The Pima County Election Integrity Commission met in regular session on December 18, 2015 at 9:00 a.m. in the Herbert K. Abrams Building, 3rd Floor Conference Rooms 3108/3110 at 3950 S. Country Club Road, Tucson, Arizona.

**ITEM 1. ROLL CALL**

Present: Arnie Urken, Chris Cole, Jeff Rogers, Bill Beard, Matt Smith, Brian Bickel, Tom Ryan, Barbara Tellman, Beth Borozan.

Also Present: Ellen Wheeler, County Administrator’s Office.

Absent: Karen Schutte, Brad Nelson

**ITEM 2. PLEDGE OF ALLEGIANCE**

The American flag was saluted with the Pledge of Allegiance.

**ITEM 3. APPROVAL OF MINUTE SUMMARY – November 20, 2015**

It was moved by Chris Cole, seconded by Arnie Urken to approve the Minutes. Tom Ryan had a couple of points of clarification. Concerning the discussion of the problem with backing up ballot images, page 3, second paragraph, there are conflicting statements about whether the backups of images are overridden or additional files created. Tom would like to get clarification on how image backups are created. Bill Beard remembers that during the RFP process there was the issue of ensuring that each backup be a separate file. Tom said that with GEMS, it was possible to go back and look at the time sequence of databases and actually see how the votes increased over the time of tabulation. It is important to have this question answered.

Tom’s other point was that he had asked the question about whether images could be separated and backed up separately and Karen answered in the affirmative. Tom thinks that what she meant was that the system can be backed up without the images, but the images cannot be backed up separately from the database. If they could be backed up separately, they should be able to be appended; while there is reason to have multiple copies of the database for each day, there’s no reason to have multiple copies of images. Barbara suggested that the question to ask the vendor is if the new version of the software that is currently in the certification process deals with this issue. The new version will be used during the Primary and General Elections in 2016.

Tom said the Minutes shouldn’t need to be changed, but these two points need to be clarified. Tom called for a vote to approve the Minutes; the Minutes of the November 20, 2015 meeting were unanimously approved.
ITEM 4. CALL TO PUBLIC

No public in attendance.

ITEM 5. TOUR OF PIMA COUNTY TREASURER’S OFFICE BALLOT STORAGE – Attending Members

Chris Cole, Beth Borozan and Tom Ryan went to the Pima County Treasurer’s Office for a tour. They have a brand new facility; rather than contracting with Iron Mountain as in the past for ballot storage, it is now done internally in the new building with one room dedicated to ballot storage. Chris Cole noted that the Treasurer’s Office will save approximately $25,000 per year. It is figured that the dedicated room has enough space to store two years’ worth of ballots, unless we go to two-page ballots. Chris explained that the room is very secure and well-protected. Tom referenced the diagram of the storage provided by the Treasurer [a copy of the diagram is incorporated into these Minutes as Attachment 1]. Beth Borozan agreed that the facility looks secure, and the measures they will take, to include cameras, etc., are good.

ITEM 6. INVITATION TO ES&S TO ATTEND FUTURE EIC MEETING – Tom Ryan

Brad Nelson was going to talk to some folks at ES&S about attending a meeting, and also provide Tom with a contact at ES&S.

ITEM 7. BALLOT IMAGES – Tom Ryan/Brian Bickel

- Solving storage problems
- What images can be used for

Brian Bickel asked what the purpose for using ballot images was as opposed to using the ballots. Tom’s response was there are two reasons. First, precinct cast ballots can be compared to the statement of votes cast (SOVC). Early ballots are hand-counted by batches, which does verify the accuracy of the machine. But you don’t get an end-to-end audit, only a partial audit that doesn’t compare with any of the numbers in the SOVC. There is a difference in the thoroughness of that audit. One way to use the images is to sort them by precinct electronically, print them and hand-count them. Bill Beard further explained that to do it manually with ballots, one would need to maintain the chain of custody throughout, sort by hand the batches, remove the individual ballots and then replace the ballots after the hand-count. Using the digital images, it would save the labor-intensive task of removing the ballots and replacing them again correctly. Tom said that any audit where counts can be done independently and compared to the SOVC as it appears on the canvass is beneficial because the SOVC is the true output of the election. The second benefit is that it would eliminate the need to do the random ballot selection while the election is going on. Currently this process interrupts the counting of early ballots to choose a random batch of ballots which slows down the process.

