

Acceptance Testing

Introduction

Acceptance testing of voting systems is perhaps the most important function that local election jurisdictions undertake in order to ensure the security and accuracy of their elections. Acceptance tests must be conducted under the strict control of the chief election official of the jurisdiction. Under no circumstance should acceptance tests be conducted by a manufacturer.

An acceptance test is defined as a test that is performed on an individual unit of a voting system in order to verify that the unit is physically, electronically, mechanically and functionally correct. Correct, in this sense, means that the unit is identical in every respect, including *software/firmware* to the unit that was originally purchased.

Acceptance testing provides assurance that the voting system is functioning correctly, that the voting system complies with the conditions of the product acquisition document, and that the voting system is correctly configured for use in an election. If initial acceptance testing is successful, the test documentation becomes the first item in the chain of custody for the elements that comprise the voting system. Later, if a component of the voting system leaves the election officials direct control for any reason (i.e. repair, upgrade, etc.) a repeat of the initial acceptance test serves to re-establish your chain of custody for the component.

Important reminder: *A certified voting system consists of a specific set of hardware/software/firmware, the specific version of the operating system, and the specific versions of any support software. In order to conduct acceptance tests you must know the version levels of each of these components.*

It is extremely important that election officials maintain a complete record of every acceptance test conducted on your voting system. These records should contain the device identification including software/firmware version, the date of the test, the name of the tester(s), and the outcome of the test. If the device passes the test no further information is necessary. If the device fails the acceptance test, the test documentation should contain a detailed description of the reason for the failure. If the failed device is returned to the manufacturer for repair, it is recommended that a copy of the test documentation be returned with the device.

Keeping all documentation on your election system in a single, easily accessible place can aid your management decisions. Ideally, you should build a database that can track the components of your system throughout their life. In it you would store the results from every acceptance test conducted, all election-related performance data, all chain-of-custody data, etc. This database becomes a single place to track each component of the voting system by serial number.

Request for Proposal and Contract Considerations

Planning for acceptance testing begins with the development of the Request for Proposal (RFP). The RFP should require that the vendor's bid proposals contain a recommended acceptance test script for each device contained in the proposal and an acceptance script for the overall voting system.

The RFP should specify that the proposed scripts must apply equally to all devices of a given type. For example, if the script is for a DRE voting station it must apply uniformly to all DRE voting stations. Do not accept a script that calls for a rigorous test of some subset of the DREs and only a cursory inspection of the rest.

The manufacturer's proposed acceptance test scripts will generally not be entirely satisfactory, but they will provide election officials with a solid basis for developing their own scripts.

Contracts for voting systems usually include a progressive payment schedule that calls for the total value of the contract to be paid in a series of payments based on measurable deliverables, such as hardware delivery, software installation and testing, etc. One of these payments should be based on completion of successful acceptance testing of *all* devices that make up the voting system and a successful acceptance test of the *overall system*.

Recommendation: *The final payment should be based on the successful completion of the first election held using the voting system.*

Acceptance Tests

There are three distinct parts to an acceptance test: a test for physical integrity, a diagnostic test of the various hardware features, and a test for functional characteristics. This last test includes a test of the various software/hardware modules that control the unit.

Acceptance tests must be conducted on *every* unit of your voting system every time a unit leaves your control and is returned. For example, if you loan a voting station to a civic club for a demonstration or send a unit of the voting system out for repair. Note that this does not include functions under the control of staff of the elections office. If you have a large number of devices this may be a tedious and time consuming task. Fortunately, as with most tedious and time consuming tasks, acceptance testing usually proceeds more quickly as the testers gain experience with the voting system. In some instances, an experienced tester can perform an acceptance test on a touch screen voting station or a ballot scanner in less than fifteen minutes.

In the course of an acceptance test, the tester may experience problems that can be easily corrected by the tester such as an incorrect time or date or a poorly calibrated touch screen. This is not a cause for terminating the test. In these cases, the tester should correct the problem and continue the test. However, the problem should be noted in the unit documentation.

