

AVANTE INTERNATIONAL TECHNOLOGY

Qualification Test Report

Original Report for VOTE-TRAKKER Version 1.2.0 created 02/27/2006

Ciber Revision 1.1 created 04-05-2006

Ciber Revision 1.2 created 04-10-2006

04/10/06 **NASED Number N-1-12-22-22-003 (2002)**

Prepared For:

The National Association of State Election Directors



Prepared By: _____

CIBER, Inc.
Independent Test Authority

ciber

CIBER, Inc.
7501 South Memorial Parkway
Suite 107
Huntsville, AL 35802

Document Revision

1.0	Original Report
1.1	2006-04-05 Added clarification in Section 3 under evaluation, Added all components of system as tested in the Summary of Reports and Addendums Section.
1.2	2006-04-10 Added text to the “Hardware” Subsection of Section 3 confirming that the units identified in that sub-section had been certified. Added text to Section 5.3 clarifying that a restart of the scanning (not system reboot) was valid recovery action, and indicating actual test recovery performed.

1 INTRODUCTION

CIBER is pleased to submit this report summarizing the qualification testing of the Avante International Technologies, Inc. (AI Technology) VOTE-TRAKKER™ 1.2.0 voting system. The AI Technology VOTE-TRAKKER™ is an integrated voting system that includes three major components: VOTE-TRAKKER™ EVC308-FF DRE Voting Machine (FFVT), OPTICAL VOTE-TRAKKER™ optical mark-sense voting system (OVT), and the VOTE-TRAKKER™ Election Management System (EMS) software.

1.1 TEST AGENCY TEST AGENCY HISTORY AND CAPABILITY

CIBER Inc. has been providing IT consulting services for over 20 years. Although the ITA division name has changed due to an aggressive acquisition and merger market, the ITA division of the company has had the same leadership in place since inception. Founded in 1974, the company's consultants now serve client businesses from 35 CIBER, 10 DigiTerra, 4 Solution Partners and 4 Enspherics offices in the U.S., Canada and Europe. With offices in six countries, CIBER's 4,500 IT specialists continuously build, test and upgrade our client's systems to "competitive advantage status." CIBER provides a single source for IT solutions, including:

- Full-solution ASP services
- Applications maintenance and support
- Testing and IQA
- Web and database hosting
- Enterprise solutions, including SAP, Oracle and Peoplesoft
- Application outsourcing
- eBusiness, from architecture through execution
- Knowledge management and training

The company has been involved in numerous QA and IQA testing projects for commercial, state, and federal government customers. CIBER has an interim accreditation as an Independent Test Authority (ITA) through the National Association of State Election Directors (NASSED).

1.2 TEST APPROACH

The submitted system is the initial qualification test for the FFVT Hardware and its embedded firmware. That hardware is integrated with modified versions of the EMS software (previous version 4.7.6) and the OVT (previous version 1.5.0) that were

previously certified. The test approach considered this release as a new system, but recognized that the EMS and OVT had been previously tested and certified. The qualification testing of those components of the system did not repeat the reviews and inspections for documents and source code that had not been altered from the previously certified release. System testing included all components as an initial release.

Wyle Laboratories performed hardware and functional testing of the FFVT. They also reviewed the Technical Data Package associated with this hardware. CIBER performed the source code review of all firmware that resides in this hardware.

The OVT includes a Optical Scanner and COTS desktop computer with custom software. The optical scanner hardware is a COTS scanner that was certified in testing by CIBER as part of the previously certified OVT version 1.5.0. The same scanner was submitted with this version of the system and had not been altered from the previous certification, so that it was not necessary to repeat the hardware testing required for the scanner. Significant changes were made to the OVT custom software, which required CIBER to conducted functional testing of the OVT. CIBER reviewed the Technical Data Package associated with the OVT and inspected all source code changes for the programs that reside on the OVT work station.

CIBER conducted functional testing of the EMS software, reviewed all documents in the Technical Data Package that the vendor had modified, and inspected the changes to the source code.

Following functional testing of the components and the recommendation by Wyle Laboratories that the FFVT 1.2.0 met the 2002 voting standards, CIBER conducted system tests to verify the integrated operation of all system components in simulated elections.

1.3 DOCUMENT OVERVIEW

This document consists of five main sections: Introduction, Qualification Test Background, System Identification, System Overview, and Qualification Test Results. The Qualification Background gives general information about the qualification test process. The System Identification Section gives information about the AI Technology software and supporting hardware. The System Overview describes the software and the Qualification Test Results Section provides a summary of the results of the testing process.

Wyle Laboratories performed qualification testing of the FFVT Voting machine and prepared a separate report describing that testing (Wyle report number 52667-01). This document describes the testing performed by CIBER, which includes testing the integrated operation of the full system.

2 QUALIFICATION TEST BACKGROUND

The primary purpose of Software Qualification Testing is to demonstrate compliance with levels of design, performance, and quality claimed for them by manufacturers. The tests are also intended to demonstrate that the system meets or exceeds the requirements of the Federal Election Commission (FEC) Voting System Standards.

The scope and detail of the requirements for qualification have been tailored to the design and complexity of the software submitted by AI Technology for testing. The qualification test procedure is intended to discover defects in software design and system operation which, should they occur in actual election use, could result in failure to complete election operations in a satisfactory manner.

The tests have been designed to evaluate system compliance with the requirements of the FEC Voting System Standards. The examination includes selective in-depth examination of software, the inspection and evaluation of system documentation and optional tests verifying system performance and function under normal and abnormal conditions.

3 SYSTEM IDENTIFICATION

The Full Face VOTE-TRAKKER™ 1.2.0 voting system submitted by AI Technology for qualification testing consisted of the following software, hardware and documentation:

Software

(See Wyle Report 52667-01 for firmware included in the FFVT)

- Election Management Software (EMS) Version 5.2.9:
 - Event Log 4.0.4
 - Generate Ballot Data 5.2.9
 - Generate VID 4.2.0
 - Load Ballot Data 3.5.7
 - Tally 4.1.6
 - Manage Ballot Data 3.8.6
 - Test Voting 1.2

- Optical VOTE-TRAKKER™ (OVT) version 1.7.0
 - Optical VOTE-TRAKKER™ 1.7.0
 - Count Ballots 2.00.4

Hardware

Ciber utilized the following hardware in the system test configuration:

- AI Technology VOTE-TRAKKER™ Model EVC308-FF Voting Machine, Firmware version 1.2.0, Serial Number VTF0300108
- Canon Optical Scanner, Model DR-5020, Serial Number BR309526

- AI Technology Magnetic Card Reader/Writer, Model ACR8000RF

The Vote-Trakker unit was located at the Wyle facility and was an actual unit that had completed the Wyle hardware and functional tests. The Optical Scanner used was located at the CIBER facility and is the unit that was certified by CIBER in the previous submittal by this vendor. That unit has been continuously located at the CIBER facility since the completion of those tests. All firmware source code was reviewed by the CIBER code reviewer.

COTS Software

- MS Windows 2000 (operating system)
- Microsoft SQL-Server Professional Series Version 7
- MS Word 2000
- Roxio Easy CD Creator 5
- ObjectTWControl v3.1 (ActiveX Control), JFL Peripheral Solutions Inc. (File name: ObjTWIN.ocx)
- Barcode deciphering: Softek Barcode Version 3.03, SoftekBarcode Control (ActiveX Control), Softek Software Inc.
- Language synthesizer engines:
 - IBM Via Voice TTS Runtime v6.610- Chinese (www.wizzardsoftware.com)
 - U.S. English Lernout & Hauspie TruVoice engine 2.0 licensed under Microsoft Agent
 - Spanish Lernout & Hauspie TruVoice engine 2.0 licensed under Microsoft Agent

Support Equipment

The following equipment is COTS equipment that was used in this test but may be replaced by equivalent equipment that conforms to the specifications provided in the vendors TDP.

- BarCode Scanner, Hand Held Products, Inc., Model 3800PDF-12, Serial Number X-48-07189 (for scanning voter paper record barcode)
- Dell Latitude D500, Service Tag Number BFSN31(Ballot preparation and Tally)
- HP Onmebook XE3, Serial Number TW11625720 (VID Card Generation)
- e-Machines T2042, Serial Number QIP2CC0203013 (OVT Computer)¹
- Dell Dimension 2400, Serial Number BNVC351 (OVT Computer)
- HP Onmebook XE3, Serial Number TW11625720 (VID Card Generation)
- Lexmark Printer, T520, Serial Number 9909TM6
- Access 2003 (to enter language translations and to maintain test records)

Documentation

¹ This computer was used until it had a catastrophic failure of the hard drive on 2/26/06. At that time it was replaced by the Dell Dimension 2400 that follows this entry in the equipment list.

(The documents with a document date of “On File / Previous Release” were not changed and therefore not resubmitted with this release. Document dates for TDP Sections are the CIBER file date.)

TDP Section	Document Name	Revision	Document Date
1.	Scope	5.2.5 Rev F	02/24/06
2.	System Overview	5.2.5 Rev. A	10/10/05
3.	System Functionality Description	5.2.5 Rev. A	09/12/05
4.	System Hardware Specification	4.7.5 Rev B	10/11/05
5.	System Design and Specification	5.2.5 Rev. E	02/24/06
6.	System Security Specification	5.2.5 Rev. D	01/05/06
7.	System Test and Verification Specification	5.2.5	07/18/05
8.	System Operation Procedures	5.2.5 Rev. F	02/24/06
9.	System Maintenance Procedures	5.2.5 Rev. E	02/24/06
10.	Personnel Deployment and Training Requirements	5.2.5 Rev. A	10/10/05
11.	Configuration Management Plan	5.2.5 Rev. A	10/10/05
12.	Quality Assurance Program	5.2.5 Rev. A	02/04/04
A.	State Certification Letters	4.6.7	On File / Previous Release
B.	Sacramento County Report of Early Voting	4.6.7	On File / Previous Release
C.	United States Patent Applications	4.6.7	On File / Previous Release
E	Procured Software Licenses	N/A	11/15/05
Manual	System Administration and Security Management Manual	5.2.9	12/02/05
Manual	Ballot Preparation Manual Vote-Trakker EMS	5.2.9 Rev B	01/25/06
Manual	Ballot Loading and Pre-Election Management Manual	5.2.9	12/02/05
Manual	Poll Worker’s Manual EE308-FF	1.2.0	1/25/06
Manual	Tally and Reporting Manual	5.2.9 Rev A	01/05/06
Manual	Optical Vote-Trakker Operating Manual	1.7.0	12/28/05
Manual	Maintenance and Repair Manual EVE308-FF	1.2.0	1/25/06
Manual	Panasonic scanner Operating Instructions	NA	On File / Previous Release
Manual	Panasonic Image Enhancement Technology	NA	On File / Previous Release
Manual	Canon Scanner User Manual	NA	On File / Previous Release
Manual	Lexmark T522 Printer User Manual	NA	On File / Previous Release
Manual	MS User Interface (Windows) Design Guidelines	NA	On File / Previous Release

Manual	Configuration Management Plan for Vote Trakker	1.1.0	On File / Previous Release
J	Database and Software Design Specifications & Coding Conventions	1.1.0	06/02/05
Manual	Sample of Warehouse Facilities Plan	NA	On File / Previous Release
L	California Procedures	NA	On File / Previous Release
Manual	Connecticut Moderator Handbook	Rev 1.0	On File / Previous Release
Manual	Quality Manual ISO9001-2000	Rev. 2	On File / Previous Release
Manual	Quality Operation Procedures and Forms	Rev. A	On File / Previous Release
Manual	Quality Work Instructions and Forms	Rev. A	On File / Previous Release

4 SYSTEM OVERVIEW

The VOTE-TRAKKER™ voting system includes the FFVT voting machine, the OVT paper ballot component and the EMS software for ballot preparation and vote tabulation.

The FFVT provides touch screen voting using a large display that allows all contests to appear on one page. (Refer to Wyle Report 52667-01 for a description of this device.) It accepts ballots prepared using the EMS software and the votes it records are transferred to the EMS for central tabulation.

The OVT consists of custom software that resides on a COTS PC and controls a commercial scanner. Ballot definitions prepared with the EMS are loaded to the OVT. The OVT is used to print the paper ballots, scan and tally the voted paper ballots and print reports of the results. The tabulated results are transferred to the EMS central tally for consolidation with the FFVT votes.

The EMS provides an election administrator with all the tools required to prepare, count, and report an election in accordance with local laws. Each election is kept in its own database. The EMS provides the tools to manage and administrate these databases. (The following overview is a summary of the capabilities provided by this system, for a full statement of the systems capabilities, refer to the Vendors Functional Requirements document and operating manuals listed in Section 3.)

The basic functionality of VOTE-TRAKKER™ voting system is grouped as follows:

- Security – The EMS, OVT and FFVT are initialized into a locked environment that allows the election official to access the database only through the authorized application. Functions are secured by user ID and password. Information is exchanged with the OVT and FFVT using a flash memory or Compact Disk and protected against viewing or alteration with unauthorized software. No networking or public transmission is used.
- System Setup – The system is delivered by AI Technology with the software pre-installed for the user. The system is not to be attached to any office network, telecommunication links or the internet.
- Reports – The EMS provides reports of contests, candidates, and jurisdiction organization. The EMS Tally program reports election results at multiple jurisdictional levels (precinct, polling place, jurisdiction) and voting sources (absentee, provisional, normal). It provides for viewing and printing of FFVT logs. The EMS “Event Log” application provides for viewing and printing of all event logs that are maintained by each EMS application and the FFVTs. The FFVT provides required poll reports and the OVT reports vote totals at the subprecinct level and for totals at that OVT. All components maintain logs which can be displayed and transferred to the EMS for viewing and printing.
- Election - The system supports general elections and open and closed primary elections. The system supports multiple geographic entities with consolidation at multiple sites and / or a single central site. The system supports a variety of contest types including N of M contests, ranking contests, recall questions, judicial contests and cumulative contests.
- Election Setup utilizes the EMS as follows:
 - The election official uses the “Manage Ballot Data” application to create a database in which a new election will be defined or to select an existing database for editing. The database becomes the active database for all other EMS applications. This application is also used to transfer the completed election to Compact Disk (CD) for loading of the FFVT(s) and the OVT(s). During that transfer it does a final validity check of the election database and terminates the transfer with warning messages if it detects an error or omission in the election definition.
 - The “Generate Ballot Data” application provides access to the selected database for defining election parameters. These include the jurisdictional organization of districts and precincts and the contests and candidates that are to be included in the election. The election official also defines parameters controlling the appearance of the ballot and operational characteristics of the FFVT and the assignment of FFVTs to polling places. When the user exits this application, it performs a validity test of the users selections and prints warning messages for conditions that it determines are potential problems.
 - The Generate VID program is used to generate VID numbers that are issued to the voters on election day. The numbers are assigned randomly and are appended with information at each polling place so that the resulting number is always unique across the entire election.

- A “Test Voting” program duplicates the logic and display characteristics of the FFVT in the EMS host environment. The screen appears on the computer monitor as it would appear on the FFVT. The election official can view and interact with the ballot as the poll workers and voters will on election day. (This preview provides a close approximation of the ballot appearance on the standard computer monitor, but a final review on the actual FFVT is necessary for complete verification of the ballot.)
 - The election officials use the “Load Ballot Data” program to transfer the election database into the FFVT and OVT from the CD created with the “Manage Ballot Data” program. The “Load Ballot Data” program is loaded in response to prompts from the FFVT during initialization and will “auto-load” when inserted into the OVT. The user must enter the database name and correct login. This program also is used to restore a database to the EMS host computer when the Election CD is used as a “backup” media.
- Election Day
 - The election day operations are controlled by the options selected during election setup as desired for that jurisdiction. In general, the polling place contains a VID computer that is used to generate a VID card for each voter. The voter inserts the card into the FFVT which selects the correct ballot for that voter’s precinct location and, if appropriate, political party. The unit contains an audio unit for assisting handicapped voters. The voter selects the desired language from a list of languages provided by that jurisdiction and then votes. At the end of the day, the voting totals, the “images” of each cast ballot and the audit logs are transferred to CD for transporting to the central tally location. Options allow for voting and verifying of provisional ballots and after-hour provisional ballots.
 - The OVT accepts the same election database that is loaded into the FFVT. The OVT is used to print the paper ballots and to scan the ballots after voting. It also accumulates totals, provides for resolution of overvotes, undervotes and invalid ballots. The results are tallied and then transferred to flash memory or CD for transporting to the Central Tally facility.
- Post Election
 - The EMS “Tally” program provides the capability to receive the information from each FFVT and OVT and to consolidate, tally and report the election results. The polling official can view an “image” of each ballot cast, can resolve provisional votes and can print reports. Multiple tally sites can be defined and their totals can be transported to a central site for consolidation.
- Tools
 - The “Test Voting” application provides a preview capability for the election official to see the ballot on the EMS host computer monitor, switch back to the Ballot Generator application to edit the definition and then return to the “Test Voting” application to view the modified ballot.

