[Music]

the senate committee on oversight will

come to order

good afternoon madam clerk mr chairman

please call the role

chairman mcbroom here senator lucito

senator tice senator mcdonald

senator irwin mr chairman there are five

members present you have a quorum

thank you very much madam clerk will

members and guests please join me in

reciting the pledge of allegiance

to the flag of the united states of

america

and to the republic for which it stands

one nation

under god indivisible with liberty and

justice for all

all right members thank you so much for

your kind attendance today

i've been doing a bunch of work

to put on this meeting and

thought that it was critical that we

take the opportunity to hear from

some of the companies that provide

voting software and equipment

mr john polis from dominion voting

systems

was kind enough to agree to come in the

other two companies that have been

serving michigan did not agree to come

in at this point

and perhaps that will change in the

future but at this point

they were unwilling um members it's

my intention today that or my

expectation

really that mr polis and your questions

will probably take us

longer than an hour and so at one hour

or

approximately there we'll take a

15-minute break

for everybody to stretch their legs and

catch their breath

and regroup after that and if it ends up

taking a little longer

um then that will build in another break

um so that everybody can take those

necessary times to clear your head um

so at this point i think we're ready to

hear from mr polis

john can you hear me i can

you hear me yes we can and i and with

you you have

mr brower who i assume is your attorney

our company's attorney yes

that's correct very good good morning mr

chairman good morning mr brower thank

you

john at this time would you raise your

right hand

do you swear to tell the truth or affirm

to tell the truth the whole truth and

nothing but the truth so help you god

i do thank you very much um

mr polis uh please go ahead with your

opening statement

thank you very much good afternoon chair

mcbroom and distinguished members of the

committee

i appreciate the chance to be here today

my name is john poulos and i am the

chief executive officer

of dominion voting systems dominion is a

u.s company headquartered in denver

colorado

i founded my company in canada more than

18 years ago

by 2010 our business had grown in the

united states

and we moved our headquarters to denver

colorado and

voluntarily worked with the committee on

foreign investment in the united states

to ensure they knew who i was by 2018

the majority of our business our

customers and employees

were in the united states and i sold the

company to us investors

this has all been publicly disclosed to

congress in sworn affidavits

dominion proudly provides voting systems

and services

to jurisdictions across 28 states and

puerto rico

i agree with the importance of the

issues being raised today by the chair

and ranking member regarding election

integrity

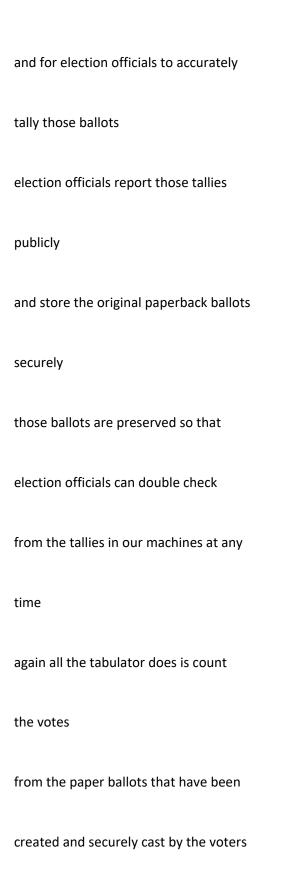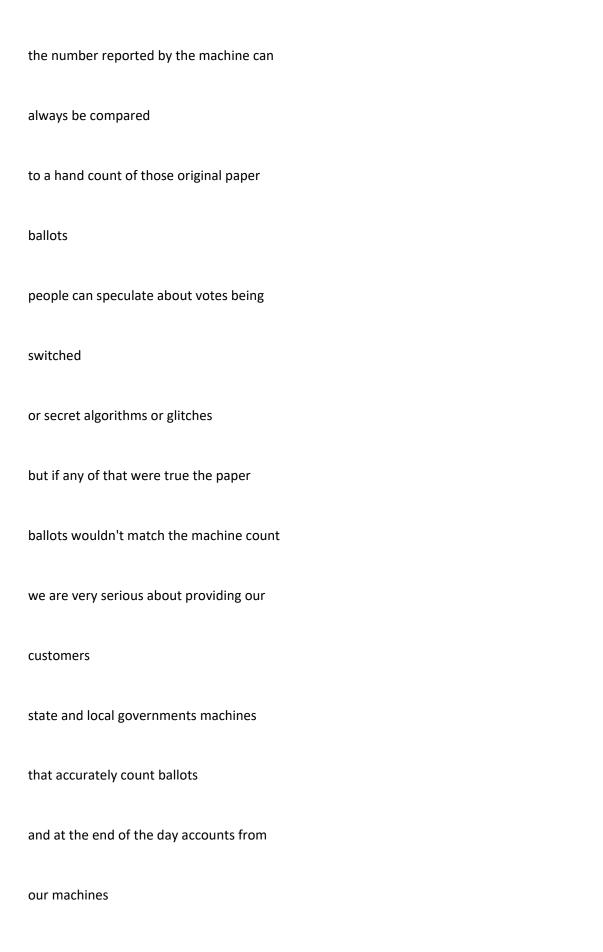at dominion we take great pride in the

