

## All.Net Analyst Report and Newsletter

### *Welcome to our Analyst Report and Newsletter*

#### **An initial review of election fraud claims (change log at the end)**

I have seen a number of election fraud claims asserting evidence related to digital systems in recent weeks, and after such claim was made with wildly inadequate apparent basis, I commented on it indicating my willingness to look from a neutral perspective at such claims. My comment was, in essence, that a graphic provided was of no value to discerning what may or may not have happened, and that on its face it indicated nothing of particular import, that there was no provenance associated with it, and that people were jumping to conclusions when they should be asking questions. I got an affirmative response and ended up looking over several such claims and some of the supporting asserted data. I thought I would share what I found along the way.

#### **Some of my background**

Among the things I do in my career is digital forensic evidence examination. Normally such a report will be a far more formalized and detailed one than this short write-up provides, and it would include an extensive background of relevant expertise (knowledge, skills, training, education, and experience). I won't go into any substantial depth in that here, but if you are interested, you might start by reviewing all the material at <http://all.net/> and go from there.

Relevant to the particulars at hand, I have substantial experience in digital forensics, including working on cases of questioned digital documents and acting and testifying as an expert witness on cases in US local, state, and Federal courts. I have published peer reviewed papers and two books on digital forensics, have been a keynote speaker and presenter at international conferences on the subject, have taught graduate classes in accredited university programs, taught POST certified law enforcement classes, done funded research on closely related subjects, and earned a Ph.D. in electrical engineering.

#### **The items in question**

I have looked at several claims, items of asserted evidence (not actual evidence as it hasn't been accepted by any court of competent jurisdiction to my knowledge at this point) and a few affidavits and videos explaining asserted claims in this regard. I will go into more detail on the way, but to be clear, none of the items of asserted evidence have been provided with adequate provenance to establish definitively their reliability or authenticity. For clarity, it's not that I don't believe them to be real things, but how they came to be and how they came to me remains unclear at this point. The two most potentially relevant items of potential interest are:

- A spreadsheet file I received asserting to have all of the vote counts for Biden and Trump (alphabetical order) reported in Pennsylvania with time stamps and district information. These are asserted as from the New York Times, but I have not yet been able to independently verify the actual source or determine the reliability of authenticity of the content. I know that I don't have "original evidence" in this instance because I received it from a Google drive as an Open Office "ODT" file and, as far as I am aware, this is not a format output by any of the actual vote counting or tallying mechanisms in Pennsylvania. Indeed the file self-identified apparently "json" sources.

- A graphical image asserted to be a photograph taken by a digital camera of a display on a computer system within a facility where votes were counted. While I haven't examined the actual depiction in any depth using forensic methods, one of the parties I spoke to in this regard asserts that he was physically present at the time in the place and that the picture reflects what he personally observed, even though he did not himself take the picture. As such, we don't know really whether the specific items in the image are real or not, but we might reasonably say that whether the depiction is reliable and authentic, we have a potential witness that could bring some level of relevant testimony to bear.

### Assertions made

There are several assertions made regarding the events on election counting days and at counting places, and to quote Stalin (inaccurately no doubt, at least because I believe he spoke Russian, not English, in his day-to-day life), "Elections are not won in the voting booths, they are won in the counting rooms". In essence, when one claim is challenged another will be put up, but the heart of the claims with potential evidence (as opposed to those based on suppositions and potentials but no real facts) is that votes were either (1) counted when they should not have been, or (2) incorrectly attributed to the wrong parties.

I will largely ignore other claims, not because they might not be valid, but because they haven't (yet) come to me with any digital evidence to examine. As a digital forensic evidence examiner, I am not qualified to analyze speculations or claims about how people may have behaved or their motives or even the meaning of the terms they used in communicating in the dialects they may have come from.

### Election system background

I have not examined any of the specific machines or details at this point, but I can speak generally about how ballots are processed and counted, based on information in the public about how elections operate, my personal observations as a voter, and my general knowledge of systems of this sort. However, in order to get definitive answers a more detailed examination of the specifics of each asserted claim would be required.

As a general rule, voting systems involving paper ballots (such as those at issue in the asserted claims), including mail-in ballots, are operated so as to make it hard to do two things at substantial scale; (1) it should be hard to associate an actual vote to an individual voter unless the voter decides to reveal it, and (2) it should be hard to make enough alterations to counts to effect the ultimate result of an election outcome without such alterations being readily apparent, or in very close elections, being readily apparent on audit and recount. All of the activities described here except the original marking of ballots themselves, are carried out with physically present representatives from all relevant parties and/or by postal workers.

Election systems (as a whole) do this by using redundancy and separation of duties. I will step through the process for paper ballots indicating at a simplistic level how they work:

- **Voters register.** This is how the original identity of the voter is established and how they come to get a ballot. This usually involves some approved method of verifying that they are real people, have the right to vote in the election, are alive at the time, etc. This is subject to challenge by all parties to the election process and is codified in law.

- **Voters get a ballot.** Every voter that will vote ultimately gets one or more physical pieces of paper called a ballot. Each ballot is uniquely identified, typically by a bar code or QR code or some such thing, and typically they also have numbers on the page. Ballots tend to have a part that can be torn off by the voter as a receipt, and since they possess that, they can independently confirm specifics of their vote, if only in theory.
  - If vote by mail is used, each voter also gets an envelope individually marked for traceability, and that holds and seals the ballot when submitted for delivery. If a voter doesn't get a ballot on time, they may (and often do) complain. If there are very few complaints, a systematic approach to subverting this process in large quantity has not likely occurred. For complaints in small numbers, new ballots are issued and lost ones are invalidated so they cannot be later counted. In other cases, identity is checked before the counting process, double votes flagged, and investigations started, with criminal charges filed if intent is found.
- **Voters vote.** For mail-in ballots, this is done at home (or elsewhere at the voters' discretion). At the polling place it is done at the location of the voting booth. Again, if voters for some reason are unable to do this (e.g., the dog ate their ballot) and wish to vote, they tend to complain, get another ballot (in person or by mail), and proceed.
- **Voters submit their ballots.** If by mail, they submit it to the US Postal Service, a military delivery service, or other carrier for delivery. If by placement in a repository of another sort, they do so by placing their ballot there. If in person, they submit their ballot to a locked box with a slot to accept ballots. In California, at least one repository was lit on fire, but no such incidents I am aware of occurred in the states where I looked at these issues.
- **The ballots are delivered to a counting room.** For vote my mail, in some states at least, you can go to the Internet and confirm your ballot (the envelope it is contained in) was accepted by the postal service, delivered to the election officials, and had proper signatures attached (in which case your ballot will be counted) or if it hasn't happened this way, you have the opportunity to cure it. An example of an anomaly is a voter getting their ballot at the polling place but not submitting it to be counted. In any national election this happens a few times here and there. Ballots are locked in boxes.
- **Voters are validated.** Either in the incoming processing of mail-in ballots, or in-person at the voting place, each individual ballot is first determined to be from or is given to an identified registered voter, and they are marked as having gotten and/or used their ballot. If you try to take my place and are recognized, you will be arrested, and if two ballots are associated with one person, they are not counted twice (or possibly at all) and an investigative process is used to resolve the issue. Only ballots from not-yet-voted registered voters are allowed into the system for counting, and if substantial attempts to forge ballots or otherwise wreck havoc are attempted, these will normally be detected even in numbers of a few ballots. For clarity, few anomalies were found in the elections at issue and none of sufficient numbers to have a material effect on the outcomes. An example is an envelope arriving without signature, but with identifying information. In some jurisdictions, the election officials try to check with the voter to correct (cure) the ballot before counting, and if cured, the anomaly is resolved and the vote counted. If not cured, the vote may not be counted or counted as a "provisional".