- The language translation of ballot text requires MicroSoft Access to view the phrases to be translated and to enter the translated phrases.
- Generating of paper ballots at the OVT and of all reports utilizes Microsoft Word.

5 QUALIFICATION TEST RESULTS

5.1 ELECTION MANAGEMENT SOFTWARE AND ELECTION SYSTEM

This section describes the testing of the EMS software, including ballot preparation software and central tally software. The tests included TDP review, source code review and functional test of the EMS. This section describes the functional and system tests conducted by CIBER. Section 5.2 summarizes the hardware testing conducted by Wyle Laboratories and Section 5.4 presents the ITA recommendation.

5.1.1 Technical data package (TDP) review summary

The TDP contains requirements, design, configuration management, quality assurance, and system operations information. The AI Technology TDP consists of the documents listed in Section 3.

CIBER reviewed the TDP documents associated with the EMS and OVT for accuracy, completeness and compliance to the 2002 Voting System Standards. (See Wyle report 52667-01 for a discussion of the FFVT TDP review.) The review results were recorded in a worksheet that provided the pass/fail compliance to each applicable Voting System Standard. The Vendor corrected each non-conformance observation and resubmitted the associated documents for re-review. This process continued until the TDP was in compliance with all TDP Standards.

Functional testing also identified text in the TDP that conflicted with actual operation of the system. These discrepancies were reported to AI Technology and tracked as test exceptions until CIBER verified the applicable documents had been corrected.

Upon final review of the aforementioned documents and receipt of the Wyle report of their review (Wyle report 52667-01) CIBER concludes that the TDP submitted by AI Technology meets the requirements under the FEC standards of 2002. Appendix A, TDP Review, provides more detailed information about the reviewed documents.

5.1.2 Source code review summary

The code was reviewed in order to evaluate its compliance with the FEC standards for source code. These standards are intended to ensure that the overall objectives for logical correctness, system integrity, reliability, and accuracy are being met. It was also reviewed for its adherence to any AI Technology coding standards.

CIBER reviewed the source code and provided the vendor with a list of deficiencies. The vendor corrected the deficiencies and re-submitted the source code. This review/correct process continued until all deficiencies were successfully resolved. Appendix B identifies the types of deficiencies that CIBER found in each component. Appendix B also provides a list of all files submitted by the Vendor.

The Vendor corrected all deficiencies in the final delivery.

CIBER determined that the EMS, OVT and FFVT source code conforms to the FEC 2002 voting system standards.

5.1.3 Functional Test Description

The main goal of functional testing is to verify that the changes to the previously certified VOTE-TRAKKER™ EMS and OVT conformed to FEC Standards and to provide a regression test of the entire system to verify it continued to operate as documented. (See Wyle report 52667-01 for a description of functional testing of the FFVT.) The functional testing performed by CIBER included creating ballots for voting, tallying both DRE and paper ballots, and reporting results for primary and general elections. The testing validated overall system performance, functional operation, security, and audit requirements as specified in the FEC Voting System Standards.

CIBER recorded all exceptions and tracked their resolution. The vendor resolved the exceptions by updating documentation to clarify functions and operations or by modifying the software. Some exceptions were found to be due to factors that did not require any changes by the vendor, such as incorrect test procedure, test conductor error, or misinterpretation of the function.

After successful completion of the functional tests, CIBER witnessed the software compile, build, and creation of the installation package. This installation package was then installed at the CIBER facility and end-to-end system tests performed to verify the integrated operation of the EMS software, Full Face Vote-Trakker¹, and Optical VOTE-TRAKKER™. Some additional exceptions were identified during system tests, which required changes to the source code. In each case, CIBER reviewed the source code change, witnessed the build of the installation files using that source code and conducted additional tests to validate the correction.

A total of 82 exceptions were recorded during the functional and system testing of this system, which were resolved as follows:

- 37 were exceptions that required change to the code
- 20 were exceptions that required changes/corrections to the TDP

¹ System test conducted by CIBER used the FFVT that WYLE had successfully tested and was recommending for certification by the FEC. All testing that used the FFVT was performed at the Wyle facility and coordinated with Wyle staff.

- 25 were test procedure mistakes, incorrect operating procedures or were withdrawn after it was concluded the system was working correctly.

CIBER verified all resolutions by test or in the case of TDP changes, by inspection of the documentation.

Appendix C provides a summary of each functional and system test case that was executed.

After completion of final system testing, CIBER concludes that AI Technology VOTE-TRAKKER™ Voting System meets the functional requirements provided by the FEC as well as the additional requirements stated or derived from the TDP.

5.2 VOTING SYSTEM HARDWARE

Wyle Laboratories performed functional, environmental and hardware testing of the FFVT as described in their report number 54667-01. CIBER conducted the source code review of the FFVT firmware (See Section 5.1.2 for discussion of the source code review.) After Wyle determined that they could recommend the FFVT for Federal Certification, CIBER conducted system tests that included the FFVT model that Wyle was recommending for certification. (See Section 5.1.3 for discussion of system testing.)

The OVT contained only COTS hardware components that were included in the previous certification effort and therefore required no hardware testing for this qualification test. The Canon Model DR-5020 that is included in the submitted configuration was previously tested by CIBER and subsequently certified by the FEC as compliant to the 2002 standard.

5.3 NOTES

During testing, the OVT paused scanning when a ballot failed to feed correctly. The error message that printed indicated a “scanner cover not closed” error had occurred. The tester checked the cover and then re-fed the ballot that failed to read. The program flashed a second message warning that the scanning activity should be restarted and immediately continued scanning and counting ballots. The tester allowed the scanning to complete and verified that all ballots were counted correctly. (This test was also conducted by restarting the scanning activity, which also resulted in correct results.) The vendor added text to the Optical VOTE-TRAKKER™ Operating Manual clarifying the error and the steps for recovering.

5.4 RECOMMENDATION FOR QUALIFICATION

It has been demonstrated through the TDP review, source code review, and functional testing that the AI Technology VOTE-TRAKKER™ 1.2.0 voting system successfully meets the required acceptance criteria of the 2002 FEC Voting System Standards.

It is upon completion of this testing that CIBER recommends to the NASED committee that Avante International Technologies, Inc. VOTE-TRAKKER™ 1.2.0 voting system be certified.

APPENDIX A

TECHNICAL DATA PACKAGE (TDP) WORKSHEET

TDP REVIEW - APPROACH AND FINDINGS

The TDP review is an evaluation for compliance with FEC guidelines for TDP completeness and quality. The FEC standards state that vendor documentation relating to voting system hardware shall be submitted with the system as a precondition of qualification testing. These are the items necessary to define the product and its method of operation; to provide vendor technical and test data supporting the vendor's claims of the system's functional capabilities and performance levels; and to document instructions and procedures governing system operation and field maintenance.

CIBER reviewed the changes in all documents and provided comments to AI Technology identifying the issues and the associated voting standard. AI Technology resolved all issues in the final submittal of the associated documents.

The following table shows all issues that were identified by CIBER and the responses by AI Technology. Each cycle of comments/responses was assigned a revision number (R1 – R4). The “Ciber Comments” column identifies the revision on which the associated comment was reported to AI Technology. (In this table, the term “Avante” refers to “AI Technology,Inc”.)

(Note: During the functional testing of the system, additional discrepancies were identified and reported to the Vendor. These items were entered into the functional test exception reporting log as “TDP Issues” and then tracked until CIBER verified the corrected document.)

2002 Reqt	Description	Ciber Comments	Avante Comments
Vol II Sec 2.1	<p>Technical Data Package, Scope</p> <p>This section contains a description of vendor documentation relating to the voting system that shall be submitted with the system as a precondition of qualification testing.</p> <p>Other items relevant to the system evaluation shall be submitted along with this documentation (such as disks, tapes, source code, object code, and sample output report formats).</p>	<p>R4.0: closed based on Avante explanation that date is completed date by Avante.</p> <p>R3.0: Please explain the dates in your List of Documentation. Are these the electronic file date?</p> <p>R1.0: A list is provided. Not all documents in the list were submitted. Some of these were not changed from the previous certification review and those copies are automatically accepted. Only the documents that have changes should be resubmitted. A number of documents in the list have dates and revision levels different than last certified copies and are expected to be delivered prior to functional testing. (I can provide a list of those documents if requested.)</p>	<p>We think that all necessary documents were included in the CD disc which was given to Tom by Dave Alampi. Please provide us the list of documents that are still missing.</p>
Vol II Sec. 2.1	<p>Technical Data Package, Scope</p> <p>Both formal documentation and notes of the vendors system development process shall be submitted for qualification tests.</p>	<p>R4.0: Received Appendix E with procurement information.</p> <p>R3.0: Did not find procurement information for all third-party software listed in General System and Design Spec. 5.2.5 Rev. B.</p> <p>R1.0: More documents remain to be delivered</p>	<p>Same as above.</p>
Vol II Sec. 2.1.1.1 d	<p>(d) Software design and specifications; (Item c = Hardware specification)</p>	<p>R3.0: verified footer is updated.</p> <p>R2.0: update received. Part of footer states 'Technical Data Package 5.2.5' and part states 'Technical Data Package 5.2.6'. Scope List of Documentation states it should be 5.2.5 Rev. A.</p> <p>R1.0: Update is expected</p>	<p>Updated the footer in Rev. B of Section 5, TDP Version 5.2.5.</p>
Vol II Sec. 2.1.1.1 e	<p>(e) System and test verification specifications; (Note: development test specs and qualification test specs per Vol II Sec. 2.7)</p>	<p>Update is expected</p>	<p>Section 12 remains the same one approved for Version 4.7.5.</p>
Vol II Sec. 2.1.1.1 g	<p>(g) User/system operations procedures;</p>	<p>R3.0: verified</p> <p>Update is expected</p>	<p>All user manuals have been submitted in the CD.</p>
Vol II Sec. 2.1.1.1 i	<p>(i) Personnel deployment and training requirements;</p>	<p>R3.0: verified footer has been updated.</p> <p>R2.0: update received. Part of footer states 'Technical Data Package 5.2.5' and part states 'Technical Data Package 5.2.5 Rev. A.'.</p>	<p>Updated the footer. This change is included in Rev. A of Section 10, TDP 5.2.5</p>
Vol II Sec. 2.1.1.1 j	<p>(j) Configuration management plan;</p>	<p>R3.0: verified</p> <p>Update is expected</p>	<p>Section 11 and Appendix I were included in the CD that Tom has.</p>
Vol II Sec. 2.1.1.1 l	<p>(l) System change notes.</p>	<p>R3.0: verified receipt</p> <p>R1.0: The documentation list refers to version 4.7.12 change notes. Change notes for 5.2.5 should be identified.</p>	<p>Documentation list has been updated to identify the change notes for 5.2.5.</p>

2002 Reqt	Description	Ciber Comments	Avante Comments
Vol II Sec. 2.2.1 a	<p>System Overview, System Description</p> <p>The system description shall include paragraphs, drawings, and diagrams that represent:</p> <p>a. A description of the functional components (or subsystems) as defined by the vendor (e.g. environment, election management and control, vote recording, vote conversion, reporting, and their interconnection);</p>	<p>R3.0: Verified the pictures have been included in Rev. A. Some pictures were not provided where they were referenced and blank space was allocated.</p>	<p>Pictures are provided. This change is included in Rev.A of Section 2, TDP 5.2.5.</p>
Vol II Sec. 2.2.1 g	<p>(g) Benchmark directory listings for all software (including firmware elements) and associated documentation included in the vendor's release as they would normally be installed upon setup and installation.</p>	<p>updated database and software design document is to be submitted</p>	<p>Section 5 and Appendix J were updated and included in the CD that Tom has.</p>
Vol II Sec. 2.2.2 b	<p>b. Quality attributes such as reliability, maintainability, usability, availability, and portability;</p>	<p>R1.0: accept--mainly a hardware issue R1.0: no quantitative analysis, no supporting analysis or description of any testing/design features to ensure reliability level (Note: text in Section 3 indicates MTBF to be provided in maintenance manual)</p>	<p>Reference to the Maintenance Manual about the MTBF was added in Rev.A of Section 2</p>
Vol II Sec. 2.5.3	<p>Software Design and Specification, Software Overview</p> <p>The vendor shall also include a certification that procured software items were obtained directly from the manufacturer, or a licensed dealer or distributor.</p>	<p>R4.0: Received Appendix E with procurement information. R3.0: Did not find procurement information for all third-party software listed in General System and Design Spec. 5.2.5 Rev. B. Certification/Licenses not found.</p>	<p>No change from 4.7.5</p>
Vol II Sec. 2.5.4 e	<p>e. Software testing and verification standards, including internal vendor procedures, that can assist in determining the program's correctness and ACCEPT/REJECT criteria;</p>	<p>R1.0: Section 12 referenced - new version not provided to date. Hold review until vendor confirms version to be used.</p>	<p>No change from 4.7.5</p>
Vol II Sec. 2.5.4 f	<p>f. Quality assurance standards or other documents that can be used by the ITA to examine and test the software. These documents include standards for program flow and control charts, program documentation, test planning, and for test data acquisition and reporting.</p>	<p>R2.0: ISO certification information has been received and verified as valid thru 8/10/08. Reference on page 4-47: updated not received R1.0: Page 5-46 refers to ISO certification -- is that still valid? The reference on page 5-47 is to a version of the quality manual used in the previous certification and does not refer to the QA manual delivered in this TDP. otherwise, there is a good discussion of QA procedures that were implemented.</p>	
Vol II Sec. 2.5.5.1 e	<p>e. Data input/output device protocols; and</p>	<p>R3.0: verified touch codes have been removed. page 5-51 indicates that a sequence of touches is used by voting official -- from other documents, I thought that was removed in this version and a vid card used?</p>	<p>Removed the "touch codes". This change is included in Section 5 for Version 5.2.5 Rev.B.</p>