limited role we play in elections

and we want to assure voters that they

can have confidence

in the accuracy and reliability of their

voting systems

we go to work every day cognizant of

this important responsibility

unfortunately dominion has recently been

thrust into the national spotlight

as part of a dangerous and reckless

disinformation campaign

aimed at sowing doubt and confusion over

the 2020 presidential election

a lot of things have been said about

dominion systems

and i'm going to address as many of them

as i can

as well as answer your specific

questions but the most important thing

to understand about dominion is this we

do not run elections

our role is limited to providing a local

election offices

with the machines they need to run

elections

after election officials have determined

who is eligible to vote

we provide the machinery for voters to

mark their ballot

and for election officials to accurately

tally those ballots

election officials report those tallies

publicly

and store the original paperback ballots

securely

those ballots are preserved so that

election officials can double check

from the tallies in our machines at any

time

again all the tabulator does is count

the votes

from the paper ballots that have been

created and securely cast by the voters

the number reported by the machine can

always be compared

to a hand count of those original paper

ballots

people can speculate about votes being

switched

or secret algorithms or glitches

but if any of that were true the paper

ballots wouldn't match the machine count

we are very serious about providing our

customers

state and local governments machines

that accurately count ballots

and at the end of the day accounts from

our machines

match the physical ballots that are

stored

those people making baseless claims

surely know that they are lies

but many honest americans see them

proliferated on social media

and they believe them these lies have

consequences

death threats have been leveled against

state and local officials

my company's employees and even against

my family

the largest threat however has been on

the assault and the confidence

in america's democratic process it is

critical

to set the record straight today on

several of the most persistent lies

first there were no switched or deleted

votes

involving dominion machines all 2020

election audits and recounts conducted

thus far

of dominion technology have validated

the accuracy and reliability of the

results

there are no algorithm that enabled

fractional voting

the election assistance commission a

bipartisan

federal agency provides for the

accreditation of

independent non-federal laboratories

that are evaluated and recommended by

the national institute of standards and

technology

to test and qualify voting systems

pursuant to have a section 231

subsection b1 among other things

these test labs perform complete source

code reviews

on every federally certified tabulation

system

states rep replicate this process for

their own

certifications

numerous election is security experts

from both sides of the aisle

including the u.s department of homeland

security

the u.s election assistance commission

and secretaries of state from across the

country

and from both parties have affirmed that

there are no evidence

and voting machines were not corrupted

to alter this

election specifically the u s cyber

security and infrastructure security

agency stated

quote there is no evidence that any

voting system

deleted or lost votes changed votes

or was in any way compromised

our company works with all u.s political

parties

and our customer base and government

outreach practices support this

non-partisan approach in fact we submit

extensive company disclosures

to federal and state authorities as

terms of product testing

system certification and ownership

information

dominion is a private american company

that provides voting systems in 28

states

regardless on whether they are blue or

red states

dominion voting systems did not now nor

has it ever

used solarwinds orion platform which was

the subject of the dhs emergency

directive dated december 13

2020.

dominion is not and has never been a

front for communists

it has no ties to hugo chavez the late

dictator of venezuela

we have never been involved in

venezuelan elections

its machines have never been used in

venezuela the company also does not have

any ties to china

whatsoever including no ties including

investment

or source code transfer there are no

ownership ties to any political parties

nor to foreign governments

dominion has no ties to the pelosi

family feinstein family clinton family

or george

soros additionally

dominion does not have any servers in

germany or

spain no votes are sent overseas

let me be clear ballots aren't sent

anywhere

not overseas not over state lines

and not even over county lines all votes

are counted by local

bipartisan u.s election officials in the

united states

the u.s army has debunked claims of

secret military

raids overseas

additionally voting systems are by

design

meant to be used as closed systems that

are not networked

meaning that they are not connected to

the internet it is technologically

impossible to

see votes being counted in real time or

to flip

them the comments about our company

being started in venezuela with cuban

money

with the intent to steal elections are

beyond bizarre

and are complete lies my company started

in my basement

which happened to be in toronto and our

only intention was to help blind people

vote on paper ballots our very first

public demonstration was in 2003

for a city on the other side of the

ambassador bridge and my partner and i

made a weekend of it and watched the

lion game

both turned into disappointing losses no

cuba

no china no venezuela

dominion does not have any ties to

smartmatic

dominion and smartmatic are two separate

companies

we do not use or license smartmatic

software

the extent of our relationship is this

in 2009

smartmatic licensed the use of a

dominion voting machine

for use in the philippines that

agreement is long over

and they no longer have the ability to

use any of our intellectual property

and we certainly do not use any of their

intellectual property or source code

the other event about our history that

many are wrongfully conflating as proof

of a relationship between dominion and

smartmatic

involves the assets that dominion

purchased from sequoia voting systems

in two thousand and ten let me be clear

on this

we didn't purchase anything from

smartmatic

sequoia's voting history went back over

a hundred years

in various different names and had

dozens of different overs through those

years

including for a brief time smartmatic

who i believe owned sequoia between 2005

and 2007 when they fully divested in

2007

it is my understanding that they

documented to syphias

that the fact that they had no ongoing

control in sequoia

at no point did we at dominion acquire

smartmatic source code

or ip nor do any of our customers use

any of their intellectual property in
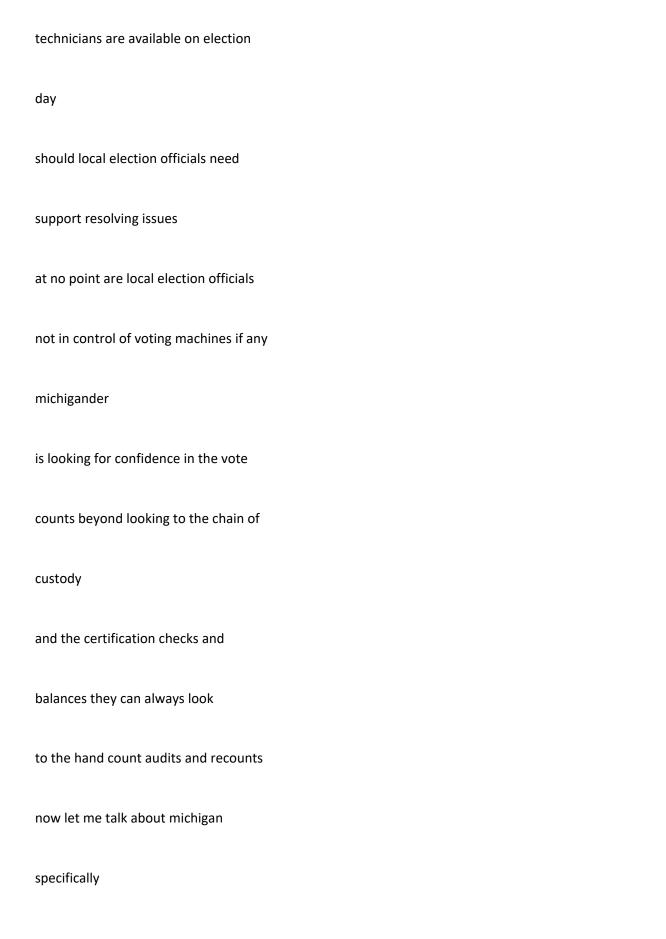
our systems

