Maricopa County:

Forensic Election Audit



Introduction









Overview



- 2.1M ballots processed by hand
- Over 1,500 people involved
- Over 100,000 hours of time contributed







Security



- The perimeter was secured at the coliseum
- COVID checks & access validation
- Ballots & election equipment were secure in corrals
- 24/7 video surveillance & law enforcement guard







Tallying



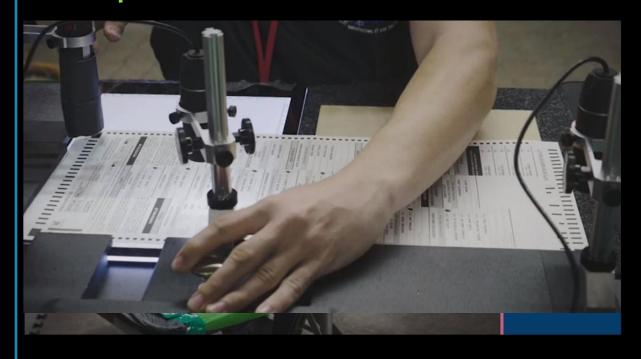
- All counters were Maricopa residents who voted in the last election.
- Each person was run through a standard background check.
- All three counters counted "blind" without any talking.
- Roughly every ~50 ballots tallies were compared and needed to agree or be redone.







Paper Examination (PE)



- High quality DLSR images captured of the front and back of all ballots
- Microscope images captured of key ballot locations
- Over 140TB of data storage for PE alone

Status





Ninjas Status — MC Forensic Audit

Current Status

- Complete
 - Hand-counting of all federal races
 - Image and microscope capture of all ballots
 - Review & Comparison of Official Results
 - Analysis of the Voter Rolls
- Expected Soon
 - Review of Splunk Logs and Routers via Settlement Agreement terms.
 - Completion of Paper Analysis



on Status — MC Forensic Audit

Current Status

- No Longer In Scope
 - Canvasses to confirm voter rolls
 - Removed from scope of work.
 - Review of tabulator configuration to check internet configuration.
 - Hardware tokens never provided by the County.
 - Review of Voter Roll System
 - Systems accessing rolls never provided by the County.
 - Review of ICX Devices
 - Systems never provided by the County.
 - Review of provisional ballots
 - Provisional Ballots Never Provided by County © Copyright 2021 - Cyber Ninjas - All Rights Reserved - Slide 13

Ballots & Tallying





Ballots & Tallying — MC Forensic Audit

Ballots & Tallying - Background

- Ballots that are damaged or can't be processed by a tabulator are duplicated.
- Damaged Sent to Duplicates (DSD) are the originals, DUPs the Duplicate.
- There should be one DSD per DUP.
- There should be a unique serial number to match up a DSD to its DUP.
- Duplicate ballots should be stored separately from original ballots.



Ballots & Tallying – MC Forensic Audit

Findings

- Duplicate ballots comingled with original ballots
- Duplicated ballots with incorrect & missing serial numbers
- Duplicates that reuse serial numbers
- More duplicates than original ballots

B Q Xel S cr	iption	T	YPE	BFIRM YOunt
ानुना विकार विकार विकार करा	allets:SD	g Ballot	S Presidential	DU P Żejna ł l Dydnaged
Wriginal Ballots Se		uplica	iit - t io n	DUP294984
DSM #ACHPOINTSAME, Duplicate Bal			jt_ SD	DU <u>P</u> 674379
Original Damaged Ba	II - I - CD	8 - E	SD	DUP1713295
Maricopa Coui	nty – Re e Ballots	porte 99	Biden	27,869 Board 1 Hand Dup 216
DUPBOARD3HAND0217	144	99	Biden	Board 1 Hand Dup 217
DUPBOARD3HAND0218	492	0	Biden	Board 1 Hand Dup 218



Ballots & Tallying – MC Forensic Audit

Findings

- Duplicate ballots comingled with original ballots
- Duplicated ballots with incorrect & missing serial numbers
- Duplicates that reuse serial numbers
- More duplicates than original ballots
 - Extra DUPS favor Trump & Jorgenson
 - Extra DUPS favor McSally