2002 Reqt	Description	Ciber Comments	Avante Comments
Vol II Sec. 2.5.10	<p>Software Design and Specification, Appendices</p> <p>The vendor may provide descriptive material and data supplementing the various sections of the body of the Software Specifications. The content and arrangement of appendices shall be at the discretion of the vendor.</p>	<p>R2.0: Maintenance and Repair Manual has been received and references have been verified.</p> <p>R1.0: References to section 9.6, which is not yet provided. (note, this is at the discretion of the vendor, and as such will be validated when section 9.6 is provided with referenced information) (Note: Appendix J and other appendices satisfy this also)</p>	
Vol II Sec. 2.6.2	<p>System Security Specification, Access Control Measures</p> <p>The vendor shall provide a detailed description of all system access control measures and mandatory procedures designed to permit access to system states in accordance with the access policy, and to prevent all other types of access to meet the specific requirements of Volume I, Section 6.2.2 [Access Control Measures].</p>	<p>R2.0: System Security Specification 5.2.5 Rev. A Section 6.2 added references to OVT Operating Manual.</p> <p>R1.0: The use of BID number for the OVT is not clear. The statement does not indicate what the bid number must match to be valid. This is explained in the OVT operating manual but needs to be added here or a reference to the OVT manual inserted.</p>	
Vol II Sec. 2.6.2	<p>System Security Specification, Access Control Measures</p> <p>The vendor shall also define and provide a detailed description of the methods used to preclude unauthorized access to the access control capabilities of the system itself.</p>	<p>R2.0: System Security Specification 5.2.5 Rev. A deleted reference to broadcasting module.</p> <p>R1.0: The last sentence of section 6.2 mentions a "broadcasting module" -- is this related to LAN or wireless broadcasting?</p>	
Vol I Sec. 6.6.1 a	<p>Security for Transmission of Official Data Over Public Communications Networks, General Security Requirements for Systems Transmitting Data Over Public Networks</p> <p>All systems that transmit data over public telecommunications networks shall:</p> <p>a. Preserve the secrecy of a voter's ballot choices, and prevent anyone from violating ballot privacy; <i>(Note: a-c also in functional checklist)</i></p>	<p>R3.0: attachment has been removed. No telecommunications or networking of systems -feature is removed in this release. However, the attachment to Section 6 of the TDP discusses VPN and data connections, etc. This should not apply since the system no longer uses telecommunication and should be removed from the TDP. Section</p>	<p>Removed the attachment. This change is included in Rev. B of Section 6 , TDP Version 5.2.5.</p>
Vol II Sec 2.6.6 d	<p>d. Physical facilities and arrangements; and</p>	<p>R2.0: manual received</p> <p>R1.0: Maintenance and repair manual is referenced but not yet submitted.</p>	
Vol II Sec. 2.7.1	<p>System Test and Verification Specification, Development Test Specifications</p> <p>In the event that test data is not available, the ITA shall design test cases and procedures equivalent to those ordinarily used during product verification.</p>	<p>Test specifications have not been provided. ITA shall design and execute test cases for full Functional Testing.</p>	
Vol II Sec. 2.7.2	<p>System Test and Verification Specification, Qualification Test Specifications</p> <p>The vendor shall provide specifications for verification and validation of overall software</p>	<p>Test specifications have not been provided. ITA shall design and execute test cases for full Functional Testing.</p>	

2002 Reqt	Description	Ciber Comments	Avante Comments
	performance.		
Vol II Sec. 2.7.2 a	<p>System Test and Verification Specification, Qualification Test Specifications</p> <p>These specifications shall cover:</p> <p>a. Control and data input/output;</p>	Test specifications have not been provided. ITA shall design and execute test cases for full Functional Testing.	
Vol II Sec. 2.7.2 b	b. Acceptance criteria;	Some provided, ITA will expand and add.	
Vol II Sec. 2.7.2 c	c. Processing accuracy;	Test specifications have not been provided. ITA shall design and execute test cases for full Functional Testing.	
Vol II Sec. 2.7.2 d	d. Data quality assessment and maintenance;	Test specifications have not been provided. ITA shall design and execute test cases for full Functional Testing.	
Vol II Sec. 2.7.2 e	e. Ballot interpretation logic;	Test specifications have not been provided. ITA shall design and execute test cases for full Functional Testing.	
Vol II Sec. 2.7.2 f	f. Exception handling;	Test specifications have not been provided. ITA shall design and execute test cases for full Functional Testing.	
Vol II Sec. 2.7.2 g	g. Security; and	Test specifications have not been provided. ITA shall design and execute test cases for full Functional Testing.	
Vol II Sec. 2.7.2 h	h. Production of audit trails and statistical data.	Test specifications have not been provided. ITA shall design and execute test cases for full Functional Testing.	
Vol II Sec. 2.7.2	<p>System Test and Verification Specification, Qualification Test Specifications</p> <p>The specifications shall identify procedures for assessing and demonstrating the suitability of the software for elections use.</p>	Test specifications have not been provided. ITA shall design and execute test cases for full Functional Testing.	

2002 Reqt	Description	Ciber Comments	Avante Comments
Vol I Sec. 2.2.5.1	<p>System Audit, System Audit Purpose and Context</p> <p>The requirements for all system types, both precinct and central count, are described in generic language. Because the actual implementation of specific characteristics may vary from system to system, it is the responsibility of the vendor to describe each system's characteristics in sufficient detail that the ITAs and system users can evaluate the adequacy of the system's audit trail.</p> <p>This description shall be incorporated in the System Operating Manual, which is part of the Technical Data Package (TDP).</p> <p><i>(ITA Note: documentation requirement-- user manual/design documents).</i></p>	R3.0: verified information has been added	Information about system audit (Event Log) is included in System Administrator Manual (Version 5.2.6 Rev. A), Optical Vote-Trakker Manual, and Tally and Reporting Manual.
Vol I Sec. 4.4.1	<p>Software Standards, Pre-election Audit Records</p> <p>During election definition and ballot preparation, the system shall audit the preparation of the baseline ballot formats and modifications to them, a description of these modifications, and corresponding dates. The log shall include:</p> <ul style="list-style-type: none"> a. The allowable number of selections for an office or issue; b. The combinations of voting patterns permitted or required by the jurisdiction; c. The inclusion or exclusion of offices or issues as the result of multiple districting within the polling place; d. Any other characteristics that may be peculiar to the jurisdiction, the election, or the polling place's location; e. Manual data maintained by election personnel; f. Samples of all final ballot formats; and g. Ballot preparation edit listings. <p><i>(ITA Note: also included in Functional Checklist).</i></p>	R3.0: verified information has been added	The System Administrator Manual contains the information about the Event Log module.
Vol II Sec. 2.8	<p>Technical Data Package, System Operations Procedures</p> <p>This documentation shall provide all information necessary for system use by all personnel who support pre-election and election preparation, polling place activities and central counting activities, as applicable, with regard to all system functions and operations identified in Section 2.3 [System Functionality Description] above.</p> <p>The nature of the instructions for operating personnel will depend on the overall system design and required skill level of system</p>	R2.0: Polling Official's Manual Version 1.05 has been received. R1.0: Poll workers Manual is referenced and not submitted yet. (This may be the "Polling Officials Manual")	

2002 Reqt	Description	Ciber Comments	Avante Comments
	operations support personnel.		
Vol II Sec. 2.8	<p>Technical Data Package, System Operations Procedures</p> <p>The system operations procedures shall contain all information that is required for the preparation of detailed system operating procedures, and for operator training, including the sections listed below: (2.81. Introduction; 2.8.2 Operational Environment; 2.8.3 System Installation and Test Specification; 2.8.4 Operational Features; 2.8.5 Operating Procedures; 2.8.6 Operations Support; 2.8.7 Appendices)</p>	TDP Section 8 is organized with the required sections.	
Vol II Sec. 2.8.2	<p>System Operations Procedures, Operational Environment</p> <p>The vendor shall describe the system environment, and the interface between the user or operator and the system.</p>	<p>R2.0: 1. Ballot Preparation Manual Version 5.2.6 has been revised: states the choice is grayed out permanently. 2.0: References in System Operations Procedures 5.2.5 Ver. A have been revised and verified. R1.0: 1. 8.1.1 Section 8.1.1 of the "Ballot Preparation" manual refers to "wireless network setting" options, but wireless is not included in this release. 2. The references in Section 8.2 appear to not point to the correct sections in the referenced manuals.</p>	
Vol II Sec. 2.8.2 a	<p>System Operations Procedures, Operational Environment</p> <p>The vendor shall identify all facilities, furnishings, fixtures, and utilities that will be required for equipment operations, including equipment that operates:</p> <p>a. Polling place;</p>	<p>R2.0: Reference has been revised to state Polling Official's Manual and references are correct. R1.0: Reference to Poll Worker manual is incorrect.</p>	

2002 Reqt	Description	Ciber Comments	Avante Comments
Vol II Sec. 2.8.2 b	b. Central count facility; and	R3.0: verified corrected references R1.0: Reference to Optical VT Manual appears to point to wrong section.	Added reference to Section 8, page 5. This change is included in Rev.B for Section 8 of TDP 5.2.5 . We think that the reference is correct now. If not, please let us know what need to be referenced.
Vol II Sec. 2.8.2 c	c. Other locations.	R2.0: Section 7.5 of Polling Official's Manual Version 1.05 deleted this. R1.0: The referenced section in the poll worker's manual discusses sending the voting results by "electronic transmission" to the tally site. This appears inconsistent with other statements that no networking or wireless is used.	
Vol II Sec. 2.8.4 a	<p>System Operations Procedures, Operational Features</p> <p>The vendor shall provide documentation of system operating features that meets the following requirements:</p> <p>a. Provides a detailed description of all input, output, control, and display features accessible to the operator or voter;</p>	<p>R2.0: Ballot Loading and Pre-election Manual Ver. 5.2.6 Section 3 clarifies to refer user to Maintenance and Repair Manual for calibration instructions. Verified Maintenance and Repair Manual Ver. 1.05 Section 4 includes instructions. R1.0: Provided in ballot preparation manual, -- in Ballot Loading and pre-election" manual, page 5 provides the option to run the calibration test, but tells the user not to do it, then assumes it was executed in the following paragraph - the text needs to be clarified. Users should not be shown options that they are not supposed to use.</p>	
Vol II Sec. 2.8.6 a	<p>System Operations Procedures, Operations Support</p> <p>The vendor shall provide documentation of system operating procedures that meets the following requirements:</p> <p>a. Defines the procedures required to support system acquisition, installation, and readiness testing (these procedures may be provided by reference, if they are contained either in the system hardware specifications, or in other vendor documentation provided to the ITA and to system users); and</p>	<p>R2.0: Maintenance and Repair Manual Version 1.05 has been received. R1.0: 1. Maintenance and repair manual is referenced but not yet submitted.</p>	

2002 Reqt	Description	Ciber Comments	Avante Comments
Vol II Sec 2.10.1 b	b. System operations for voting system functions performed at the polling place;	<p>R2.0: 1. Figures are now labeled correctly in Ballot Loading and Pre-Election Manual Ver. 5.2.6.</p> <p>2: Ballot Loader and Pre-Election Manual has been revised to state 3 VTs.</p> <p>3. Described in Polling Official's Manual Version 1.05 Section 3, page 6.</p> <p>R1.0: 1. Figures 4E and 4F on page 14 of the "Ballot Loading and pre-election" manual are mislabeled.</p> <p>2. The "ballot Loading and pre-election" manual says that no more that 4 VTs can be plugged into a single circuit. The "Polling Officials Manual" says no more than 3.</p> <p>3. The "Polling Officials Manual" does not mention a flash drive, but that is in the configuration according to the "Ballot Loading and pre-election " manual. One of these documents should explain how the flash memory is used.</p>	
Vol II Sec 2.10.1 c	c. System operations for voting system functions performed at the central count facility;	<p>R3.0: (1) Verified information has been revised or included as needed.</p> <p>R2.0: 1. Tally and Reporting Manual Version 5.2.6 is revised to delete electronic transmission on page 4 but not on page 9.</p> <p>2. Tally Manual page 26 and 32: revised. This item is complete.</p> <p>R1.0: 1. Tally manual states on pages 4 and 9 that voting results can be transported from the polling place by "electronic transmission". That is inconsistent with statements that there is no use of telecommunication.</p> <p>2. On page 25 of the Tally manual it states that the VT exports 2 copies of ballot image data but then mentions only the VT hard drive and the flashcard. The flash card is not mentioned in the Polling officials manual. The export media needs to be specified and made consistent with the other manuals.</p>	Corrected page 9. This change is included in Rev. A for Tally and Reporting Manual 5.2.6.
Vol II Sec 2.10.1	<p>Personnel Deployment and Training Requirements, Personnel</p> <p>A description shall be presented of which functions may be carried out by user personnel, and those that must be performed by vendor personnel.</p>	Page 10-11 refers to manuals for the following areas; System hardware and networking, Election and software application engineers, Implementation manager. It states that they are part of the TDP, but I could not determine which manuals they are or if they were omitted from the TDP.	

2002 Reqt	Description	Ciber Comments	Avante Comments
Vol II Sec. 2.11.2 a	<p>Configuration Management Plan, Configuration Identification</p> <p>The vendor shall provide a description of the procedures and naming conventions used to address the specific requirements of Volume I, Section 8.4 [8.3 Configuration Identification] of the Standards. These requirements pertain to:</p> <p>a. Classifying configuration items into categories and subcategories; File note: Should read 'Volume I Section 8.3'.</p>	<p>R3.0: verified this has been deleted R1.0: This section identifies a "instant runoff" module. That reference should be removed if incorrect -- or the module included in all applicable sections of the TDP and associated manuals.</p>	<p>Removed "Instand Runoff". This change is included in Rev. A of Section 11 of Version 5.2.5.</p>
Vol II Sec. 2.11.7 c	<p>c. Procedures and training materials for using the tools.</p>	<p>R4.0: Verified Appendix I Vote-Trakker CM Plan. R3.0: (1) Maintenance and Repair Manual has been received. This item is complete. (2) Section 11.7 still contains reference to Vote-Trakker Configuration Management Plan. Does a separate CM plan exist? 1. Section 11.7 c refers to the "maintenance and repair manual" which is not yet provided. This reference and the reference to the "assembly manual" need to be enhanced to show what sections / paragraphs in those manuals are being referenced. 2. The same section (11.7 c) refers to the "Vote-Trakker Configuration Management Plan", Which is what this section of the TDP is named. I could not locate any copy of a separate CM Plan. If that document exists, please provide. Otherwise please correct the references.</p>	<p>The Maintenance and Repair Manual was included in the CD that Tom received from Dave Alampi.</p>
Vol II Sec. 2.13	<p>Quality Assurance Program, System Change Notes</p> <p>Vendors submitting a system for testing that has been tested previously by the test authority and issued a qualification number shall submit system change notes. These will be used by the test authority to assist in developing and executing the test plan for the modified system.</p>	<p>R2.0: Change notes have been received.</p>	
Vol II Sec. 2.13 a	<p>Quality Assurance Program, System Change Notes</p> <p>The system change notes shall include the following information:</p> <p>a. Summary description of the nature and scope of the changes, and reasons for each change;</p>	<p>R2.0: Change notes have been received.</p>	
Vol II Sec. 2.13 b	<p>b. A listing of the specific changes made, citing the specific system configuration items changed and providing detailed references to the sections of the documentation</p>	<p>R2.0: Change notes have been received.</p>	

2002 Reqt	Description	Ciber Comments	Avante Comments
	changed;		
Vol II Sec. 2.13 c	c. The specific sections of the documentation that are changed (or complete revised documents, if more suitable to address a large number of changes);	R2.0: Change notes have been received.	
Vol II Sec. 2 2.13	d. Documentation of the test plan and procedures executed by the vendor for testing the individual changes and the system as a whole, and records of the test results.	R2.0: Change notes have been received.	

APPENDIX B

SOURCE CODE REVIEW

SOURCE CODE REVIEW APPROACH AND FINDINGS

The source code review is an evaluation for compliance with FEC guidelines and AI Technology standards for software quality.

This report details the results of the AI Technology VOTE-TRAKKER™ voting system software evaluation. The evaluation is an assessment of the source code considering the following characteristics:

- Selection of programming languages: High-level programming language shall be used.
- Software integrity: Self-modifying, dynamically loaded, or interpreted code is prohibited.
- Software modularity and programming: Software shall be designed in a modular fashion. Modules shall have a specific function which can be tested and verified independently, shall be uniquely and mnemonically named, shall be small enough to be easily followed and understood, shall have a single entry point, and process flow within the module shall be restricted.
- Control constructs: Software must adhere to acceptable constructs.
- Naming conventions: Names shall be chosen to enhance readability and intelligibility of the program, shall be consistent, and shall be unique within an application.
- Coding conventions: Software shall adhere to basic coding conventions.
- Comment Conventions: All modules must contain headers and provide header comments describing information contained in the header. Descriptive comments shall be provided to identify objects and data types.

Evaluation

The AI Technology VOTE-TRAKKER™ voting system developers use Visual Basic 6.0 and C++ languages to construct a system of applications for election data processing. The implementation of these languages utilize object oriented design and programming methodology to enhance understandable and maintainable of the code

Findings

The following is the list of components that were reviewed as a part of this version release. All source code was reviewed to the 2002 standards. Also listed are the types of anomalies found in each component. All anomalies were corrected. All source code meets the standards of the 2002 VSS.

