

## **Request for Re-Scan/ Re-Tabulation of the Ballots**

I am hereby formally requesting that the Election Commission initiate and supervise audit procedures for rescanning and re-tabulation of the ballots from the May 2009 election. The compelling reasons for the need for such an audit procedure emanates from the failure of the election officials to adhere to the requirements of election law in planning, processing, and auditing the May 2009 election. Additionally the City and its contractor TrueBallot, Inc. have issued a number of misleading statements concerning the election processing and auditing. It is important that appropriate audit procedures be performed and the public record corrected on the misrepresentations about the election processing, audit and review.

### **Requested Post Election Audit Procedure Under Supervision of the Election Commission**

On March 9, 2009 Aspen City Council adopted Ordinance #3, to add Sec. 2.26.030 to the Municipal Code<sup>1</sup> requiring compliance with Secretary of State's Election Rules.<sup>2</sup> Those adopted rules require standardized post election audit tests which were not performed.<sup>3</sup> I request that the Election Commission order a remedial audit to substitute for the required post-election audit which was not performed, and to somewhat mitigate for the use of unauthorized software in the chosen voting system. The following requested audit goes farther than the legally required audit because of other irregularities in the election which were not contemplated in the SOS audit procedures.

A post-election audit step can be planned and executed which will develop and document necessary information about the processing of the last election. The paper ballots can be scanned with off- the-shelf scanners, printed and hand counted to perform the functions that were required by Aspen's adopted regulations but not performed.

No one is suggesting that material, outcome-changing errors exist in the May 2009 scanning/interpretation operation. However there is a need to review the functions that were compromised or overlooked in the election processing.

### **Re-Scan/ Re-Tabulation Audit Procedure is Merited**

1. Aspen and Colorado law requires Secretary of State certified, rigorously tested voting systems (hardware and software.)<sup>4</sup> TrueBallot Inc. (TBI) system was not certified nor adequately tested.
2. Clerk Koch committed to Council and public that TBI system would be certified. However, there was no attempt at system certification.<sup>5</sup>

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<sup>1</sup> Exhibit A, page 5 Ord #3 adopts Secretary of State Election Rules.

<sup>2</sup> Exhibit B SOS Rules as of March 2009.

<sup>3</sup> Rule 11.5.4 Exhibit B

<sup>4</sup> Exhibit B, SOS Rules 11 and 45

<sup>5</sup> Exhibit C, page 3, in addition, in recording of meetings.

3. Public was assured by Council that any citizen could verify the tabulation by viewing the ballots and testing on home computers.<sup>6</sup> This commitment was not fulfilled. It should be fulfilled now in conjunction with the remedial audit procedure.
4. There is little basis on which to rely on the TBI system. Officials had no reasonable basis on which to rely on the TBI system, which met almost none of the SOS (Aspen adopted) requirements. TBI system had woefully inadequate public election experience. TBI scanning/Interpretation software appears to have been used in only one previous public election,-- if there.<sup>7</sup> The software configuration for running the Council tabulation was custom written for Aspen, with almost no testing. It was apparently being written and configured days or hours before the election. Virtually no due diligence was done by City staff on TBI system before contracting for election processing, despite the fact that certified systems are required.<sup>8</sup>
5. Aspen law<sup>9</sup> requires rigorous and standard Logic and Accuracy Tests (LAT) of the voting system which were for most part ignored.
6. Undisclosed software changes were made after the noncompliant public LAT on the evening of May 4.<sup>10</sup> (Certified software copy is required to be in escrow in the SOS office and cannot be changed, "on the fly.")
7. Aspen law requires post-election audit with rigorous standards and participation by SOS.<sup>11</sup> No audit was attempted which complied with the law. One limited, inadequate audit step was undertaken, which cannot suffice for more comprehensive procedures in

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<sup>6</sup> 3.9.09 Council Meeting, Mayor Ireland: "You can program your computer at home and count ballots and see if it gets the same results. Our system that's proposed here today is the guy who runs the ballots through the machine will be here and you can watch him do that in this room we can televise it."

<sup>7</sup> 3.09.09 Jim True city council: "This is a computer system that's been used in other places in the country including Burlington Vermont just a week ago and we're comfortable with it. " [The scanning and interpretation system was NOT used in Burlington, nor an any public election, that has been discovered, with the possible exception of Takoma Park, MD 2007 election. But TIB no longer used there.]

