1. I am Jim August from Boulder County. I was a watcher at the Boulder County Ballot Processing facility for the 2012 General election. I am a retired engineer from Ball Aerospace.

2. What I saw as a watcher made me sick. The Bell & Howell system used for processing the Mail Ballot envelopes malfunctioned many times each day in many different ways.

3. Through CORA I have obtained some records and found that many records like test records apparently don’t even exist because no formal testing was done.

4. See the attached two reports for many more detail

5. A couple of significant highlights.

   a. Both automatic and manual signature verification were used. The ASV system from Bell & Howell rejected over 50% for signature problems.
   b. This was followed up by complete manual verification and after 6 months I have not been able to obtain complete records through CORA yet for manual results.
c. Then 56% of those envelopes that operators flagged for signature problems were apparently opened and the ballots counted anyway.

6. A few key points.
   a. Boulder County did not prepare a requirements document like it appears is being done for the UVS. But don’t rush it and do it right
   b. Boulder County did not submit any request for Proposals like it appears is being done for the UVS. But don’t rush it and do it right
   c. It appears the current focus is to get EVERBODY to vote
   d. That there seems to be ZERO focus on accurate processing
   e. That the HAVA required maximum error rate is 1 error per 500,000. And that includes determining whose entire ballot to count and whose not to count in processing mail ballot envelopes.
   f. Make sure any Automatic Signature Verification system is tested and certified by a qualified independent 3rd party to meet the HAVA requirement.

A well-known person to my generation stated, “It is enough for the people to know there was an election. Those that vote decide nothing. Those that count the votes determine everything.” Joseph Stalin.

Let’s remember that Boulder County Election results have not yet been certified and the primary reason is the many problems with the defective Bell & Howell Vote by Mail system. Boulder County serves as a prime example how NOT to process Mail ballots.
May 7, 2013

Board of County Commissioners
Boulder County Courthouse
1325 Pearl St.
Boulder, CO 80301
commissioners@bouldercounty.org

Boulder County Clerk and Recorder
1750 33rd Street, Suite 100
Boulder, CO 80301
clerkandrecorder@bouldercounty.org

Dear County Commissioners and Clerk

I am here to ask you to take the following actions to reduce the potential for Election Fraud:

1. Make public the actual performance of the Bell & Howell system
2. Return the defective Bell & Howell system for full credit
3. Investigating the accuracy of using any Automatic Signature Verification system
4. Identification of detailed requirements for an automated Mail Ballot processing system
5. Procure a replacement by competitive bid if reasonable

Your reasons for taking these actions are

1. Get rid of the political embarrassment caused by the Bell & Howell system
2. Improve the integrity of the election process in Boulder County
3. Provide increased transparency into Boulder County Government
4. Improve election integrity
5. Hopefully have following elections certified.

I am sorry that I will get technical but the problems I observed are technical. I believe all election problems are technical at some point.

I want to start with a quotation that is credited to a well-known person of my generation.
"It is enough that the people know there was an election. Those who vote decide nothing; those who count the votes decide everything." By Joseph Stalin. I fear that Stalin's statement may be coming true for Boulder County.

I believe that in Boulder County, the greatest failure in the 2012 General election was in the great experiment in the process of selecting whose ballot to count and whose not to count by using the Bell & Howell Vote By Mail (VBM) system.

Without completing successful testing of both the hardware and software, followed by strict configuration control there is no way to know all of that the decisions and actions that were made by the machine were correct.

Even though we were told that signature verification was performed manually, how do we have any way of knowing that the untested, malfunctioning machine with no configuration control processed each and every operator input accurately. I observed cases where it did not respond correctly to operator input.

Based upon what I observed during the election and what I have discovered in my post election investigation, leaves me greatly confused. Is there a conspiracy to cover up incompetency or is it just plain election fraud since it appears there was no real control over the repeatedly malfunctioning VBM Envelope processing system.

The current problems are only going to get much worse when the election system is changed over to Mail Only voting. So we must fix this VBM problem NOW.

Voter / ballot qualification is the main critical function performed by the VBM system. Registration and signature verification are the most significant methods used to qualify a mail ballot for counting. With the VBM system used in Boulder County the registration verification is totally automatic except for a very few envelopes that need to be handled manually. The signature verification can be by automatic and or manual processes.