Physical Analysis: This portion of the acceptance test is performed to assure that the voting unit is not physically damaged and that all physical components are working properly. The specific tests will vary based on the particular voting system; however, some typical items will include:

- Examine the outer shell or case for any sign of damage such as dents or cracks.
- Check that the top and bottom of the shell mate easily, that all doors open and shut easily, etc.
- Inspect all latches and hinges. Latches should open and shut without binding.
- Hinges should operate smoothly and be inspected to insure that hinge pins are not easily removed.
- All locks should open and close without binding.
- Inspect all electrical wires and connectors for damage or signs of wear.

Diagnostic Analysis: This portion of the acceptance test is performed to assure that all of the mechanical and electronic components of the voting unit are operating correctly. Again, the specific tests will vary based on the particular voting system; however, some typical items will include:

- Test all input/output devices. This will include any voter card readers, printers, PC card slots, etc.
- Test the connections that support any accessibility devices. If accessibility devices use a serial port, use a loop-back connector to test this port.
- On ballot scanners verify that the ballot feed path is properly set and that ballots will feed without binding.
- On touch screen devices verify that the screen is calibrated correctly.
- If there are controls that the voter can use to change brightness or intensity, verify that these controls are working properly.
- If the device is a commercial computer, verify that the floppy disk drives, CD/DVD drives, PC Slots, etc. are working properly.
- If the devices record date and time, verify that the date and time are correct.

Functional Analysis: This test is performed to assure that the correct federal and state certified version(s) of the software/firmware are installed in the voting unit and that the system will perform correctly during an election. This test consists of loading a mock election onto the unit, casting a known pattern of votes, closing the election, printing the reports, and then comparing the test results with the known vote pattern.

The following sections provide a generic outline for developing an acceptance test for the most common devices found in an electronic voting system. In each of the tests described below, you will need to setup a mock election. This mock election does not need to be long; however, it should exercise the features of the voting unit being tested. If your jurisdiction allows straight party voting, straight party voting with cross-over, multiple representative districts (i.e. vote for n of m), etc. then these types of contests should be included in your mock election.

Acceptance Tests for Optical Scan Ballot Scanners

This section describes an acceptance test for a stand-alone ballot scanner. The scanner should be set up for this test the way it will be set up for use in a precinct.

Materials Required: In addition to the following, you must know the version of the operating system and/or firmware that was certified for your ballot scanner.

1. A memory card or other device that is used to configure the ballot scanner for an election. This device must contain the election setup for the mock election that you will be using to test the scanner.
2. The password, manager card, or other device that is used to gain manager/administrator privilege on the scanner.
3. A test deck of pre-marked optical scan ballots for the mock election. This test deck typically contains one ballot with a vote for the first candidate in each race, two ballots with votes for the second candidate, three ballots with votes for the third candidate, etc. For 'yes' or 'no' questions, vote 'yes' on the first ballot and 'no' on the next two ballots. Do not vote this question on subsequent ballots. Although most ballot printers can supply you with this test deck; it is recommended that these ballots be hand prepared using the marking device noted by the system manufacturer.

Physical Analysis: This analysis is conducted with the scanner turned **off**.

1. Examine the case and/or cover for cracks or dents.
2. Inspect latches, hinges, carrying case, wheels, etc.
3. Examine the legs and/or stand. The legs and/or stand must operate smoothly without binding.
4. Inspect the power cord and plug for any frayed insulation or damaged connectors.
5. Verify that there is sufficient paper in the printer to complete the test.

Diagnostic Analysis: This analysis is conducted with the scanner turned on. Some of these tests may require manager/administrator privilege.

1. Turn on the ballot scanner and, as it boots up, verify that the correct federal and state certified version of the operating system and software are installed. This information may only display on the screen briefly. If you miss it, turn the scanner off and then re-boot.
2. Verify that the date and time set in the scanner are correct and, if not, correct them.
3. Be aware of time changes due to daylight savings time. If the daylight savings time will change between the time of this test and the next election, set the time on the scanner to compensate for this change.
4. Print a test pattern to verify that the printer is operating correctly. If your scanner does not have the ability to print a test pattern, the printer can be tested during the Functional Analysis.