- **Ballots are validated.** Ballots can have various anomalies, such as coffee stains, not being marked, etc. And low quality forgery attempts can be made. These are detected in the counting room when examined, without voter information associated with them, by at least one person representing each party, and typically also by a supervisor of some sort. Questioned ballots are separated for independent processing.
  - Questioned ballots are examined by parties from all relevant sides, and if disputes remain and cannot be resolved on site, they are set aside for potential litigation. However, courts will not consider them unless they have a potential to change the outcome of an election. Thus the quantity of questioned ballots must be large enough, in the aggregate, to make it worth further examination by the courts.
  - In the elections at issue, nothing at this stage was identified in sufficient quantity to warrant a court looking further. For example, one of the cases below involved at most 35 identified ballots, and the margin was in excess of 80,000 votes.

In counting rooms, typically, no marking devices are allowed, there are no trash containers or other receptacles, video cameras record all of the events, there are people present from each party every time any ballot is handled, there are independent observers and additional observers allowed from each party to the election, and there is no realistic path for unnoticed alteration of substantial numbers of ballots once there.

- **Votes are counted by hand or by a counting machine.** If by hand, I won't discuss it here, but generally, multiple parties are present and have to agree on each vote or it goes to an appeals process for resolution. If by counting machine, the machines count the number of marks in each location on each the ballot, add the number of marks found at each location, and report the results, typically on digital media, such as a USB digital storage device. The ballots remain physically in place, so they can be checked later in an audit or other similar process. In Georgia they apparently did this. So if there is a serious question regarding the counting mechanisms, you can go back to the physical ballots to settle the issue. Typically, the counting machines are not connected to any outside system, and have been programmed and tested by all parties in advance to assure that they count correctly. In a recount, ballots are sent through machines again, but not necessarily the same machine for each ballot. Unless there is only one counting machine in a facility, ballots will end up going through different machines (on a statistical basis) on recount, so any one machine that operated differently will get detected in such a process, and manual review can proceed. There tend to be small numbers of differences in mechanical recounts, largely because the edge between a valid and invalid marking on a ballot varies slightly with the paper alignment and the calibration of the hardware in each machine. So a few vote markings will be made or missed differently if you count enough ballots enough times. If such differences are substantial in context, manual review may be necessary.
- **Votes are tabulated by a tabulating center.** In most states, local counting rooms transmit (physically and/or electronically) their counts to tabulation centers where state-wide tabulations are assembled to provide total votes for candidates. The tabulation systems don't count the votes on ballots, and the vote counting mechanisms don't tabulate votes. Typically, the tabulation center checks back via telephone to verify that the data as tabulated is correct, as part of the certification process. So if they disagree

substantially (or in this case at all), investigation will be done to resolve any anomalies. Tabulation centers also often compare the total number of votes made (according to the tabulation results) against the number of voters submitting ballots (according to the registration system for validating voters when they submit ballots), so any missing votes are found and any excess votes are identified. There are also things like over-votes (e.g., when a voter marks more than one candidate for President) and under-votes (e.g., when a voter doesn't mark any candidate for an office), and all of these are tabulated and compared. There are also mechanisms for other voting processes such as ones where top 3 candidates win, and so forth.

I will stop here, not because there aren't more steps with further redundancies, but because we have reached the end of the relevant issues identified to me at this point. I think it is important to note that the redundancy and separation of duties makes undetected cheating harder than it would be if a threat only had to alter a single machine or mechanism.

### **Specifics of the asserted “frauds” and my reviews**

There are two asserted items involved in this discussion:

- Votes were counted when they should not have been
- Votes were incorrectly attributed to the wrong parties (shifted)

The latter claim requires intentional alteration of the normal processing by voting mechanisms and, because of the inherent redundancy in voting systems would require a wide conspiracy.

### **Claim: Votes were counted when they should not have been:**

The asserted basis for this claim is that in the counting room in Detroit, MI, envelopes containing ballots and marked as potentially invalid were entered into a computer system, and that this implies something was wrong here. Here is an example of a posting in this regard:

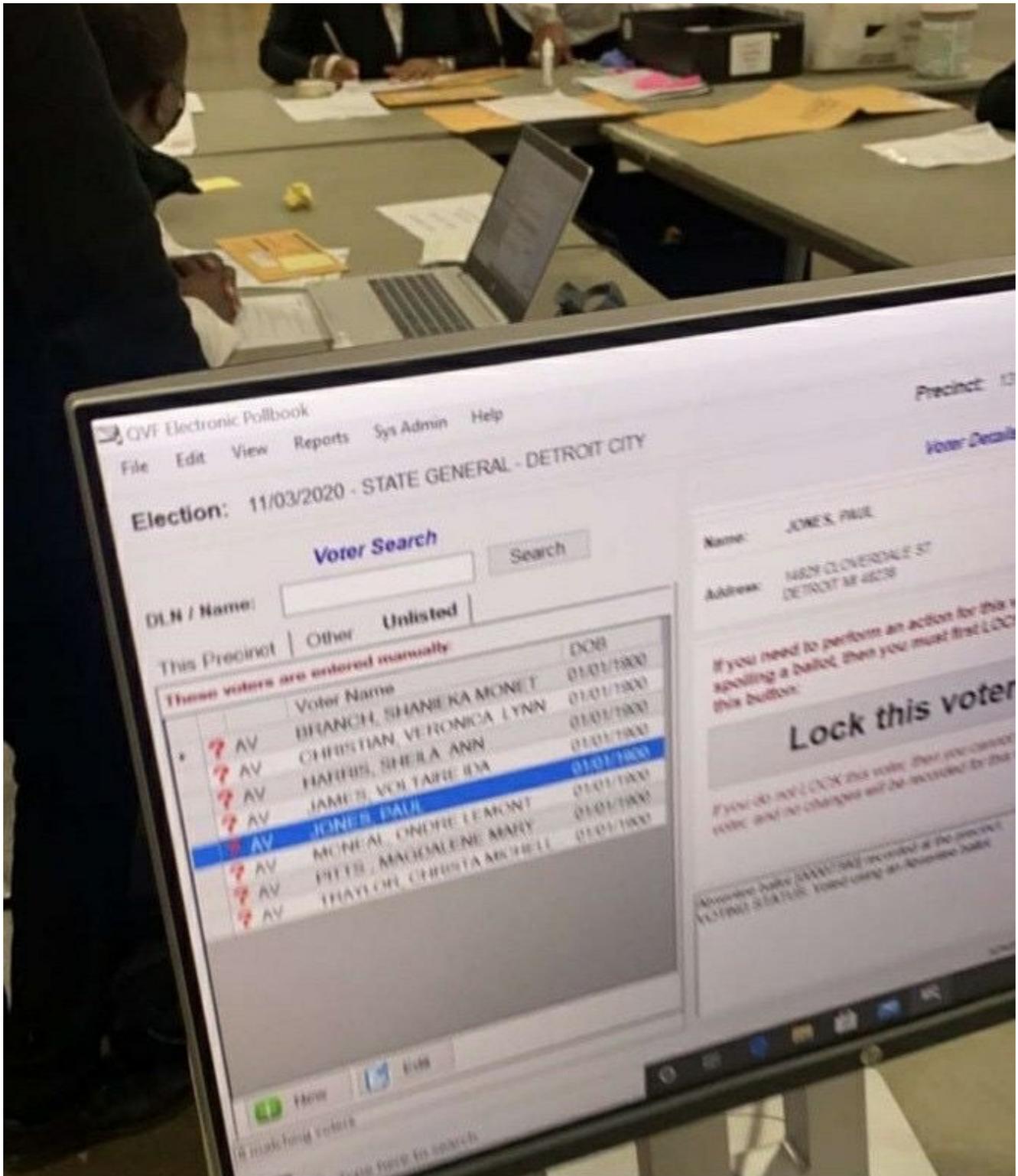
I am not saying this definitely will change the final result. However, America needs to know the extend of irregularities that DID HAPPEN. See DOB column that suggest that MANY votes were counted despite NO VALID PROOF of IDENTIFICATION [#COUNTLEGALVOTES](#)