Based on VBM machine reports, the automatic signature verification used in the 2012 General Election had, over a 50% false reject rate and an unknown false accept rate.

The manual process is a whole different subject and won’t be discussed in detail in this report.

I have received no documentation that any of the 18 objections or suggestions made 2 months ago have been acted on by BOCC except making an excuse for one item and then passing the buck to the Clerk for the remainder of the items.

a. The Commissioners did state in their email to me on 4-1-13, “it was in the best interest of Boulder County to use cooperative bidding”. But look at the junk the County purchased through this process which still has not been paid for because of problems
b. The Clerk’s office has many problems, however all 18 of these issues in my March 7th letter are the responsibility of the commissioners since they approved the Purchase Order.

c. How can you say the county had a quality election when the results are still not certified, placing all local candidates status in question?

d. After 2 months, has the Clerk yet completed the investigation on the problems they knew about over 6 months ago which was before Election Day

e. Please note that 9 months have passed of the 12-month period allowed in the contract for a return with full credit. We can get out of this mess now but you must act NOW.

It is a documented fact that the Clerk knew about the VBM system malfunctions before 10-28-12 since she was recorded on security video watching a malfunction. And an undocumented hold was placed on the second invoice. Kimberly Smith wrote to Alan Smith On 1-23-13 “The invoice has not been paid yet due to the fact that several deadlines were not met for the original install and upgrades. Hillary and our election staff are working with the vendor.” We now know one reason why it wasn’t paid. Formal testing was not completed.

Of all Boulder County Government departments, I would expect the Boulder County Clerk and Recorder’s office to be the best at record keeping. We, the public are many times required to provide originals of some of our most important documents to the Clerk’s office, yet that office is very poor at election record keeping. They simply cannot find documents that they should have in a file cabinet near the machine.

I have been asked to deposit $7,500 in one case and $4,380 in another case for the Clerk to review and redact documents where there is no proof these documents even exist and why do any test documents need to be reviewed and redacted? Is there something being hidden?

After many different CORA requests looking for any documents that would prove any FORMAL test was successfully complete, I have not been provided a single page of proof. So I believe that one of the deadlines that was not meet in October 2012 was the performance of the “Acceptance Testing” as identified in the purchase contract.

Here are some of the problems I have found since last month based on County supplied data.

The document titled “Cumulative Report – Official” shows 130,252 absentee ballots counted yet the VBM final “Fine Sort” report shows only 125,106.

Where did 5,146 ballots come from?

Of the total 364 VBM batches processed about 10% were voided with most having no explanation and no reports generated. Sorry I cannot give a precise number because I am still trying to sort through the sloppy, inaccurate and incomplete records.
Of the First pass reports, The VBM system typically rejected over 60% for "no signature match" while performing Automatic Signature Verification. This seems bad since Boulder County paid an extra $40,000 for the "Automatic Signature Verification" function. Yet the Clerk has stated in writing several times that the "Automatic Signature Verification" (ASV) function was not used. Then why did the County pay $40,000 extra? I don't believe ASV can ever come close to the federal mandated accuracy.

I have proof that the software was changed several times on the VBM system and when I asked for associated documents, I was told in writing "No such documents exist". Standard quality control practices in the computer field mandate configuration control management of all software. Doesn't the County have staff that maintains the computers and provides configuration control?

It appears that a lot of the communication, such as holding payments was verbal, even with the vendor. Shouldn't those communications have been in writing? I was told that no written documents exist between the BOCC, staff and the Clerk as a result of my letter I gave you on March 7th so it must have all been verbal. Please be transparent.

I found out why the price appeared to be changed from $219, 960.68 to $205,410 with no documentation. Bell & Howell did not bill for the $14,550 "Software Maintenance Agreement (SMA) " that was listed in the contract. Was this not provided? But they made undocumented changes to the software.

See the attached flow diagram, which is more than the County, could provide me. Please read the notes in the diagram.

Closing
1. Please get rid of the defective Bell & Howell VBM machine. This unit is a lemon.
2. If there is a desire to procure a replacement, then lets develop a valid requirements documents so the County can purchase what is needed.
3. I strongly doubt that an Automatic Signature Verification process can ever meet the HAVA maximum error rate of 1 per 500,000.
4. Please keep in mind that I am not backing away from this major threat to our election process and will consider ratcheting up my efforts if necessary.
This is a simplified flow diagram that I have been able to construct from the information I have been able to pull out from the limited documents I have received from the County via CORA Requests.