Barbara Tellman said it seemed to her that under the current wording of §16-602, what Tom is suggesting cannot be done. Tom agreed but said that this discussion is to illustrate the benefits of using ballot images. Brian then asked what the purpose of the audit is. Tom explained it this way: Look at the election process in three parts. There are the physical machines that do the scanning, they send information to the software, and there are two parts to that, the part that does accumulation of all the information coming in from all the machines, and then the part that takes that accumulated data and creates reports. When precinct ballots are being counted, all three parts
are being audited. When early ballots are being counted, only the first part is being audited because we are not getting the effect of the accumulation of all the other machines in the single batch processed on one machine. Barbara said that the original purpose of §16-602 was to verify the accuracy of the computer count, not to get a complete audit. The purpose would need to be changed in the law itself.

Arnie Urken said that the thing that makes election processing different from business processing is whether the ballots include information that should be detected to determine that invalid ballots aren't being counted such as too many marks, or making messages on their ballot so they can sell their ballot. Having ballot images provides a different type of data relevant to ascertaining the integrity of elections.

Brian said he is not arguing for or against images. He is trying to understand the purpose because an audit is being done by looking at a representative portion of the product. Assuming that the representative portion of the product is correct, the product is correct, which is an act of faith. Bill Beard said that the fundamental problem is, how much faith do you put in the election systems that are designed, created and run by man? Since all of us are flawed, how much faith can be put in that end product? That's the purpose of having the audit with checks and balances all interrelated.

Chris Cole said that right now, there is a good chance of having a good representative sample of precinct cast ballots. There isn't that same chance for a representative sample of early ballots because they are scattered and fragmented. Brian understands but disagrees that a representative sample is not being obtained with early ballots.

Tom explained that part of negotiating for the law for hand count audits was to get a partial audit on early ballots because the counties were not willing to physically sort early ballots by precinct. The Legislature would not agree to make the counties sort ballots. Using images provides a way of getting around to that number.

Matt Smith asked if a ballot is a public document. Tom responded that it is not in Arizona; Chris added that you cannot do a freedom of information request on ballots. Matt asked then, how are we even able to count those ballots? Bill said that the law is set up to allow the storage, tabulation and counting where provided by law under the supervision of the elections departments with the political party observers in place. Matt asked, given that level of scrutiny, why can't we have the ballot images at the same level as the ballots? Bill responded that state law tends to be after-the-fact in terms of technology.

Brian restated that if the purpose of the audit is to test the performance of the equipment, the current method does that. If the purpose of the audit is to verify the election process, then he can understand the change. Brian questioned whether a representative sample is taken for each of the four scanners used in Central Count, and Tom and Barbara both said batches are chosen for each of the scanners. Tom again said that with the early ballot batch audit, we are completely ignoring the back half of the software which accumulates the counts for multiple batches from multiple machines and creates the reports.

Barbara agreed theoretically with Tom, but she is not convinced there is a problem. She has been involved in the hand count process ever since it began, and each one has come out either perfectly or with maybe one or two ballots difference which has always been due to human error. Jeff Rogers added that he has done every one except the last couple since they started, and he concurs with what Barbara says. The variances are usually explained by stray marks on the ballots.
Arnie added that all these audits could pass, but there are individuals who are smart enough to manipulate the data without anyone ever seeing. In principle, the more auditing you can do, the more confidence you instill in the results. That is the advantage to using ballot images.