The graphical image provided below appears to be a photograph of a screen with output from “QVF Electronic Pollbook” software for the election at issue. I haven't examined the image for internal indicators of how it came to be, and the provenance is unclear, however, I will assume for the purposes of this discussion that the picture was taken at the counting room at the location indicated, and has not been altered after taken in any material way.

The picture shows dates of birth of 01/01/1900, consistent with a person born at the turn of the 19<sup>th</sup> century to the 20<sup>th</sup> century, who would now be ~120 years old. Clearly there aren't likely to be 8 such actual voters voting in Detroit at this time. The indications include: “These voters are entered manually”, “Lock this voter...”, A big red “?” next to every row, “Voter Search” at the top, and some other harder to read details.

A witness who indicated being present stated to me during a call that there were a total of 35 envelopes, all with yellow colored stickers indicating irregularities in these envelopes and that they were being entered into this system at the time. They were not at a table where votes were being processed for counting, and he has no knowledge of whether any ballots they

might have contained were ever counted, or what this system is used for. He tried to ask, but was not answered in regard to these questions.



The graphical image in question

I looked up “QVF Electronic Pollbook” (from the top of the screen) in a Google search and found the following:

[https://www.michigan.gov/sos/0,4670,7-127-1633\\_11976\\_60889---,00.html](https://www.michigan.gov/sos/0,4670,7-127-1633_11976_60889---,00.html)

This is apparently an official State of Michigan Web site indicating:

...

#### *Electronic Pollbook (EPB) Introduction*

*The Bureau of Elections developed computer software that can be used in the polling place on election day to process voters and generate precinct reports. The electronic pollbook (EPB) software is a unique download from the Qualified Voter File (QVF) software that can be loaded on to a laptop prior to each election. The software allows election inspectors to look up a voter's registration record, confirm their registration is correct and assign a ballot to that voter, essentially automating the typical paper process. After the election is complete, the EPB software will generate reports to complete the official precinct record (paper pollbook) and a voter history file that can be uploaded into the QVF software to update voter history in a matter of minutes. Free laptop computers are available to EPB users via a Federal grant program, funded by the Help America Vote Act (HAVA). ...*

The page references “Electronic Pollbook Refresh Election Inspector Manual For Windows 10 & BitLocker Flash Drives”, dated September 4, 2020, and apparently an official manual at: [https://www.michigan.gov/documents/sos/EPB\\_Manual\\_Win10\\_526477\\_7.pdf](https://www.michigan.gov/documents/sos/EPB_Manual_Win10_526477_7.pdf)

I downloaded this for brief review and found on page 13 of 34, what appears to be a screen area titles “Voter Search”. The procedure indicated is:

### **Add an Unlisted Voter**

If a voter is not found under the **This Precinct** tab or the **Other** tab, the citizen was not registered to vote in the Qualified Voter File (QVF) for that jurisdiction at the time of the EPB download.

In other words, this system is for tracking VOTERS WHO WERE NOT REGISTERED at the time of the download. This is apparently part of the standard and normal procedure for handling apparently unregistered voters. It then describes the process for determining if the voter was in fact registered after the download and issuing a provisional ballot as/if appropriate. This is pretty much the opposite of proof that “.. irregularities that DID HAPPEN. ... suggests that MANY votes were counted despite NO VALID PROOF OF IDENTIFICATION...”

### **Claim: Votes were incorrectly attributed to wrong parties: Dominion Voting Systems**

This claim is much more complex, only provided in videos, and asserts and shows information generated in a spreadsheet by doing various things with things asserted to be voting records. As such, there are several areas that could reasonably be questioned, starting with the origin and provenance of the original data, how it was converted into a spreadsheet, and how the spreadsheet was manipulated to produce the asserted results, and ending in the so-called analytical results.

This claim is also supported but not necessarily dependent upon claims about electronic machines associated with the vote counting and tallying process being undermined. It asserts credence from the unrealistic claims of a perfect system by election officials who may or may not know much about the underlying technology, and asserted facts about the competence or intentional subversion intent by the voting machine makers and/or those who programmed machines for the election at hand. Widely available counter-arguments in the media do not get at the underlying technical issues, preferring to assert the ridiculous nature of claims associating dead politicians from other countries planning the election fraud before anybody knew who the candidate even were.

I will disregard all of this in my review of the information made available to me and try to stick to the specific claims and asserted information to support those claims. I will start with the claims about the machines themselves. I am, again, assuming without basis that what was provided to me reflects what was done and that all the data provided is what was observed.

The first of the related claims regards the so-called “Dominion” and “Edison Research” systems. This is from a court filing Case 2:20-cv-13134-LVP-RSW ECF No. 1-15, PageID.631 Filed 11/25/20 Pages 1 – 17. The names are blanked out in the version I received, but they may be obtained by looking up the actual court records. I did not do so. The affidavit is from:

*“an electronic intelligence analyst under 305th Military Intelligence with experience gathering SAM missile system electronic intelligence. I have extensive experience as a white hat hacker used by some of the top election specialists in the world. The methodologies I have employed represent industry standard cyber operation toolkits for digital forensics and OSINT, which are commonly used to certify connections between servers, network nodes and other digital properties and probe to network system vulnerabilities.”*

This individual (the analyst) seems to claim expertise that would qualify them to do a decent job of looking things up. However, as we will see, this is a questionable conclusion. The analyst apparently did a “public network scan of Dominionvoting.com on 2020-11-08” which is asserted to have “revealed the following inter-relationships and revealed 13 unencrypted passwords for dominion employees, and 75 hashed passwords available in TOR nodes:” Now to be clear, this scan is not merely an external probing of the computer system(s) used for “dominionvoting.com”, but also apparently includes lookups of other systems currently or historically in contact with that domain. Hashed passwords in TOR nodes, for example, are not information stored at the dominionvoting.com site. The analysis uses information stored elsewhere and asserting to be about things at that site. So in essence, the analyst was doing what people trying to break into a site might do for intelligence and things that investigators or intelligence operatives might do, not what a forensic examiner would do to examine a system.