Vote By Mail (VBM) processing

1. Why are there any "Rejects" at this point?
2. Why are there any "Out of Scheme" at this point?
3. These are totals from Re-pass Batch reports
4. This total is from Last Fine Sort Batch report
5. This total is from "Official Cumulative Report" report
6. Why were any of these passed to Manual SBS Sig Verify?
Interim Description of Bitsy Operation

By Jim August, a very concerned Boulder County Mail in Ballot Voter, 6-4-13

Preface

1. This is an in-process report on what has been discovered so far about the Bell & Howell (B&H) “Vote By Mail” (VBM) system used to process most (why not all?) Mail Ballot Envelopes (MBE) returned by USPS or via “Drop Boxes” for the 2012 General Election.

2. There are other issues with Boulder County Elections but this report only focuses on the many problems related to a specific Bell & Howell VBM system.

3. “Bitsy” is the nickname given by the Boulder County staff to the “Bell & Howell Criterion Elevate” system used by Boulder County to process MBEs. This nickname may be based on the perception that this B&H system had a smaller footprint than its competitors. The Bitsy name will be used throughout this report for reasons of brevity. Note that MBEs contain live ballots during the multiple stages of Bitsy MBE processing.

4. This small size appeared to be a major requirement for the Clerk’s office when procuring this system. In my investigation I have not found one single meaningful requirement stated except that the system should have a small footprint. I would expect at least some form of explicit performance requirements.

5. In general the quality of Bitsy-related information provided by Boulder County was way below what I would expect for election accounting.

6. This report is based in a large part on the copies of the Bitsy Batch Reports generated by Bitsy. See Appendix information at the end of this report.

7. I requested copies of specifications and detailed process descriptions, and was told by County staff that they did not exist.

8. This model and analysis were developed based on my personal observations and limited information obtained from Boulder County with CORA requests. There are still a lot of unknowns and questions that need to be answered.

Tabulation of Batch Reports

1. As a result of 3 major CORA requests I received the following 3 sets of documents.
   a. The first document was a 21 page “VBM Batch Tracking” manually maintained log
      i. This log is very sloppy and incomplete and almost impossible to follow if it is all you have. See a sample copy included in the appendix.
      ii. The basis for knowing that this document existed was that I personally observed entries being made in this log when I was a watcher. There was no information openly provided by the County that even suggested this log existed. It took two CORA requests to get a complete copy.
      iii. See Internet links 1 & 2 near the end of this report.
   b. The second set of documents were copies of Volume 1 of the Bitsy generated batch reports for the first part of entries in the VBM log mentioned above.
      i. I observed this volume being used by staff in the security video for 10-26-2012. Again there was no information openly provided by the County that even suggested these reports existed.
Interim Description of Bitsy Operation
By Jim August, a very concerned Boulder County Mail in Ballot Voter, 6-4-13

ii. This volume covered from batch 1 on 10-18-2012 through batch 204 on 10-31-2012
iii. See this Internet link for complete, downloadable documentation of my efforts: http://tinyurl.com/14q4hbd
c. The third set of documents were copies of Volume 2 of the Bitsy generated batch reports for the last part of entries in the VBM log mentioned above.
   i. This was the result of an addition CORA request when I found that Volume 1 was incomplete.
   ii. This covered from batch 205 on 11-1-2012 through batch 364 on 11-7-2012.
   iii. See Internet link above.

2. I then created a spreadsheet that contains selected information on all 340 batches.
   a. Sheet 1 of the spreadsheet summarizes key information about the “First Pass” reports.
   b. Sheet 2 of the spreadsheet summarizes key information about the “RePass” (second pass) reports.
   c. I did not enter any data for the 3rd pass, which is titled “Fine Sort” other than identify which batches were “FS”
   d. See Internet link above.