i will not be commenting today on

employees

whether full-time part-time or

single-day contractors

or past employees and that is simply due

to safety concerns

you can ask me what you'd like about

what we do or about myself but not our

employees

dominion employees are facing harassment

and threats against personal safety

due to the false allegations of recent

weeks

we are working around the clock to

address issues with law enforcement

and take every measure we can to ensure

the safety of our employees

but i will say this no dominion employee

has given me any reason to suspect that

they have

or would do anything to try to alter an

election outcome

but what's even more important for you

to know is that it would not be possible

for them to do so

these falsehoods i've just listed are

only a sampling of the most egregious

lies

the disinformation campaign being waged

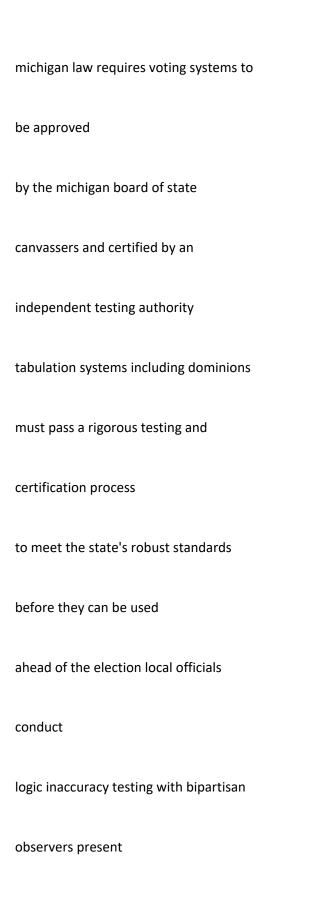against dominion defies facts or logic

to date no one has produced credible

evidence of vote fraud

or vote switching on dominion systems

because these

these things simply have not occurred

i would now like to explain further

dominion's roles in election

it is important to know that dominion is

never able to affect the outcome of an

election

dominion does not handle voter

registration poll books

or signature verification we don't

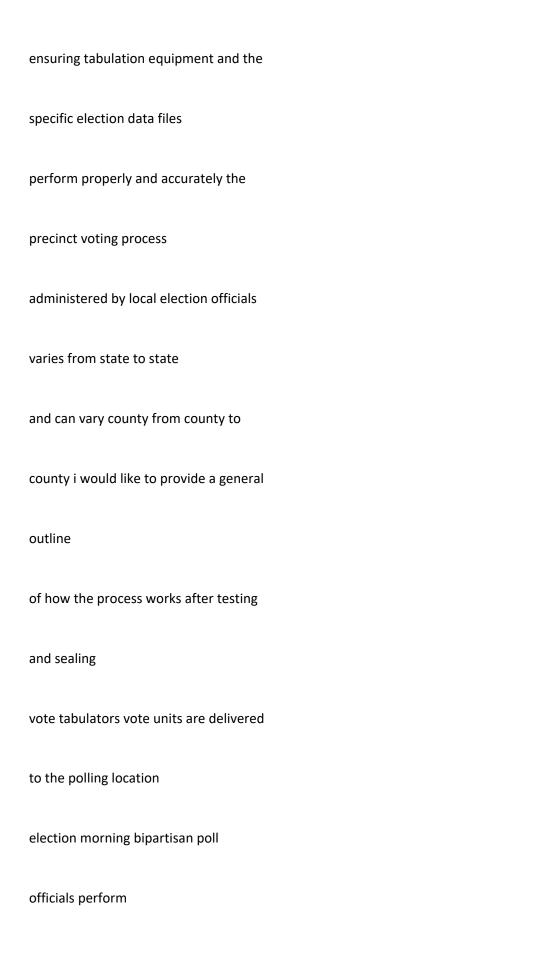supply software or equipment for these

services

we don't provide vote by mail services

and we don't control

or secure voters paper ballots we have

we have no role in verifying the

eligibility of voters

these are the jobs of bipartisan poll

workers and local election officials

long before election day before we sell

our equipment

our voting systems undergo an

accreditation process run by the eac

the process involves compliance with all

voluntary voter system guidelines

including standards for secure software

design such as software independence

dominion systems must be tested by an

independent federally accredited

laboratory

and dominion must disclose its ownership

system source code

reviews and all component hardware

sourcing information

onto the eac in addition to federal

certification

dominion submits to additional rounds of

testing and disclosures

in order to get certified in the 28

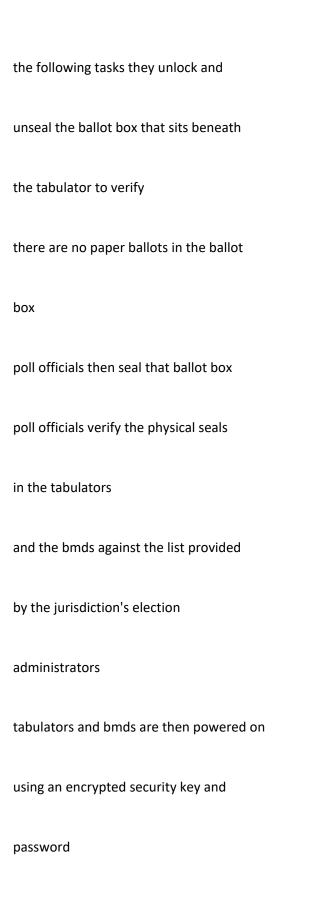states in which we operate
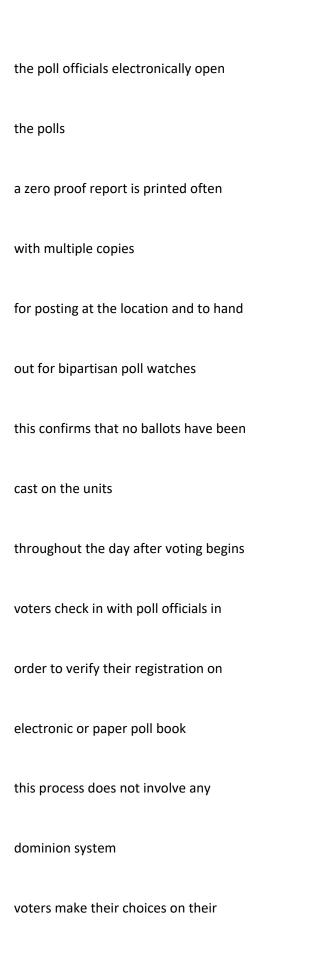
once we sell our equipment to local