As an example, the claim is that “The same public scan also showed a direct connection to the group in Belgrade as highlighted below”, is based somehow on a “robtex.com/dns-lookup/dominionvoting.com showing host names as shown here.

IP numbers of the name servers	Subdomains/Hostnames
2400:cb00:2049:1::adf5:3bb3	Domains or hostnames one step under this domain
2606:4700:50::adf5:3aad	barracuda.dominionvoting.com
2803:f800:50::6ca2:c0ad	<b>belgrade.dominionvoting.com</b>
2803:f800:50::6ca2:c1b3	webmail.dominionvoting.com
2a06:98c1:50::ac40:20ad	www.dominionvoting.com
108.162.192.173	4 results shown.
108.162.192.170	

Note that the name “belgrade” as part of a hostname indicated nothing whatsoever about an actual location. It is merely a name given to a server by the people authorized to give names

to hosts. For example, I used to have a server called red.all.net, but that doesn't mean it was somehow "connected to" a communist organization. The analyst did not apparently take the next step of looking up information on the IP addresses or domain names. I did:

```
>nslookup belgrade.dominionvoting.com
Server:      127.0.1.1
Address:    127.0.1.1#53
```

```
Non-authoritative answer:
Name:   belgrade.dominionvoting.com
Address: 82.117.198.54
```

And then:

```
>whois 82.117.198.54
% This is the RIPE Database query service.
...
% Information related to '82.117.196.0 - 82.117.204.255'
% Abuse contact for '82.117.196.0 - 82.117.204.255' is 'abuse@sbb.rs'
inetnum:      82.117.196.0 - 82.117.204.255
netname:      SBBNET
descr:        fixed /30 peer ranges for business customers
country:      RS
...
person:       Dragoljub Spasojevic
address:      Serbia BroadBand
address:      Bulevar Zorana Djindjica 8a
address:      11000 Beograd
address:      SRBIJA
org:          ORG-SKMS1-RIPE
phone:        +381 11 4001199
phone:        +381 11 4001399
fax-no:       +381 11 4001053
nic-hdl:      DS7777-RIPE
mnt-by:       SBB-MNT
created:      2008-09-18T11:23:21Z
last-modified: 2017-10-30T22:02:54Z
source:       RIPE # Filtered
...

```

So "belgrade..." uses an IP address apparently managed by Serbia Broadband and has since 2017. But this doesn't mean it's actually in Belgrade. On the other hand, [www.dominionvoting.com](http://www.dominionvoting.com) leads to:

```
>whois 104.18.90.9
# ARIN WHOIS data and services are subject to the Terms of Use
# ...
NetRange:     104.16.0.0 - 104.31.255.255
CIDR:         104.16.0.0/12
NetName:      CLOUDFLARENET
...
Organization: Cloudflare, Inc. (CLOUD14)
```

RegDate: 2014-03-28  
Updated: 2017-02-17  
...  
OrgName: Cloudflare, Inc.  
OrgId: CLOUD14  
Address: 101 Townsend Street  
City: San Francisco  
StateProv: CA  
PostalCode: 94107  
Country: US  
RegDate: 2010-07-09  
Updated: 2019-09-25  
Ref: <https://rdap.arin.net/registry/entity/CLOUD14>

This is an ISP operated from San Francisco, CA, and has been registered since 2014. All of this of course tells us nothing meaningful about the equipment at hand in this election, but it does show that the analysis was incomplete and didn't use the more authoritative information sources readily available. A LinkedIn search was also used, but LinkedIn data is provided by the account holder, and it has not been established as reliable. Again, these are techniques intelligence analysts use, but are not sound for legal purposes.

It is important to note the use of the term "connection" in the writing of the report by the analyst. A connection in this regard merely means something found in common. For example, my nickname is Fred, and there is someone from China with a nickname of Fred who was involved in ... So be careful in reading these uses of "connection". Here is an example I found that seemed to me to be really ridiculous:

*"Dominionvoting is also dominionvotingsystems.com, of which there are also many more examples, including access of the network from China. The records of China accessing the server are reliable."*

This conclusion is stated with no facts behind it. So I looked up dominionvotingsystem.com, and found the following information (**emphasis** added and used for **my typing**)

```
>host dominionvotingsystem.com
dominionvotingsystem.com has address 34.102.136.180
>whois dominionvotingsystem.com
Domain Name: DOMINIONVOTINGSYSTEM.COM
Registry Domain ID: 2572261610_DOMAIN_COM-VRSN
Registrar WHOIS Server: whois.godaddy.com
Registrar URL: http://www.godaddy.com
Updated Date: 2020-11-13T20:42:00Z
Creation Date: 2020-11-13T20:42:00Z
Registry Expiry Date: 2021-11-13T20:42:00Z
Registrar: GoDaddy.com, LLC
Registrar IANA ID: 146
Registrar Abuse Contact Email: abuse@godaddy.com
Registrar Abuse Contact Phone: 480-624-2505
...
>nsllookup 34.102.136.180
...
180.136.102.34.in-addr.arpa name = 180.136.102.34.bc.googleusercontent.com.
```

Hopefully you caught the difference. I didn't include the "s" at the end. This is apparently not registered to Dominion Voting Systems, and of course it was created "**2020-11-13T20:42:00Z**", or in other words November 13, 2020 – **AFTER** the election. So somebody created this domain after the election. While that's not the one being asserted in this affidavit, there is no more basis provided for the one the affidavit claimed. I also looked up the claimed dominionvotingsystems.com:

```
>whois dominionvotingsystems.com
Domain Name: DOMINIONVOTINGSYSTEMS.COM
Registry Domain ID: 2530599738_DOMAIN_COM-VRSN
Registrar WHOIS Server: whois.godaddy.com
Registrar URL: http://www.godaddy.com
Updated Date: 2020-05-27T14:59:11Z
Creation Date: 2020-05-26T15:48:57Z
Registry Expiry Date: 2021-05-26T15:48:57Z
Registrar: GoDaddy.com, LLC
Registrar IANA ID: 146
Registrar Abuse Contact Email: abuse@godaddy.com
Registrar Abuse Contact Phone: 480-624-2505
Domain Status: clientDeleteProhibited https://icann.org/epp#clientDeleteProhibited
Domain Status: clientRenewProhibited https://icann.org/epp#clientRenewProhibited
Domain Status: clientTransferProhibited https://icann.org/epp#clientTransferProhibited
Domain Status: clientUpdateProhibited https://icann.org/epp#clientUpdateProhibited
Name Server: NS1.DNS.COM
Name Server: NS2.DNS.COM
DNSSEC: unsigned
URL of the ICANN Whois Inaccuracy Complaint Form: https://www.icann.org/wicf/
```