Outline of Bitsy Mail Ballot Envelope Processing

1. The general steps of processing Vote By Mail (VBM) envelopes is as follows
   a. Receive and prepare envelopes for Bitsy
   b. Daily, download voter information from Colorado SCORE database.
   c. Perform Bitsy “First Pass” on VBM, containing live ballots.
   d. Perform manual “Signature Verification”
   e. Perform Bitsy “Second Pass on envelopes
   f. Perform Bitsy “Fine Sort” on envelopes
   g. Daily, upload new ballot status information to SCORE
   h. Manually and automatically process “Exception” envelopes
   i. Open envelopes
   j. Remove Ballots
   k. Scan ballots with Hart system
   l. Resolve Voter intent on questionable ballots
   m. Count votes with Hart system
   n. Tally all votes.

2. More detailed steps of processing
   a. Receive and prepare envelopes for Bitsy
      i. Receive by USPS or from drop boxes
      ii. Manually remove tabs over signature
      iii. Manually remove junk mail
      iv. Manually remove “Undeliverable” envelopes
Interim Description of Bitsy Operation

By Jim August, a very concerned Boulder County Mail in Ballot Voter, 6-4-13

v. Manually arrange with all envelopes facing same direction and stack in groups of about 400 per mail tray.
b. Daily, download voter information from SCORE
c. Perform Bitsy “First Pass” on envelopes
   i. Envelopes are feed into Bitsy in groups of about 800 or less
   ii. Bitsy checks for feed of multiple envelopes. Not sure how these are processed.
   iii. Bitsy checks envelope thickness for 0 or multiple ballots. Not sure how these are processed.
   iv. Bitsy scans image of envelope.
   v. Bitsy extracts bar code from image. It is assumed that barcode is for Voter ID
   vi. Identifies voter from barcode
   vii. Looks up voter in downloaded SCORE database
   viii. Bitsy extracts signature image
   ix. Performs Automatic Signature Verification (ASV)
   x. Bitsy prints processed date on envelope
   xi. Bitsy sorts and counts envelopes on First pass as follows
      a) Bin 1, rejects, may be those that barcode could not be read correctly
      b) Bin 2, appears not to be used
      c) Bin 3, accumulates those in the following categories
         1. Administrative action
         2. ID required
         3. ID Flagged
         4. No Signature
         5. No Affidavit Signature
      d) Bin 4, VIP. Not sure what this means but there were 190 of them. Are these “Confidential Voters”?
      e) Bin 5, No Signature Match by ASV system (about 60% go here)
      f) Bin 6, ASV pass for Districts 1 – 12. Called group 6
      g) Bin 7, ASV pass for Districts 13 – 24 Called group 7
      h) Bin 8, ASV pass for Districts 25 - 35 Called group 8
      i) Bin 9, ASV pass for Districts 36 – 46 Called group 9
      j) “Oops bin”, for “Out of Scheme”. Not sure what these are
      k) Bins 10-16 not used on first pass?
d. Perform manual “Signature Verification” using Bell & Howell software
   a. Perform manual “Signature Verification” by team of two judges using Bell & Howell’s “Side by Side” (SBS) system with signature pairs for 4 voters on screen at a time. All envelopes from First Pass are checked except the “Rejected” and “Out of Scope”
   b. Manually verify by a team of two higher-level (?) judges those signatures that were flagged in previous step.
e. Perform Bitsy “Second Pass” on envelopes
Interim Description of Bitsy Operation
By Jim August, a very concerned Boulder County Mail in Ballot Voter, 6-4-13

i. Basically same as First Pass except the ASV seems to be turned off and those signatures that were manually rejected should now be sorted to bin 5. (About 4% go here)
ii. Only about 44% of first pass envelopes are reported as being fed into second pass.
iii. Letters are generated and sent to all voters that had envelopes that were not successfully sorted into bins 6-9

f. Perform Bitsy “Fine Sort” on envelopes
i. Sorts each group from second pass into 16 districts.
ii. No report of any that are rejected or sent to Oops bin

g. Daily, upload new ballot status information to SCORE

h. Manually and automatically process “Exception” envelopes
   i. The steps performed here are varied based on reason for exception

i. Open envelopes
   i. A machine is used to slit open the bottom of each envelope

j. Remove Ballots
   i. Manually performed by 2 people.
   ii. Set aside those that are wrong ballot style or have different ballot style on envelope and ballot

k. Scan ballots with Hart system

l. Interpret votes with Hart system

m. Resolve vote intent as needed with Hart system

n. Tally all votes.