Component	<u>EMS 5.2.9</u>
Language	Visual Basic
Noted & Corrected Anomalies	<p>4.2.3a - Module does not have a single purpose.</p> <p>4.2.7a1 - Module header needs a purpose.</p> <p>4.2.7a2 - Module header needs comments for units called.</p> <p>4.2.7a3 - Module header needs comments for input and outputs.</p> <p>4.2.7a4 - Module header needs comments for file referenced.</p> <p>4.2.7a5 - Module header needs comments for global variables.</p> <p>4.2.7a6 - Module header needs revision history.</p> <p>4.2.7b - Variables, objects, and data types need comments upon declaration.</p> <p>4.2.7c - Code needs in-line comments.</p> <p>5.4.2f - Case statement with no default case.</p> <p>5.4.2g - Possible vote counter overflow.</p> <p>5.4.2h - Indenting is inconsistent.</p> <p>5.4.2k - Lines is more than 80 columns in width.</p> <p>5.4.2p - Message not self explanatory or error message like the status message.</p> <p>5.4.2r - Over 5 levels of indenting.</p> <p>5.4.2s - Variables must be initialized where declared where permitted.</p> <p>5.4.2u - Constants should be defined, enumerated, or have comments explaining its meaning.</p>

Component	<u>Full Face VOTE-TRAKKER 1.2</u>
Language	Visual Basic
Noted & Corrected Anomalies	<p>4.2.3b - Not legal name.</p> <p>4.2.7a1 - Module header needs a purpose.</p> <p>4.2.7a2 - Module header needs comments for units called.</p> <p>4.2.7a3 - Module header needs comments for input and outputs.</p> <p>4.2.7a4 - Module header needs comments for file referenced.</p> <p>4.2.7a5 - Module header needs comments for global variables.</p> <p>4.2.7a6 - Module header needs revision history</p> <p>4.2.7b - Variables, objects, and data types need comments upon declaration.</p> <p>4.2.7c - Code needs in-line comments</p> <p>4.2.7e - Commenting is not uniform.</p> <p>5.4.2h - Indenting is inconsistent.</p> <p>5.4.2k - Lines is more than 80 columns in width.</p> <p>5.4.2o - No message on exit.</p> <p>5.4.2q - Over 5 levels of indirection.</p> <p>5.4.2r - Over 5 levels of indenting.</p> <p>5.4.2t - Implied comparisons not allowed</p> <p>5.4.2u - Constants should be defined, enumerated, or have comments explaining its meaning.</p>

Component	<u>Optical Vote-Trakker 1.6.9</u>
Language	Visual Basic and C++
Noted & Corrected Anomalies	<p>4.2.3b - Not legal name.</p> <p>4.2.3e - Module does not have a single entry and exit point.</p> <p>4.2.3f and 5.4.1 - Module contains a nonpermissible construct.</p> <p>4.2.7a1 - Module header needs a purpose.</p> <p>4.2.7a2 - Module header needs comments for units called.</p> <p>4.2.7a3 - Module header needs comments for input and outputs.</p> <p>4.2.7a4 - Module header needs comments for file referenced.</p> <p>4.2.7a5 - Module header needs comments for global variables.</p> <p>4.2.7a6 - Module header needs revision history.</p> <p>4.2.7b - Variables, objects, and data types need comments upon declaration.</p> <p>4.2.7c - Code needs in-line comments.</p> <p>5.4.2s - Variables must be initialized where declared where permitted.</p> <p>5.4.2t - Implied comparisons not allowed.</p> <p>5.4.2u - Constants should be defined, enumerated, or have comments explaining its meaning.</p>

Below is a list of all source code files that were delivered to CIBER for review:

EMS 5.2.9

Common Modules

=====

clsAppLog.cls	28 KB	12/15/2005 09:05:50 PM
clsCRC.cls	17 KB	12/15/2005 09:05:50 PM
clsDBWrapper.cls	8 KB	12/15/2005 09:05:50 PM
clsRecorder.cls	17 KB	12/15/2005 09:05:50 PM
cReadTextTabulation.cls	5 KB	12/15/2005 09:05:50 PM
FrmChangeSupervisor.frm	19 KB	12/14/2005 07:22:44 PM
frmMsg.frm	9 KB	9/6/2005 11:09:36 AM
frmOneSource.frm	53 KB	12/15/2005 09:05:52 PM
frmOneSource.frx	1 KB	4/4/2005 12:02:02 PM
frmProgress.frm	3 KB	12/2/2005 06:48:52 PM
frmQualifyWriteIn.frm	28 KB	12/14/2005 07:22:46 PM
frmQualifyWriteIn.frx	1 KB	5/16/2005 03:53:54 PM
frmTransferRichText.frm	1 KB	12/15/2005 09:05:52 PM
frmTransferRichText.frx	1 KB	5/11/2005 03:52:28 PM
mdlBasicDatabaseOperation.bas	15 KB	12/15/2005 09:05:52 PM
mdlBringWindowToTop.bas	9 KB	12/15/2005 09:05:52 PM
mdlBuildDB.bas	24 KB	9/6/2005 11:09:36 AM
mdlCheckContestNumber.bas	4 KB	12/15/2005 09:05:52 PM
mdlCheckLogin.bas	2 KB	12/7/2005 11:08:22 PM
mdlCheckVoteSetting.bas	13 KB	12/2/2005 06:48:54 PM
mdlComPort.bas	4 KB	12/15/2005 09:05:52 PM
mdlCRC.bas	8 KB	12/15/2005 09:05:52 PM
mdlDBConnection.bas	9 KB	12/15/2005 09:05:52 PM
mdlDriverInfo.bas	16 KB	12/15/2005 09:05:52 PM
mdlEncrypt.bas	6 KB	12/15/2005 09:05:52 PM
mdlEventLog.bas	13 KB	12/15/2005 09:05:54 PM
mdlFileControl.bas	5 KB	12/15/2005 09:05:54 PM
mdlFileFolder.bas	4 KB	12/15/2005 09:05:54 PM
mdlFileManagement.bas	3 KB	12/15/2005 09:05:54 PM
mdlGetAllNetworkMachine.bas	8 KB	12/15/2005 09:05:54 PM

mdlGetWriteIn.bas	4 KB	12/15/2005	09:05:54	PM
mdlKeyStroke.bas	4 KB	12/15/2005	09:05:54	PM
mdlLanguage.bas	14 KB	12/15/2005	09:05:54	PM
mdlLevelDifinition.bas	2 KB	12/15/2005	09:05:54	PM
mdlLimitKey.bas	1 KB	12/14/2005	07:22:48	PM
mdlLog.bas	7 KB	12/15/2005	09:05:54	PM
mdlManageDatabaseInfo.bas	10 KB	12/14/2005	07:22:48	PM
mdlMapDrive.bas	9 KB	12/15/2005	09:05:54	PM
mdlNormalMsg.bas	7 KB	9/6/2005	11:09:38	AM
mdlPaperBallotImage.bas	15 KB	12/14/2005	07:22:48	PM
mdlPassword.bas	1 KB	12/15/2005	09:05:54	PM
mdlShowLanguage.bas	8 KB	12/15/2005	09:05:54	PM
mdlShutDown.bas	8 KB	12/15/2005	09:05:54	PM
mdlSQLDataType.bas	6 KB	12/15/2005	09:05:54	PM
mdlStrFunctions.bas	31 KB	12/15/2005	09:05:56	PM
mdlSupervisor.bas	9 KB	12/14/2005	07:22:50	PM
mdlSystemInfo.bas	3 KB	12/15/2005	09:05:56	PM
mdlTallySub.bas	32 KB	12/15/2005	09:05:56	PM
mdlUserRight.bas	4 KB	12/15/2005	09:05:56	PM
mdlWord.bas	18 KB	12/15/2005	09:05:56	PM
frmBallotType.frm	5 KB	12/14/2005	07:22:36	PM
frmBarcode.frm	11 KB	12/14/2005	07:22:36	PM
frmBarcode.frx	1 KB	6/9/2005	01:11:10	PM
frmNoVID.frm	15 KB	12/14/2005	07:22:38	PM
frmNoVID.frx	1 KB	11/10/2005	06:11:12	PM
frmTally.frm	169 KB	12/14/2005	07:22:40	PM
frmTally.frx	1 KB	12/7/2005	03:43:24	PM
mdlBarcode39.bas	7 KB	12/14/2005	07:22:40	PM
mdlBase36.bas	4 KB	12/14/2005	07:22:40	PM
mdlData.bas	3 KB	12/14/2005	07:22:40	PM
mdlPaperBallotVarConst.bas	18 KB	12/14/2005	07:22:40	PM
mdlTally.bas	169 KB	12/21/2005	11:35:50	AM
mdlVIDValidation.bas	9 KB	12/14/2005	07:22:42	PM
Card.gif	20 KB	3/23/2005	03:04:38	PM
clsPaperBallot.cls	43 KB	12/15/2005	09:05:24	PM
clsVoiceTxt.cls	28 KB	12/15/2005	09:05:26	PM
frmAbout.frm	8 KB	12/15/2005	09:05:26	PM
frmAbout.frx	1 KB	7/26/2005	08:50:24	PM
frmADA.frm	18 KB	12/15/2005	09:05:26	PM
frmBattery.frm	13 KB	12/15/2005	09:05:26	PM
frmDateTime.frm	11 KB	12/15/2005	09:05:26	PM
frmHandlePoll.frm	19 KB	12/15/2005	09:05:28	PM
frmInsertCard.frm	32 KB	12/15/2005	09:05:28	PM
frmKeyIn.frm	123 KB	12/15/2005	09:05:30	PM
frmKeyIn.frx	20 KB	12/5/2005	05:23:10	PM
frmLoadBallot.frm	9 KB	12/15/2005	09:05:30	PM
frmMachine.frm	59 KB	12/15/2005	09:05:32	PM
frmMachine.frx	1 KB	12/15/2005	08:41:22	PM
frmMain.frm	58 KB	12/15/2005	09:05:32	PM
frmMsg.frm	9 KB	12/15/2005	09:05:32	PM
frmMultiLanguage.frm	6 KB	12/15/2005	09:05:32	PM
frmPaperRecord.frm	3 KB	7/13/2005	10:37:56	AM
frmPrintResult.frm	117 KB	12/15/2005	09:05:34	PM
frmPrintResult.frx	1 KB	11/30/2005	06:43:08	PM
frmProgress.frm	3 KB	12/15/2005	09:05:34	PM
frmReadReceipt.frm	5 KB	12/15/2005	09:05:34	PM

frmSampleBallot.frm	85 KB	12/15/2005	09:05:36	PM
frmSampleBallot.frx	1 KB	7/29/2005	03:25:18	PM
frmSetting.frm	34 KB	12/15/2005	09:05:36	PM
frmTally.frm	58 KB	12/15/2005	09:05:38	PM
frmTally.frx	1 KB	9/2/2005	01:14:08	PM
frmTestPrinter.frm	17 KB	12/15/2005	09:05:38	PM
frmTransferTally.frm	22 KB	12/15/2005	09:05:38	PM
frmVerifyBarcode.frm	24 KB	12/15/2005	09:05:38	PM
frmVerifyBarcode.frx	1 KB	11/30/2005	05:58:38	PM
mdlCDR.bas	12 KB	12/15/2005	09:05:38	PM
mdlCheckMouseMove.bas	2 KB	12/15/2005	09:05:40	PM
mdlCheckRawDataFile.bas	6 KB	12/15/2005	09:05:40	PM
mdlCheckTime.bas	6 KB	12/15/2005	09:05:40	PM
mdlCheckVID.bas	25 KB	12/15/2005	09:05:40	PM
mdlColor.bas	2 KB	12/15/2005	09:05:40	PM
mdlDevice.bas	12 KB	12/15/2005	09:05:40	PM
mdlDisableLowLevelKeys.bas	5 KB	12/15/2005	09:05:40	PM
mdlErrInfo.bas	9 KB	12/15/2005	09:05:40	PM
mdlExportTabulation.bas	10 KB	12/15/2005	09:05:40	PM
mdlFormMaganemnt.bas	22 KB	12/15/2005	09:05:40	PM
mdlImportTabulation.bas	19 KB	12/15/2005	09:05:40	PM
mdlMachineInformation.bas	6 KB	12/15/2005	09:05:42	PM
mdlMain.bas	9 KB	12/15/2005	09:05:42	PM
mdlMsg.bas	9 KB	12/15/2005	09:05:42	PM
mdlNetworkSetting.bas	1 KB	12/15/2005	09:05:42	PM
mdlPrinter.bas	129 KB	12/15/2005	09:05:42	PM
mdlReadDBSetting.bas	34 KB	12/15/2005	09:05:44	PM
mdlReceiptNumber.bas	5 KB	12/15/2005	09:05:44	PM
mdlRecord.bas	41 KB	12/15/2005	09:05:44	PM
mdlShell.bas	28 KB	12/15/2005	09:05:44	PM
mdlSimpleBallotStyle.bas	25 KB	12/15/2005	09:05:44	PM
mdlSpeak.bas	188 KB	12/15/2005	09:05:46	PM
mdlUserManagement.bas	12 KB	12/15/2005	09:05:46	PM
mdlVerifyProvisional.bas	46 KB	12/15/2005	09:05:46	PM
mdlVidCard.bas	45 KB	12/15/2005	09:05:48	PM
mdlVote.bas	34 KB	12/15/2005	09:05:48	PM
mdlVoteNumber.bas	15 KB	12/15/2005	09:05:48	PM
mdlWriteDB.bas	24 KB	12/15/2005	09:05:48	PM
PROPS.ICO	1 KB	7/26/1999	02:00:00	AM

Database Script Files

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AUTORUN.INF	1 KB	8/9/2001	03:06:14	PM
create_proc.sql	657 KB	7/28/2005	05:31:56	PM
Create_tables.sql	79 KB	7/1/2005	03:54:08	PM
CREATEDB.SQL	1 KB	2/18/2003	05:49:38	PM
Data.mdb	1124 KB	7/1/2005	03:53:26	PM
drop_proc.sql	24 KB	7/28/2005	04:36:50	PM
drop_tables.sql	4 KB	2/1/2005	03:02:04	PM
Event Log.mdb	268 KB	8/28/2002	03:34:54	PM
Insert_Init_Data.sql	31 KB	10/31/2005	04:24:46	PM
Language Instruction.doc	484 KB	12/7/2005	09:56:40	PM
Readme.txt	1 KB	1/5/2005	12:42:44	PM
SMJBDP32.DLL	31 KB	6/20/2002	12:59:26	PM
SMJBDP32.txt	1 KB	6/20/2002	01:47:16	PM
SMJCOMMON.INI	1 KB	12/18/2002	03:53:02	PM

Tabulation.mdb	248 KB	12/8/2004	04:18:42	PM	
Thumbs.db	26 KB	3/23/2005	02:05:14	PM	rh
TouchScreenDriver.txt	1 KB	9/7/2005	01:49:00	PM	
Transfer_tables.sql	2 KB	11/16/2004	08:34:56	AM	
TransferTabulation.txt	1 KB	12/8/2004	04:15:10	PM	

Event Log

=====

EventLogReport.doc	19 KB	12/10/2004	01:12:40	PM	
frmAbout.frm	4 KB	7/29/2005	04:18:42	PM	
frmAbout.frx	1 KB	10/18/2004	01:04:48	PM	
frmDBConnection.frm	8 KB	7/29/2005	04:18:42	PM	
frmDBLog.frm	9 KB	7/29/2005	04:18:42	PM	
frmDBLog.frx	1 KB	3/16/2005	04:16:10	PM	
frmDocument.frm	2 KB	7/29/2005	04:18:42	PM	
frmDocument.frx	1 KB	4/4/2005	04:46:08	PM	
frmLogin.frm	3 KB	7/29/2005	04:18:42	PM	
frmMain.frm	20 KB	7/29/2005	04:18:42	PM	
frmMain.frx	3 KB	4/4/2005	04:47:20	PM	
mdlErrInfo.bas	7 KB	7/29/2005	04:18:42	PM	
mdlMain.bas	4 KB	7/29/2005	04:18:42	PM	
mdlPrinter.bas	18 KB	7/29/2005	04:18:44	PM	
VoteTrakker Event LogPassword.mdb	76 KB	1/11/2002	04:17:24	AM	