Note the registration date – 2020-05-26. This domain was registered this year, only 4.5 months before the election. Note also that the Web site didn't respond (when I tried). Now here's the actual URL for Dominion Voting Systems: <https://www.dominionvoting.com/>

```
>whois dominionvoting.com
Domain Name: DOMINIONVOTING.COM
Registry Domain ID: 263216014_DOMAIN_COM-VRSN
Registrar WHOIS Server: whois.godaddy.com
Registrar URL: http://www.godaddy.com
Updated Date: 2020-11-22T15:26:18Z
Creation Date: 2005-11-21T21:46:43Z
Registry Expiry Date: 2021-11-21T21:46:43Z
Registrar: GoDaddy.com, LLC
Registrar IANA ID: 146
Registrar Abuse Contact Email: abuse@godaddy.com
Registrar Abuse Contact Phone: 480-624-2505
Domain Status: clientDeleteProhibited https://icann.org/epp#clientDeleteProhibited
Domain Status: clientRenewProhibited https://icann.org/epp#clientRenewProhibited
Domain Status: clientTransferProhibited https://icann.org/epp#clientTransferProhibited
Domain Status: clientUpdateProhibited https://icann.org/epp#clientUpdateProhibited
Name Server: JASON.NS.CLOUDFLARE.COM
Name Server: JOAN.NS.CLOUDFLARE.COM
DNSSEC: unsigned
URL of the ICANN Whois Inaccuracy Complaint Form: https://www.icann.org/wicf/
>>> Last update of whois database: 2020-11-27T12:44:21Z <<<
```

Registered in November of 2005, this domain has been around for a while and likely reflects the actual company of interest to the affidavit writer.

The individual submitting the affidavit apparently did not consider that they were looking up a recently formed unrelated domain with a similar name, presumably part of an intentional deception campaign of some sort. I don't know who did this, and I haven't sought to investigate it, but the the author of the affidavit chose to include it in a report as an attempt to relate the company to China. The rest of the analyst details are relating to showing that the system this points to is in China. But this information should be disregarded unless significant further investigation shows something relating it to the actual company being discussed. On its face the analysis should be considered unreliable, at least in this regard. The analyst claims to

Domain Name: dominionvotingsystems.com  
 Registry Domain ID: 2530599738\_DOMAIN\_COM-VRSN  
 Registrar WHOIS Server: whois.godaddy.com  
 Registrar URL: http://www.godaddy.com  
 Updated Date: 2020-05-26T15:48:58Z  
 Creation Date: 2020-05-26T15:48:57Z  
 Registrar Registration Expiration Date: 2021-05-26T15:48:57Z  
 Registrar: GoDaddy.com, LLC  
 Registrar IANA ID: 146  
 Registrar Abuse Contact Email: abuse@godaddy.com  
 Registrar Abuse Contact Phone: +1.4806242505  
 Domain Status: clientTransferProhibited <http://www.icann.org/epp#clientTransferProhibited>  
 Domain Status: clientUpdateProhibited <http://www.icann.org/epp#clientUpdateProhibited>  
 Domain Status: clientRenewProhibited <http://www.icann.org/epp#clientRenewProhibited>  
 Domain Status: clientDeleteProhibited <http://www.icann.org/epp#clientDeleteProhibited>  
 Registrant Organization:  
 Registrant State/Province: Hunan  
 Registrant Country: CN  
 Registrant Email: Select Contact Domain Holder link at <https://www.godaddy.com/whois/results.aspx?domain=dominionvotingsystems.com>  
 Admin Email: Select Contact Domain Holder link at <https://www.godaddy.com/whois/results.aspx?domain=dominionvotingsystems.com>  
 Tech Email: Select Contact Domain Holder link at <https://www.godaddy.com/whois/results.aspx?domain=dominionvotingsystems.com>  
 Name Server: NS1.DNS.COM  
 Name Server: NS2.DNS.COM  
 DNSSEC: unsigned

know about domain spoofing of this sort, but decide not to take it into account in this instance. As an intelligence operative, they should be keenly aware of attempts at foreign interference in the US elections. This reflects a potentially intentional malicious subversion of facts.

The analyst next reports performing a “scan” of an Iranian company associated somehow with this name and produces a list of vulnerabilities, now claiming an Iranian connection and trying to link it to the name of an Obama-related organization, do a multiple step link analysis (we are all only a few links away from each other on this Earth when you do this sort of analysis), claims things about typo variations, claims that the company sold some patent rights to China in 2019 through a Canadian bank, and continues to meander through a myriad of irrelevant associations having nothing apparently to do with the matter at hand – the subversion of the US election. All of this to try to show that the elections were somehow rigged. It's called guilt by association, and has been used for many nefarious purposes throughout history.

I will look no further at this affidavit at this time, as it will take more time than it is worth to try to follow it through in this short write-up. However, I will note something that I think is worth mentioning. One quote stuck out (**emphasis** added):

*21. In my professional opinion, this affidavit presents **unambiguous evidence** that Dominion Voter Systems and Edison Research have been accessible and **were certainly compromised by rogue actors, such as Iran and China.** By using*

***servers and employees connected with rogue actors and hostile foreign influences combined with numerous easily discoverable leaked credentials, these organizations neglectfully allowed foreign adversaries to access data and intentionally provided access to their infrastructure in order to monitor and manipulate elections, including the most recent one in 2020. This represents a complete failure of their duty to provide basic cyber security. This is not a technological issue, but rather a governance and basic security issue: if it is not corrected, future elections in the United States and beyond will not be secure and citizens will not have confidence in the results.***

A few issues here. (1) the asserted profession does not include, as documented, expertise in all the relevant fields required to opine on all these issues, (2) as far as I am aware, nothing in the affidavit is evidence as it has not been admitted into a legal proceeding as such, (3) it makes conclusions not demonstrated by the facts provided, (4) it asserts facts that appear inconsistent with outside reality, and (5) these are conclusions far beyond what any real expert would assert from the information offered. Statements like “*certainly compromised by ...*” and “*these organizations neglectfully allowed foreign adversaries to access data and intentionally provided access to their infrastructure in order to monitor and manipulate elections*” are patently ridiculous conclusions based on only the information provided. In my experience, such a report would result in a Daubert challenge and prevent that analyst from being allowed to present in front of a jury, and possibly also in front of future juries.

#### **Claim: Votes were incorrectly attributed to wrong parties: Simulation and statistics**

In another variation on the theme of vote stealing, there is the claim that votes were somehow moved from candidate to candidate using the voting mechanisms to produce realistic looking counts that altered the outcome across multiple voting places in Philadelphia county, Pennsylvania. These claims are more specific, rather than the generic claims of association in the previous example, and rely on records asserted to be actual vote reports. Again, I have not sought any original records in this instance, but am merely relying on the information provided without proper provenance, and thus not considered reliable or authentic for legal purposes. I am assuming for the purposes of this write-up that these are what they are asserted to be, and that things like field names indicate the actual uses.

The asserted data set was provided to me in ODT format as a download from a Google drive. I downloaded it and made copies to process it with the open office spreadsheet application.