<sup>8</sup> 3.30.09 Jim True Email to TBI, "Is it possible for you to provide us with your program and a description of how to use it, so that we can perform a small test ourselves here? I do not know whether you have a special scanner but if the equipment required is not special, it may be helpful if we can demonstrate our own understanding of your program.." [Response that this was not possible.]

<sup>9</sup> SOS rule 11.5.3

<sup>10</sup> 5.19.09 TBI email to Jim True: "I had been testing my software with the bulk elimination feature turned on, and when I was instructed to do one-at-a-time elimination, I had to use the Cambridge parameters that behaved differently than what I expected for the last round." See also 5.28.09 Press Release (Exhibit D)

<sup>11</sup> SOS rule 11.5.4

the adopted SOS rules.<sup>12</sup> The public was seriously misled on the nature of this limited audit step and told that “comprehensive audits” and hand counts were to be performed.

8. The City issued a misleading press release<sup>13</sup> claiming a City staff “IRV process audit”, which apparently did not take place, and claimed a “manual verification” of all rankings, which did not take place. In the release the City made the false claim that “everyone had the opportunity to double-check the IRV tallies themselves,” and boasted of the completeness of the “audit,” although minimal audit standards were not met.
9. TBI executive, Caleb Kleppner, after submitting his draft to the Clerk for approval, published a false and misleading Aspen Times editorial on the Aspen election, claiming “thorough audits,” although none were performed.<sup>14</sup> Kleppner, acting in his role as the City’s agent, falsely claimed that humans reviewed every ballot for interpretation, although there is no evidence of even limited human review. The false claims also stated that the election could be and had been independently verified. The public was told that the post-election audit “far exceeded anything required by law,” when the truth was that the one small audit step did not begin to approach minimal standards required by law. It was further stated that the city performed an “independent verification that every ballots was tallied correctly.” This is blatantly false.

On the date of publication, September 17, I formally requested corrections from both the City staff and the City’s agent TBI. Neither issued a correction.

10. Scanner settings were reported to have been 1 bit output, to enhance scanning speed but 1 bit settings likely sacrificed quality of the scanned data. 1 bit scanning cannot consistently deliver the needed fidelity of the actual markings on the ballots given the variety of pen colors and pressure on paper used by individual voters.
11. GRTV screen shots document that TBI software sometimes misinterpreted the raw rankings, although the seriousness and extent of this problem is unknown. (Corrections were likely made before tabulations, but this assumption should be tested.)<sup>15</sup>
12. The public was promised a minimum of 10% hand count of ballots as part of the post-election audit, with promises to increase sample size if necessary.<sup>16 17 18</sup> But, instead **no hand count** was performed at all. (see footnote 12)

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<sup>12</sup> Aspen Times reported- “We are just confirming that the ballot reflects the string,” said Jim True, special counsel for the city of Aspen. <http://www.aspentimes.com/article/20090508/NEWS/905089992>

<sup>13</sup> Exhibit I City Press Release May 28, 2009

<sup>14</sup> Exhibit J Kleppner Editorial Aspen Times 9.17.2009

<sup>15</sup> Exhibit E shows sample of raw rankings (in yellow box) differing than oval markings on screen.

13. The City designed “audit” of May 7 performed no test of the counting of votes. The test was limited to a non-random sample of ballot interpretations.
14. On election night, the Election Commission was asked to review/resolve some ballot interpretations viewing only at the 1bit image, not the original paper ballot. Given the uncertain quality of the images, the paper ballots should have been reviewed. EC was not told of the minimal image quality setting.
15. TBI not legally authorized to process Aspen’s election. The legal requirements for certification of the system, criminal background checks, posting performance bonds, and being electors of Colorado were all violated. Nor were they sworn deputies or election judges, and therefore could not legally handle Aspen’s ballots. Yet, they were given the primary role in Aspen’s ballot handling and processing, despite the law literally stating that such unauthorized persons cannot touch ballots.
16. Candidates Behrendt and Frisch Were Unfairly Denied Recounts. A re-scan/re-tab audit procedure can address the question of whether outcome would have been affected.
  - a. Behrendt came within 43 votes of Torre in the CC Seat 2 race, or 1.7% of 2510 CC ballots cast. Trigger for automatic (hand count) recount should have been 3% or anything less than 75 votes.<sup>19</sup>
  - b. Frisch came within 17 votes of being in the IRV runoff finalists. Technically, Aspen’s recount provisions only measure the final result for triggering recounts,

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<sup>16</sup> 3.9.09 CC Meeting Minutes: “Mayor Ireland suggested a 10% hand count of the polling places for the post-election audit and if that creates sufficient doubt, the entire election could be hand counted. **This audit would be more comprehensive because it is a new system.** This would give people confidence that the machine counted the election the way it was supposed to. Councilman Skadron asked if this method will be tested prior to the election. Ms. Koch told Council logic and accuracy tests are conducted before all elections; this is not a new procedure.”