Generate Ballot Data

=====

AllCandidate.doc	19 KB	10/25/2005	10:54:08	AM	
AllContestPosition.doc	19 KB	10/14/2005	05:42:56	PM	
AllContestPositionByDistrict.doc	19 KB	10/17/2005	12:23:52	PM	
AllDistrictPrecinct.doc	19 KB	4/4/2005	06:52:28	PM	
AllPrecinctDistrict.doc	19 KB	4/4/2005	06:53:20	PM	
Default.wav	1 KB	9/30/2004	09:11:52	AM	
ElectionDistrict.mdb	120 KB	11/1/2004	11:39:54	AM	
frmAbout.frm	4 KB	12/2/2005	06:48:56	PM	
frmAbout.frx	7 KB	9/28/2004	09:04:22	AM	
frmAutoSetCandidateOrder.frm	41 KB	12/2/2005	06:48:58	PM	
frmAutoSetCandidateOrder.frx	1 KB	3/16/2005	04:54:06	PM	
frmBallotType.frm	65 KB	12/2/2005	06:48:58	PM	
frmBallotType.frx	1 KB	7/29/2005	05:02:28	PM	
frmCandidate.frm	88 KB	12/2/2005	06:49:00	PM	
frmCandidate.frx	1 KB	7/26/2005	08:23:36	PM	
frmCandidateCharacterOrder.frm	16 KB	12/2/2005	06:49:00	PM	
frmCandidateCharacterOrder.frx	1 KB	7/26/2005	08:23:36	PM	
frmCandidateRotation.frm	38 KB	12/2/2005	06:49:02	PM	
frmCandidateRotation.frx	1 KB	7/29/2005	05:03:26	PM	
FrmChangePass.frm	10 KB	12/2/2005	06:49:02	PM	
frmContestGroup.frm	23 KB	12/2/2005	06:49:02	PM	
frmContestGroup.frx	1 KB	7/26/2005	08:23:36	PM	
frmContestPosition.frm	107 KB	12/2/2005	06:49:04	PM	
frmContestPosition.frx	1 KB	10/17/2005	12:40:16	PM	
frmCounty.frm	26 KB	12/2/2005	06:49:06	PM	
frmCounty.frx	1 KB	7/26/2005	08:09:10	PM	
frmDateTime.frm	9 KB	12/2/2005	06:49:06	PM	
frmDistrict.frm	23 KB	12/2/2005	06:49:06	PM	
frmDistrict.frx	1 KB	10/17/2005	12:02:28	PM	
frmEntry.frm	8 KB	12/2/2005	06:49:06	PM	

frmInit.frm	215 KB	12/2/2005	06:49:10	PM
frmInit.frx	1 KB	12/2/2005	06:06:00	PM
frmLevel.frm	11 KB	12/2/2005	06:49:10	PM
frmLevel.frx	1 KB	7/26/2005	08:05:24	PM
frmLogin.frm	9 KB	12/2/2005	06:49:12	PM
frmMachine.frm	64 KB	12/2/2005	06:49:12	PM
frmMachine.frx	1 KB	7/26/2005	08:36:46	PM
frmMultiInstruction.frm	10 KB	12/2/2005	06:49:12	PM
frmMultiInstruction.frx	1 KB	3/17/2005	12:11:14	PM
frmMultiLanguage.frm	4 KB	12/2/2005	06:49:12	PM
frmMuniciplity.frm	28 KB	12/2/2005	06:49:14	PM
frmMuniciplity.frx	1 KB	7/26/2005	08:17:34	PM
frmOrderCandidate.frm	39 KB	12/2/2005	06:49:14	PM
frmOrderCandidate.frx	1 KB	3/15/2005	01:58:44	PM
frmParty.frm	30 KB	12/2/2005	06:49:16	PM
frmParty.frx	1 KB	10/17/2005	12:03:18	PM
frmPrecinct.frm	29 KB	12/2/2005	06:49:16	PM
frmPrecinct.frx	1 KB	10/31/2005	06:29:00	PM
frmPrecinctDistrict.frm	76 KB	12/2/2005	06:49:18	PM
frmPrecinctDistrict.frx	1 KB	7/26/2005	08:18:38	PM
frmPrintOption.frm	8 KB	12/2/2005	06:49:18	PM
frmPubQuestion.frm	58 KB	12/2/2005	06:49:18	PM
frmPubQuestion.frx	1 KB	7/26/2005	08:23:36	PM
frmRecordingVoice.frm	39 KB	12/2/2005	06:49:20	PM
frmRecordingVoice.frx	1 KB	11/11/2005	12:39:36	PM
frmRestrict.frx	1 KB	8/22/2003	03:46:34	PM
frmRestrictParty.frm	20 KB	12/2/2005	06:49:20	PM
frmRestrictParty.frx	1 KB	3/15/2005	01:58:44	PM
frmRotateDistrict.frm	51 KB	12/2/2005	06:49:22	PM
frmRotateDistrict.frx	1 KB	7/29/2005	05:03:26	PM
frmRotateGroup.frm	33 KB	12/2/2005	06:49:22	PM
frmRotateGroup.frx	1 KB	3/15/2005	01:58:42	PM
frmSelectGroup.frm	6 KB	12/2/2005	06:49:22	PM
frmSelectGroup.frx	1 KB	3/17/2005	12:38:08	PM
frmSelectUser.frm	5 KB	12/2/2005	06:49:22	PM
frmSelectUser.frx	1 KB	3/17/2005	12:46:16	PM
frmSetBallot.frx	1 KB	2/18/2003	02:21:50	AM
frmSetBallotType.frm	19 KB	12/2/2005	06:49:22	PM
frmSetBallotType.frx	1 KB	7/29/2005	05:02:28	PM
frmSetVoteType.frm	9 KB	12/2/2005	06:49:24	PM
frmSlateCandidate.frm	20 KB	12/2/2005	06:49:24	PM
frmSlateCandidate.frx	1 KB	7/26/2005	08:23:36	PM
frmSlateContest.frm	39 KB	12/2/2005	06:49:24	PM
frmSlateContest.frx	1 KB	3/17/2005	04:19:54	PM
frmState.frm	17 KB	12/2/2005	06:49:24	PM
frmState.frx	1 KB	7/26/2005	08:09:38	PM
frmTransferLanguage.frm	46 KB	12/2/2005	06:49:26	PM
frmTransferLanguage.frx	1 KB	5/25/2005	03:40:38	PM
FrmUser.frm	65 KB	12/2/2005	06:49:26	PM
FrmUser.frx	1 KB	5/19/2005	04:53:56	PM
frmVoterVID.frm	13 KB	12/2/2005	06:49:28	PM
frmVoterVID.frx	1 KB	10/17/2005	12:02:28	PM
frmWard.frm	32 KB	12/2/2005	06:49:28	PM
frmWard.frx	1 KB	8/1/2005	05:11:32	PM
LanguageTranslation.mdb	1068 KB	11/11/2005	10:16:06	AM
LanguageTranslation1028.mdb	1068 KB	10/26/2005	08:51:58	PM

LanguageTranslation3082.mdb	1068 KB	11/11/2005	10:16:48 AM
MachineData.mdb	212 KB	10/26/2005	07:48:08 PM
mdlErrInfo.bas	8 KB	12/2/2005	06:49:28 PM
mdlFontControl.bas	3 KB	12/2/2005	06:49:28 PM
mdlGenerateCode.bas	4 KB	12/2/2005	06:49:28 PM
mdlMain.bas	1 KB	12/2/2005	06:49:28 PM
mdlSetCandidateOrder.bas	6 KB	12/2/2005	06:49:28 PM
mdlTemplate.bas	13 KB	12/2/2005	06:49:28 PM
mdlVoteSetting.bas	33 KB	12/2/2005	06:49:30 PM
mfrmMain.frm	17 KB	12/2/2005	06:49:30 PM
MSCAL.OCX	87 KB	7/10/1997	11:00:00 AM
OneContestCandidate.doc	19 KB	9/23/2005	11:40:30 AM
PollWorkerData.mdb	116 KB	10/21/2004	02:26:44 PM
PrecinctSubprecinct.mdb	3152 KB	11/1/2004	11:39:54 AM
SystemSetting.mdb	92 KB	2/25/2005	05:46:42 PM
Template.mdb	340 KB	5/27/2005	05:44:58 PM
Template_Transfer_tables.sql	1 KB	11/16/2004	08:35:12 AM

Generate VID

=====

frmAbout.frm	5 KB	12/7/2005	11:04:54 PM
frmAbout.frx	4 KB	5/26/2005	01:49:40 PM
FrmEnter.frm	8 KB	12/7/2005	11:04:56 PM
frmIssuePollWorkerCard.frm	13 KB	12/7/2005	11:04:56 PM
frmIssuePollWorkerCard.frx	1 KB	4/5/2005	04:04:36 PM
frmKeyIn.frm	73 KB	12/7/2005	11:04:56 PM
frmKeyIn.frx	1 KB	12/7/2005	10:09:06 PM
frmLogin.frm	11 KB	12/7/2005	11:04:58 PM
frmProgress.frm	4 KB	12/7/2005	11:04:58 PM
frmSearchPrecinct.frm	12 KB	12/7/2005	11:04:58 PM
frmSearchPrecinct.frx	1 KB	3/18/2005	12:28:38 PM
frmVoters.frm	15 KB	12/7/2005	11:04:58 PM
frmVoters.frx	1 KB	11/30/2005	01:30:24 PM
frmWrite.frm	13 KB	12/7/2005	11:04:58 PM
GenerateVID.mdb	600 KB	5/31/2005	01:51:08 PM
mdlErrInfo.bas	6 KB	12/7/2005	11:04:58 PM
mdlExport.bas	5 KB	12/7/2005	11:04:58 PM
mdlMain.bas	1 KB	12/7/2005	11:04:58 PM
mdlSetting.bas	9 KB	12/7/2005	11:04:58 PM
mdlShow.bas	17 KB	12/7/2005	11:05:00 PM
VoteTrakker VID GeneratorPasswo...	94 KB	2/22/2005	07:13:40 PM

Load Ballot Data

=====

01.jpg	1 KB	6/18/2003	07:10:50 AM
02.jpg	1 KB	6/18/2003	07:13:46 AM
03.jpg	1 KB	6/18/2003	07:18:10 AM
04.jpg	1 KB	6/18/2003	07:18:54 AM
05.jpg	1 KB	6/18/2003	07:15:54 AM
06.jpg	1 KB	6/18/2003	07:16:58 AM
07.jpg	1 KB	6/18/2003	07:20:58 AM
08.jpg	1 KB	6/18/2003	07:20:10 AM
AUTORUN.inf	1 KB	8/9/2001	03:06:14 PM
Configure.txt	1 KB	9/6/2002	03:45:12 PM
create_proc.sql	657 KB	7/28/2005	05:31:56 PM
Create_tables.sql	79 KB	7/1/2005	03:54:08 PM

createdb.sql	1 KB	2/18/2003 02:49:38 PM
Data.mdb	3572 KB	12/7/2005 01:24:58 PM
drop_proc.sql	24 KB	7/28/2005 04:36:50 PM
drop_tables.sql	4 KB	2/1/2005 03:02:04 PM
frmAbout.frm	5 KB	8/5/2005 04:46:18 PM
frmAbout.frx	2 KB	3/15/2005 01:58:20 PM
frmKeyIn.frm	57 KB	8/5/2005 04:46:20 PM
frmKeyIn.frx	1 KB	7/26/2005 07:58:30 PM
frmTransferBallot.frm	24 KB	8/5/2005 04:46:20 PM
Insert_Init_Data.sql	31 KB	10/31/2005 04:24:46 PM
Language Instruction.doc	484 KB	12/7/2005 09:56:40 PM
LanguageTranslation1028.mdb	1068 KB	5/25/2005 03:37:44 PM
mdlDatabaseSetting.bas	3 KB	8/5/2005 04:46:20 PM
mdlErrInfo.bas	5 KB	8/5/2005 04:46:20 PM
mdlFormControl.bas	3 KB	8/5/2005 04:46:20 PM
mdlLoadBallot.bas	70 KB	8/5/2005 04:46:22 PM
mdlMain.bas	3 KB	8/5/2005 04:46:22 PM
Signature.jpg	17 KB	3/12/2004 01:34:12 PM
Tabulation.mdb	248 KB	12/8/2004 04:18:42 PM
TouchScreenDriver.txt	1 KB	9/7/2005 01:49:00 PM
Transfer_tables.sql	2 KB	11/16/2004 08:34:56 AM
TransferTabulation.txt	1 KB	12/8/2004 04:15:10 PM
VoteTrakker Load Ballot DataPas...	76 KB	1/11/2002 04:17:24 AM

Manage Ballot Data

=====

AUTORUN.INF	1 KB	8/9/2001 03:06:14 PM
Configure.txt	1 KB	9/12/2002 05:44:58 AM
CR_MANAGE_BALLOT_DATA.MDB	280 KB	8/3/2003 07:31:16 PM
create_proc.sql	657 KB	7/28/2005 05:31:56 PM
Create_tables.sql	79 KB	7/1/2005 03:54:08 PM
CREATEDB.SQL	1 KB	2/18/2003 02:49:38 PM
Data.mdb	3572 KB	12/14/2005 01:10:22 AM
drop_proc.sql	24 KB	7/28/2005 04:36:50 PM
drop_tables.sql	4 KB	2/1/2005 03:02:04 PM
frmAbout.frm	4 KB	9/6/2005 11:09:40 AM
frmAbout.frx	1 KB	9/28/2004 09:01:26 AM
frmKeyIn.frm	53 KB	9/6/2005 11:09:42 AM
frmKeyIn.frx	1 KB	8/20/2001 10:49:36 AM
frmManagement.frm	29 KB	9/6/2005 11:09:42 AM
Insert_Init_Data.sql	31 KB	10/31/2005 04:24:46 PM
Language Instruction.doc	484 KB	12/7/2005 09:56:40 PM
LanguageTranslation.mdb	174 KB	7/3/2002 06:21:28 PM
LanguageTranslation3082.mdb	1068 KB	10/18/2004 10:01:38 AM
Load_Ballot_Data.exe	840 KB	8/5/2005 04:45:06 PM
mdlCDR.bas	21 KB	9/6/2005 11:09:42 AM
mdlDeployKeyInForm.bas	4 KB	9/6/2005 11:09:42 AM
mdlErrInfo.bas	5 KB	9/6/2005 11:09:44 AM
mdlMain.bas	2 KB	9/6/2005 11:09:44 AM
TouchScreenDriver.txt	1 KB	9/7/2005 01:49:00 PM
Transfer_tables.sql	2 KB	11/16/2004 08:34:56 AM
TransferTabulation.txt	1 KB	12/8/2004 04:15:10 PM
VoteTkVocF.acs	1 KB	7/18/2001 10:48:52 AM
VoteTkVocM.acs	1 KB	7/26/2001 05:22:54 AM
VoteTrakker Load Ballot DataPas...	76 KB	1/11/2002 04:17:24 AM
VoteTrakker Manage Ballot DataP...	76 KB	3/10/2005 04:01:26 PM

