

2014 IDAHO PROCEDURES

ES&S DS850 CENTRAL COUNT TABULATOR

Office of the Secretary of State

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This document provides procedures for the operation of the Election Systems and Software (ES&S) DS 850 central count tabulator.

2014 IDAHO PROCEDURES ES&S DS850 CENTRAL COUNT TABULATOR

Table of Contents

OVERVIEW.....3

- Security and Chain of Custody Plan
- Certified System Software Version
- Acceptance Testing
- Ballot Management Plan
- Tabulation Plan
- Documentation Plan
- Staff Training
- Poll Worker Training
- Voter Information Campaign

PRE-ELECTION PROCEDURES.....8

- Preventative Maintenance and Calibration
- Maintenance Documentation
- Election Definition Programming
- Logic and Accuracy Test with Actual Election Ballots
- Logic and Accuracy Testing for ERM
- Marking Devices
- Procedure Training Manual

TABULATION.....11

- Logic and Accuracy Test
- Ballot Preparation
- Ballot Inspection Process. “What Constitutes a Vote”
- Sort Switches
- Ballot Duplication and “Sorted Ballots”
- Indeterminate Read Errors
- Invalid Ballot Style Error
- Results Accumulation and Reporting

POST-TABULATION.....15

- Logic and Accuracy Test
- Retain Ballots and Test Documentation
- Incident Contingency Plans

2014 IDAHO PROCEDURES ES&S DS850 CENTRAL COUNT TABULATOR

BEST PRACTICES.....16

- County Procedures – Using the DS850
- Clerk’s Resource Web Site
- Prepare Detailed Plans and Procedures
- Pre-Election Testing and Reporting
- Election Day
- Data Transfer to Election Reporting Manager
- Sample Tracking Spread Sheet

ONLINE RESOURCES.....19

Clerk’s Resource Website: <http://www.sos.idaho.gov/elect/Clerk/clerkinfo.htm>.

ES&S Manuals:

- ES&S Pre-Election Training Manual
- ES&S Election Day Training Manual
- ES&S Operator’s Guide for the DS 850

2014 IDAHO PROCEDURES

ES&S DS850 CENTRAL COUNT TABULATOR

OVERVIEW

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Security and Chain of Custody Plan

“The integrity of elections comes down to a series of processes and procedures administered by each county, combined with the technology and its established procedures.” *From the Election Technology Center, an industry group representing voting equipment manufacturers.*

Election computers, computer ballots files, ballots, tabulator(s), Election Qualification Code (EQC) media, and all election definition USB memory devices, all USB results USB memory devices must be secured at all times. Disable wireless connectivity on election laptops.

Counties must develop written security procedures and have a manual available for training and review. This manual should detail physical security of buildings, tabulators, election computers, ballot files, EQC media, USB devices and ballots. Include subcontracted printers and secure transportation of ballots from printers to the county and to and from the polls in your plan.

County election personnel should operate in teams so that no one person is ever left alone with ballots, the tabulator(s), the EQC media, election definition USB memory devices and USB result devices.

Chain of custody procedures and sign off forms must be developed and implemented to track access to all ballots, ballot transport from printer(s) and to and from the polls.

AutoMARK units, PCMCIA flash cards and ballots should also be included in a comprehensive security plan including chain of custody for access and installation of PCMCIA cards by county personnel.

2014 IDAHO PROCEDURES

ES&S DS850 CENTRAL COUNT TABULATOR

Certified System Software Version

Verify certified firmware and software versions on each unit. Document with date, ES&S technician, and responsible county observer(s). All units will be upgraded to Unity 3.4.0.0 during scheduled maintenance in 2014.

Table 1-2 Unity 3.4.0.0 System Hardware Components

Component	Hardware Version	Firmware Version
Model 100	1.3	5.4.4.5
DS200	1.2	1.6.1.0
Model 650	1.1, 1.2	2.2.2.0
AutoMARK	1.0, 1.1, 1.3	1.3.2907
DS850	1.0	2.2.0.0

Table 1-3 Unity 3.4.0.0 System Software Components

Component	Version
Audit Manager (AM)	7.5.2.0
Election Data Manager (EDM)	7.8.1.0
ES&S Ballot Image Manager (ESSIM)	7.7.1.0
Hardware Programming Manager (HPM)	5.8.0.0
Election Reporting Manager (ERM)	7.8.0.0
LogMonitor Service	1.0.0.0
AIMS	1.3.257
VAT Previewer	1.3.2907

Acceptance Testing

Security begins with acceptance testing. Validate the performance of the system before acceptance. The purpose of acceptance testing is to ensure that the entire system is reading ballots, tabulating and reporting as specified.