officials

the machines are under their control in

many circumstances

source code is delivered by hand by

state certification officials

officials keep rigorous chain of custody

logs

this is how election officials ensure

that equipment

is not tampered with what's more our

systems require a paper ballot that is

always in the custody of the local

election officials

need while we do ensure trained

technicians are available on election

day

should local election officials need

support resolving issues

at no point are local election officials

not in control of voting machines if any

michigander

is looking for confidence in the vote

counts beyond looking to the chain of

custody

and the certification checks and

balances they can always look

to the hand count audits and recounts

now let me talk about michigan

specifically

michigan law requires voting systems to

be approved

by the michigan board of state

canvassers and certified by an

independent testing authority

tabulation systems including dominions

must pass a rigorous testing and

certification process

to meet the state's robust standards

before they can be used

ahead of the election local officials

conduct

logic inaccuracy testing with bipartisan

observers present

ensuring tabulation equipment and the

specific election data files

perform properly and accurately the

precinct voting process

administered by local election officials

varies from state to state

and can vary county from county to

county i would like to provide a general

outline

of how the process works after testing

and sealing

vote tabulators vote units are delivered

to the polling location

election morning bipartisan poll

officials perform

the following tasks they unlock and

unseal the ballot box that sits beneath

the tabulator to verify

there are no paper ballots in the ballot

box

poll officials then seal that ballot box

poll officials verify the physical seals

in the tabulators

and the bmds against the list provided

by the jurisdiction's election

administrators

tabulators and bmds are then powered on

using an encrypted security key and

password

the poll officials electronically open

the polls

a zero proof report is printed often

with multiple copies

for posting at the location and to hand

out for bipartisan poll watches

this confirms that no ballots have been

cast on the units

throughout the day after voting begins

voters check in with poll officials in

order to verify their registration on

electronic or paper poll book

this process does not involve any

dominion system

voters make their choices on their

ballot either through hand marking

or via an electronic bmd device which

simply generates a voter

a made paper ballot voters then review

their paper ballots

and carefully look at their choices and

insert those paper ballots

into the tabulator which sits atop the

physically secured and sealed

ballot box at the close of voting

poll officials perform the following

tasks using

an encrypted security key and password
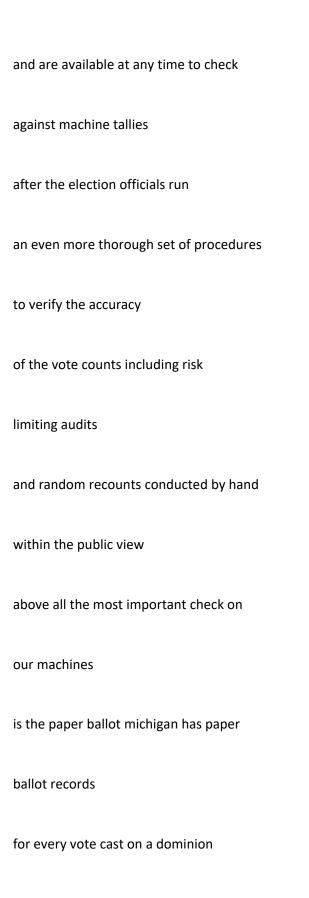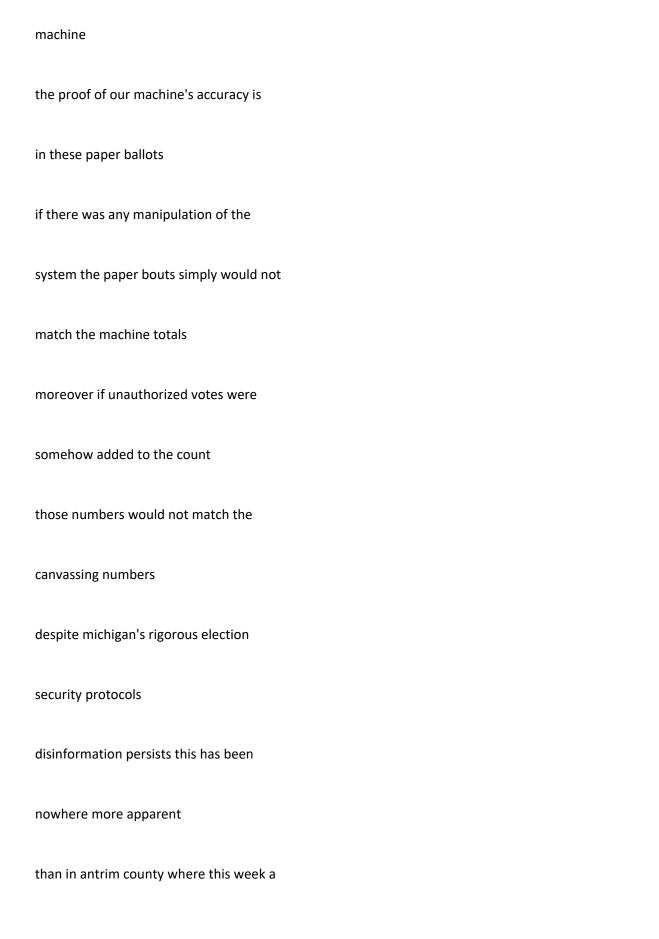
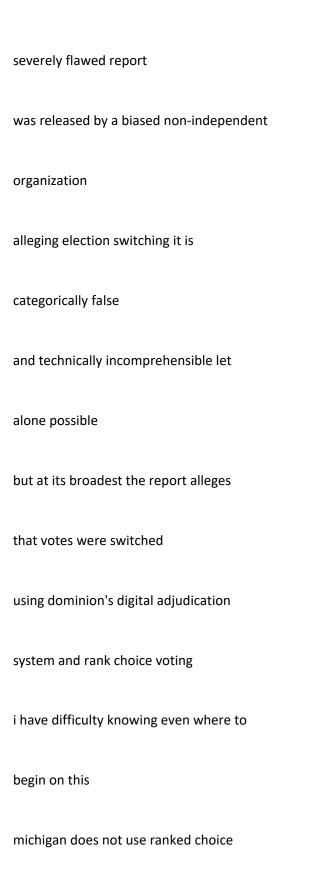poll officials electronically close the