<sup>17</sup> 5.6.09 Koch to EC: “I have scheduled a post election audit of the election results and hand counting 10% of the ballots tomorrow (May 7) at 2 p.m. in the sister cities room.” ( Public commitment made 3.9.09 council meeting. )

<sup>18</sup> Exhibit G is the Clerk’s audit plan that was not executed.

<sup>19</sup> Recount thresholds were “liberalized” in Paragraph 8.4.1 (page 19) of the IRV procedures adopted by Ord #3. (Exh A) The adopted paragraph has drafting errors which would never trigger a recount. The recount trigger had been explained to the public as follows:  
3.9.09 Jim True in CC meeting: “it might be better in this situation if we just liberalize this so that the community is comfortable is in fact, that we are looking at this as best and fairly as we can, so that if one half of one percent out of when you have **2500** ballots is a very small number. We felt that if your **three percent** is still a small number but it would be...it would give people more comfort.”  
[City denied Behrendt a recount claiming that the 3% should have been measured as 3% of Torre’s 1073 winning votes, or 32 votes, meaning that Behrendt’s 43 vote loss did not qualify for a recount. Any number less than 75 votes should have qualified for a recount under the scheme explained to the public.]

this appears to have been an unfair oversight which fails to recount very close elimination rounds.

- c. An additional example is documented as Torre was eliminated in favor of Behrendt in the 2<sup>nd</sup> elimination round for Seat 1 by 3 votes.

(Recounting in the context of these and similar examples will give practical meaning to the exercise and lessons for next election.)

17. Some 149 rankings were deemed by the computer system to be unqualified write-in votes without the required human review to determine voter intent. If voters, (possibly in confusion over the ballot matrix), wrote in a registered candidate's name, say, "Frisch," or "Behrendt," the vote was inappropriately counted for an unknown name in violation of state rules on determining "voter intent." Those 149 rankings should be reviewed to determine whether listed candidates should have been credited with some of those 149 rankings.
18. The number of ballot scans (and number of ballots counted) exceeds the number of ballots counted by Accu-Vote by 11 votes.<sup>20</sup> While the error has been attributed to the Accu-Vote machine, a rigorous analysis has not been performed to determine if instead the scanner count could be erroneous.
19. 17 pairs (34 ballot cast vote records) are "adjacent duplicates" which should be examined to determine if they are indeed identical ballots voted in sequence or potentially erroneously duplicated scans.<sup>21</sup>
20. Voter Intent Should Be More Thoroughly Analyzed. Item 17 above addresses voter intent rules which were not adhered to. In addition, the rules themselves did not adequately address the uniqueness of the IRV ranking process. Numerous rankings which were ignored by the rules should be analyzed for voter intent as auxiliary information, which will likely suggest rule changes for the future.<sup>22</sup>

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<sup>20</sup> <http://www.fairvote.org/premier-accuvote-machines-missed-0-4-of-ballots-in-aspen-elections/>

<sup>21</sup> Exhibit F shows adjacent ballot scans which are identical. The 5 pairs in the F series deserve particular note as they were ballots mailed in through the postal system, greatly reducing the chances of sequential ballots from spouses/friends voting together.

<sup>22</sup> For example rankings subsequent to an over-voted ranking were not considered. Assume example, a voter had the following ranking on the Council race: Kasabach, Speck, Wampler=Lasser --(overvote), Frisch, Torre, Johnson, Johnson, Behrendt. His vote counted for Kasabach and Speck, and then ceased to count because of the over-vote in ranking 3. His vote was therefore not counted at all in the finalist

The above are some of the more obvious questions which a re-scan/re-tab audit procedure could answer. There are a number of other such questions about the scanned and interpreted and tabulated data which could be included in the formalized audit procedure.

### **Re-Scan/Re-Tab Audit Procedure is Practical and Inexpensive**

Although cost should not be the primary consideration, a re-scan and hand count can be accomplished with virtually no incremental cost.

--City owned or borrowed commercial scanning equipment can be used to re-scan all of the ballots onto electronic files (pdfs, jpgs, tiffs, etc.) Those files can be saved to DVD and paper copies of the ballots printed for use in the hand counting exercise. (High quality scans with at least grayscale and adequate DPI should be used.)