Description	Damaged Sent to	Duplicate	Expected %	% Difference
Description	Duplication (DSD)	Ballots (DUP)	To Candidate	To Candidate
Trump	995,404	996,896	48%	58%
Biden	1,040,873	1,041,733	50%	33%
Jorgenson	31,501	31,580	2%	3%

Description	Damaged Sent to Duplication (DSD)	Duplicate Ballots (DUP)		% Difference To Candidate
McSally	983,662	985,100	47%	55%
Kelly	1,064,336	1,065,266	51%	36%



Tyber Ballots & Tallying — MC Forensic Audit Ninjas

Tally Results – (Based on DSD)

	McSally	Kelly	Write In / Over / Under	Total
Maricopa County Forensic Audit	983,662	1,064,336	40,398	2,088,396*
Official Maricopa County Canvass	984,203	1,064,396	40,964	2,089,563
DELTA	(541)	(60)	(566)	(1,167)



Tyber Ballots & Tallying — MC Forensic Audit Ninjas

Tally Results – (Based on DSD)

	Trump	Biden	Jorgenson	Write In / Over / Under	Total
Maricopa County	995.404	1,040,873	31,501	20,791	2,088,569
Forensic Audit				20,732	
Official Maricopa	995 665	1,040,774	31,705	21,419	2,089,563
County Canvass	333,003	1,040,774	31,703	Z1, T13	2,003,303
DELTA	(261)	99	(204)	(628)	(994)

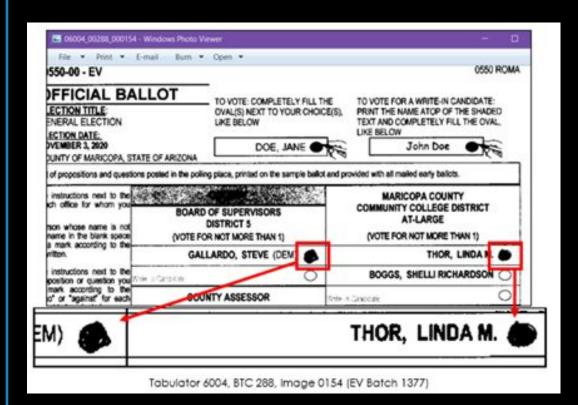
^{*} Slight difference in Presidential & Senate ballot totals are due to small differences in hand counts across 2.1M ballots

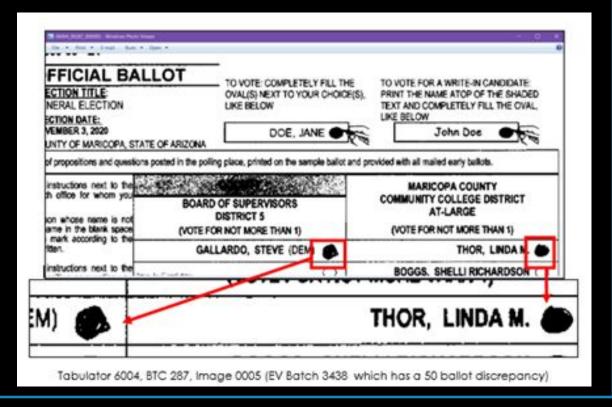


Ballots & Tallying – MC Forensic Audit

Findings

At least a batch of 50 ballots was run through the tabulators twice.





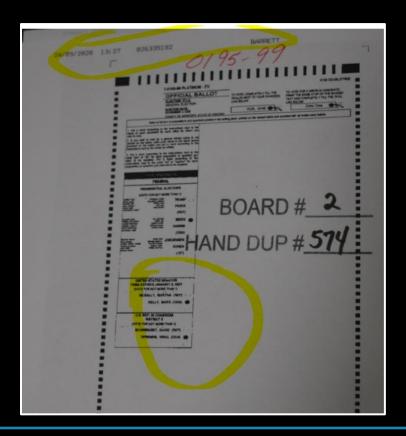


Ballots & Tallying – MC Forensic Audit

Findings

Several UOCAVA ballots have been double-counted





Official Results





Official Results - Background

- Official Canvass Tallies of the ballots cast
 - Per candidate, per precinct, provisional, etc.
- VM55 Final Voted File A list of all the people who cast a ballot in the election
 - Indicates method of voting and other details
- VM34 Full Voter File A list of all people eligible to vote
 - Released on a monthly basis