polls

a results tape is printed with multiple

copies

for posting at the polling location and

to hand out the poll watchers

this confirms the turnout and the vote

totals

for all of the ballots that have been

inserted into the tabulators by voters

for the bmd there are no results since

it's simply a mechanism

for voters including voters with

disabilities to make ballot choices

and create a paper ballot for the few

jurisdictions

less than one percent of our customer

base

an external cellular modem is required

in our case we specifically designed the

modem to be external

to allow all poll watchers to easily and

readily know

whether it is connected in the counties

where it is required

the modem is connected to the tabulator

after the poles are closed

after the seals are removed to transmit

unofficial summary results

to the jurisdiction central location

upon completion of that transmission

the external modem is removed

the ballot box is then unsealed and

unlocked and the paper ballots are

removed from the ballot box and manually

accounted for by poll officials

including reconciliation with the poll

book voter numbers

the seal is removed from the dork and

removable memory device

the removable memory device together

with a copy of the results tape

and the paper ballots are sealed in a

transport container
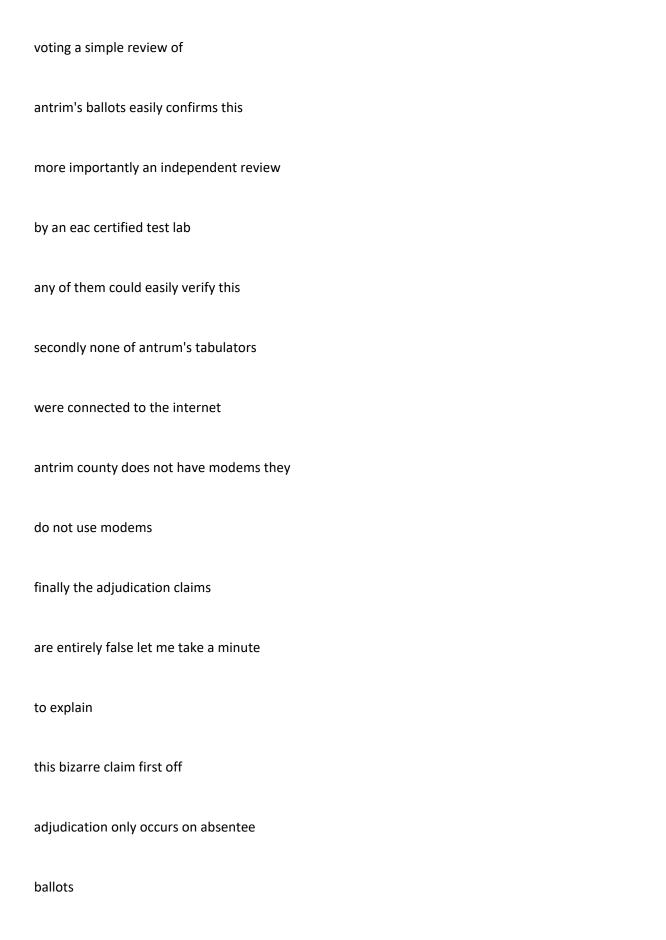
that transport container is transported