5. Unplug the ballot scanner and verify that it will operate on the battery. If the scanner will not operate on the battery check to be sure the battery is fully charged before failing the scanner.
6. Verify that the battery charger will charge the battery.
7. Test all ports and card slots. If the scanner uses a serial port to communicate with the election management system, use a loop-back connector to test this port.

Functional Analysis: This analysis is conducted with the scanner loaded with the mock election and set for election mode. Turn the scanner on, load the mock election, and then set the scanner in election mode.

1. Be sure all vote totals are set to zero.
2. Print a zero tape.
3. Use the pre-marked test deck to accumulate a significant number of ballots (at least 25) on the scanner.
4. Close the election on the ballot scanner.
5. Print the results tape.
6. Verify that the vote counts on the result tape match the known results of the test deck.
7. Zero the vote counters and remove the mock election from the scanner.

Documentation: If the scanner experiences a failure during any of the above steps that cannot be corrected by the tester, terminate the test. Prepare documentation that lists the serial number of the scanner, the persons conducting the tests, the date, and a description of the failure. Make two copies of this documentation; one copy for your permanent record and another copy that stays with the scanner to assist the persons making any required repairs.

Attach all printouts to the copy retained for your permanent record.

If the scanner passes all of the above tests, prepare documentation for your permanent record that lists the serial number of the scanner, the persons conducting the tests, and the date. Attach all printouts to this documentation.

Recommendation: *It is important to be able to look at a scanner and determine whether or not it has passed acceptance testing. One way to accomplish this is to attach a permanent, non-removable label to the back or underside of the scanner. This label should contain the serial number of the scanner, the date, and the name or initials of the testers.*

Acceptance Test for Touch-screen Voting Stations

This section describes a typical acceptance test for a touch-screen voting station. The voting station should be set up for this test the way it will be set up for use in a precinct.

Material Required: In order to conduct an acceptance test, you will need the following materials. You will also need to know the version of the operating system and the software/firmware on your voting stations.

1. A memory card or other device that contains the mock election to be used for the test. This will be used to load the mock election into the voting station.
2. If the voting station uses a serial port to connect disability devices, you will need a loop-back connector.
3. A voter card or other device required to activate the voting station for a voter.
4. The password, manager card, or other device required for gaining manager/administrator privilege on the voting station.

Physical Analysis: This analysis is conducted with the voting station turned off.

1. Examine the case and/or cover for cracks or dents.
2. Inspect latches, hinges, carrying case, wheels, etc.
3. Examine the legs and/or stand. The legs and/or stand must operate smoothly without binding.
4. Inspect the power cord and plug for any frayed insulation or damaged connectors.
5. Verify that there is sufficient paper in the printer to complete the test.

Diagnostic Analysis: This test is conducted with the voting station turned on. Some parts of the test may require manager/administrator privilege.

1. Turn the voting station on and as it boots up verify that the correct federal and state certified version of the operating system and firmware are installed. This information may only appear briefly on the screen. If you miss it, turn the voting station off and then turn it back on.
2. Verify that the date and time are correct and correct them if necessary.
3. Be aware of time changes due to daylight savings time. If the daylight savings time will change between the time of this test and the next election, set the time on the scanner to compensate for this change.
4. Check the calibration on the screen and re-calibrate the screen if necessary.
5. Print a test pattern to verify that the printer is operating correctly. If your voting station does not have the ability to print a test pattern, the printer can be tested during the Functional Analysis.
6. Examine the screen for condition and clarity.
7. Unplug the voting station and verify that it will operate on the battery. If the battery is dead, charge the battery and repeat this test.
8. Verify that the battery charger will charge the battery and that any indicators that display charging condition and level of battery charge are functioning properly.
9. Test all card slots and input/output ports. If the voting station uses a serial port to connect the accessibility devices, test this port using a loop-back connector.