A video was provided with the asserted claims, starting with some claim about the ratios of votes (Trump to all) changing over time only in Philadelphia county, these changes asserted to represent changes in the shifting of votes between candidates across districts. I extracted the Philadelphia county records from the others, stored it in a separate spreadsheet, and went from there, sorting by various fields, and adding an additional field, the ratio of total votes over votes for Trump. This comes out to exactly 7 for the claims identified, making it easier than trying to verify a multi-digit fraction equal to about 1/7th. Here is an example extract:

73	2500	2020-11-04T07:08:18	PA	Philadelphia	62-26	42101-PH	0	0	0	#DIV/0!	#DIV/0!	NOVEMBER_04_2020_070818.json
74	1002	2020-11-04T07:08:18	PA	Philadelphia	04-21	42101-PH	256	255	1	0.003906	256	NOVEMBER_04_2020_070818.json
75	2150	2020-11-04T07:08:18	PA	Philadelphia	50-25	42101-PH	240	236	1	0.004167	240	NOVEMBER_04_2020_070818.json
76	971	2020-11-04T07:08:18	PA	Philadelphia	03-12	42101-PH	212	211	1	0.004717	212	NOVEMBER_04_2020_070818.json
77	1809	2020-11-04T07:08:18	PA	Philadelphia	38-04	42101-PH	197	194	1	0.005076	197	NOVEMBER_04_2020_070818.json
78	986	2020-11-04T07:08:18	PA	Philadelphia	04-05	42101-PH	189	187	1	0.005291	189	NOVEMBER_04_2020_070818.json
79	974	2020-11-04T07:08:18	PA	Philadelphia	03-15	42101-PH	303	300	2	0.006601	151.5	NOVEMBER_04_2020_070818.json
80	963	2020-11-04T07:08:18	PA	Philadelphia	03-04	42101-PH	150	148	1	0.006667	150	NOVEMBER_04_2020_070818.json
81	1138	2020-11-04T07:08:18	PA	Philadelphia	10-06	42101-PH	293	290	2	0.006826	146.5	NOVEMBER_04_2020_070818.json
82	1153	2020-11-04T07:08:18	PA	Philadelphia	10-21	42101-PH	280	275	2	0.007143	140	NOVEMBER_04_2020_070818.json
83	1166	2020-11-04T07:08:18	PA	Philadelphia	11-05	42101-PH	138	137	1	0.007246	138	NOVEMBER_04_2020_070818.json
84	972	2020-11-04T07:08:18	PA	Philadelphia	03-13	42101-PH	125	122	1	0.008	125	NOVEMBER_04_2020_070818.json
85	1280	2020-11-04T07:08:18	PA	Philadelphia	17-02	42101-PH	234	232	2	0.008547	117	NOVEMBER_04_2020_070818.json
86	1467	2020-11-04T07:08:18	PA	Philadelphia	24-14	42101-PH	115	112	1	0.008696	115	NOVEMBER_04_2020_070818.json
87	2409	2020-11-04T07:08:18	PA	Philadelphia	59-11	42101-PH	230	227	2	0.008696	115	NOVEMBER_04_2020_070818.json
88	2429	2020-11-04T07:08:18	PA	Philadelphia	60-06	42101-PH	112	110	1	0.008929	112	NOVEMBER_04_2020_070818.json
89	1462	2020-11-04T07:08:18	PA	Philadelphia	24-09	42101-PH	104	102	1	0.009615	104	NOVEMBER_04_2020_070818.json
90	1040	2020-11-04T07:08:18	PA	Philadelphia	06-01	42101-PH	100	98	1	0.01	100	NOVEMBER_04_2020_070818.json
91	998	2020-11-04T07:08:18	PA	Philadelphia	04-17	42101-PH	98	94	1	0.010204	98	NOVEMBER_04_2020_070818.json
92	1148	2020-11-04T07:08:18	PA	Philadelphia	10-16	42101-PH	290	286	3	0.010345	96.66667	NOVEMBER_04_2020_070818.json
93	2174	2020-11-04T07:08:18	PA	Philadelphia	51-19	42101-PH	193	191	2	0.010363	96.5	NOVEMBER_04_2020_070818.json
94	2167	2020-11-04T07:08:18	PA	Philadelphia	51-12	42101-PH	287	283	3	0.010453	95.66667	NOVEMBER_04_2020_070818.json
95	1272	2020-11-04T07:08:18	PA	Philadelphia	16-12	42101-PH	190	187	2	0.010526	95	NOVEMBER_04_2020_070818.json
96	2047	2020-11-04T07:08:18	PA	Philadelphia	46-04	42101-PH	190	185	2	0.010526	95	NOVEMBER_04_2020_070818.json
97	2066	2020-11-04T07:08:18	PA	Philadelphia	46-23	42101-PH	190	186	2	0.010526	95	NOVEMBER_04_2020_070818.json

Note the first row has fields with “#DIV/0”, an indicator of division by ZERO for a record with no votes. I added these fields (columns) for analysis. Also note that all the timestamps are for the same year, month, day, hour, minute, second. Nothing unusual there, as many records are introduced in any given second in an automated mechanism. I have no information about the actual source of these asserted records, but it looks to me like the input to a vote tabulating system, since records from different polling places within a county are typically tabulated at one central site, and the import of records at or about just after poll closing is normal for an election. Counting starts when the polling places close, and in this particular election, my recollection is that Pennsylvania votes were only counted from in-person ballots until the day after the election. The 2<sup>nd</sup> column (of my addition) containing the “#DIV/0” entry is the ratio of total votes (4 columns earlier) to Trump votes (2 columns earlier). The column after Philadelphia indicates the precinct, according to the header fields, and the last field is apparently the filename it was delivered from (this is a presumption on my part), and appears to have the date and time indicated in the name as well:

1	TimeStamp	state	Locality	Precinct	Geo	Total_Vot	Biden_Vot	Trump_vot	RATIO	INVERSE	FileStamp
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As can be clearly seen from the listing above, the ratios of Total to Trump vary, are not always integers, and because most of the total vote numbers are in the low 100s, there are only going to be so many different ratios. Particularly because there are 250,341 rows of these entries in the spreadsheet for Philadelphia alone. I won't be showing all of them here. Indeed we would expect lots of the same ratio for any given number across all these records and that's just what we get when we sort by the ratio. I did that sorting and a sample output follows.