securely by poll officials sometimes

accompanied by sheriffs

to the jurisdiction's central location

as a reminder none of these actions are

performed by dominion employees election

administrators at the jurisdiction

central location will accumulate

the electronic results regardless of

whether they have been

unofficially transmitted through modem

or not from the tabulators removable

memory devices

accumulation occurs on a closed network

computer system

election night unofficial reports will

be generated by the election officials

and canvas process begins to reconcile

all election data

and in particular ballot counts and the

voter registration poll book numbers

indicating how many voters were

processed and how many ballots were

counted

after canvas the jurisdiction certifies

the election to the state

again throughout this period the actual

paper ballots created by voters

are locked and stored under the complete

control of local election officials

and are available at any time to check

against machine tallies

after the election officials run

an even more thorough set of procedures

to verify the accuracy

of the vote counts including risk

limiting audits

and random recounts conducted by hand

within the public view

above all the most important check on

our machines

is the paper ballot michigan has paper

ballot records

for every vote cast on a dominion

machine

the proof of our machine's accuracy is

in these paper ballots

if there was any manipulation of the

system the paper bouts simply would not

match the machine totals

moreover if unauthorized votes were

somehow added to the count

those numbers would not match the

canvassing numbers

despite michigan's rigorous election

security protocols

disinformation persists this has been

nowhere more apparent

than in antrim county where this week a

severely flawed report

was released by a biased non-independent

organization

alleging election switching it is

categorically false

and technically incomprehensible let

alone possible

but at its broadest the report alleges

that votes were switched

using dominion's digital adjudication

system and rank choice voting

i have difficulty knowing even where to

begin on this

michigan does not use ranked choice

voting a simple review of

antrim's ballots easily confirms this

more importantly an independent review

by an eac certified test lab

any of them could easily verify this

secondly none of antrum's tabulators

were connected to the internet

antrim county does not have modems they

do not use modems

finally the adjudication claims

are entirely false let me take a minute

to explain

this bizarre claim first off
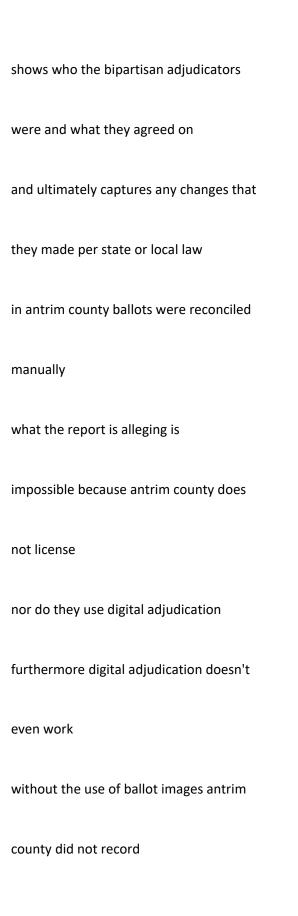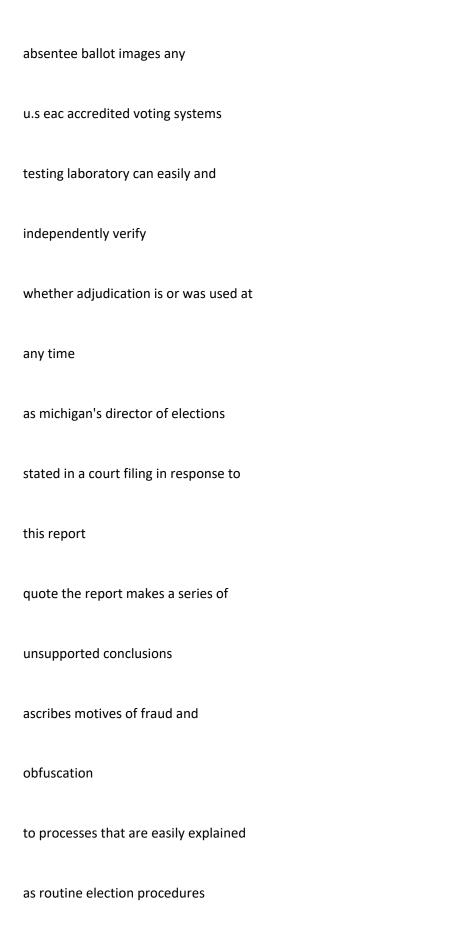
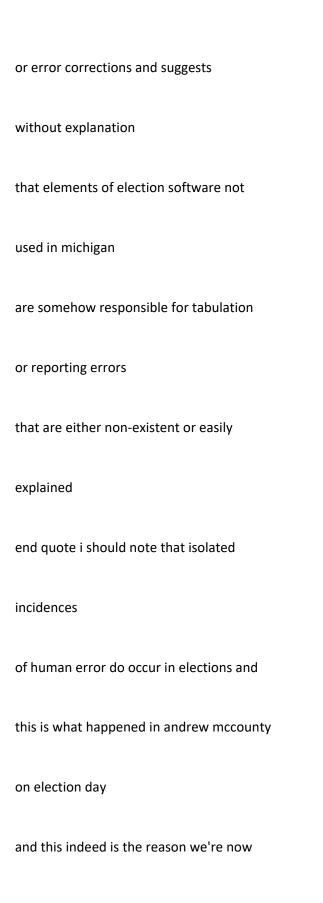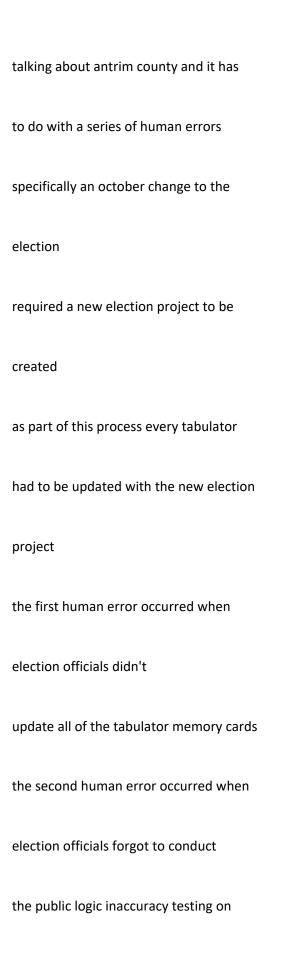adjudication only occurs on absentee