Acceptance testing must include functionality testing of all features and controls on all tabulators. Logic and accuracy testing must be performed with a complete test deck and expected results verified. Load testing with 1000 ballots must be performed to assure the tabulator(s) are operating as specified. Make arrangements with your vendor in advance to provide an election definition, a test deck and ballots to perform a load test before signing any acceptance documents. Keep copies.

If a county plans to accumulate results on a county spreadsheet the tabulator alone may be accepted after passing acceptance testing.

2014 IDAHO PROCEDURES

ES&S DS850 CENTRAL COUNT TABULATOR

For those counties using Election Reporting Software (ERM) and computers supplied by the vendor a test of the entire system is required. Importing election data, reporting and archiving functions of the software and election computer must also be tested.

As there may be a period of time between the delivery of the equipment and the availability of a qualified Election Reporting Software (ERM) trainer, tabulators that pass county testing may be accepted as one component of the system and a “partial acceptance” of the system may be issued to the vendor.

When a vendor representative qualified to operate the Election Reporting Manager (ERM) demonstrates the transfer, archiving and reporting of “Unofficial Election Results” to the county web site, including burning a CD-ROM of all election data, the system may be accepted as a whole. Make arrangements in advance with the vendor for acceptance testing of the entire system.

Ballot Management Plan

Diagram the ballot flow for your county. Utilizing the DS850 is a complete system change even for those counties familiar with the DS650 or other ES&S optical scan tabulators. All ballot management procedures must be evaluated and revised for the new system.

Detail each step including ballot layout, acceptance of the PDF version of the ballot, acceptance of the actual size printed version of the ballot, delivery to and from the printer, transport to and from the polls, tabulation and path of travel for “**Sorted Ballots**” including duplications, write-ins and ballots with machine read errors.

Include secure storage of the ballots, testing reports, EQC media, Election definition USB media, USB results media, and all transferred data and reports from the election computer.

Every step of the tabulation process with the new system must be evaluated to assure procedures are correct and personnel are prepared. Conducting a mock election is highly recommended.

Tabulation Plan

Develop a tabulation plan. Detail procedures and documentation for each phase of the process for Absentee and Election Day ballots and “Sorted Ballots”.

Diagram the physical path of travel to insure ballots are not mixed before or after tabulation and sorting on the DS850.

2014 IDAHO PROCEDURES ES&S DS850 CENTRAL COUNT TABULATOR

Include receiving ballots, labeling containers for counted, uncounted and “Sorted Ballots” and a storage plan that allows access to duplications, originals and write-ins in case of a recount.

Develop a ballot preparation plan for Absentee ballots. Absentee ballots may require flattening and/or back folding to run through the tabulator. Use a small stack of ballots for each run to improve throughput of absentee ballots.

A “Sorted Ballot” is defined as any ballot that is sorted by the tabulator to the top bin and requires review by staff. Scanner operators should not review ballots. “Sorted Ballots” should be placed in bins and sent to the resolution board. Include blanks, indeterminate read errors and channel read errors. Ballots with valid write-ins are sorted to the middle bin and should be sent to the write-in board for examination and tabulation.

Diagram how “Sorted Ballots” travel from the tabulator for review, possible duplication and back to the tabulator for counting. Include a plan for duplicates and originals to move to secure storage. Develop labels for containers, processing logs and sign-off forms.

If your county is using Election Reporting Manager (ERM) software to accumulate data, develop a plan for transfer of election data from each USB memory device for each transfer to the election computer running ERM. Include labeling and secure storage of the USB memory devices and printing and saving reports.

The tabulation plan should also include election night reporting of “Unofficial Election Results” for the public new media, county web site and the Secretary of State. Printed public reports, internet reports, computer displays and video displays should be prominently labeled “**Unofficial Election Results**”. Use the Short Form Summary Report from Election Reporting Manager (ERM) on election night. Do not report overvotes and undervotes in public reports on election night.

Documentation Plan

Insure that all security procedures, test data, tabulator reports, transfer data, public reports and results are verified, documented, archived and accessible for review. Retain election documentation for 22 months.

Re-establish chain of custody documentation if any component of the system needs to be returned to the manufacturer on return to the county. This requires a new acceptance test when the component is returned to the county.

Track performance of each tabulator to facilitate repair and replacement of units if necessary. Document in detail any and all performed maintenance and/or upgrades. Retain maintenance and performance records on all units for the life of the unit.

2014 IDAHO PROCEDURES ES&S DS850 CENTRAL COUNT TABULATOR

Staff Training

1. Election staff must receive detailed machine training from the vendor.
2. Election staff must receive training on security and chain of custody procedures.
3. Election staff must receive ballot management training detailing county procedures for securing, transporting, tabulating, duplicating and storing ballots.
4. It is highly recommended that the county conduct a mock election to familiarize election officials with the processes and procedures that need to be implemented prior to conducting their first election on the system.