Tom explained the different philosophies of auditing. The current philosophy is to test the system to see if it is doing something correctly. The other philosophy is to sample the ballot images to test that the outcomes are most probably correct. It is entirely different, using different mathematics. There is a technique called risk limiting audit that will give you the predetermined outcome confidence—you say you want to verify 90% confidence that the outcomes are correct. If a race is close, it gets more scrutiny than a race that won by 70%. This is a technique that the statistical union of the United States has declared the gold standard for election auditing.

Arnie brought up the issue of citizens being able to consent to how the image of their ballot is used. If he chooses to have his image kept absolutely private or to be made public, he ought to be able to say that. And why shouldn’t he be able to sell that information? Barbara pointed out that would eliminate the concept of secret ballot because some sort of identifier would have to be placed on the ballot.

Tom said there are various states around the country that make their ballot images public record, either through legislation or court action. That is the ultimate in transparency.

**ITEM 8.** NOVEMBER 3, 2015 ELECTION UPDATE – Brad Nelson

Brad Nelson is not present to report on this. Beth Borozan asked about the poll worker report cards and whether they had been sent out.

**ITEM 9.** PLANS FOR PPE – Brad Nelson

Barbara Tellman had asked Brad in an email about polling places for the Presidential Preference Election (PPE), and Brad replied that they need to wait for voter registration data as of January 1, 2016 and then they can choose the polling places. That information will be available at the January EIC meeting.

**ITEM 10.** UPDATE TO PROCEDURES MANUAL & ELECTION LAW REVISIONS

Barbara Tellman is very disappointed that they have heard nothing from the Secretary of State’s office. They must have laws ready to be submitted, and the EIC has heard nothing about what they are proposing. Tom predicted that they won’t see any election revisions until the bills “drop.” Barbara noted that back in August they were talking about a series of public meetings, and in November the EIC was told they would get drafts of bills as they were finished. She would like to see what they are doing with campaign finance. Chris would like to see the changes to §16-602 concerning the percentage for hand count audits.
ITEM 11.  POST ELECTION AUDIT/HAND COUNT – Tom Ryan

• Options for revising §16-602

Tom asked for this to be on the agenda because during the last meeting, Eric Spencer said that §16-602 needs to be rewritten because it is very hard to follow. Tom has looked online at how other states have done it, and some are just a paragraph describing a method and it is up to the procedures manual to actually determine how to accomplish it.

Tom made a list of things that could be changed. In one place the statute says that the officer in charge shall conduct a hand count, which makes it sound mandatory. In another place, it requires that the auditors be collected by the Democratic, Republican and Libertarian parties. If the parties don’t do it, there is no audit. Half the Arizona counties are not conducting hand count audits because they claim they can’t get the auditors to do it.

Tom asked everyone, particularly members who have sat through the hand count to read through the law and write out any questions, concerns or issues for discussion at the next meeting.

Barbara has submitted some of her comments to the SOS, one of which is the fact that very few people vote at the precinct and some of the precincts chosen for hand count only have 20 voters. There is nothing in the law that says we should count precincts with a reasonable number of voters. Secondly, for counties like Pima that are not using scanners to count at the precinct but at Central Count, the whole concept of having separate calculations for precinct ballots is becoming irrelevant. Also it should be specified in the law that local races may be hand counted if desired.

Tom will provide his list of changes he has proposed to §16-602 to the rest of the Commission.

ITEM 12.  BYLAWS REVISION

Brian Bickel had provided a copy of the last markup version of the Bylaws, as well as a clean copy.

ITEM 13.  FUTURE AGENDA ITEMS

Tom wants to discuss revisions to §16-602 to get everyone’s input.
Tom said to add Bylaws.
Beth requested November 3, 2015 Election Update, and Plans for PPE.
Bill would like a discussion on timeframes for resolving issues with new system, new version of software, etc.
Barbara would like Bill to report on election legislation going forward.

ITEM 14.  NEXT MEETING DATES

The next meeting date will be January 15, 2016.

ITEM 15.  ADJOURNMENT

It was moved by Bill Beard and seconded by Barbara Tellman and unanimously carried to adjourn the meeting. The meeting adjourned at 10:10 a.m.