Questions

1. When Bitsy scans envelope, does it scan only one or both sides?
2. What are the processing steps for the “Rejected” envelopes?
3. What are the processing steps for the “Out of Scheme” envelopes?
4. What are the processing steps for the questionable and other flagged envelopes?
5. How is threshold or sensitivity set for Automatic Signature Verification?
6. How is ASV flag overridden for SBS manual Signature Verification?
7. In “Fine Sort” pass, what goes into bins 1-5 and were is that reported?
8. How are the cured envelopes processed? Do then get mixed back in with new envelopes or are they processed as a separate batch or manually?
Interim Description of Bitsy Operation
By Jim August, a very concerned Boulder County Mail in Ballot Voter, 6-4-13

9. Are there daily Bitsy tracking logs?

Points of interest
1. There doesn’t seem to be any accountability of mail ballot envelopes throughout the system.
   a. How many were received each day from USPS. Did USPS have a count?
   b. How many were in each drop box?
   c. Was the correct number of drop box processed?
   d. What was the chain of custody?
   e. Was there any daily or activity log?

   Did Bitsy make the first count of those received? But Bitsy has been proven not able to provide an accurate count? This is the first thing I observed as a watcher that got me started in this investigation.

2. There were 364 batches processed by Bitsy per the logs
   a. 44 (12%) Batches were VOID. Most without any report or reason given. I tried to get copies of some of the void reports and was told “No such document exists” (I think the information should still be in Bitsy’s database). Or have election records been destroyed which I believe is against the law?
   b. 194 of the batches were First Pass
   c. 84 of the batches were Repass (the second pass) but 22 (26%) had no reports or data.
   d. 38 batches were Fine Sort
   e. 4 Batches were other types or unknown

3. Of those that were able to be read on first pass, over 64% were flagged as “No Signature Match” by the ASV software. If ASV was inactive I would expect either 0% or 100% to have been flagged. This is proof that the ASV was active during the First Pass. This is contrary to what we were told by the Clerk.

4. In the Repass phase the manual signature reject rate was about 4.3%. But in the “Real Time Ballot Return Report”, Report #BP-009, has a total Signature Discrepancy reject rate of 0.26% (344 total rejected out of 130,094) for all returned by mail ballots.

5. So is the signature discrepancy reject rate 64%, or 4.3%, or 0.26%?

6. The BP-009 report states that 130,094 ballots were returned but 131,559 were fed into Bitsy in the First Pass’. Why were more processed by Bitsy than were received? Or is that just more Bitsy counting errors?

7. The First Pass reports have the following forms of rejects
   a. 2,353 “Rejects” that the bar code could not be read or some other reason of not locating the voter in SCORE.
   b. 167 envelopes with no signatures
   c. 1,550 ballots that needed ID to be provided
Interim Description of Bitsy Operation  
By Jim August, a very concerned Boulder County Mail in Ballot Voter, 6-4-13

d. 190 VIP flagged envelopes. What are VIP envelopes anyway?
e. 685 envelopes that were out of scheme such as “Primary” ballots being return for the General Election and who knows what else.
f. That’s a total of 4,945 rejected for one reason or another in the First Pass alone.
g. Yet the bottom line was that only 875 out of 130,094 were rejected for the entire election

8. Of the 131,559 submitted to first pass 128,521 were passed onto “Side by Side” manual signature verification using Bitsy software. Only those “rejected” or “Out of Scheme” were not passed on to manual signature verification.

9. The RePass (Second Pass) reports have the following forms of rejects

a. Remember that 44% of the envelopes bypassed this pass.
b. 413 “Rejects” that the bar code could not be read or some other reason of not locating the voter in SCORE. Why were there any that were not caught in first pass?
c. 158 envelopes with no signatures. Were these the uncured ones?
d. 302 ballots that needed ID to be provided. Were these the uncured ones?
e. 14 VIP flagged envelopes. Why were there any that were not caught in first pass?
f. 16 envelopes that were out of scheme such as “Primary” ballots being return for the General Election. Why were there any that were not caught in first pass?
g. 2,515 were rejected in the Repass that had a manual signature rejection. That’s about 4% of those processed, which sounds about right.
h. That’s a total of 3,418 rejected for one reason or another in the RePass.
i. Yet the bottom line was that only 875 out of 130,094 were reported by the Clerk rejected for the entire election

10. The Fine Sort pass (third pass) generates a report

a. This report only has the batch ID number, the report time and the accumulated totals for each district. However checking the accumulated number by district can not be verified at this time since there is: (1) No report of how many were fed into the Fine Sort pass, nor (2) How many were rejected at this pass. This report is grossly incomplete.

