where applicable to guide the maintainers in making any needed corrections. Also included is a general synopsis section where recurring problems are explained and solutions may be suggested. Some areas may be identified where improvements are needed in non-critical areas, and those changes should be addressed in future versions of this software.

The recommendation is given at the end of this document.

#### Evaluation

The code on the disk has been reviewed and described in the software specification. The evaluation of the code is given on the subsequent pages. This document is arranged as follows:

- 1) Source File Specific Notes
- 2) General Observations
- 3) Final Assessment Statements

Revision 4.32 of the code was received on January 27<sup>th</sup>, 2003.

All files were compared with the latest 4.2 revision counterparts and any differences were investigated. The following is the listing of the source code files that changed and were reviewed, along with any change-specific observations.

1) Revision 4.32 Source File Specific Notes

MODEM.C  
MODEM.H  
SBCPRG.C  
UTILITY.C

2) Revision 4.32 General Observations/Final Assessment Statements

Revision 4.32 was a minor change from 4.2. All the changes were done in full compliance with the FEC guideline and accurately described in the change log.

It is recommended that this code be considered to be compliant with the FEC guidelines for coding practices as set forth within the FEC Performance and Test Standards for Punchcard, Marksense, and Direct Recording Electronic Voting Systems.

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**CARD ACTIVATOR 4.32 Source Listing**

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C:\WINDOWS\TEMP\ca\_32 source.zip

Page 1

Name	Type	Modified	Size	CRC	Path
Config.h	H File	5/1/01 08:43	10,054	98f796f	
Cryptsig.c	C File	4/25/02 10:33	35,170	cdc54b9e	
Des.c	C File	4/25/02 08:05	24,968	87ae02be	
Kyb_drv.c	C File	6/7/02 07:20	7,625	71019726	
Kyb_drv.h	H File	1/18/02 08:52	2,673	5ca4adc2	
Lcd_drv.c	C File	1/18/02 08:55	13,574	9a67136f	
Lcd_drv.h	H File	2/1/01 10:16	5,349	6bb83529	
Led_drv.c	C File	2/5/01 12:02	3,812	b73d3e68	
Led_drv.h	H File	2/1/01 10:11	1,119	4c78341	
Lowsmart.c	C File	1/18/02 08:57	14,265	babe06b2	
Lowsmart.h	H File	6/15/01 07:07	9,894	80d8a561	
Modem.c	C File	1/24/03 06:48	29,957	2e15fbf	
Modem.h	H File	11/26/02 06:27	1,551	b8fab4bd	
Sbcprg.c	C File	1/24/03 06:31	109,777	3501dbd0	
Sbcprg.exe	Application	1/24/03 06:53	117,310	7ee52f42	
Sbcprg.h	H File	10/1/02 05:46	2,163	771d4bd8	
Struct.h	H File	4/25/02 08:13	37,290	a2d28573	
Utility.c	C File	11/25/02 07:07	37,575	9c187102	
Utility.h	H File	5/15/02 05:15	5,369	dd8ee39d	
19 file(s)			469,495		

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