84	2020-11-04T19:30:1	2127	42101-PHILADELPHIA 38-04	249	246	1	249
85	2020-11-04T19:36:3	2127	42101-PHILADELPHIA 38-04	249	246	1	249
86	2020-11-04T19:42:5	2127	42101-PHILADELPHIA 38-04	249	246	1	249
87	2020-11-04T19:47:1	2127	42101-PHILADELPHIA 38-04	249	246	1	249
88	2020-11-04T20:02:3	2127	42101-PHILADELPHIA 38-04	249	246	1	249
89	2020-11-04T20:11:1	2127	42101-PHILADELPHIA 38-04	249	246	1	249
90	2020-11-04T20:19:5	2127	42101-PHILADELPHIA 38-04	249	246	1	249
91	2020-11-04T20:36:5	2127	42101-PHILADELPHIA 38-04	249	246	1	249
92	2020-11-04T20:41:1	2127	42101-PHILADELPHIA 38-04	249	246	1	249
93	2020-11-04T09:39:4	1809	42101-PHILADELPHIA 38-04	245	242	1	245
94	2020-11-04T10:25:1	1809	42101-PHILADELPHIA 38-04	245	242	1	245
95	2020-11-04T11:42:3	1809	42101-PHILADELPHIA 38-04	245	242	1	245
96	2020-11-04T12:26:4	1809	42101-PHILADELPHIA 38-04	245	242	1	245
97	2020-11-04T13:08:4	1809	42101-PHILADELPHIA 38-04	245	242	1	245
98	2020-11-04T14:09:3	1809	42101-PHILADELPHIA 38-04	245	242	1	245
99	2020-11-04T14:16:0	1809	42101-PHILADELPHIA 38-04	245	242	1	245
100	2020-11-04T14:27:1	1809	42101-PHILADELPHIA 38-04	245	242	1	245
101	2020-11-04T15:00:3	1809	42101-PHILADELPHIA 38-04	245	242	1	245
102	2020-11-04T09:39:4	2044	42101-PHILADELPHIA 46-01	241	238	1	241
103	2020-11-04T10:25:1	2044	42101-PHILADELPHIA 46-01	241	238	1	241
104	2020-11-04T11:42:3	2044	42101-PHILADELPHIA 46-01	241	238	1	241
105	2020-11-04T12:26:4	2044	42101-PHILADELPHIA 46-01	241	238	1	241
106	2020-11-04T13:08:4	2044	42101-PHILADELPHIA 46-01	241	238	1	241
107	2020-11-04T14:09:3	2044	42101-PHILADELPHIA 46-01	241	238	1	241
108	2020-11-04T14:16:0	2044	42101-PHILADELPHIA 46-01	241	238	1	241
109	2020-11-04T14:27:1	2044	42101-PHILADELPHIA 46-01	241	238	1	241
110	2020-11-04T15:00:3	2044	42101-PHILADELPHIA 46-01	241	238	1	241
111	2020-11-04T07:08:1	2150	42101-PHILADELPHIA 50-25	240	236	1	240
112	2020-11-04T07:12:4	2150	42101-PHILADELPHIA 50-25	240	236	1	240
113	2020-11-04T07:21:1	2150	42101-PHILADELPHIA 50-25	240	236	1	240
114	2020-11-04T07:37:1	2150	42101-PHILADELPHIA 50-25	240	236	1	240
115	2020-11-04T07:43:4	2150	42101-PHILADELPHIA 50-25	240	236	1	240
116	2020-11-04T08:02:0	2150	42101-PHILADELPHIA 50-25	240	236	1	240
117	2020-11-04T08:16:2	2150	42101-PHILADELPHIA 50-25	240	236	1	240
118	2020-11-04T08:31:0	2150	42101-PHILADELPHIA 50-25	240	236	1	240
119	2020-11-04T09:06:5	2150	42101-PHILADELPHIA 50-25	240	236	1	240
120	2020-11-05T16:53:4	1471	42101-PHILADELPHIA 10-21	477	471	2	238.5
121	2020-11-05T18:42:0	1471	42101-PHILADELPHIA 10-21	477	471	2	238.5
122	2020-11-05T19:11:1	1471	42101-PHILADELPHIA 10-21	477	471	2	238.5
123	2020-11-05T19:31:0	1471	42101-PHILADELPHIA 10-21	477	471	2	238.5
124	2020-11-05T20:01:3	1471	42101-PHILADELPHIA 10-21	477	471	2	238.5
125	2020-11-05T20:22:1	1471	42101-PHILADELPHIA 10-21	477	471	2	238.5
126	2020-11-05T20:50:2	1471	42101-PHILADELPHIA 10-21	477	471	2	238.5
127	2020-11-05T21:06:2	1471	42101-PHILADELPHIA 10-21	477	471	2	238.5
128	2020-11-05T21:45:4	1471	42101-PHILADELPHIA 10-21	477	471	2	238.5
129	2020-11-05T22:11:1	1471	42101-PHILADELPHIA 10-21	477	471	2	238.5
130	2020-11-05T22:46:3	1471	42101-PHILADELPHIA 10-21	477	471	2	238.5
131	2020-11-05T23:18:3	1471	42101-PHILADELPHIA 10-21	477	471	2	238.5
132	2020-11-05T23:56:3	1471	42101-PHILADELPHIA 10-21	477	471	2	238.5
133	2020-11-06T00:46:2	1471	42101-PHILADELPHIA 10-21	477	471	2	238.5
134	2020-11-06T01:19:4	1471	42101-PHILADELPHIA 10-21	477	471	2	238.5

**Asserted Total to Trump Vote Ratios**

This listing has a subset of the columns so you can see the ratios more clearly. As you can see, at various times, batches of 249 votes, or 245 votes, or 241 votes, or 240 votes, etc. were recorded, and because of the way this is sorted, you can see that each of these with 1 Trump vote are listed together, then we have some with 2 Trump votes, and so forth.

Nothing is apparently unusual here either. In fact, because of the order of the sorting, records with more Trump votes per vote appear later in the listing. Below is an example of some records near the end of the listing, where Trump gets 100% of the votes and where he gets most of the votes. These examples show various dates and times, in this sample, all from election night and from several different districts. Again, nothing apparently unusual here.

247987	2020-11-04T12:26:4	149842101-PHILADELPHIA 26-02	376	54	320	1.175
247988	2020-11-04T13:08:4	149842101-PHILADELPHIA 26-02	376	54	320	1.175
247989	2020-11-04T14:09:3	149842101-PHILADELPHIA 26-02	376	54	320	1.175
247990	2020-11-04T14:16:0	149842101-PHILADELPHIA 26-02	376	54	320	1.175
247991	2020-11-04T14:27:1	149842101-PHILADELPHIA 26-02	376	54	320	1.175
247992	2020-11-04T15:00:3	149842101-PHILADELPHIA 26-02	376	54	320	1.175
247993	2020-11-04T07:08:1	150542101-PHILADELPHIA 26-09	364	50	312	1.16666667
247994	2020-11-04T07:12:4	150542101-PHILADELPHIA 26-09	364	50	312	1.16666667
247995	2020-11-04T07:21:1	150542101-PHILADELPHIA 26-09	364	50	312	1.16666667
247996	2020-11-04T07:37:1	150542101-PHILADELPHIA 26-09	364	50	312	1.16666667
247997	2020-11-04T07:43:4	150542101-PHILADELPHIA 26-09	364	50	312	1.16666667
247998	2020-11-04T08:02:0	150542101-PHILADELPHIA 26-09	364	50	312	1.16666667
247999	2020-11-04T08:16:2	150542101-PHILADELPHIA 26-09	364	50	312	1.16666667
248000	2020-11-04T08:31:0	150542101-PHILADELPHIA 26-09	364	50	312	1.16666667
248001	2020-11-04T09:06:5	150542101-PHILADELPHIA 26-09	364	50	312	1.16666667
248002	2020-11-04T07:08:1	149842101-PHILADELPHIA 26-02	359	44	313	1.14696486
248003	2020-11-04T07:12:4	149842101-PHILADELPHIA 26-02	359	44	313	1.14696486
248004	2020-11-04T07:21:1	149842101-PHILADELPHIA 26-02	359	44	313	1.14696486
248005	2020-11-04T07:37:1	149842101-PHILADELPHIA 26-02	359	44	313	1.14696486
248006	2020-11-04T07:43:4	149842101-PHILADELPHIA 26-02	359	44	313	1.14696486
248007	2020-11-04T08:02:0	149842101-PHILADELPHIA 26-02	359	44	313	1.14696486
248008	2020-11-04T08:16:2	149842101-PHILADELPHIA 26-02	359	44	313	1.14696486
248009	2020-11-04T08:31:0	149842101-PHILADELPHIA 26-02	359	44	313	1.14696486
248010	2020-11-04T09:06:5	149842101-PHILADELPHIA 26-02	359	44	313	1.14696486
248011	2020-11-04T07:08:1	250742101-PHILADELPHIA 63-07	9	0	9	1
248012	2020-11-04T07:08:1	168842101-PHILADELPHIA 34-19	1	0	1	1

**Asserted Total to Trump Vote Ratios (where Trump got most of the votes)**

The recording provided asserted vote changing by some statistical changes in ratios from 7-1 to some other values at different times. There are a substantial number of records with 7-1 ratios (203 of them), but then there are also 83 rows with 6.875-1 ratios, 2313 rows with a DIV/0 (no trump votes), 102 with a 2-1 ratio, and so forth. I am not a statistician, but none of this appears particularly unusual to me, and a professional statistician would be required to do a proper analysis of this. The person asserting to do the analysis in the video does not claim such expertise as far as I am aware.