Tally

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DTSReport.doc	19 KB	4/15/2005 11:55:02 AM
frmAbout.frm	5 KB	12/7/2005 11:08:26 PM
frmAbout.frx	3 KB	10/14/2004 01:17:26 PM
frmDBLog.frm	41 KB	12/7/2005 11:08:26 PM
frmDBLog.frx	1 KB	4/6/2005 02:34:42 PM
frmDocument.frx	1 KB	9/27/2001 03:31:16 AM
FrmEnter.frm	9 KB	12/7/2005 11:08:28 PM
frmLogin.frm	6 KB	12/7/2005 11:08:28 PM
frmMain.frm	12 KB	12/7/2005 11:08:28 PM
frmMain.frx	3 KB	3/21/2005 12:34:30 PM
frmMassCD.frm	20 KB	12/7/2005 11:08:28 PM
frmMassCD.frx	1 KB	7/29/2005 04:21:14 PM
frmNoFinishLocation.frx	1 KB	2/26/2002 01:44:30 PM
frmNoFinishTypeIn.frx	1 KB	12/11/2001 04:02:30 PM
frmNumber.frm	26 KB	12/7/2005 11:08:28 PM
frmNumber.frx	1 KB	4/6/2005 02:50:22 PM
frmProgress.frm	2 KB	12/7/2005 11:08:28 PM
frmRawData.frm	48 KB	12/7/2005 11:08:30 PM
frmRawData.frx	1 KB	4/6/2005 02:56:52 PM
frmSelectAddress.frm	23 KB	12/7/2005 11:08:30 PM
frmSource.frx	1 KB	10/1/2001 09:28:42 AM
frmSourceInformation.frm	46 KB	12/7/2005 11:08:32 PM
frmSourceInformation.frx	1 KB	4/6/2005 03:04:52 PM
frmSourceTabulation.frm	70 KB	12/7/2005 11:08:32 PM
frmSourceTabulation.frx	1 KB	4/6/2005 03:05:26 PM
frmTally.frm	190 KB	12/7/2005 11:08:36 PM
frmTally.frx	1 KB	12/7/2005 03:43:08 PM
frmTally.log	1 KB	4/14/2003 06:53:40 PM
frmTypeInTabulation.frx	1 KB	4/13/2003 10:03:12 AM
frmVerifyProvisional.frm	30 KB	12/7/2005 11:08:36 PM
frmVerifyProvisional.frx	1 KB	7/29/2005 04:21:14 PM
mdlDriver.bas	16 KB	12/7/2005 11:08:36 PM
mdlErrInfo.bas	6 KB	12/7/2005 11:08:36 PM
mdlExportTabulation.bas	12 KB	12/7/2005 11:08:38 PM
mdlImportTabulation.bas	50 KB	12/7/2005 11:08:38 PM
mdlMain.bas	3 KB	12/7/2005 11:08:38 PM
mdlMassCD.bas	35 KB	12/7/2005 11:08:38 PM
mdlVerifyProvisional.bas	2 KB	12/7/2005 11:08:38 PM
VoteTrakker TallyPassword.mdb	76 KB	1/11/2002 01:17:24 AM

Full Face Vote-Trakker 1.2

Common Modules

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clsAppLog.cls	28 KB	1/24/2006 09:09:20 PM	r
clsCRC.cls	17 KB	1/24/2006 09:09:20 PM	r
clsDBWrapper.cls	8 KB	1/24/2006 09:09:20 PM	r
clsRecorder.cls	17 KB	1/24/2006 09:09:22 PM	r
cReadTextTabulation.cls	5 KB	1/24/2006 09:09:22 PM	r
FrmChangeSupervisor.frm	19 KB	12/27/2005 01:48:22 PM	r
frmMsg.frm	9 KB	12/21/2005 12:26:50 PM	r
frmOneSource.frm	53 KB	1/24/2006 09:09:22 PM	r
frmOneSource.frx	1 KB	4/4/2005 12:02:02 PM	r
frmProgress.frm	3 KB	12/21/2005 12:26:50 PM	r

frmQualifyWriteIn.frm	28 KB	12/27/2005	01:48:24 PM	r
frmQualifyWriteIn.frx	1 KB	5/16/2005	03:53:54 PM	r
frmTransferRichText.frm	1 KB	1/24/2006	09:09:24 PM	r
frmTransferRichText.frx	1 KB	5/11/2005	03:52:28 PM	r
mdlBasicDatabaseOperation.bas	15 KB	1/24/2006	09:09:24 PM	r
mdlBringWindowToTop.bas	9 KB	1/24/2006	09:09:24 PM	r
mdlBuildDB.bas	24 KB	12/21/2005	12:26:50 PM	r
mdlCheckContestNumber.bas	4 KB	1/24/2006	09:09:24 PM	r
mdlCheckLogin.bas	2 KB	12/21/2005	12:33:26 PM	r
mdlCheckVoteSetting.bas	13 KB	12/21/2005	12:26:50 PM	r
mdlComPort.bas	4 KB	1/24/2006	09:09:24 PM	r
mdlCRC.bas	8 KB	1/24/2006	09:09:24 PM	r
mdlDBConnection.bas	9 KB	1/24/2006	09:09:24 PM	r
mdlDriverInfo.bas	16 KB	1/24/2006	09:09:24 PM	r
mdlEncrypt.bas	6 KB	1/24/2006	09:09:24 PM	r
mdlEventLog.bas	13 KB	1/24/2006	09:09:24 PM	r
mdlFileControl.bas	5 KB	1/24/2006	09:09:26 PM	r
mdlFileFolder.bas	4 KB	1/24/2006	09:09:26 PM	r
mdlFileManagement.bas	3 KB	1/24/2006	09:09:26 PM	r
mdlGetAllNetworkMachine.bas	8 KB	1/24/2006	09:09:26 PM	r
mdlGetWriteIn.bas	4 KB	1/24/2006	09:09:26 PM	r
mdlKeyStroke.bas	4 KB	1/24/2006	09:09:26 PM	r
mdlLanguage.bas	14 KB	1/24/2006	09:09:26 PM	r
mdlLevelDifinition.bas	2 KB	1/24/2006	09:09:26 PM	r
mdlLimitKey.bas	1 KB	12/27/2005	01:48:26 PM	r
mdlLog.bas	7 KB	1/24/2006	09:09:26 PM	r
mdlManageDatabaseInfo.bas	10 KB	12/27/2005	01:48:26 PM	r
mdlMapDrive.bas	9 KB	1/24/2006	09:09:26 PM	r
mdlNormalMsg.bas	7 KB	12/21/2005	12:26:52 PM	r
mdlPaperBallotImage.bas	15 KB	12/27/2005	01:48:26 PM	r
mdlPassword.bas	1 KB	1/24/2006	09:09:26 PM	r
mdlShowLanguage.bas	8 KB	1/24/2006	09:09:26 PM	r
mdlShutDown.bas	8 KB	1/24/2006	09:09:28 PM	r
mdlSQLDataType.bas	6 KB	1/24/2006	09:09:28 PM	r
mdlStrFunctions.bas	31 KB	1/24/2006	09:09:28 PM	r
mdlSupervisor.bas	9 KB	12/27/2005	01:48:28 PM	r
mdlSystemInfo.bas	3 KB	1/24/2006	09:09:28 PM	r
mdlTallySub.bas	32 KB	1/24/2006	09:09:28 PM	r
mdlUserRight.bas	4 KB	1/24/2006	09:09:28 PM	r
mdlWord.bas	18 KB	1/24/2006	09:09:30 PM	r
Card.gif	20 KB	3/23/2005	03:04:38 PM	r
clsPaperBallot.cls	43 KB	1/24/2006	09:08:52 PM	r
clsVoiceTxt.cls	28 KB	1/24/2006	09:08:52 PM	r
frmAbout.frm	8 KB	1/24/2006	09:08:52 PM	r
frmAbout.frx	1 KB	7/26/2005	08:50:24 PM	r
frmADA.frm	18 KB	1/24/2006	09:08:54 PM	r
frmBattery.frm	13 KB	1/24/2006	09:08:54 PM	r
frmDateTime.frm	11 KB	1/24/2006	09:08:54 PM	r
frmHandlePoll.frm	19 KB	1/24/2006	09:08:54 PM	r
frmInsertCard.frm	32 KB	1/24/2006	09:08:54 PM	r
frmKeyIn.frm	123 KB	1/24/2006	09:08:58 PM	r
frmKeyIn.frx	20 KB	12/5/2005	05:23:10 PM	r
frmLoadBallot.frm	9 KB	1/24/2006	09:08:58 PM	r
frmMachine.frm	59 KB	1/24/2006	09:09:00 PM	r
frmMachine.frx	1 KB	12/15/2005	08:41:22 PM	r
frmMain.frm	58 KB	1/24/2006	09:09:00 PM	r

frmMsg.frm	9 KB	1/24/2006	09:09:00	PM	r
frmMultiLanguage.frm	6 KB	1/24/2006	09:09:00	PM	r
frmPaperRecord.frm	3 KB	7/13/2005	10:37:56	AM	r
frmPrintResult.frm	117 KB	1/24/2006	09:09:02	PM	r
frmPrintResult.frx	1 KB	11/30/2005	06:43:08	PM	r
frmProgress.frm	3 KB	1/24/2006	09:09:02	PM	r
frmReadReceipt.frm	5 KB	1/24/2006	09:09:04	PM	r
frmSampleBallot.frm	85 KB	1/24/2006	09:09:04	PM	r
frmSampleBallot.frx	1 KB	7/29/2005	03:25:18	PM	r
frmSetting.frm	34 KB	1/24/2006	09:09:06	PM	r
frmTally.frm	58 KB	1/24/2006	09:09:08	PM	r
frmTally.frx	1 KB	9/2/2005	01:14:08	PM	r
frmTestPrinter.frm	17 KB	1/24/2006	09:09:08	PM	r
frmTransferTally.frm	22 KB	1/24/2006	09:09:08	PM	r
frmVerifyBarcode.frm	24 KB	1/24/2006	09:09:08	PM	r
frmVerifyBarcode.frx	1 KB	11/30/2005	05:58:38	PM	r
mdlCDR.bas	12 KB	1/24/2006	09:09:08	PM	r
mdlCheckMouseMove.bas	2 KB	1/24/2006	09:09:08	PM	r
mdlCheckRawDataFile.bas	6 KB	1/24/2006	09:09:08	PM	r
mdlCheckTime.bas	6 KB	1/24/2006	09:09:08	PM	r
mdlCheckVID.bas	25 KB	1/24/2006	09:09:10	PM	r
mdlColor.bas	2 KB	1/24/2006	09:09:10	PM	r
mdlDevice.bas	12 KB	1/24/2006	09:09:10	PM	r
mdlDisableLowLevelKeys.bas	5 KB	1/24/2006	09:09:10	PM	r
mdlErrInfo.bas	9 KB	1/24/2006	09:09:10	PM	r
mdlExportTabulation.bas	10 KB	1/24/2006	09:09:10	PM	r
mdlFormMaganemnt.bas	22 KB	1/24/2006	09:09:10	PM	r
mdlImportTabulation.bas	19 KB	1/24/2006	09:09:10	PM	r
mdlMachineInformation.bas	6 KB	1/24/2006	09:09:12	PM	r
mdlMain.bas	9 KB	1/24/2006	09:09:12	PM	r
mdlMsg.bas	9 KB	1/24/2006	09:09:12	PM	r
mdlNetworkSetting.bas	1 KB	1/24/2006	09:09:12	PM	r
mdlPrinter.bas	130 KB	1/24/2006	09:09:12	PM	r
mdlPrinter.OBJ	18 KB	11/12/2003	08:16:18	AM	r
mdlReadDBSetting.bas	34 KB	1/24/2006	09:09:14	PM	r
mdlReceiptNumber.bas	5 KB	1/24/2006	09:09:14	PM	r
mdlRecord.bas	41 KB	1/24/2006	09:09:14	PM	r
mdlShell.bas	28 KB	1/24/2006	09:09:14	PM	r
mdlSimpleBallotStyle.bas	25 KB	1/24/2006	09:09:14	PM	r
mdlSpeak.bas	188 KB	1/24/2006	09:09:18	PM	r
mdlUserManagement.bas	12 KB	1/24/2006	09:09:18	PM	r
mdlVerifyProvisional.bas	46 KB	1/24/2006	09:09:18	PM	r
mdlVidCard.bas	45 KB	1/24/2006	09:09:18	PM	r
mdlVote.bas	34 KB	1/24/2006	09:09:20	PM	r
mdlVoteNumber.bas	15 KB	1/24/2006	09:09:20	PM	r
mdlWriteDB.bas	24 KB	1/24/2006	09:09:20	PM	r
PROPS.ICO	1 KB	7/26/1999	02:00:00	AM	r

Voting (Full Face)

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01.jpg	1 KB	6/18/2003	07:13:46	AM	r
02.jpg	1 KB	6/18/2003	07:10:50	AM	r
03.jpg	1 KB	6/18/2003	07:18:10	AM	r
04.jpg	1 KB	6/18/2003	07:18:54	AM	r
05.jpg	1 KB	6/18/2003	07:15:54	AM	r

06.jpg	1 KB	6/18/2003	07:16:58 AM	r
07.jpg	1 KB	6/18/2003	07:20:58 AM	r
08.jpg	1 KB	6/18/2003	07:20:10 AM	r
frmPartySelection.frm	42 KB	1/24/2006	09:09:30 PM	r
frmPartySelection.frx	1 KB	6/8/2005	01:21:00 PM	r
frmVote.frm	582 KB	1/24/2006	09:09:38 PM	r
InsertCard.avi	29118 KB	3/16/2004	12:34:32 PM	r
LanguageTranslation1028.mdb	1068 KB	7/1/2005	12:15:08 PM	r
LanguageTranslation3082.mdb	1068 KB	7/1/2005	12:15:14 PM	r
mdlDifferentControl.bas	3 KB	1/24/2006	09:09:38 PM	r
mdlFontControl.bas	47 KB	1/24/2006	09:09:38 PM	r
mdlFullFaceVote.bas	10 KB	1/24/2006	09:09:38 PM	r
mdlGenerateBallot.bas	40 KB	1/24/2006	09:09:40 PM	r
mdlLongTest.bas	46 KB	1/24/2006	09:09:40 PM	r
mdlScheme.bas	6 KB	1/24/2006	09:09:40 PM	r
mscal.oca	29 KB	8/28/2002	12:38:04 PM	r
MSCAL.OCX	87 KB	7/10/1997	11:00:00 AM	r
PaperRecord.doc	19 KB	8/15/2005	12:34:40 PM	r
Thumbs.db	15 KB	3/23/2005	01:51:24 PM	rh
TouchScreenDriver.txt	1 KB	9/7/2005	01:49:00 PM	r
Voting.org	3 KB	8/9/2001	12:24:46 PM	r

Optical Vote-Trakker

Common Modules

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clsAppLog.cls	28 KB	2/17/2006	11:21:36 AM	a
clsCRC.cls	17 KB	2/17/2006	10:29:44 AM	a
clsDBWrapper.cls	8 KB	2/17/2006	11:21:36 AM	a
clsRecorder.cls	17 KB	1/24/2006	07:09:22 PM	a
cReadTextTabulation.cls	5 KB	2/17/2006	11:21:36 AM	a
FrmChangeSupervisor.frm	19 KB	2/17/2006	11:21:36 AM	a
frmMsg.frm	9 KB	2/14/2006	04:44:04 PM	a
frmOneSource.frm	53 KB	2/17/2006	11:21:38 AM	a
frmOneSource.frx	1 KB	4/4/2005	10:02:02 AM	a
frmProgress.frm	3 KB	2/17/2006	10:29:44 AM	a
frmQualifyWriteIn.frm	28 KB	2/17/2006	11:21:38 AM	a
frmQualifyWriteIn.frx	1 KB	5/16/2005	01:53:54 PM	a
frmTransferRichText.frm	1 KB	2/17/2006	11:21:38 AM	a
frmTransferRichText.frx	1 KB	5/11/2005	01:52:28 PM	a
frmTransferRichText.log	1 KB	1/25/2003	12:31:44 PM	a
mdlBasicDatabaseOperation.bas	15 KB	2/17/2006	11:21:38 AM	a
mdlBringWindowToTop.bas	9 KB	2/17/2006	11:21:38 AM	a
mdlBuildDB.bas	24 KB	2/14/2006	04:44:04 PM	a
mdlCheckContestNumber.bas	4 KB	1/24/2006	07:09:24 PM	a
mdlCheckLogin.bas	2 KB	2/17/2006	10:29:44 AM	a
mdlCheckVoteSetting.bas	13 KB	2/17/2006	10:29:46 AM	a
mdlComPort.bas	4 KB	1/24/2006	07:09:24 PM	a
mdlCRC.bas	8 KB	2/17/2006	10:29:46 AM	a
mdlDBConnection.bas	9 KB	2/17/2006	11:21:38 AM	a
mdlDriverInfo.bas	16 KB	2/14/2006	04:44:04 PM	a
mdlEncrypt.bas	6 KB	2/17/2006	11:21:38 AM	a
mdlEventLog.bas	13 KB	2/17/2006	11:21:38 AM	a
mdlFileControl.bas	5 KB	2/17/2006	10:29:46 AM	a
mdlFileFolder.bas	4 KB	2/17/2006	11:21:38 AM	a
mdlFileManagement.bas	3 KB	2/17/2006	11:21:40 AM	a
mdlGetAllNetworkMachine.bas	8 KB	2/14/2006	04:34:04 PM	a