11. Comparison of data from other reports

   i. Shows 130,094 were returned with 129,219 accepted, 875 were rejected and 3,275 were undeliverable. This is significantly different from Bitsy reports.

b. Report “BP-012B” titled “Ballot Reconciliation Report” dated 11/20/2013 @ 07:24 PM” reported 876 rejected for the following reasons for “Absentee / Mail Ballots”
   i. 6 - Rejected-Voted more than one ballot
Interim Description of Bitsy Operation
By Jim August, a very concerned Boulder County Mail in Ballot Voter, 6-4-13

ii. 1 - Rejected-Voided / Not Voted
iii. 1 - Rejected-Other
iv. 3 - Rejected-Empty Envelope
v. 3 - Rejected-Administrative Action
vi. 70 - Rejected-No Signature
vii. 73 - Rejected- Verification Affidavit not complete
viii. 344 - Rejected-Signature Discrepancy
ix. 349 - Rejected-ID required - Not provided

12. There seems to be an outstanding cure rate for the various rejects throughout the process.
   a. In the first pass there were 4,945 rejects not counting the 65% flagged by automatic
      signature discrepancy. However it appears that 2,007 of these rejects were fed to
      manual signature verification followed by Bitsy second pass. Why?
   b. In the second pass (RePass) there were 3,418 rejects which now includes those
      manually flagged for signature discrepancies. Yet 44% did not go through the
      second pass
   c. It appears that 6,356 rejects were pulled out on first and second pass with problems
      that needed to be cured.
   d. However the final total rejected was 875 or 876 depending on which report is used.
      That means that over 86% were cured but I have been told in the past that only about
      half were cured. So was this much higher cure rate reliable?

Suggestions:
1. There should be a 100% audit of the entire “cure” process.
2. There should be an in depth audit of the Mail Ballot Envelope processing.
3. There should be a great improvement in the credibility of all reports
4. Accurate data should be collected and reports should be generated for every step in the
   process
5. The Automatic Signature Verification (ASV) system should NOT be used until it can be
certified by an independent agency to have an error rate of less than 1 per 500,000 as
required by HAVA.
6. There should be detailed procedures for each step in the processing
7. All procedures should be available to be review by the public.
8. A detailed flow diagram should be developed and provided to the public. For example
diagram provide by the Clerk for mail in ballot processing only had the following blocks.
   i. Receive, track and Stage
   ii. Sort (Bitsy involved)
   iii. Verify Signatures (Bitsy involved)
   iv. Open and Separate
   v. Scan
   vi. Resolve for Voter Intent
   vii. Record CVR
Interim Description of Bitsy Operation
By Jim August, a very concerned Boulder County Mail in Ballot Voter, 6-4-13

Summary

There were about 130,000 mail ballot envelopes received by the County during the 2012 General Election and then processed with Bitsy.

Based on the findings in my investigation about 70,000 Ballot envelopes were not searched and removed for signature discrepancies. **If the real signature reject rate is about 4% then does it mean that about 2,800 envelopes were falsely accepted by not being sorted out in the second pass? That is Fraud!**

There are a lot of holes and major discrepancies in the accounting of envelopes as they move through the process. These gaps and discrepancies leave open to question the integrity of the entire Election. It is believed that it may be next to impossible to provide traceability of all envelopes through the entire Bitsy process.

There is no visible evidence that the Boulder County Clerk’s office has made any effort to correct any of these problems even after multiple formal complaints. The only apparent action has been various official statements given over the last 6 months *that they were investigating the performance.* So what can we expect for our next election?

The following is based on my analysis using various reports provided by the Clerk’s office.