Definitions

- EV32 Early Voting Sents A list of all the ballots mailed out
 - Includes the date mailed, the address mailed to, the ballot type, etc.
- EV33 Early Voting Returns A list of all the ballots received for Early Voting
 - Includes the date returned and the method (Mail-in or in Person)



Election System Balance

- If the following situation happened
 - 10 people mailed in a ballot
 - 10 people voted early in person
 - 10 people voted on election day in person

- You would expect
 - The Official Canvas has a total of 30 votes across all the candidates / precincts etc.
 - The VM55 should show a list of 30 people:
 - 10 people who voted via mail-in
 - 10 via Early Voting in Person
 - 10 via Election Day in person
 - EV32 Sents would show 10 ballots mailed
 - EV33 Returns would show 10 mail-in ballots received, and 10 mail-in ballots for EV In Person

None of these system balance.



Findings

- Official Canvass has 3,432 more ballots cast than the list of people who show as having cast a vote (VM55)
- 9,041 mail-in voters show returning more ballots (EV33) than they were sent (EV32).
- 277 Precincts show in the Official Canvass as having more ballots cast than people who showed up to vote (VM55) for a total of 1,551 excess votes.
- There are 2,472 ballots shown in EV33 that don't have corresponding entries in the VM55, and only 2,042 ballots show as rejected in the Official Canvas for a discrepancy of 430.
- 397 mail-in ballots show as received (EV33) that never show as sent (EV32).
- 255,326 Early Votes show in the VM55 that do not have a corresponding EV33 entry.

Voters Who Moved





Ninjas Moving-MC Forensic Audit

Moving - Background

• Individuals who voted were compared against a commercial database called Melissa to see who moved before the October 5th cutoff.

Melissa Personator

- Checks addresses associated with a user
- Shows prior and current addresses
- Tracks moves and move dates
- Tracks date-of-birth and death dates



Moving – MC Forensic Audit

Findings

- 23,344 voters voted via mail-in ballot even though they show in Melissa as having moved, and no one with the same last name shows as living at the address.
- 2,382 voters voted in-person even though they show in Melissa as having moved out of Maricopa County.
- 2,081 voters moved out-of-state during the 29 days before the election and were given a full ballot instead of a presidential-only ballot.

Voter Rolls





Voter Rolls - Background

 Registration dates do not generally change unless to correct a mistake.

Thank you for your questions.

Are there any circumstances in which someone's registration date can change?

Generally, a voter's date of registration does not change outside of correcting a mistake. The date of registration is the date where the voter first registered to vote in in the county, while any updates to a voter's registration is tracked separately.

The only time a voter may have two dates of registration is if their registration has previously been cancelled and the voter registers again. The original record could be cancelled for a variety of reasons, including death of the voter, voter request, or the voter has moved outside Maricopa County. Only the latest voter registration record is considered valid and a voter cannot use their cancelled record.



Voter Rolls - Background

- AFFSEQ is a unique number found in the voter roll system that is associated with a single transaction to a single user.
 - That change transaction has an image to go along with it to reference the document that authorized the change.
 - AFFSEQ's should be unique and only happen once and definitely shouldn't be shared by users.
- A.R.S. 16-152 requires that complete names be used.



Ballots & Tallying – MC Forensic Audit

Findings

- Potentially as many as 5,047 individuals who voted in more than one county for up to 5,295 votes.
- 393 voters with incomplete names voted in the election.
- 198 individuals registered after the October 15th cutoff and voted in the election.
- 2,861 voters have shared an AFFSEQ number with another voter at some point.
- 282 potentially deceased voters voted in the election.
- 186 people potentially have duplicate voter IDs that both voted.

Description	Number of	
Bescription	voters	
Last name only	15	
Last name is an	9	
initial only	9	
No last name	45	
First name is an	224	
initial only	324	
Total	393	