Poll Worker Training

It is the responsibility of the county to insure that each voter receives a demonstration and knows how to properly cast a ballot that will be tabulated by machine.

“If a vote is properly cast according to the instructions given to the voter, the machine will count it.” U.S. Court of Appeals, 11th Circuit, December 6, 2000, Touchston and Sheppard vs. Michael McDermott.

Include in your poll worker training a required voter demonstration of proper ballot marking of an oval optical scan ballot which includes:

1. How to properly mark an optical scan ballot by completely filling in the oval.
2. How to request a new ballot if they make any mistake.
3. Not to erase or use “Xs” or check marks.
4. To vote a write-in, mark the oval and write the name on the line.
5. To carefully check their own ballot for stray marks.

Instruct poll workers to make it clear to all voters that an improperly marked ballot or a ballot with unintentional stray marks may not be readable by the tabulation equipment.

Voter Information Campaign

Plan to develop a comprehensive voter education campaign that instructs voters on how to mark an optical scan ballot properly.

2014 IDAHO PROCEDURES

ES&S DS850 CENTRAL COUNT TABULATOR

PRE-ELECTION PROCEDURES

- Preventative Maintenance and Calibration
- Maintenance Documentation
- Election Definition Programming
- Logic and Accuracy Test with Actual Election Ballots
- Logic and Accuracy Testing for ERM
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Preventative Maintenance and Calibration

All DS850 tabulators must be calibrated by the vendor during the preventive maintenance cycle. Any adjustment to calibration should be made by or with the assistance of a qualified ES&S technician.

Maintenance Documentation

Required maintenance documentation must track dates, county and vendor personnel with access to the tabulator(s), EQC media, USB memory devices and ballots. Detail all services performed on each tabulator. "Maintenance" is not adequate detail for documentation. Be specific.

Election Definition Programming

Determine with your ES&S representative how your election will be programmed. This decision will affect the operating mode of the scanner, report functions and tabulation options on election night.

Order from the vendor (or make copies) of the EQC media and the election definition USB memory device. Store one copy of the EQC media and one copy of the USB memory device, with the election definition for all precincts, in your vault.

At all times EQC media and USB memory devices are to be treated as ballots and stored securely with chain of custody documentation showing all personnel with access to the devices.

Develop a timeline and sign-off procedures with the vendor to document and ensure the timely delivery of ballots and election specific programming for the tabulator. Allow adequate time for testing, possible changes, and pre-election logic and accuracy testing.

2014 IDAHO PROCEDURES

ES&S DS850 CENTRAL COUNT TABULATOR

Logic and Accuracy Test with Actual Election Ballots

Perform the logic and accuracy test with actual election ballots to confirm the USB memory device with the election definition coding is correct and that the machine is properly reading, sorting, tabulating and reporting the actual ballots for the election.

This test should be done as soon as you receive ballots from your printer and the election definition from ES&S to allow time for corrections to coding or ballots.

The vendor will send you a test deck to document their election definition programming. Use the vendor's test deck to check programming only. Confirm the USB memory device containing the DS850 election definition coding is correct and that the machine(s) is properly reading, tabulating and reporting. Do not use the vendor's test deck for final logic and accuracy tests.

When actual ballots are available, in even years send one precinct to the state for the state test deck. A short test deck for one precinct will be marked and returned to the county to use as an example

Make a complete county test deck for all precincts and rotations. All ballot positions and rotations must be verified. The state test deck for one precinct may be used later for public demonstrations after the tabulator(s) have been tested with the complete county test deck. In Odd numbered years, make a complete county test deck. One precinct of the county test deck may be used for public demonstrations.

Before testing "Zero" all tabulators. Print a "Zero Report" to confirm all totals are zero and no votes remain in the memory before testing.

Set the DS850 sort options for **Blanks** and **Write-ins**. The blanks will not be tabulated and will be sorted to the top bin for review. Ballots with marked ovals for write-in positions will be sorted to the middle bin for review. Votes will be tabulated except for the write-in position. Totals for these "sorted ballots" will need to be added manually to match the expected results on the test deck grid.

Test all machine(s). Print an "Election Detail Report" with overvotes and under votes to confirm expected results. If the tabulators and ERM do not successfully duplicate expected results after 2 attempts call your ES&S representative immediately.

After successful testing "Zero" all tabulators. Print a "Zero report" to confirm no totals remain in the tabulator memory after logic and accuracy testing and that the tabulator is ready to count ballots on Election Night.

2014 IDAHO PROCEDURES ES&S DS850 CENTRAL COUNT TABULATOR

Logic and Accuracy Testing for ERM

Logic and accuracy testing must include all machines and accumulation of results in Election Reporting Manager (ERM).

Follow the procedure above for each machine. Transfer the totals from all machines via USB memory device to the Election Reporting Manager (ERM). Compare all reports to the test deck to assure accuracy.