Functional Analysis: For this test the voting station is turned **on** and the mock election is loaded.

1. Verify that the mock election loaded correctly and that the ballot(s) contain all contests and candidates.
2. Set the voting station in election mode.

3. Print the Zero Totals tape.
4. Manually enter ballots that contain one vote for each candidate and issue. Continue to manually enter ballots until each candidate on the ballot has received exactly one vote and each issue has received one 'yes' and one 'no' vote.
5. Verify that each candidate has received exactly one vote and each issue has received one 'yes' and one 'no' vote.
6. If the voting station has the ability to automatically generate Logic and Accuracy ballots, use this feature to enter a total number of ballots that exceeds the number of ballots expected to be cast on a typical election day (usually about 150).
7. Close the election on the voting station.
8. Print the results.
9. Verify that the printed results exactly match the known number of votes cast for each candidate and issue.
10. Zero the totals and close the voting station.

Documentation: If during any of the above steps the voting station experiences a failure that cannot be corrected by the tester, terminate the test. Prepare documentation that lists the serial number of the touch screen unit, the persons conducting the tests, the date, and a description of the failure. Make two copies of this documentation; one copy for your permanent record and another copy that stays with the touch screen unit to assist the persons making any required repairs. Attach all printouts to the copy retained for your permanent record.

If the touch screen unit passes all of the above tests, prepare documentation for your permanent record that lists the serial number of the unit, the persons conducting the tests, and the date. Attach all printouts to this documentation.

Recommendation: *It is important to be able to look at a voting station and determine whether or not it has successfully passed acceptance testing. One way to accomplish this is to attach a permanent, non-removable label to the back of the screen or underside of the voting station. This label should contain the serial number of the voting station, the date, and the name or initials of the testers.*

End-to-end Voting System Acceptance Test

This test is sometimes referred to as a test of the election management system. In reality, it not only tests the election management system but also tests the ability of the election management system to interface correctly with the voting devices and to correctly count the votes and print reports. This test should be conducted on all newly acquired voting systems, and also after any event that has the potential to alter the voting system. Such events include replacing a disk drive or other component in the election computer and any time the election computer leaves your direct control and is returned.

Important: *If you use a 'blended system', for example optical scan and touch screen for ADA, all components of the system must be included in this test.*

Materials Required: You must know the correct federal and state certified versions of the operating systems and software/firmware for your election management system and your vote gathering devices, scanners and voting stations. In addition, you will need the following:

1. An election management computer with your voting system installed.
2. If Touch Screen units are used:
 - One Touch Screen voting unit,
 - One blank Touch Screen Memory Card or other device used to load the election definition into the voting unit,
 - One Touch Screen manager/supervisor card or other device used to obtain manager/supervisor access to the voting unit,
 - One Touch Screen voter card or other device used to initiate a voting session for a voter.
3. If Optical Scan Ballot Scanners are used:
 - One Ballot Scanner,
 - One blank memory card or other device used to load the election definition into the ballot scanner,
 - One set of pre-marked Optical Scan test ballots with known results. This can be the same test deck used to conduct acceptance tests on the ballot scanner.
4. All communications cables and devices necessary to connect the voting units and ballot scanners to the election management computer.
5. One blank disk or other device used by your system to record and store the election results.
6. One disk or other device containing your mock acceptance test election setup.

Prerequisite: The election management system consisting of items 1 through 4 above must be set up and tested before beginning this acceptance test. *(NOTE: It is acceptable to allow your IT staff or the manufacturer to do this setup because in the course of conducting the end-to-end test you will verify that everything has been set up correctly.)*

The Touch Screen voting unit and the ballot scanner should have previously completed acceptance testing. If not, run the Touch Screen voting station acceptance test and the ballot scanner acceptance test on these units prior to beginning this test.