-Volunteer election activists with relevant experience can propose protocol for the ballot copying, printing, process controls and hand count procedures.

-Volunteer citizens can participate in the hand count.

### **Re-Scan/Re-Tab Audit Procedure Poses No Legal Risk**

No Risk of Overturning the Election. Election was final when certified on May 12. Audit results cannot affect the outcome of the election.

Ballots Were Intended to be Observed by Public. Aspen specifically adopted a new Code Section 2.26.050 in March 2009 requiring that the ballots could be observed by candidates and public while they were being counted. Therefore there should be no question about the ballots being observed in an audit by the public. <sup>23</sup>

No Risk of Disclosure of Voter Identity. Election Commission has the authority to select and swear in election judges to review ballots as the volunteer auditors. They will be sworn to keep any unexpected discovery of an individual's vote confidential. (However, such votes should not

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rounds for the two CC seats, despite his expressed rankings for the finalists in the race. The impact of those ignored rankings should be considered along with possible rule changes.

<sup>23</sup> Sec. 2.26.050 Voting Tabulation Center The City Clerk shall designate one location within the City of Aspen to serve as the Voting Tabulation Center prior to each election. The center shall be reasonably accessible to the public for the purpose of observing the vote tabulation At a minimum the City Clerk shall arrange the **counting of ballots** so that the candidates and their representatives **may observe the ballots as they are counted**. The City Clerk shall ensure that public observation does not interfere with the counting of the ballots Tabulation of votes shall be conducted as described in this Chapter and the Procedure Manual referenced in Section 02.26.060

exist in the ballots anyway, and consistent with the stated ability for the public to observe the ballots as they are counted as stated above.)

Remove Alleged Risk of Violating CRS 31-10-616 City has claimed that Colorado law does not allow removal of ballots from ballot box except for election contests. Such strict interpretation would prohibit recounts or audits, which is an absurd result, reducing transparency.

By adopting the SOS Rules as part of the Municipal Code in March 2009, Aspen laws **require** opening the ballot box after the election and performing a post election audit<sup>24</sup>, just as in Title 1 (county, state and Federal elections.) Such an audit was not performed by the City and the election judges. A remedial audit should be performed now under direction of the Election Commission.

Additionally, Secretary of State Buescher has issued a letter stating that he is not opposed to the public release of ballot images. This should relieve any concern about an unfounded claim of violation of voter privacy due to the proposed audit procedure.<sup>25</sup>

To safeguard against any unfounded claim of violation of 31-10-616, the Election Commission could request that the Council adopt an ordinance in accordance with its Home Rule Charter requiring an audit of the 2009 election, although this seems unnecessary.

Alternatively, the Election Commission has the authority<sup>26 27</sup> to establish all procedures relating to the conduct of elections which presumably includes post-election reviews. The EC should be able to require this audit, even without a new City Ordinance given that the legally required voting system testing required under Rule 45 and post-election audit under Rule 11 were not accomplished.

### **Benefits of the Re-Scan/Re-Tab Audit**

- Public gains more comfort in the 2009 election processing.
- Public awareness of IRV counting and processing increases due to the hand count.
- Importance of future post-election audits is demonstrated.

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<sup>24</sup> Rule 11.5.4 Exhibit B requires an extensive audit. An opening of the ballot box to access ballots is obviously required.

<sup>25</sup> Exhibit H is Secretary Buescher's letter issued in January, 2010.

<sup>26</sup> Election commission. 31-10-105 The election commission in municipalities having such commission has all the powers and jurisdiction and shall perform all the duties provided by this article with respect to clerks and governing bodies, but the election commission does not have the authority to call a special election.

<sup>27</sup> Aspen Charter Sec. 2.4 The election commission shall have charge of all activities and duties required of it by statute and this Charter relating to the conduct of elections in the city. In any case where election procedure is in doubt, the election commission shall prescribe the procedure to be followed.

- Importance of compliance with regulations is demonstrated.
- Citizen oversight and involvement is returned to the election process.
- Lessons learned can be documented for future elections.
- Importance of transparency and single ballot audit-ability are demonstrated.
- Addresses a number of outstanding issues and complaints coming before the Commission.

In summary, a significant step could be made to reduce the concerns and public debate over the 2009 election process controls with this fairly simple audit procedure. The audit would serve to bring much-needed transparency to the process and to remedy some deficiencies which have created much concern. It would also create a structured method of verifying some of the issues and complaints which have been or will be filed with the Election Commission.

Please let me know if I can answer any questions or provide more information.

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