If the tabulators and ERM do not successfully duplicate expected results after 2 attempts call your ES&S representative immediately.

After successful testing “Zero” all tabulators and print a “zero” report to confirm no totals remain in the tabulator memory after logic and accuracy testing and that the tabulator is ready to count ballots on Election Night.

Save all testing data and reports and burn a CD-ROM with results and reports to document successful logic and accuracy testing. Clear totals from ERM after testing to and ensure the software is ready for Election Day ballots. Save all testing documentation for 22 months.

It is recommended as part of county testing to produce public reports, labeled “Unofficial Election Results” and test the election night reporting process and equipment.

Marking Devices

Counties are to provide voters at the polls with ES&S approved marking devices. Absentee voters are to be instructed to use a Blue or Black ink pen or #2 pencil.

Procedure Training Manual

Develop written procedures to train personnel in:

- Security and Chain of Custody procedures and documentation.
- Pre-tabulation ballot preparation procedures, logging and container labeling.
- Folded absentee ballot preparation, logging and container labeling.
- Election night ballot management, transport and labeling procedures.
- Ballot sorting procedures for “Sorted Ballots” including blanks, write-ins and ballots with non-conforming markings or stray marks producing an “Indeterminate Read” error, and “Code Channel” errors.

2014 IDAHO PROCEDURES ES&S DS850 CENTRAL COUNT TABULATOR

- Duplication and Write-in procedures including final tabulation.
- DS850 operator error recovery if a precinct(s) needs to be re-counted.
- DS850 machine failure procedure. Develop backup plan in advance with ES&S for counting after machine failure. Develop procedures with nearest county with a similar system to support each other in emergency.
- Transfer procedure to Election Reporting Manager (ERM) including accumulation, backup of all transferred election data and reporting of “Unofficial Election Results”.
- Backup and secure storage of all election data including data transfers from USB memory devices and printed reports.
- Election night reporting to the Secretary of State.
- Election computer backup and failure procedure.
- Storage and container labeling procedures for absentee ballots, election night ballots, absentees, duplications, originals and write-in ballots.

TABULATION

- Logic and Accuracy Test
- Ballot Preparation
- Definition of a Vote for Optical Scan Ballots
- Sort Switches
- Ballot Duplication and “Sorted Ballots”
- Indeterminate Read Errors
- Invalid Ballot Style Error
- Results Accumulation and Reporting

Logic and Accuracy Test

“Zero” all tabulators before testing and print and save a “Zero” report. Set the DS850 sort options for **Blanks**, and **Write-ins**. Test all machines with the state test deck or one precinct from the county test deck before and after tabulating ballots on Election Day. If the unit(s) fails to pass on the second test call your ES&S representative immediately.

The logic and accuracy test must include Election Reporting Manager (ERM), printing reports and posting unofficial election results to the county web site.

2014 IDAHO PROCEDURES

ES&S DS850 CENTRAL COUNT TABULATOR

Ballot Preparation

Before tabulation inspect ballots and remove damaged ballots and send them to the duplication board for review.

ES&S recommends ballots be as flat as possible, fanned several times and carefully aligned before placing a stack into the tabulator. A stack of ballots 3 to 4 inches (150 ballot pages) prevents overloading the tabulator with too many ballots per run especially for folded absentee ballots.

Ballot Inspection Process – What Constitutes a Vote?

Counties are to follow the Secretary of State’s directive for optical scan ballots, revised July 1, 2013, to determine in a fair and consistent manner what markings are to be counted as a Vote.

“An optical scan voting system requires that the elector place a mark in a pre-defined area on the ballot in order to cast a vote. The vote shall be considered valid when the vote tabulator recognizes a mark within the predefined area unless the ballot is rejected as being blank.

If the tabulation device rejects the ballot as being blank, and it appears that the reason is because the ballot was marked consistently, but in a manner that it could not be read by the device, the ballot is to be duplicated in a machine readable manner from the marks on the original ballot.

If the tabulation device rejects the ballot because of an “indeterminate read error”, the ballot is to be examined by the duplication board and, if the board can determine the intent of the voter, duplicated in a machine readable manner from the marks on the ballot. If the duplication board cannot determine the intent of the voter, or if the members of the board disagree on the intent of the voter, the ballot is to be duplicated with the race or races in question left blank so that no vote will be recorded for the race or races in question.

An elector shall not place on the ballot a sticker bearing the name of a person, or use any other method or device, except writing, to vote for a person whose name is not printed on the ballot.”

See the [Idaho Election Handbook](#) in the Secretary of State’s Directives and [“What Constitutes a Vote”](#) on the Clerk’s Resource website for guidelines for tabulating ballots with write-ins.