Verify Correct Operating System and Election Management Software: Turn on the election management computer. As the computer boots up, verify that the correct federal and state certified version of the operating system is installed. After the boot up is complete, verify that the correct federal and state certified version of the election management system is installed. This can be accomplished by comparing the hash values of the installed voting system software with the hash values contained in the Web site of the National Software Reference Library maintained by the National Institute of Standards and Technology (<http://www.nsr.nist.gov/votedata.html>).

Verify the Election Management System Hardware: Verify that all components of the election management computer are turned on and functioning properly. This includes such components as printers, communication devices, disk drives, etc.

Verify Voting System Functionality: This test will verify that the overall voting system is functioning properly. It will verify that the election management system will format media to setup the TS voting stations and OS ballot scanners, that votes cast on these devices can be uploaded to the election management system, and that these votes will be counted correctly.

1. Load the acceptance test database (election setup) on the election management computer.
2. Verify that the election management system will support the Touch Screen voting unit (If your voting system does not include Touch Screen units go to Step 3).
 - Use the election management system to prepare the memory card or other device that is used to load the acceptance test mock election into the TS voting unit.
 - Load the mock election into the voting unit.
 - Open the election on the unit.
 - Manually enter one vote for each candidate and one ‘yes’ and one ‘no’ vote for each issue on the ballot.
 - If the Touch Screen voting unit has the facility to produce Logic and Accuracy ballots, use this feature to cast one set of Logic and Accuracy ballots.
 - Close the election on the Touch Screen voting unit.
 - Print the vote totals on the voting station printer.
 - Use your standard method for transferring votes from the voting station to the election management computer to upload the votes from the voting unit to the election management system.
3. Verify that the election management system will support the Optical Scan ballot scanner.
 - Use the election management system to prepare the memory card or other device that is used to load the acceptance test mock election into the ballot scanner.
 - Load the mock election into the ballot scanner.
 - Open the election on the ballot scanner.
 - Use the pre-marked set of optical scan test ballots to cast votes on the ballot scanner.
 - Close the election on the ballot scanner.
 - Print the vote totals on the ballot scanner.
 - Use your standard method for transferring votes from the ballot scanner to the election management computer to upload the votes from the ballot scanner to the election management system.
4. Verify Printed Outputs.
 - Close the election on the election management system.
 - Print the standard reports that contain the vote totals.
 - Compare the results printed from the election management system with the results printed from the voting station and ballot scanner.

Documentation: If the voting system experiences a failure during any of the above steps that cannot be corrected by the tester, terminate the test. Prepare documentation that lists the serial number of the election computer and the serial number or other identifying information for any other component that failed, the persons conducting the tests, the date, and a description of the failure. Make two copies of this documentation; one copy for your permanent record and another copy that stays with the touch screen unit to assist the persons making any required repairs. Attach all printouts to the copy retained for your permanent record.

If the voting system passes all of the above tests, prepare documentation for your permanent record that lists the serial number of the voting system computer, the serial number of the Touch Screen voting unit, the serial number of the Optical Scan ballot scanner, the persons conducting the tests, and the date. Attach all printouts to this documentation.

***Recommendation:** It is important to be able to look at a voting system computer and determine whether or not it has successfully passed acceptance testing. One way to accomplish this is to attach a permanent, non-removable label to the case of the voting system computer. This label should contain the serial number of the computer, the date, and the name or initials of the testers.*

Conclusion

Acceptance testing on each machine delivered to a voting jurisdiction by a manufacturer is a critical step in the process of ensuring that electronic voting units used by voters on election day will function as intended. Although each manufacturer has internal quality control procedures, and although quality control should be guaranteed to some degree in the contractual agreement between the manufacturer and the voting jurisdiction, these procedures and guarantees are worthless unless the jurisdiction can proactively detect failures or non-functional systems at the time the product is delivered. Rigorous acceptance testing provides this detection mechanism.