The full range of dates of the records I received started at 2020-11-04T07:08:18 and ended at 2020-11-11T21:50:46. The records containing the ratio 7 started at 2020-11-04T07:08:18 and ended at 2020-11-11T21:50:46, from which I conclude that records with ration 7 are spread over the entire period of the records made available. I haven't done a distribution analysis, but a brief glance shows records from each day as 15 from 11-11, 27 from 11-10, 33 from 11-09, 13 from 11-08, 8 from 11-07, 25 from 11-06, 5 from 11-05, and 77 from 11-04 (election day). I guess if you wanted to, you could check the number of records with all ratios from those dates and try to confirm or refute anomalies beyond statistical norms, and you should feel free to do so. The point I wish to make here is that these ratios didn't start and stop at some particular point in the counting, as asserted in the video I was provided. I will stop here for now, but will be adding addenda to this report over time. So reload...

**Conclusions**

This is not a proper forensic examination of records with sound provenance applied in a rigorous manner. Rather, this is merely a simple review of some asserted claims about frauds with the basis provided by the individual making these claims, some in affidavits, some in videos, some with little or no additional information. I don't want to speculate about what a real forensic examination might produce, but I do conclude that from a standpoint of detecting obvious inconsistencies, these specific claims have inconsistencies that seem to refute them.

### Some interesting data from the dataset provided

In the process of performing the limited analysis I undertook, I found something I thought was interesting and might be worth checking into. Here are the largest vote count records I identified:

id	timestamp	state	Locality	Precinct	Geo	total_votes	biden_votes	trump_votes	ratio	INVERSE_RATIO	FileStamp
1602	2020-11-04T20:41:12	PA	Philadelphia	17-06	42101-PH	23537	23528	6	0.000255	3922.833	NOVEMBER_04_2020_204112.json
1913	2020-11-10T21:30:56	PA	Philadelphia	30-17	42101-PH	1331	1167	155	0.116454	8.587097	NOVEMBER_10_2020_213056.json
1913	2020-11-10T21:45:52	PA	Philadelphia	30-17	42101-PH	1331	1167	155	0.116454	8.587097	NOVEMBER_10_2020_214552.json

Note that the first record has 23,537 votes, 23,528 for Biden, 6 for Trump, and 9 others. The next largest vote count record has only 1331 votes total. So again, assuming all the information provided to me is authentic and reliable, this one record is responsible for almost 1/3 of Biden's margin in Pennsylvania. Final tallies as certified came to only a 80,555 vote lead for Biden.

Looking more closely at this particular precinct (17-06), out of a total of 147 records, all of them have exactly 6 Trump votes and exactly 3 "Other" votes. Except for the one record indicating 23,537 votes, none have more than 327 votes in the record. With the exception of this one record, all of these records have increasing numbers of total vote counts with the times and dates indicated. The particularly large record is date and time stamped on election night at 20:41:12, about 41 minutes after poll closings. There's a big gap in time between 06:01:05 (6AM) on the 5<sup>th</sup> (morning after) and 14:01:50 (2PM) that Wed afternoon. It looks like an 8 hour stop in counting, which may reflect a legal action at the time, or it might be sleep for the workers. The batch size behaviors are somewhat interesting as well. The sizes of vote counts monotonically increases over time, with (in time sequence):

- 9 records of [253, 244, 6] (Total, Biden, Trump)
- 9 records of [254, 245, 6],
- 22 records of [260, 251, 6],
- 1 record of [23537, 23528, 6],
- 21 records of [278, 269, 6],
- 16 records of [303, 294, 6],
- 9 records of [313, 304, 6],
- 5 records of [321, 312, 6],
- 17 records of [324, 315, 6],
- 30 records of [326, 317, 6],
- 8 records of [327, 318, 6].

I don't know how these records came to be, but they don't seem to me to be the result of a real vote counting process. Of course I looked at other records provided, and found very similar patterns in district after district, excepting the large vote count single record. While the 6 Trump and 3 Other votes did not hold, the number of votes counted and for each candidate increased monotonically over time stamps. I did a quick review sampling the entire dataset sent to me (for all of PA) and the same pattern held true in this sampling.

I don't want to speculate, but this looks like there is some problem with this set of records provided to me, perhaps somewhere between origination and delivery to me.

Update on this: Per <https://results.philadelphiavotes.com/VoterTurnoutDetails.aspx?> Which, (thanks to Jim - no last name provided by me) indicates (Jim's words):

*“The final number of ballots cast in 17-06 is 357, which is unremarkable. Oddly enough, the next highest count in your spreadsheet is 1331 in precinct 30-17, which is one of just eight precincts that have over 1000 ballots cast, out of more than 1700 precincts in total.”*

So we are really clear, if and to the extent the analysis of the spreadsheet of votes by the party making assertions about vote shifting was the same spreadsheet provided to me, the analysis is nowhere near any sort of reality at all. Especially the record with 23,537 votes in it.

It appears that this spreadsheet records the then-current totals, not a record of each loading of new votes at the given time. This is consistent with the notion of updates to the totals over time, especially considering that the number of votes is monotonically increasing for totals and for each candidate (and thus no vote shifting could occur post-hoc). In addition, these counts are not up to date. Indeed they terminate before the totals were arrived at.

I update my previous conclusions to indicate that the spreadsheet provided to me has at least one obvious error, and thus cannot be reliable and authentic with regard to the actual votes (it might be authentic in the sense of being the actual records, but clearly the vote count of 23,537 is not authentic as to the actual vote counts at that time), and that no post-hoc evidence of vote shifting appears present at this time. I have not verified that all counts are monotonically increasing, but this should be readily checked by others wishing to assert some sort of foul play.

### **Change log for this document**

I pushed this document out originally on 2020-11-28 in a hurry to make sure folks were able to start looking at it. The urgency has to do with timing for the election. It was and is eternally intended to be at most a draft. This is not to the standard of a forensic analysis or an expert report that I would normally write up in a legal matter, but rather intended to help people better understand some of the claims being made and independently review them for validity. It has been done without fee.

I did an update on or about 2020-11-29@0811 Pacific to add the first addenda and correct various sentence and typing errors.

The update of 2020-11-29 at about 1145 Pacific time adds this change log and some other things I did to improve wording in the first few pages.

The update of 2020-11-30 at or about 1015 Pacific time reflects two typos and some additional details on the spreadsheet.

The update of 2020-12-02 at or about 0620 Pacific time corrected a pagination error and made a few spelling corrections.