mdlGetWriteIn.bas	4 KB	2/17/2006	11:21:40 AM	a
mdlKeyStroke.bas	4 KB	2/17/2006	11:21:40 AM	a
mdlLanguage.bas	14 KB	2/17/2006	11:21:40 AM	a
mdlLevelDifinition.bas	2 KB	2/17/2006	11:21:40 AM	a
mdlLimitKey.bas	1 KB	2/17/2006	11:21:40 AM	a
mdlLog.bas	7 KB	2/17/2006	11:21:40 AM	a
mdlManageDatabaseInfo.bas	10 KB	2/17/2006	11:21:40 AM	a
mdlMapDrive.bas	9 KB	2/14/2006	04:34:04 PM	a
mdlNormalMsg.bas	7 KB	2/14/2006	04:44:06 PM	a
mdlPaperBallotImage.bas	15 KB	2/17/2006	11:21:40 AM	a
mdlPassword.bas	1 KB	2/17/2006	11:21:40 AM	a
mdlShowLanguage.bas	8 KB	2/17/2006	11:21:40 AM	a
mdlShutDown.bas	8 KB	1/24/2006	07:09:28 PM	a
mdlSQLDataType.bas	6 KB	2/17/2006	11:21:40 AM	a
mdlStrFunctions.bas	31 KB	2/17/2006	11:21:40 AM	a
mdlSupervisor.bas	9 KB	2/17/2006	11:21:42 AM	a
mdlSystemInfo.bas	3 KB	2/17/2006	11:21:42 AM	a
mdlTallySub.bas	32 KB	2/17/2006	11:21:42 AM	a
mdlUserRight.bas	4 KB	2/17/2006	10:29:48 AM	a
mdlWord.bas	18 KB	2/17/2006	11:21:42 AM	a
frmBallotType.frm	5 KB	2/17/2006	11:21:28 AM	a
frmBarcode.frm	11 KB	2/17/2006	11:21:30 AM	a
frmBarcode.frx	1 KB	6/9/2005	11:11:10 AM	a
frmNoVID.frm	15 KB	2/17/2006	11:21:30 AM	a
frmNoVID.frx	1 KB	11/10/2005	04:11:12 PM	a
frmTally.frm	170 KB	2/17/2006	11:54:50 AM	a
frmTally.frx	1 KB	2/17/2006	11:54:50 AM	a
mdlBarcode39.bas	7 KB	2/17/2006	11:21:32 AM	a
mdlBase36.bas	4 KB	2/17/2006	11:21:32 AM	a
mdlData.bas	3 KB	2/17/2006	11:21:32 AM	a
mdlPaperBallotVarConst.bas	18 KB	2/17/2006	11:21:32 AM	a
mdlTally.bas	170 KB	2/17/2006	11:21:34 AM	a
mdlVIDValidation.bas	9 KB	2/17/2006	11:21:34 AM	a

CountBallotsSourceCode
=====

BallotData.cpp	53 KB	9/29/2005	10:40:46 AM	a
BallotData.h	3 KB	7/28/2005	11:25:02 AM	a
barcode.cpp	6 KB	1/14/2003	06:53:28 AM	a
barcode.h	3 KB	1/14/2003	06:53:28 AM	a
CountBallots.apr	41 KB	9/29/2005	10:51:28 AM	a
CountBallots.clw	3 KB	10/3/2005	05:50:16 AM	a
CountBallots.cpp	6 KB	9/14/2005	01:47:34 PM	a
CountBallots.dsp	6 KB	1/21/2003	02:23:40 PM	a
CountBallots.dsw	1 KB	1/21/2003	02:23:40 PM	a
CountBallots.h	2 KB	9/14/2005	01:50:24 PM	a
CountBallots.ncb	1273 KB	12/21/2005	10:45:12 AM	a
CountBallots.opt	52 KB	12/21/2005	10:45:12 AM	a
CountBallots.plg	2 KB	12/21/2005	10:45:10 AM	a
CountBallots.rc	11 KB	9/29/2005	10:51:28 AM	a
CountBallotsDlg.cpp	78 KB	9/29/2005	10:43:00 AM	a
CountBallotsDlg.h	7 KB	9/14/2005	02:54:04 PM	a
DataCheckDlg.cpp	7 KB	9/22/2005	01:38:50 PM	a
DataCheckDlg.h	2 KB	8/1/2005	07:43:42 AM	a
DBDlg.cpp	3 KB	8/1/2005	07:13:02 AM	a
DBDlg.h	2 KB	7/29/2005	12:01:58 PM	a

IdentifyImage.cpp	47 KB	9/23/2005	07:02:16 AM	a
IdentifyImage.h	6 KB	9/23/2005	06:53:38 AM	a
ImageProcess.cpp	5 KB	9/14/2005	03:29:50 PM	a
ImageProcess.h	2 KB	8/1/2005	06:52:14 AM	a
ModulesSetup.exe	900 KB	1/21/2003	02:20:26 PM	a
msado15.tlh	88 KB	7/13/2001	06:30:46 AM	a
msado15.tli	74 KB	7/13/2001	06:30:46 AM	a
objtwain.cpp	6 KB	11/4/2002	12:36:42 PM	a
objtwain.h	2 KB	11/4/2002	12:36:42 PM	a
resource.h	1 KB	6/2/2005	08:55:00 AM	a
StdAfx.cpp	1 KB	11/1/2002	11:47:44 AM	a
StdAfx.h	1 KB	1/2/2003	12:09:04 PM	a
TestResultDlg.cpp	6 KB	9/23/2005	06:54:28 AM	a
TestResultDlg.h	2 KB	8/1/2005	07:47:52 AM	a
twain.h	81 KB	10/24/2002	07:03:22 AM	a
twcontrol.cpp	85 KB	1/21/2003	01:43:52 PM	a
twcontrol.h	19 KB	1/21/2003	01:43:52 PM	a

Database Script Files

=====

create_proc.sql	657 KB	7/28/2005	03:31:56 PM	a
Create_tables.sql	79 KB	7/1/2005	01:54:08 PM	a
CREATEDB.SQL	1 KB	2/18/2003	03:49:38 PM	a
drop_proc.sql	24 KB	7/28/2005	02:36:50 PM	a
drop_tables.sql	4 KB	2/1/2005	01:02:04 PM	a
Event Log.mdb	268 KB	8/28/2002	01:34:54 PM	a
Insert_Init_Data.sql	31 KB	10/31/2005	02:24:46 PM	a
SMJBDP32.DLL	31 KB	6/20/2002	10:59:26 AM	a
SMJBDP32.txt	1 KB	6/20/2002	11:47:16 AM	a
SMJCOMMON.INI	1 KB	12/18/2002	01:53:02 PM	a
Tabulation.mdb	248 KB	12/8/2004	02:18:42 PM	a
Thumbs.db	26 KB	3/23/2005	12:05:14 PM	hsa
Transfer_tables.sql	2 KB	11/16/2004	06:34:56 AM	a
VoteTkVocF.acs	1 KB	7/18/2001	08:48:52 AM	a
VoteTkVocM.acs	1 KB	7/26/2001	03:22:54 AM	a
Voting.RES	47 KB	10/25/2005	11:51:40 AM	a

Optical Vote-Trakker

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0001E111.bmp	124 KB	2/14/2006	01:42:56 PM	a
0002E001.bmp	124 KB	2/14/2006	01:37:12 PM	a
0004E001.bmp	124 KB	2/14/2006	09:22:08 AM	a
0004E002.bmp	124 KB	2/14/2006	09:22:10 AM	a
0004E003.bmp	124 KB	2/14/2006	09:22:10 AM	a
0006E001.bmp	124 KB	2/17/2006	09:04:46 AM	a
0006E002.bmp	124 KB	2/17/2006	09:04:48 AM	a
0006E003.bmp	124 KB	2/17/2006	09:04:48 AM	a
0007E001.bmp	124 KB	2/17/2006	11:07:00 AM	a
Card1.jpg	17 KB	3/12/2004	11:34:12 AM	a
clsPaperBallot.cls	143 KB	2/17/2006	11:21:44 AM	a
DTSReport.doc	19 KB	2/14/2006	01:41:22 PM	a
frmAbout.frm	4 KB	2/17/2006	11:21:44 AM	a
frmAbout.frx	4 KB	5/11/2005	11:26:44 AM	a
frmBarcode.frx	1 KB	2/12/2003	05:06:18 PM	a
frmCreateOption.frm	4 KB	2/17/2006	11:21:44 AM	a
frmDBLog.frm	16 KB	2/17/2006	11:21:44 AM	a

frmDuplicateVID.frm	19 KB	2/17/2006 11:21:46 AM	a
frmDuplicateVID.frx	1 KB	5/11/2005 01:30:40 PM	a
FrmEnter.frm	10 KB	2/17/2006 11:21:46 AM	a
frmLogin.frm	3 KB	2/17/2006 11:21:46 AM	a
frmMain.frm	10 KB	2/17/2006 11:21:46 AM	a
frmOption.frm	53 KB	2/17/2006 11:21:46 AM	a
frmOption.frx	1 KB	9/7/2005 09:51:32 AM	a
frmOverVote.frm	29 KB	2/17/2006 11:21:48 AM	a
frmOverVote.frx	1 KB	7/7/2005 11:36:36 AM	a
frmPaperBallot.frx	1 KB	6/6/2002 05:34:22 AM	a
frmPrintReport.frm	25 KB	2/17/2006 11:21:48 AM	a
frmPrintReport.frx	1 KB	7/7/2005 11:36:36 AM	a
frmProgress.frm	2 KB	2/17/2006 11:21:48 AM	a
frmTicket.frm	103 KB	2/14/2006 02:06:36 PM	a
frmTicket.frx	1 KB	12/7/2005 01:47:22 PM	a
frmUnderVote.frm	49 KB	2/17/2006 11:21:48 AM	a
frmUnderVote.frx	1 KB	7/7/2005 01:45:24 PM	a
frmVIDValidation.frm	27 KB	2/17/2006 11:21:50 AM	a
frmVIDValidation.frx	1 KB	12/20/2005 01:00:16 PM	a
frmWriteIn.frm	58 KB	2/17/2006 11:21:50 AM	a
frmWriteIn.frx	1 KB	7/7/2005 01:55:38 PM	a
frmWriteInSummary.frm	8 KB	2/17/2006 11:21:50 AM	a
mdlErrInfo.bas	8 KB	2/17/2006 11:21:52 AM	a
mdlExportTabulation.bas	21 KB	2/17/2006 11:21:52 AM	a
mdlGenerateTicket.bas	147 KB	2/14/2006 02:06:40 PM	a
mdlLogIn.bas	4 KB	2/17/2006 11:21:52 AM	a
mdlLongTest.bas	48 KB	2/17/2006 11:21:52 AM	a
mdlMain.bas	3 KB	2/17/2006 11:21:52 AM	a
mdlSetting.bas	9 KB	2/17/2006 11:21:52 AM	a
mdlShell.bas	11 KB	2/17/2006 11:21:52 AM	a
mdlVote.bas	11 KB	2/17/2006 11:21:52 AM	a
mssccprj.scc	1 KB	1/9/2003 04:33:40 PM	a
Optical Vote-Trakker.exe	2524 KB	2/17/2006 11:20:22 AM	a
OpticalBallotImage.mdb	116 KB	12/21/2004 01:16:04 PM	a
OpticalVoteTrakker.PDM	7 KB	9/12/2005 02:28:44 PM	a
Scanner VotingPassword.mdb	76 KB	8/3/2003 06:13:18 PM	a
Scanner.RES	32 KB	9/7/2005 09:51:38 AM	a

APPENDIX C

FUNCTIONAL TEST REQUIREMENTS

FUNCTIONAL TEST APPROACH AND FINDINGS

The test approach was to functionally test the changed or added EMS and OVT functions with test cases that exercised those functions and also provided an overall regression test of those components. After Wyle completed its qualification testing of the FFVT and had indicated that they would recommend its certification, CIBER conducted end-to-end System Tests to validate the integrated operation of the EMS, FFVT, and OVT. The test cases exercised the overall ballot preparation, voting and tabulation software as it would be used in actual elections, allowing the new functions to be validated as part of the overall operation of the application.

Approach

The ITA prepared a software test plan that identified the objectives of the test and the test cases that were required to validate those objectives. The planned test cases were expanded and modified during the testing to ensure all identifiable potential deficiencies (exceptions) were tested and that all modifications were validated. All exceptions were reported to the vendor and tracked by CIBER to ensure they were resolved. The test cases that were executed are summarized the tables that follow.

The results of functional and system testing verifies that the AI Technology VOTE_TRAKKER 1.2.0 voting system conforms to the FEC 2002 Voting System Standards and implements the features specified in the vendor's TDP.

Test Case: fnGE01_050930	Configuration
General Election Definition: 1 State, 2 counties, 3 municipalities, 2 polling places + absentee ballots	<ul style="list-style-type: none"> • 4 Precincts + 1 split • 5 political parties • 1 statewide contest, 3 assembly district contests, 2 senate district contests, 3 county contests, 5 municipal contests, 3 supervisory district contests, one bond issue • Contest types: N of M, Straight Party, Ranked, Recall • Candidate rotation by District • Regular ballots, Absentee (paper) ballots, Provisional Ballots, After Hour Provisional Ballots • English only text • Multi-line write-in
Voting Devices Utilized: OVT, FFVT	
Procedures:	
<ul style="list-style-type: none"> • Create election database using the “Manage Ballot Data” application • Generate a Ballot using “Generate Ballot Data” as follows: <ul style="list-style-type: none"> ○ Define “levels” as State, County, City, Precinct and Ward ○ Enter voting districts as: Statewide (Alabama), Assembly District (AD1, AD7, AD32), County (Madison, Jefferson), City (Madison, Birmingham, Clanton), Senate Districts (1 and 2), Supervisory Districts (1,3,5) ○ Enter 5 political parties ○ Enter 4 precincts, one with two subprecincts ○ Save Template of precinct/district/party configuration ○ Enter registered voter counts ○ Enter contests and setup contest groups ○ Add candidates to contests and order candidates ○ Enter 2 qualified write-in candidates ○ Enter bond issue ○ Setup 3 rotation groups for assembly districts and Cities, set up precinct rotation for contests not in those districts. ○ Set system settings for voting machines, voting strategy, voter paper receipt format • Preview ballots using the “voting test” application and modify ballots and system settings as necessary • Use “Generate VID” application to generate maximum number of Voter Identification numbers (800,000) • Export Election Database To CD using the “Manage Ballot Data” Application • In the “Optical Vote-Trakker” (OVT) Computer, import this election database using “Load Ballot Data” and then: <ul style="list-style-type: none"> ○ Set paper ballot formatting options and optional text and generate “full information” ballots. ○ Mark ballots, fill some with 25% mark and 50% mark, include write-in, overvote and undervote contests. ○ Scan ballots, verify sensitivity to partially marked choices, invalid ballot detection ○ Resolve write-ins, undervotes and overvotes ○ Export OVT tabulated results to Flash Memory and save for use in functional test fnTallyGen • Verify election loads on FFVT and cast votes for each precinct and save FFVT Tabulation file for input to TallyGen functional test. <p>NOTE: the Election database CD and OVT FM exported from this test are used in the fnTallyGen Test.</p>	