***Recommendation:** Your agreement with the vendor should include an understanding that the warranty on a unit of the voting system will not begin until the initial acceptance testing has been successfully completed.*

Figure 3. Johnson CO. Kansas Acceptance Test Procedures (EXAMPLE)

TSX TOUCH SCREEN ACCEPTANCE TESTING PROCEDURES

SERIAL NUMBER: (Left side of unit) 204404	Check off as completed. Note any discrepancies.
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Inspect for physical damage, such as cracks.	
Write to the right the number of keys received with unit (if new).	
Unfold legs and stand unit up.	
Plug TS unit into electrical source.	
Plug polarity checker into “daisy chain” outlet only far enough for lights to come on. Confirm electrical. Remove polarity checker.	
Unlock PC card compartment on top left side. (turn key 3:00 to 6:00)	
Make sure that the nut on the inside of the key assembly is tight.	
Make sure that there is a red cover on the On/Off button. Power On by holding red button to count of 3. Open doors.	
Confirm that Boot Loader Release Build Date is April 19, 2004. If not, record the build date to the right.	
Confirm that Windows CE 4.10 Build Date is February 5, 2004. If not, record the build date to the right.	
Confirm that the ballot station is version 4.5.2 (lower right hand corner of screen). If not, record ballot station version to the right.	
Unlock printer compartment and bring forward. (turn key 12:00 to 3:00)	
Feed printer paper, if necessary.	
Insert Manager card. Enter (the password) and “OK.”	
Confirm AC Online and write battery percentage to right.	
Touch “System Setup.”	
Confirm Serial Number on Setup screen. Write on this sheet at top if necessary.	
Touch “Set Date.”	
Touch the arrows to set the correct month, year, and time. Be careful of AM & PM. Touch the correct date on the calendar.	
Select Central Time from the drop-down list. Uncheck “Automatically adjust clock for daylight saving.”	
Touch “Apply” after setting date, time, and/or time zone.	
Touch “OK” if no changes made or “X” to exit.	
Touch “Diagnostics.” Touch “Test Printer.”	
If printer does not print, push the whole printer to the right to confirm that there is a solid connection. You may also need to open the lid by pushing down on the gray lever – make sure that the hinges are seated correctly, tighten the paper roll, feed the paper, and snap the lid shut.	
After test finishes, touch “OK” for “Printer test PASSED.”	
Attach loop back connector (slightly wider at top) to serial port located on the back of the unit. Touch “Test Serial Port.”	
On the Serial Port Test window, use the dropdowns to change the Baud Rate to 115200 and make sure “Flow Control” reads “Software.” Touch “Test.”	
When done, touch “OK.” Touch “Done” to exit test.	
Remove loop back connector.	
Touch “Test Card Reader.” Manager card is ejected.	
Remove the Manager card as requested. (DO NOT TEST THE	

MANAGER CARD. IT WILL BE ERASED.)	
Insert a voter card when prompted.	
Remove voter card when prompted. Re-insert Manager Card.	
Touch "Test Sound" – Touch "Play."	
After sound is heard, Touch "Close."	
Touch "Test Modem."	
On the Test Modem window, use the dropdown to change the Baud Rate to 115200 and make sure "Flow Control" reads "Hardware." Touch "Test."	
After test finishes touch "OK" for "Modem test PASSED."	
Touch "Done" to return to the Diagnostics screen.	
Touch "Done" to get out of Diagnostics screen.	
Touch "Calibrate."	
Touch the center of each target with your stylus. There are 3 targets for 2 passes. (Calibration is best if using something small enough to hit exact center of target.)	
After calibration is finished. Touch "OK" to exit System Setup.	
Touch "Exit Supervisor" to remove Manager Card.	
Hold red button to count of 3 to turn TS unit Off.	
Tear off printer tape. Fold in half and tape to the back of this form facing out.	
Close and lock both compartments.	
If needed, clean screen with nonabrasive, dry cloth (optical cloth).	
Return protective Styrofoam sheet to cover screen.	
Close side panels and lock with padlock specific to that machine.	
Unplug unit and fold up legs.	
Return unit to its location on the tables in the warehouse and plug in.	
TECHNICIAN:	DATE:

Figure 4. Johnson Co. Kansas DRE Diagnostic Procedures EXAMPLE

TSX DIAGNOSTICS

ELECTION: Summer 2005	SERIAL NUMBER: 216879	Check off as completed. Move unit to repair bench if it fails.
Inspect for physical damage, such as cracks.		
Flip machine over and extend legs (double first, then single). Twist gently to align bullets.		
Make sure "Property of" sticker is on back. Fold legs down & turn machine back over.		
Plug TS unit into electrical source. Unlock machine padlock.		
Examine padlock label. Take key & padlock to printer and make new label if needed.		
Make sure that AC light is yellow.		
Unlock PC card compartment on left side of unit. (Turn key from 12:00 to 3:00)		

Insert Tech PC card with tech label on top of card.	
Power On by pressing red button and holding to the count of 3.	
Confirm that the Boot Loader Release Build Date is April 19, 2004.	
Confirm that the Windows CE 4.10 Build Date is February 5, 2004.	
Confirm in lower right-hand corner that Ballot Station Version is 4.5.2.	
Unlock printer cover & raise printer. Make sure there is enough paper for diagnostics.	
Use yellow tape to tape printer around the bottom so that it is firmly against connection.	
Confirm that the touch screen says “AC Online” in the Power field.	
Insert Manager card. Touch (the password) and “OK.” Touch “System Setup.”	
Confirm that the number on the screen and the sticker on the left side of machine match. Write Serial number on this sheet if needed.	
Touch “Set Date.” Select “Central Time” from the drop-down list if not already selected. Touch “ Apply .”	
If date/time is still not correct (daylight saving), reset by touching date and/or using arrows to set time, year or month. (Be careful of AM & PM.) Touch “ Apply ” if you reset anything.	
Uncheck “Automatically adjust clock for daylight saving time.” Touch “ Apply .”	
Touch “OK” if no changes made or “X” to exit Date/Time Properties window.	
Record today’s date and time here for proofing purposes.	
Touch “Diagnostics.” Touch “Test Card Reader.”	
Manager card is ejected. Remove the Manager card. Do not respond to Warning.	
Insert a smart card . (DO NOT TEST THE MANAGER CARD. IT WILL BE ERASED.)	
Remove smart card when prompted after test.	
Reinsert Manager card. Touch “Done.”	
Touch large “OK” at bottom of screen to save settings.	
Touch “Exit Supervisor.” Remove Manager card.	
Touch “Clear Totals.” Answer “OK” to message.	
Touch “Test Count.” Check “Not Using Voter Card.”	
Touch “Count Test.” Touch “Vote.” Touch “Next.”	
Vote for Red, White, & Blue and then one time for the first candidate in every race, except write in “yam” for favorite food.	
Touch “Cast Ballot.” Touch “Close” on the “Select Precinct and Party” screen.	
Touch “Close” on the “Pre-Election Testing Mode” screen.	
Touch “Reporting.” Answer “Yes” to “Print write-in candidates?”	
“PRINT LONG REPORT?” – answer “No.”	
“NEED ANOTHER COPY?” – answer “No,” unless printer did not print successfully.	
Tear off printer tape. Confirm machine number and 1 vote for Red, White, Blue, first candidate in each race & yam. Fold printout facing out. Paper clip to back of this form.	
Push red button & hold to count of 3 to turn unit Off. Use eject button to remove PC card.	
Make sure there is enough paper for manual L&A. Close and lock both compartments.	
Clean screen with dry optical cloth. Replace protective Styrofoam sheet over screen.	
Examine hinges & fold privacy panels in. Relock machine at top with its specific padlock.	
Put a plastic tie through the lower holes in the privacy panels as a marker that it is done.	
Remove colored dot from “foot” of machine.	
TECHNICIAN:	DATE:

Revised 5/31/05