131,517 entered the First Pass

128,493 entered Manual Signature Verification

58,226 entered the Second Pass, **Why so few here?**

54,778 came out Second Pass,

Yet 125,106 came out of Fine Sort to be opened. **Where did 70,328 MBEs reappear from?**

But 130,252 were counted. **Why were 5,146 more counted than came out of “Fine Sort”?**

Is it really “Election Fraud” or is it just “Incompetency” or was it the defective Bitsy? If it is all blamed on Bitsy problems, then it would be Fraud to ever use that system again.
Interim Description of Bitsy Operation
By Jim August, a very concerned Boulder County Mail in Ballot Voter, 6-4-13

Links to various data and other documents
Links to the complete, downloadable documentation of Bitsy Report and Appendix files mentioned in the pages above are at:  http://tinyurl.com/l4q4hbd

See separate PDF file for the following Appendices

1. Top View diagram of envelope flow through Bitsy,
2. Flow diagram of mail ballot envelope processing using Bitsy
3. Sample page of Vote By Mail manual Log
4. Sample “First Pass” report
5. Sample of “Repass” report
6. Copy of final “Fine Sort” report
7. Copy of page 1 of “Cumulative Report”
Interim Description of Bitsy Operation
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BELL & HOWELL "BITSY"

Bitsy Picture for those that may not have seen the beast:
SCORE database

Printed Batch Reports

Bell & Howell "Vote By Mail" system (Bitsy)

Bitsy database

Manual Prep 131,559
First Pass (Scan) Reject 128,521

Second Pass (Rapass) 58,609 Cured

Third Pass (Fine Sort to District) 69,912

Manual Envelope Opening 123,106

Counted by Hart System 130,252

Undocumented Processing 69,912

Questionable Manual Cure Uncured

Where did 5,146 come from?

Jim August 6-3-13
<table>
<thead>
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<th>Date</th>
<th>Op.</th>
<th>Exp.</th>
<th>Bitsy</th>
<th>Batch #</th>
<th>First Pass</th>
<th>Report</th>
<th>TO SCORE</th>
<th>SBS COUNT</th>
<th>SBS Rev</th>
<th>SBS Var</th>
<th>Verify</th>
<th>Batch Comp</th>
<th>SCORE</th>
<th>Batch #</th>
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<th>Batch</th>
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# Incoming First Pass Count Per Bin and Code Report

**Boulder County**  
**Elections Division**  
1750 33rd Street Suite 200  
Boulder, CO 80301

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**Total Read:** 1,365  
**Total Rejects:** 0  
**Total Out of Scheme:** 0

**Total Good:**  
- Reject: 0  
- DS-25: 87  
- DS-26: 389  
- DS-28: 147  
- DS-29: 7  
- DS-30: 643  
- DS-32: 5  
- DS-33: 12  
- No Sig Match: 70

**Total Challenged:** 1,365
## Incoming First Pass Count Per Bin and Code Report

**Boulder County**  
**Elections Division**  
1750 33rd Street Suite 200  
Boulder, CO 80301

**Printed On:** Saturday, November 03, 2012 @ 10:58:48 AM  
**Processing Date:** Saturday, November 03, 2012  
**Batch:** 252  
**Mailing:** 2012_BoCo_General  
**Job Name:** VBM_1_FP

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Total Fed: 985  
Total Read: 892

Total Good:

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877
# Incoming Fine Sort Group Report

**Boulder County**  
**Elections Division**  
**1750 33rd Street Suite 200**  
**Boulder, CO 80301**

Printed On: **Wednesday, November 07, 2012 @ 2:38:25 A.M.**  
Processing Date: **2012_BoCo_General**  
Job Name: **VBM_3_FS**  
Optimize Level: **Low**

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### Cumulative Report — Official
Boulder County, Colorado — 2012 Boulder County General Election — November 06, 2012

**Page 1 of 16**

**11/28/2012 07:18 PM**

**Total Number of Voters:** 180,826 of 248,953 = 72.63%

**Precincts Reporting 234 of 235 = 99.57%**

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**Cast Votes:**
- 129,426 99.37%
- 17,853 99.45%
- 32,418 99.11%
- 179,499 99.33%

**Over Votes:**
- 76 0.06%
- 21 0.12%
- 38 0.12%
- 135 0.07%

**Under Votes:**
- 748 0.57%
- 76 0.43%
- 254 0.78%
- 1,078 0.60%

---

**Precincts Counted:**
- 234

**Total:**
- 234

**Percent:**
- 100.00%

**Ballots Registered:**
- 180,712

**Percent:**
- 72.69%

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<td>Rejected-Administrative Action</td>
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