

ES&S

The following systems were examined in Austin on January 6, 2005:

AutoMARK Voter Assist Terminal (VAT) – v. 1.0.121 – DRE terminal
AIMS – v. 1.0.2 – AutoMARK Information Management Software
UNITY - version 2.4.3 - setup, central-count accumulation and reporting system.

Specific UNITY subsystems:

Hardware Programming Manager – v – 5.0.3.0
Data Acquisition Manager – v – 5.0.3.1
Election Reporting Manager – v – 6.4.3.0

Outstanding Issues

The problems noted from the May 2004 examination:

- *Marked optical-scan ballots not being read consistently by the same scanner:*
ES&S has agreed to make sure that the correct pens are used with their optical scan systems. I do not consider this a solution since: 1) the vendor had distributed “approved” pens to the examiners and 2) how can it be guaranteed that an election worker will not distribute the wrong pens to voters.
- *Disk read errors when uploading the same results from the OPTECH scanners into UNITY:*
This was an admitted bug. A duplicate read test was done and it appeared to be fixed. I recommend that the system provide feedback to the operator when a duplicate attempt has occurred rather than quietly doing nothing. The duplicate attempt should also be written to the real-time log.
- *Automatically zero-out results upon entering election-day tabulation on any vote recording or accumulating system:*
This continues to be debated by the vendor. To my knowledge, no other vendor's system lacks this safeguard. The vendor argues that this should be done manually as it is documented as part of the election preparation; if it is done automatically then results from a previous election will be lost if the jurisdiction failed to archive. Archiving is also documented, so how can it be argued that you expect the jurisdiction to follow procedures in regard to zeroing but not archiving? Zeroing should be automatic – not vulnerable to human error. The consequence of not zeroing is far greater than not archiving. With a little programming effort both requirements can be assured automatically. This is not a difficult technical issue to solve.

New system – AutoMARK

The AutoMARK system is a product of a partnership between ES&S and AutoMARK Technical Services. It is essentially an electronic pen. The AutoMARK Voter Assist Terminal or VAT is intended to be used by those needing (or desiring) an audio or magnified ballot. It provides a DRE terminal that satisfies the requirements of ADA and HAVA. When a voter has cast his ballot, the VAT produces a voted (marked) optical-scan ballot that can be tabulated just like a

voter marked optical-scan ballot. This allows a jurisdiction to meet the ADA and HAVA requirements without having to replace their existing optical-scan system.

The AIMS software is used to create the electronic ballots used in the VAT. Currently, AIMS can import the electronic setup created in UNITY. Importing the election setup electronically from other vendors' systems is being developed. AIMS also allows ballot creation manually – that is, by typing in the races, candidates, precincts, etc.

The AutoMARK system was voted upon and the results were uploaded into UNITY without error.

Conclusion

The AutoMARK system is an innovative and effective addition to ES&S system. I recommend that it be certified. I also recommend certification of the UNITY 2.4.3 system as it meets the **current** requirements outlined in the Texas Election Code.

I also recommend that the state adopt an additional rule that requires the automatic zeroing at the start of vote recording (voting machines) and accumulation (regional and central-count). I have made this suggestion in previous reports, but ES&S has not corrected this flaw.

In regards to the following quote by Mr. Borofsky, of Bexar County Elections:

At face value, this would require the Master PEB to search and zero out any votes remaining on the iVotronic as it turns the voting unit on for the election. As currently configured, the PEB will already indicate that there is a problem if the voting unit has not been cleared and tested for the election because the election qualifying codes(EQC) for the election will not match. That indication will confirm that the unit has not been cleared and tested since the last election and, logically, could still contain votes, but from a previous election. As currently configured, there will be an observable signal if the early Voting PEB is used for a unit not previously cleared, for an election day unit not previously cleared; or, if an election day PEB is tried during early voting or on election day in a unit not assigned to that poll site or previously used.

I am not disputing whether there are warning messages. Regardless of the warning(s), it is not sufficient. The problem was witnessed by the examiners in a recent examination. When accumulating the examiners ballots, votes from a different election were erroneously tabulated. The test was performed by the vendor. If the vendor can make this error, so can a jurisdiction.

I suggest the system be changed so that if a voting terminal has votes on it (as indicated by a warning), the election judge has the option to put the terminal aside. But, if the election judge decides to open the DRE, in spite of the warning, the votes are automatically cleared. This must be governed by the program, not the operator.

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Examiner