Test Case: fnPE01_051020	Configuration
Primary Election with Cross-party voting Definition: 1 State, 2 counties, 3 municipalities, 2 polling places + absentee ballots	<ul style="list-style-type: none"> • 4 Precincts + 1 split • 5 political parties • 1 statewide contest, 3 assembly district contests, 2 senate district contests, 3 county contests, 5 municipal contests, 3 supervisory district contests, one bond issue • Contest types: N of M, Straight Party, Ranked, Recall, Judicial • Candidate rotation by District • Regular ballots, Absentee (paper) ballots, Provisional Ballots, After Hour Provisional Ballots • English and Spanish text and voice recording • Voice recording of ADA text phrases • Multi-line write-in
Voting Devices Utilized: OVT, FFVT	
Procedures:	
<ul style="list-style-type: none"> • In “Manage Ballot Data” application, create a database for this election. • Generate a Ballot using “Generate Ballot Data” as follows: <ul style="list-style-type: none"> ○ Import precincts / districts / political party configuration by importing the template created in the fnGE01_050930 test (above) Define “levels” as State, County, City, Precinct and Ward ○ Use MS Paint to Create Icons for each party and store in “party_icon” folder ○ Enter contests for each party and some non-partisan and setup contest groups ○ Setup cross-party voting rules ○ Add candidates to contests and order candidates ○ Enter bond issue with custom text ○ Set to rotate all contests by precinct ○ Set system settings for voting machines, voting strategy, voter paper receipt format (allow voting of any precinct at any machine). ○ Add Spanish language as available language. ○ Export text phrases to translate to Spanish, translate them (using CIBER laptop) then import translation back ○ Record Spanish and English text phrases using voice recording in System Settings ○ Use MS Paint to create signature file for paper ballots and store in “Paper_Ballot_Folder” • Preview ballots using the “voting test” application and modify ballots and system settings as necessary • Use “Generate VID” application to generate 1000 Identification Numbers • Use the OVT Application on this same ballot preparation computer to: <ul style="list-style-type: none"> ○ Set ballot format options, create and print “reference” ballots and associated sample ballots • Export Election Database To CD using the “Manage Ballot Data” Application • In the “Optical Vote-Trakker” (OVT) Computer, import this election database using “Load Ballot Data” and then: <ul style="list-style-type: none"> ○ Mark ballots, include write-in, overvote and undervote contests. ○ Scan ballots, verify invalid ballot detection ○ Resolve write-ins, undervotes and overvotes ○ Export OVT tabulated results to Flash Memory and save for use in functional test fnTally • Save the exported CD to validate that the system settings cause the expected result at the FFVT. <p>NOTE: the Election database CD and OVT FM exported from this test are used in the fnTally Test.</p>	

Test Case: fnTally	Configuration
Primary Election with Cross-party voting Definition: 1 State, 2 counties, 3 municipalities, 2 polling places + absentee ballots (Database is same as used for fnPE01_051020, OVT tabulation file were generated in that test is input to this test.)	<ul style="list-style-type: none"> • 4 Precincts + 1 split • 5 political parties • 1 statewide contest, 3 assembly district contests, 2 senate district contests, 3 county contests, 5 municipal contests, 3 supervisory district contests, one bond issue • Contest types: N of M, Straight Party, Ranked, Recall, Judicial
Voting Devices Utilized: FFVT (not certified, used only to generate test input data)	
Procedures:	
<ul style="list-style-type: none"> • Use “Load Ballot Data” Application to load the fnPE01_051020 database • In “Tally” application, <ul style="list-style-type: none"> ○ Set tally level to “state” in order to tabulate multiple counties. ○ Import OVT totals using “specified path” option ○ Create qualified write-in candidate ○ Validate OVT imported correctly ○ (Use an available FFVT to enter and tabulate votes for election database fnPE01_051020. Enter ADA and regular votes. Export the tabulation file.) ○ Import FFVT Tabulation file ○ Validate provisional votes ○ Print all tally reports and verify accuracy. 	

Test Case: fnTallyGen	Configuration
General Election Definition: 1 State, 2 counties, 3 municipalities, 2 polling places + absentee ballots (Database is same as used for fnGE01_050930, OVT tabulation file generated in that test is input to this test.)	<ul style="list-style-type: none"> • 4 Precincts + 1 split • 5 political parties • 1 statewide contest, 3 assembly district contests, 2 senate district contests, 3 county contests, 5 municipal contests, 3 supervisory district contests, one bond issue • Contest types: N of M, Straight Party, Ranked, Recall, Judicial
Voting Devices Utilized: Bar code scanner for recount. (FFVT used to generate input data for test)	
Procedures:	
<ul style="list-style-type: none"> • Load the previously exported fnGE01_050930 database • In “Tally” application <ul style="list-style-type: none"> ○ Set tally level to “state” in order to tabulate multiple counties. ○ Import OVT totals ○ Validate OVT imported correctly Use an available FFVT to enter and tabulate votes for election database fnGE01_050930. Enter ADA and regular votes. Export the tabulation file. ○ Create qualified write-in candidate ○ (Use an available FFVT to enter votes on the fnGE01_050930. Include ADA votes, provisional and regular votes) ○ Import FFVT Tabulation file from FM ○ Validate provisional votes ○ Print all tally reports and verify accuracy. ○ Clear all tally results and conduct recount by scanning barcodes on voting receipts ○ Consolidate voting machine logs ○ Print reports and logs 	

Test Case: fnMaxCandidates	Configuration
General Election Definition: 1 State, 2 counties, 3 municipalities, 3 polling places + absentee ballots	<ul style="list-style-type: none"> • 4 Precincts + 1 split • 5 political parties, 60 candidates in one contest • 1 statewide contest, 3 assembly district contests, 2 senate district contests, 3 county contests, 5 municipal contests, 3 supervisory district contests, one bond issue • Contest types: N of M, Straight Party, Ranked, Recall, Judicial
Voting Devices Utilized: FFVT and OVT	
Procedures:	
<ul style="list-style-type: none"> • Select the previously exported fnGE01_050930 database, delete all existing tally results from the database. • In Generate Ballot data: <ul style="list-style-type: none"> ○ Add candidates to the N of M race to get a total of 60 candidates in that contest ○ Set Ballot and FFVT Database settings. And set default polling place to Birmingham precinct. • Use “Manage Ballot Data” to export the election database • At the FFVT: <ul style="list-style-type: none"> ○ import the ballot, vote regular, provisional and after hour provisional ballots. Close poll and export tabulation . ○ Modify FFVT address to simulate different physical precinct and repeat voting as in previous step ○ Modify FFVT address to simulate different physical precinct and repeat voting as in previous step • In the OVT <ul style="list-style-type: none"> ○ Import the election database ○ Create paper ballots and print them ○ Mark and scan ballots to simulate incorrect ballots as might occur in real election ○ Resolve write-ins, overvotes, undervotes, invalid ballots ○ Print all OVT tabulation reports ○ Export the tabulation to FM • In “Tally” application <ul style="list-style-type: none"> ○ Set tally level to “state” in order to tabulate multiple counties. ○ Import FFVT tabulations (CDs) using the “mass import” option. ○ Import OVT totals ○ Print all tally reports and verify accuracy. ○ Print reports and logs 	

Test Case: syAvanteLA	Configuration
General Election Definition: One ballot style to handle large number of contests and candidates. (Election database was provided by Avante and modified during the ballot preparation portion of this test.)	<ul style="list-style-type: none"> • 1 precinct, 1 ballot style • 9 political parties • 30 contests, 270 candidates, 5 amendments • Contest types: N of M, Straight Party, Ranked, Recall, Judicial
Voting Devices Utilized: FFVT and OVT	
Procedures:	
<ul style="list-style-type: none"> • Load the LA database provided by Avante • In Generate Ballot data: <ul style="list-style-type: none"> ○ Removed contests from database to get a total of 30 ○ Add 5 amendments ○ Set Ballot and FFVT Database settings. ○ View ballots and adjust settings to fit the ballot on screen • On the OVT software running on the Ballot Preparation computer, generate the paper ballot. • In the “Generate VID” application, generate 200 VIDS • In the OVT <ul style="list-style-type: none"> ○ Import the election database ○ Print ballots ○ Mark and scan ballots, mark one to verify scanner sensitivity ○ Adjust sensitivity of scanner and recount votes – verify sensitivity changed ○ Resolve write-ins, overvotes, undervotes ○ Export the tabulation to FM • Use “Manage Ballot Data” to export the election database with the paper ballot definition. • At the FFVT (Qualified by Wyle): <ul style="list-style-type: none"> ○ import the ballot, vote 5 ballots, export results to CD and close poll • In “Tally” application <ul style="list-style-type: none"> ○ Set tally level to “state” in order to tabulate multiple counties. ○ Import FFVT tabulations (CDs) using the “mass import” option. ○ Import OVT totals ○ Print all tally reports and verify accuracy. 	

Test Case: syPE01	Configuration
Primary Election, no Cross-party voting Definition: 1 State, 1 county, 2 municipalities, 1 polling place + absentee ballots	<ul style="list-style-type: none"> • 4 Precincts + 1 split • 5 political parties • 1 statewide contest, 3 assembly district contests, 2 senate district contests, 3 county contests, 5 municipal contests, 3 supervisory district contests, one bond issue • Contest types: N of M, Recall, Judicial Group • Candidate rotation by District • Regular ballots, Absentee (paper) ballots, Provisional Ballots, After Hour Provisional Ballots • English only • Multi-line write-in
Voting Devices Utilized: OVT, FFVT	
Procedures:	
<ul style="list-style-type: none"> • In “Manage Ballot Data” application, create a database for this election. • Generate a Ballot using “Generate Ballot Data” as follows: <ul style="list-style-type: none"> ○ Create districts, precincts, sub-precincts ○ Enter contests for each party and some non-partisan ○ Setup judicial groups ○ Setup rotation groups to demonstrate district rotation ○ Add candidates to contests and order candidates ○ Set system settings for voting machines, voting strategy, voter paper receipt format ○ Preview ballots using the “voting test” application and modify ballots and system settings • Use “Generate VID” application to generate 2000 Identification Numbers • In the OVT application on the Ballot Generation computer generate paper ballot formats • Export Election Database To CD using the “Manage Ballot Data” Application • In the “Optical Vote-Trakker” (OVT) Computer, import this election database using “Load Ballot Data”: <ul style="list-style-type: none"> ○ Print ballots ○ Mark ballots, include write-in, overvote and undervote contests. ○ Scan ballots, verify invalid ballot detection ○ Resolve write-ins, undervotes and overvotes ○ Export OVT tabulated results to Flash Memory • In Tally, import the OVT results and verify they match actual ballot votes • In FFVT: <ul style="list-style-type: none"> ○ Import the election, cast votes including write-ins and provisional votes ○ Verify provisional votes at the FFVT ○ Close poll and export tally • In Tally: <ul style="list-style-type: none"> ○ Import FFVT tabulation and event log ○ Tally and verify tabulation results ○ Print logs and reports 	

Test Case: syGE01	Configuration
General Election Definition: 1 State, 2 counties, 3 municipalities, 2 polling places + absentee ballots	<ul style="list-style-type: none"> • 4 Precincts + 1 split • 5 political parties • 1 statewide contest, 3 assembly district contests, 2 senate district contests, 3 county contests, 5 municipal contests, 3 supervisory district contests, one bond issue • Contest types: N of M, Straight Party, Ranked, Recall • Candidate rotation by District and Precinct • Regular ballots, Absentee (paper) ballots, Provisional Ballots, After Hour Provisional Ballots • English, Spanish, Chinese languages • Multi-line write-in
Voting Devices Utilized: OVT, FFVT, Laptop at Polling Place dedicated to VID Card printing	
Procedures:	
<ul style="list-style-type: none"> • Restore the election database that was generated for the fnMaxCandidates test • Generate a Ballot using “Generate Ballot Data” as follows: <ul style="list-style-type: none"> ○ Rename district level for city to “polling place” and remove a polling place ○ Modify rotation groups to rotate one contest by polling place and the remaining by precinct ○ Set system settings for voting machines, voting strategy, voter paper receipt format • Preview ballots using the “voting test” application and modify ballots and system settings as necessary • Use “Generate VID” application to generate 5000 Voter Identification numbers • In “Generate Ballot Data” <ul style="list-style-type: none"> ○ Set system settings to allow multi-language, set election name, ○ Add qualified write-ins ○ (In MS Paint) create party ICONs ○ Add translations for Chinese and Spanish text (export to separate computer, translate and import translation using “Generate Ballot Data”) • Export Election Database To CD using the “Manage Ballot Data” Application • In the “Optical Vote-Trakker” (OVT) Computer, import this election database using “Load Ballot Data”: <ul style="list-style-type: none"> ○ Set paper ballot formatting options and generate “full information” ballots for one language ○ Generate one ballot for Chinese language and one for Spanish language ○ Generate and print on full information ballot using the full face layout ○ Mark ballots, include write-in, overvote and undervote contests. ○ Scan ballots, ○ Resolve write-ins, undervotes and overvotes ○ Export OVT tabulated results to Flash Memory a • On the VID laptop at the “Polling Place” <ul style="list-style-type: none"> ○ Load the database for this election ○ Generate VID cards for this election on this dedicated laptop as may be done in an actual election. (Cards are generated on demand as voting occurs) • At FFVT <ul style="list-style-type: none"> ○ Load election database and set VID Laptop location to match the FFVT location ○ Vote ballots including Chinese, Spanish, provisional, regular, ADA unit, qualified write-in, verify incorrect voter actions including time-out response for fleeing voter ○ Close poll and export tally ○ Change FFVT name to simulation a different polling place and repeat 3 above steps • In the Tally application <ul style="list-style-type: none"> ○ Import FFVT tabulations ○ Resolve provisional ballots ○ Import the OVT tabulation ○ Tally and print reports and verify accuracy of vote totals 	

Summary of Report and Addendums

The first two entries in this summary identify the components that were certified with a predecessor system that contained EMS and OVT components that were modified and included in the VOTE-TRAKKER™ 1.2.0 Voting System. The VOTE-TRAKKER™ DRE hardware in 1.2.0 is completely new. The configurations of the predecessor system that had been certified (versions 4.7.5 and 4.7.6) provide the history of the EMS and OVT components of VOTE-TRAKKER™ 1.2.0.

Original Report Created 02-23-04

Software Functional Test	Hardware	Source Code
VOTE-TRAKKER™ 4.7.5 (2002)	Optical Vote-Trakker 1.5.0 COTS Canon DR-5020 (2002) Vote-Trakker Hardware Version 1.4.0 Software Version 4.7.5 Vote-Trakker Hardware Version 1.3.0 Software Version 4.7.5 VT Printer COTS Seiko M/N KPU-S347-11H	Manage Ballot Date Rev. 3.8.1 Generate VID Rev. 4.0.5 Generate Ballot Data Rev. 5.1.1 Load Ballot Data Rev. 3.5.1 Event Log 4.0.0 Tally 4.0.2 Optical Vote-Trakker Rev. 1.5.0 Count Ballots Rev. 1.00.4

Original report consisted of full TDP and source code review to the 2002 standards. Full functional system integration test to 2002 standards.

Addendum 1 Created 06-11-04

Software Functional Test	Hardware	Source Code
VOTE-TRAKKER™ 4.7.6 (2002)	Optical Vote-Trakker 1.5.0 COTS Canon DR-5020 (2002) Vote-Trakker Hardware Version 1.4.0 Software Version 4.7.6 Vote-Trakker Hardware Version 1.3.0 Software Version 4.7.6 VT Printer COTS Seiko M/N KPU-S347-11H	Manage Ballot Date Rev. 3.8.1 Generate VID Rev. 4.0.5 Generate Ballot Data Rev. 5.1.1 Load Ballot Data Rev. 3.5.1 Event Log 4.0.0 Tally 4.0.2 Optical Vote-Trakker Rev. 1.5.0 Count Ballots Rev. 1.00.4

Addendum 1 consisted of changes to code of the hardware only. The software ITA verified with the hardware ITA that the functionality of the software was not affected by the hardware change.

Original Report Created 2/27/06

Software Functional Test	Hardware	Source Code

<p>VOTE- TRAKKER™™ EVC308-FF 1.2.0</p>	<ul style="list-style-type: none"> • COTS Scanner, Canon DR-5020 • VOTE-TRAKKER™ EVC308-FF DRE Voting Machine Version 1.2.0 	<p>Election Management Software (EMS) Version 5.2.9:</p> <p>Event Log 4.0.4</p> <p>Generate Ballot Data 5.2.9</p> <p>Generate VID 4.2.0</p> <p>Load Ballot Data 3.5.7</p> <p>Tally 4.1.6</p> <p>Manage Ballot Data 3.8.6</p> <p>Test Voting 1.2</p> <p>Optical Vote-Trakker Rev. 1.5.0</p> <p>Count Ballots Rev. 2.00.4</p> <p>FFVT firmware version 1.2.0</p>
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