2014 IDAHO PROCEDURES

ES&S DS850 CENTRAL COUNT TABULATOR

As it may be necessary at times to hand count optical scan ballots, see the Paper Ballot Procedural Manual for approved procedures for hand counting ballots also available on the [Clerk's Resource website](#).

Sort Switches

Set the DS850 sort options for **blank ballots** and **write-ins** if a valid declaration of intent to be a write-in candidate has been filed. Blank ballots and write-ins, require inspection by the duplication board for resolution.

Ballot Duplication and “Sorted Ballots”

Staff must fully understand and follow sorting, inspection, and duplication procedures when the DS850 sorts ballots.

Diagram the path of travel of all “Sorted Ballots”. Make certain they can be tracked, accounted for and are accessible for review. Include all sorted “blanks”, original and duplicate ballots, ballots with a valid write-in, and ballots duplicated for “Invalid Ballot Style” error, “Code Channel” error and “Indeterminate Read” errors.

Counties are to use the existing ballot duplication procedures for ballots that are unreadable by machine. The duplication board requires a foreman/supervisor responsible for logging in Sorted Ballots from the scanner(s), overseeing duplication procedures, checking that duplicates and originals are labeled properly, that duplicates are returned to the appropriate scanner for tabulation and all Sorted Ballots are stored properly.

All “Sorted Ballots” including “blanks”, counted duplicate ballots, original ballots, ballots with a valid write-in, and machine error ballots should be stored carefully to allow access should there be a re-count as these ballots would likely be examined first.

Indeterminate Read Errors

If the scanner sorts a ballot to the top bin for a Blank ballot, an “Indeterminate Read Error” forward the ballot for review and resolution by the duplication board. Scanner operators should not review ballots. The ballot is to be duplicated in a machine readable manner by filling in those ovals that contain a mark.

Invalid Ballot Style Error

ES&S recommends re-running ballots that produce an “Invalid Ballot Style” error. Many times the ballot will be read the 2nd time through the scanner. If the ballot is not read, forward the ballot for resolution by the duplication board.

2014 IDAHO PROCEDURES ES&S DS850 CENTRAL COUNT TABULATOR

Results Accumulation and Reporting

Before transferring data to the election computer, print and save a “Zero” report from the Election Reporting Manager (ERM) software to confirm that there are no votes in any precincts before importing data from the USB memory devices.

At the completion of each run the operator has the option to complete a batch by pressing “Done” or scanning additional ballots by choosing “Scan More”. When “Done” is pressed to complete a batch, all data for the batch will be automatically saved and optional bin reports will be printed if programmed into the election definition.

Bin reports are recommended as the DS850 prints reports quickly. Save one set of bin reports with the tabulated ballots and a second in a folder for review if necessary. See County procedures below.

Work with ES&S staff during training to develop an appropriate data transfer plan for your county. Determine if you will transfer data after a specific number of batches or by precinct depending on the size of your precincts.

Use a data transfer log to track all transfer devices from each tabulator for each transfer to confirm data verification and backup on the election computer.

Make sure you have a sufficient number of devices for all precincts. More than one precinct may be stored on a device. ES&S recommends saving 10 precincts per device for convenience, depending on the size of the precinct. Save the results to a USB memory device by selecting “Results” from the Election menu and then “Export for Results”.

Have backup devices available in case of failure. Label and save all transfer devices. Be sure devices are labeled with tabulator number and USB device number, date, precincts on the device and time of transfer.

Upload data from each machine to the Election Reporting Manager (ERM) software. Save election data files from each transfer to pre-made storage folders on the election computer. Time stamp, rename and save files.

Print and save a “Precinct Summary Report” after each transfer from each tabulator. Check the totals for anomalies or inconsistencies before generating any public reports. Give each public report a unique name, time stamp and save in the pre-made folders on the election computer.

At the completion of tabulation verify that all election data from regular ballots, absentee and “Sorted Ballots” has been transferred to the Election Reporting Manager (ERM).

2014 IDAHO PROCEDURES

ES&S DS850 CENTRAL COUNT TABULATOR

The Election Reporting Manager (ERM) operator will confirm the completeness and accuracy of all data transfers for public reports with the clerk or election supervisor before distributing public reports in print, for public display or posting to the internet.

All public reports in all forms must be stamped or labeled “Unofficial Election Results”. All public reports should not display overvotes and undervotes. Report “Unofficial Election Results” to the Secretary of State before going home on election night.

POST-TABULATION

- Logic and Accuracy Test
- Retain Ballots and Test Documentation
- Incident Contingency Plans

Logic and Accuracy Test

After tabulation, a logic and accuracy test must be performed to demonstrate that the tabulator(s) have functioned properly. The state test deck or county test deck for one precinct may be used for the test after tabulation.

Before testing “Zero” all tabulators. Use the same procedure and print and save the same reports as the initial Election Day logic and accuracy report.