ballots

and only in states that require it a

voter making a mistake on an absentee

ballot is an age-old problem

a common mistake is when a voter fills

in the wrong oval

and then tries to correct it by filling

in another oval and drawing an x

or a scribble through the first this is

what election experts call

an overvote in some states it's it's

considered exactly that and no vote is

counted

however in some states like michigan

bipartisan review committees are asked

to review these ballots for common

mistakes such as the one i just

described

to see if they agree on voter intent all

decisions are made by local officials

and a bipartisan committee

in some counties election officials do

this using a digital adjudication system

whereas other counties conduct this

process manually

by creating new ballots when needed with

digital adjudication

the original ballot is never changed and

a full audit trail shows the original

image

shows who the bipartisan adjudicators

were and what they agreed on

and ultimately captures any changes that

they made per state or local law

in antrim county ballots were reconciled

manually

what the report is alleging is

impossible because antrim county does

not license

nor do they use digital adjudication

furthermore digital adjudication doesn't

even work

without the use of ballot images antrim

county did not record

absentee ballot images any

u.s eac accredited voting systems

testing laboratory can easily and

independently verify

whether adjudication is or was used at

any time

as michigan's director of elections

stated in a court filing in response to

this report

quote the report makes a series of

unsupported conclusions

ascribes motives of fraud and

obfuscation

to processes that are easily explained

as routine election procedures

or error corrections and suggests

without explanation

that elements of election software not

used in michigan

are somehow responsible for tabulation

or reporting errors

that are either non-existent or easily

explained

end quote i should note that isolated

incidences

of human error do occur in elections and

this is what happened in andrew mccounty

on election day

and this indeed is the reason we're now

talking about antrim county and it has

to do with a series of human errors

specifically an october change to the

election

required a new election project to be

created

as part of this process every tabulator

had to be updated with the new election

project

the first human error occurred when

election officials didn't

update all of the tabulator memory cards

the second human error occurred when

election officials forgot to conduct

the public logic inaccuracy testing on

the final election project

both of these errors were compounded

when the programmer of this election

took specific steps to ensure that the

original ballots

from the september project were all that

were already printed

could be used in the tabulators not

affected by the addition

of the school board race

if all of the tabulators had been

updated as per procedure

there wouldn't have been any error in

the unofficial reporting

if public logic inaccuracy testing had

taken place

the error would have been caught when it

should have been caught prior to the

election

if steps weren't specifically taken to

salvage the already printed ballots

the system would not have allowed

election officials to upload

memory cards and the reporting error

never would have occurred

human mistakes happen especially in busy

election years when election officials

work tirelessly through weekends and

holidays

for months on end which is even more

difficult in small counties where there

is a lack of dedicated election staff

this year in particular with the

difficulties compounded by the pandemic

this is exactly why canvas procedures

exist

which of course where this error was

quickly identified

and corrected

because our systems in michigan use

paper ballots the accuracy of the

tabulation machines can be proven by
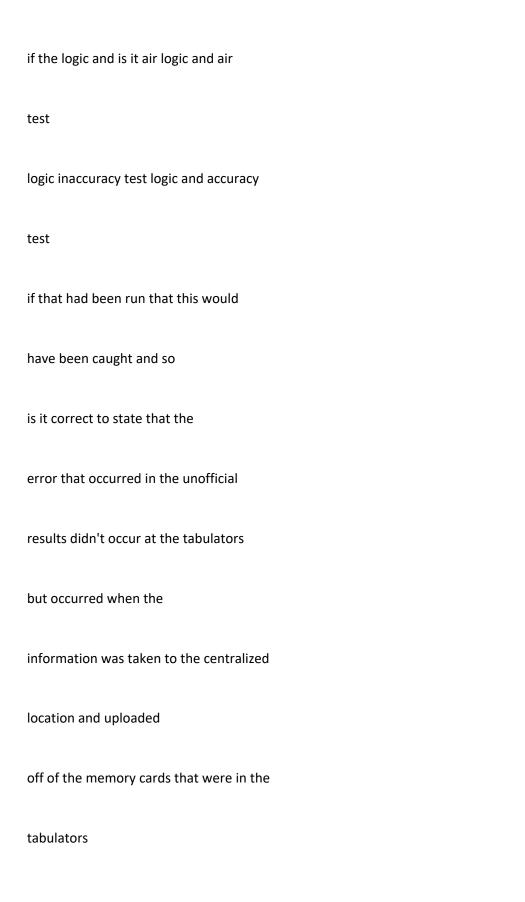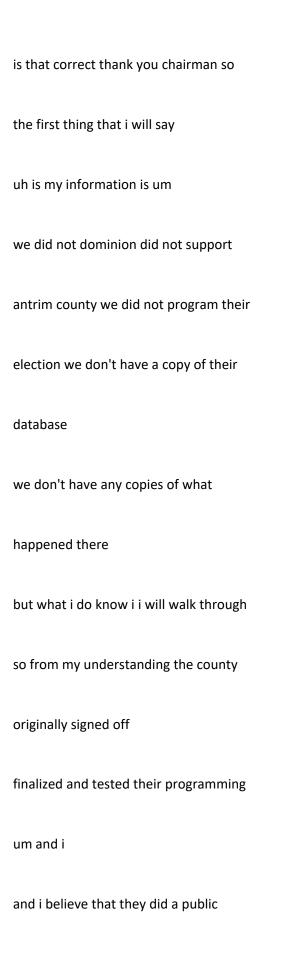
hand counts and audits

as the michigan secretary of state

office has already announced

this week the bureau of elections in

antrim county will conduct a hand count

of all ballots cast in the presidential

election

this will verify that our system counted

votes accurately

those making unfounded allegations

against dominion are selective

in their expressed concern for example

they ignore that in several key

battleground states

the president got more votes on dominion

systems than in other jurisdictions

some of the requested recount sites such

as philadelphia and milwaukee

were not even dominion customers at all

i will close

by reminding everyone that all dominion

machines in battleground states

produce voter verifiable paper ballots

and records for review

these paper ballots for every vote cast

are preserved and secured

by the local election officials and are

overseen by representatives from both
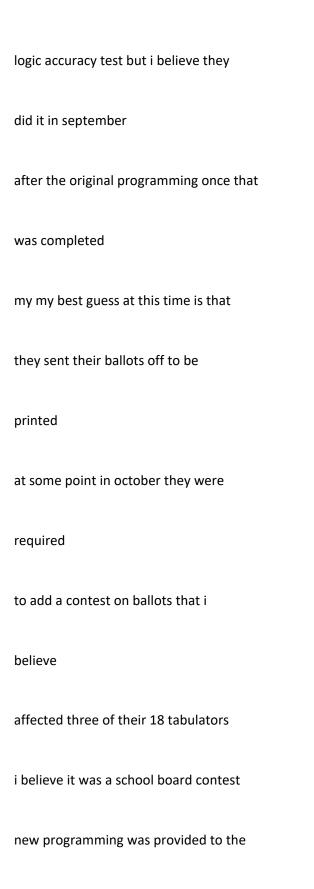
parties

