

Beta Test Report

(A joint effort of Hillsborough, Sarasota and Duval Counties)

OVERVIEW:

The ballots for the beta test were printed using 14" V-4 paper on the ABPS printing system. Ballots were hand marked by a team of employees using a variety of marking instruments (#2 pencil, black ball point pen, blue ball point pen, black fiber point marker) in the standard sequential layout with one over voted and one blank ballot per deck for 30 randomly selected precincts, and in a 1 for first, 2 for second, blank, over vote pattern for the remaining 353 precincts.

- The ballots were read through precinct level OSXs as set up for the Hillsborough County 2008 general election.
- The ballots were also read through one early vote OSX as configured for the same election. In addition, the 30 full decks were repeatedly read through the early vote machine until 18023 cards had been processed.
- The 30 full decks were read through the PCS units in various configurations. In addition, 17" ballots were processed through the PCS for ballot handling characteristics only (successfully).
- Also ballots with bi-fold were processed through the PCSs for the ballot handling characteristics (successfully). PCSs were used in various configurations. Results were uploaded into GEMS in the same manner as for an election (by LAN and modem).
- All OSXs were successfully uploaded.
- Under certain normal conditions, the PCSs would not upload some precincts (see detail).

GEMS:

Gems imported every election database we attempted to import (Hillsborough 2008 general election, Sarasota 2008 general election, Sarasota 2008 primary election) with no errors found. In addition, the text file import of election data for the Hillsborough 2008 general election ran successfully, importing the county geo-political design, races, candidates, titles, etc in English/Spanish, English and Spanish.

- One issue uncovered which does not affect the correct counts for the election is that if the operator un-checks "Set for Election", saves it, checks "Set for

Election" and allows GEMS to attempt to recover the OSX cards previously downloaded or uploaded, it is unable to do so (same as in previous version).

OSX:

The green lock icon not being present on the OSX issue has been corrected. The issue with the left override button not functioning after the machine had been power cycled until the right button had been pressed appears to have been corrected. Issues associated with near exactness in the length of the ballot have been changed to allow a greater tolerance of the paper length.

- Due to the failure to acknowledge some #2 pencil marks as a vote or a marginal mark, it is recommended that the use of #2 pencils be removed from the instructions.
- Upload of the card with the 18,023 cards processed required eight minutes, thirty seconds via the LAN and 9 minutes forty five seconds via modem. Both upload methods were successful.
- During this trial of the early vote machine, two OSX machines failed during the process of scanning ballots. The OSX would simply no longer accept ballots and reported scanning errors. The trial was continued by removing the memory card from the non-functioning OSX and using a replacement OSX.
- After the early vote machine was replaced there was an extensive delay scanning the first ballot (over two minutes in some cases while the ballot remained held in the scanner portion of the machine).
- The ballots processed during the life of the OSX counter is reset to zero when the firmware is upgraded. Ideally the upgrade should capture the existing count and reset it after the new firmware is installed, or if not possible, the tech should be able to enter the former count as they do the serial number.

PCS:

PCSs were tested in several configurations.

- It is recommended that the vendor consider certifying the Tally Net configuration by, establishing a PC on the network not associated with a DRS, and use it for the "hub" for monitoring.
- It was noted that operating the system using the "Capture Image Mode" takes more than twice as long to process each ballot as operating without capturing images. This difference in scan time was not present in the previous version of the PCS system.
- The vendor has been apprised of a significant issue in which no more processing of ballots can occur – period (if during tabulation, the workspace is shut down, or

if a workstation is turned off, system rebooted, etc., no more uploads can be completed). It should be noted that this issue exists in both Tally-Net configuration as well as stand-alone configuration. The vendor has been able to reproduce this issue and will be working on a correction.

- Paper handling was tested using ballots with two folds. This was successful after “back-bending” the ballots along the folds. 17” ballots were also processed through the equipment for paper handling review only.

AutoMark:

Files were exported from Gems and imported into AIMS and the AutoMark card created.

- Random precincts were tested using the AutoMark and the ballots were marked correctly.

Comments:

- Upgrade training, documentation and release notes are recommended.
- The “UNOFFICIAL” watermark on the PCS reports obstructs viewing of the results. Consider transparent shaded watermark or outline watermark to rectify.
- The workspace name is too long to be viewed entirely in the selection list on the PCS and there is no slider to view the entire name. As a result similarly named workspaces cannot be easily differentiated.
- The scrolling on the LCD screen on the OSX eliminates viewing some of the appropriate messages.
- The “Thank you for Voting” message on the OSX display is very brief (approximately 1-2 seconds)
- After processing a significant amount of ballots, it was noticed that when the early voting machine was turned off and then back on, the first ballot took an extended amount of time to process (10-20 seconds). This was first noticed after processing approximately 8,000 ballots.
- It would be appropriate to have a full listing and explanation of all error codes.
- The upload failed message on the OSX has a blue background (same as the successful message). It is recommended that it have a red background.
- Is there a practical limit to the number of simultaneous uploads (LAN and modem) and is there degradation of the speed as more are brought on line?
- There is a request to have the OSX unit display the “Thank You for Voting” message longer (or ideally to allow setting the duration in GEMS) so voters are able to more easily read (to confirm) their ballot was accepted.

- There should be documented practical specifications to the ballot card capacity of all Premier tabulation devices. These guidelines should be submitted to and tested by the state during certification, and the state should verify that the system capacities are sufficient to meet the needs of the largest county in Florida accounting for the growth of the county over the next 20 years.