After successful testing “Zero” the tabulator and confirm no totals are left in the memory after testing.

The logic and accuracy test must include Election Reporting Manager (ERM). Transfer the totals from all machines, save all data and reports.

Retain Ballots and Test Documentation

For those counties using Election Reporting Manager (ERM) software, plan to burn a CD-ROM containing all results, transfer and reporting files in the event the election needs to be re-created. All testing documentation should also be saved to CD-ROM.

All ballots and test documentation including Election Qualification Code (EQC) media, Election Definition USB memory devices, logic and accuracy testing reports, test decks, transfer USB devices containing election data, transferred data files on CD-ROM, results reports from the DS850 and Election Reporting Manager (ERM) are to be retained for 22 months. Store the machines and election computers securely.

Incident Contingency Plans

Counties using the DS850 should prepare a plan in the event one or more machines fails. It is essential that counties develop an incident contingency plan with the vendor and near

2014 IDAHO PROCEDURES ES&S DS850 CENTRAL COUNT TABULATOR

by counties utilizing similar tabulators in case of equipment failure. This plan must be developed well in advance of the election as the vendor may need to coordinate machine specifications between counties to allow ballots from one county to be tabulated on the machines used in another county.

Counties using Election Reporting Manager (ERM) must develop a plan in case of the failure of a USB memory device or the election computer(s). Include election data backup and retrieval from USB memory devices or from the tabulator.

BEST PRACTICES

- County Procedures – Using the DS850
- Clerk’s Resource Web Site
- Prepare Detailed Plans and Procedures
- Pre-Election Testing and Reporting
- Election Day Procedures
- Data Transfer to Election Reporting Manager
- Sample Tracking Spread Sheet

County Procedures – Using the DS850 – Kootenai County

1. There will be three people at the machine. One person to receive ballots from the runners, fill out the log sheet and jog the ballots. One person to run the machine and one person to remove the ballots from the trays, and place them in a box for storage. In the event that only two people are available to work at a machine the person who is jogging the ballots will also be removing them from the trays after counting.
2. Make sure that all actions taken while running the machine are also spoken. This helps ensure that there is a double and triple check for all actions taken while counting ballots.
3. Once you have logged in the Scan Ballots screen will be up. Check to see that the machine has been zeroed. Select Menu and Reports and **Zero Report**. Press Print to print the report and keep it with the log sheet.
4. Record the precinct number and start time on the Machine Log Sheet. Only take ballots out of cardboard boxes marked with Green tape. Jog the ballots with the cut corner on the bottom inside of the jogger. Jog larger amounts for a longer time period.
5. **For Absentee Ballots** select the Scanning menu and press Scan Ballots. Make sure that the Mode is listed as “Mixed”. If it isn’t select the Election menu, Configuration, Process Mode and pick Mixed Mode.
6. The orientation of the ballots can affect how fast and efficiently the ballots are run through the machine. Try to place them with the “Valley Fold” or “Up Fold” closest to the read head. Place a 1” stack of ballots (approx. 100 ballots) into the

2014 IDAHO PROCEDURES ES&S DS850 CENTRAL COUNT TABULATOR

- input hopper and make sure that the handle is firm against their side. Press Scan Ballots. On the Scan Ballots screen confirm that Sorting is on.
7. Press Start to begin scanning. After the ballots have been scanned the Load Ballots screen will come up; press Save and then save again when the confirmation screen appears. If ballots were sorted to the top bin follow Step 16.
 8. Remove the counted ballots from the tray and place them in a cardboard box with Red tape. Mark Absentee Ballots on the label.
 9. Run the Election Detail Report following Step 22.
 10. **For Precinct Ballots** select the Election menu, Configuration, Process Mode and pick Single Precinct.
 11. Select the Scanning menu and press Scan Ballots and Select Precinct. From the search screen type "P" and Search then choose the precinct that you are on from the list. Place about 2" stack of ballots into the input hopper and make sure that the handle is firm against their side. On the Scan Ballots screen confirm that Sorting is on.
 12. Press Start to begin scanning. After the ballots have been scanned the Load Ballots screen will come up. Press Save and then Save again when the confirmation screen appears. If ballots were sorted to the top bin then see step 16.
 13. Two copies of two reports will print; save one with the ballots and one with the log sheet. *Optional procedure, but recommended. Automatic bin reports must be pre-programmed into the election definition. Printing time is minimal.*
 14. Remove the counted ballots from the tray and place them in a cardboard box with Red tape. Mark the precinct number on the label and place a colored piece of paper between each precinct.
 15. **Write-Ins-** Ballots sorted to the middle bin are write-ins. Remove them from the collection tray and place it in your bin for write-ins that will go to the write-in board.
 16. **Ballots sorted to the top bin-** The machine will sort ballots that are unreadable, for a different precinct than the one selected or that are damaged. The Current box under the Scan Ballots screen will list the number of ballots in the top bin. Once the machine has stopped scanning and you have saved, remove the ballots from the top bin. Place the ballots into the input hopper and follow Step 12. Any of the ballots that are again sorted to the top bin again need to be looked at. If they are damaged follow the procedure for damaged ballots. If the ballot is from the wrong precinct set it aside to run separately under that specific precinct. Once the ballots have been re-scanned clear the totals for the Top Bin by pressing the red X next to Top Bin and press Save and Save again when the confirmation screen appears. Follow Step 13.
 17. **Damaged Ballots-** If the machine is unable to read a ballot because the ballot is damaged in some way place it in the bin for the Duplication Board and notify a runner. Record the number of ballots that were sent to the Duplication Board in the space provided on the Log Sheet. When the duplicated ballots are returned to the machine check the number on the log sheet to be sure that all ballots have been returned to your machine. Follow steps 12-14 for scanning the ballots.

2014 IDAHO PROCEDURES ES&S DS850 CENTRAL COUNT TABULATOR

18. Frequently dust the reader with the canned air, blow dust away from motors by blowing from the sides of the machine out toward the room. After approximately 10,000 ballots clean the rollers with the Q-Tips provided and rubbing alcohol. Make sure that the alcohol lid is put back on and that the Q-Tip isn't dripping or even soaking wet.
19. After running absentee ballots or after approximately 10 precincts transfer your results to a USB drive. Press Menu, Election, Results and Export For Results. Insert a blank USB drive (from the green basket next to the jogger) into the scanner's USB port. **ONLY ONE** USB drive should be plugged in at a time.
20. Enter the Election Code and press Accept. When the Export for Results screen appears press Confirm. When the screen tells you that results were successfully exported remove the USB drive and press Done. Put the USB drive in the red basket next to the write-in and duplication board baskets; Carrie or the person who is uploading results or a runner will pick it up.
21. Record the time completed on the Log Sheet. Note any comments such as the number of ballots sent to duplication, blank unstamped ballots or any other happening that would not otherwise be notated.
22. At the end of the evening press Menu, Reports, Results Report and select **Election Detail** then Print.
23. Put all reports and all log sheets together, sign the log sheets and leave them on the table.
24. Clean up area. (Empty green boxes, chairs to be put away, etc.)
25. Check around for any red boxes with ballots. Be sure they have been put in a secure area before leaving.

Troubleshooting:

- If at any point you are unsure whether you should continue, ask Carrie or our ES&S election night support for help.
- If something happens to the machine that you haven't been trained to fix, please don't attempt to fix it, ask for help from Carrie or our ES&S election night support.

Break Schedule

- After working on at the machine for two hours each person will take a 10 minute break, leaving the other two people to run the machine.
- After 12am take a break every hour with each person taking a 10 minute break while the other two people run the machine.

2014 IDAHO PROCEDURES

ES&S DS850 CENTRAL COUNT TABULATOR

Online Resources

Clerk's Resource Web Site: <http://www.sos.idaho.gov/elect/clerk/clerkinfo.htm>.

Procedures are posted on the Clerk's Resource website along with an election calendar, ballot samples, grant applications, procedural manuals and other resources. Check this site often for updates. Bookmark or download documents for quick reference.

ES&S Manuals:

- ES&S Pre-Election Checklist
- ES&S Election Day Checklist
- ES&S DS850 Operator's Guide

ES&S Portal Web Site. Check the ES&S Portal for equipment updates. Download and print all appropriate technical bulletins.

<http://www.essvote.com/HTML/home.html>

The U.S. Election Assistance Commission. The U.S. Election Assistance Commission, (EAC), has issued seven Quick Management Guide brochures.

http://www.eac.gov/election_management_resources/default.aspx.

Prepare Detailed Plans and Procedures

- Evaluate and document security for ballots, tabulator(s), EQC media, USB memory device(s), computer files and computers.
- Design, use and archive chain of custody sign off forms for personnel.
- Diagram ballot flow from incoming through final storage of ballots to insure ballots are not mixed during tabulation. Include path of travel for all "Sorted Ballots".
- Diagram data flow from ballot development to DS850 programming, data transfer to Election Reporting Manager (ERM) software, public reporting and archiving of all ballot files, results files, testing reports, and public reports.
- Develop absentee procedures and tabulation plan.
- Develop a tabulation plan for "Sorted Ballots" including blank ballots, valid write-in ballots, and Indeterminate Read errors.

2014 IDAHO PROCEDURES ES&S DS850 CENTRAL COUNT TABULATOR

- Document in county procedural manuals all processes and sign off forms for review and training.
- Ensure that all procedures, testing verifications, tabulator reports, transfer data, public reports and results are verified, securely archived, and accessible for review.
- Develop a voter information campaign. Emphasize properly marking an optical scan ballot so that all ballots are machine readable.
- Design poll worker training to demonstrate and instruct proper marking, requesting a new ballot for any mistake, no erasures, Xs, or check marks. Voters should be instructed to carefully check their ballot for stray marks that may effect readability by the scanner.
- Develop detailed contingency plans for power failure, DS850 failure, election computer failure, mixed ballots during tabulation, and Election Reporting Manager (ERM) failure.

Pre-Election Testing and Reporting

- The EQC media, master election definition USB memory device, result USB memory device and all transfer USB memory devices are to be treated like ballots and secured at all times. Use sign-off forms for all personnel.
- Label all media and memory devices carefully in advance with date, time, election title, device number and scanner number. Make pre-printed labels for all memory devices, transfer containers and storage boxes.
- Secure one copy of the EQC media and the Election Definition USB memory device in the vault. After the election definition is loaded on the DS850(s), secure the second copy in vault. Do not use an election definition USB memory device for data transfer.
- Before testing, assign each DS850 an identifying number, zero all tabulators and set the DS850 sort options for Blanks and Write-ins.
- Perform logic and accuracy test with the county test deck of actual election ballots to confirm tabulation coding, ballot printing accuracy and report functions.
- Transfer test data via USB memory device if using Election Reporting Manager (ERM) or record data in county spread sheet. Print and save reports from the tabulator(s) and Election Reporting Manager (ERM) to verify data transfer and backup procedures.

2014 IDAHO PROCEDURES ES&S DS850 CENTRAL COUNT TABULATOR

- Save all test data in a special folder on the election reporting computer or with test ballots if not using ERM. Verify and sign off and save all testing reports and store for 22 months with ballots and election data.
- Check public reporting procedure and displays. Make sure all public reports and displays are stamped or labeled “Unofficial Election Results”. Do not report undervotes or overvotes on public reports.
- “Zero” the tabulator(s) to clear test results and confirm no votes are left in memory after testing and that the tabulator is ready for counting Election Day ballots.

Election Day

- Perform public logic and accuracy test with short state test deck. Remember to “Zero” the tabulator and print confirming reports before and after testing.
- Transfer test data to spread sheet or via USB memory device to Election Reporting Manager (ERM), print “Precinct Summary” reports to confirm transfer procedure. Save test data on the election reporting computer and printed reports with test ballots.
- Verify and sign off on all test reports and store for 22 months with ballots.
- Check public reporting procedure and displays for accuracy. Make sure all public reports and displays are stamped or labeled “Unofficial Election Results”. Do not report undervotes and overvotes on public reports.
- Prepare and label ballots for scanning.
- Scan ballots with **BLANK** and Write-in switches “**ON**” (if there is a valid write-in candidate).
- Press “**Save**” often. Label the DS850 with a notice to operators to “Save” often.
- Store counted ballots away from incoming ballots, “Sorted Ballots” and duplications. Color code “counted” boxes, pre-print labels with date, time, election title, transfer memory device number, scanner number and precinct.
- Forward “Sorted Ballots” for review by the duplication board. “Sorted Ballots” include blank ballots, ballots with a valid write-in, and ballots with machine errors including “Indeterminate Read”.

2014 IDAHO PROCEDURES ES&S DS850 CENTRAL COUNT TABULATOR

- DS850 operators should not review ballots.
- Separate “originals” and “duplicates” before moving duplicated ballots from the duplication board to the assigned tabulator(s) to avoid mixing ballots.
- To facilitate review if necessary, duplicated ballots, original ballots and write-ins should be stored by precinct and separated from counted “normal” ballots.

Data Transfer from the DS850 to Election Reporting Manager (ERM)

- Before initial logic and accuracy testing, set up storage folders on the election computer to save the election testing files from each DS850, all election data files from each USB transfer memory device for each data transfer.
- Do not use the Election Definition USB memory devices for data transfer. Develop a backup up plan for USB memory device and election computer failure.
- Use a tracking log to verify transfer and backup of data from each USB memory device used to transfer results to ERM.
- Time stamp and record the DS850 number and precincts tabulated for each machine for each file transfer. Rename transferred files to avoid overwriting files.
- Save all public reports on the election computer and all election data files and testing documentation.
- Securely archive all USB memory devices with ballots, printed test data and printed public reports.
- Burn a CD-ROM of all files saved on the election computer. The data stored on the CD-ROM should be a complete picture of all data allowing the county to re-create the election if necessary. Store the CD-ROM securely in the vault with the election definition USB memory devices.

Sample Tracking Spread Sheet

A sample spread sheet to assist in developing county procedures for security, documentation, maintenance, testing and performance of each tabulator is available on the Clerk’s Resource website: <http://www.sos.idaho.gov/elect/Clerk/clerkinfo.htm>.