if there was any manipulation of the

system the paper ballots would not match

the machine

totals moreover if unauthorized votes

were somehow added to the count

those numbers would not match the

canvassing numbers

as one example the recent hand count in

georgia of 5

million votes matched our voting

machines tallied perfectly

showing that our machines counted

accurately i was asked recently what i

thought about the georgia hand count and

my reaction is always one of enthusiasm

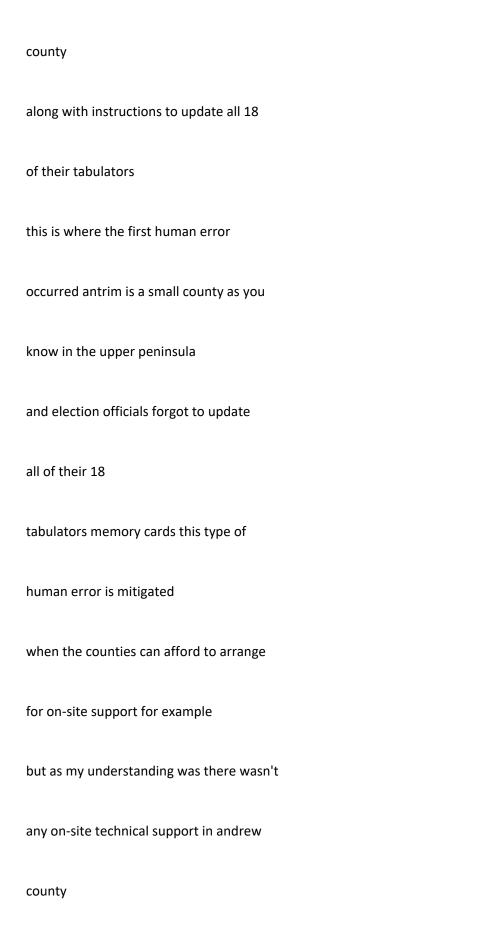a hand count is the most certain way of

proving that our systems work

we welcome recounts because they prove

the value of our systems

this indisputable fact is a key

redundancy

of our voting process that will

undoubtedly continue to serve

as the basis for truth and transparency

in the 2020 election and beyond

i appreciate the opportunity to testify

at this official hearing

under oath about our company and how we

worked in the 2020 elections

we have yet to see our critics make

their allegations under oath

as i'm doing here today or to bring any

real independent fact-based evidence

forward

thank you again and i'm now happy to

take your questions

thank you mr polis i'd i'd like to start

with some questions regarding the antrum

situation if i may

and i'd like to have a better

understanding

of how exactly the air

occurred and so oh and what i want to

specifically drive at

is your um statement about how

if the logic and is it air logic and air

test

logic inaccuracy test logic and accuracy

test

if that had been run that this would

have been caught and so

is it correct to state that the

error that occurred in the unofficial

results didn't occur at the tabulators

but occurred when the

information was taken to the centralized

location and uploaded

off of the memory cards that were in the

tabulators

is that correct thank you chairman so

the first thing that i will say

uh is my information is um

we did not dominion did not support

antrim county we did not program their

election we don't have a copy of their

database

we don't have any copies of what

happened there

but what i do know i i will walk through

so from my understanding the county

originally signed off

finalized and tested their programming

um and i

and i believe that they did a public

logic accuracy test but i believe they

did it in september

after the original programming once that

was completed

my my best guess at this time is that

they sent their ballots off to be

printed

at some point in october they were

required

to add a contest on ballots that i

believe

affected three of their 18 tabulators

i believe it was a school board contest

new programming was provided to the

county

along with instructions to update all 18

of their tabulators

this is where the first human error

occurred antrim is a small county as you

know in the upper peninsula

and election officials forgot to update

all of their 18

tabulators memory cards this type of

human error is mitigated

when the counties can afford to arrange

for on-site support for example

but as my understanding was there wasn't

any on-site technical support in andrew

county

this type of human error i should point

out of election program

programming happens from time to time uh

and it's the

entire purpose of why we have public

logic and accuracy testing

because this process uh which is a

requirement

in states including michigan um the the

test entails

zeroing every tabulator uh that's going

to be used in an election

uh officials in front of the in front of

public uh

view feed a known test deck of ballots

into the tabulator

once they're done that they close the

poll they print the results tape they

upload the results into the database

and then they ensure the results that

were that are being reported are in fact

the expected results

um it's it's it's it's specifically

designed

to be used in a public form so at the

conclusion

of this process uh once it's verified

the tabulators then are

re-zeroed sealed and made ready for

election

deployment so performing that step

would have caught the first human

mistake but this step was unfortunately

missed

which is the second error

if that those two are not even enough

because those two errors

which happened one after another um were

compounded by the way the election

update was programmed during the october

programming update

the contracting firm used by antrim took

care

to program the new tabulation files to

allow antrum to salvage

the original ballots that were already

printed

except for the ballots affecting uh the

new school board race which i believe

were three tabulators this is the only

reason

why any memory card that was mistakenly

not updated

could be uploaded for the unofficial

tally

thank you what i'm trying to get at

specifically

mr polis is the how do we

verify whether the mistake is made in

the

programming at the tabulator versus

at where the memory cards are taken to

and so because and tell me during the

logic and accuracy

is that done i mean i know you run the

stack of ballots through and then you

print a slip up on the tabulator to make

sure that it accurately counted

the ballots but is there a time then

when the results are taken from the
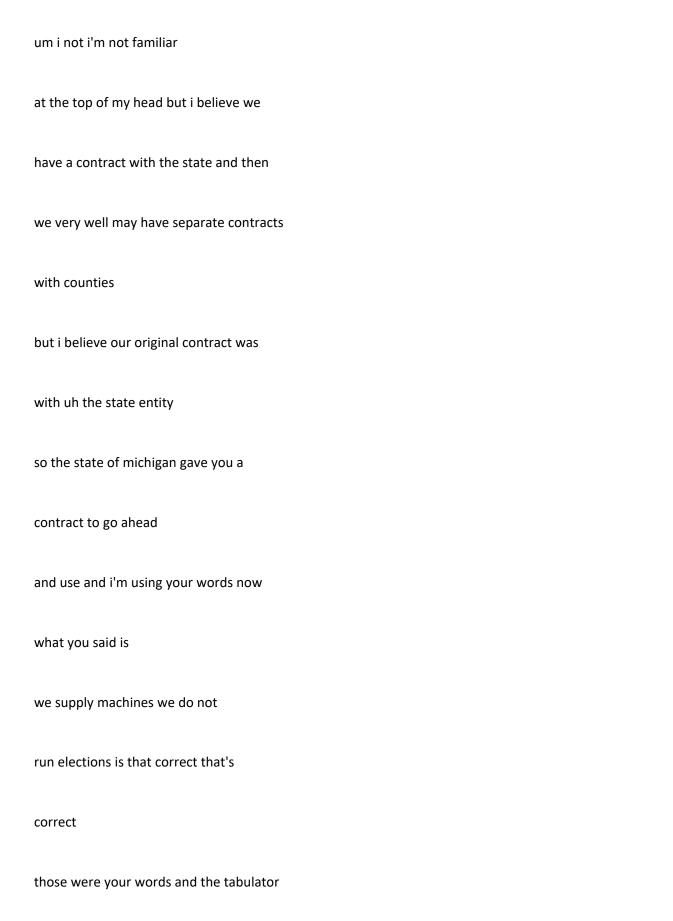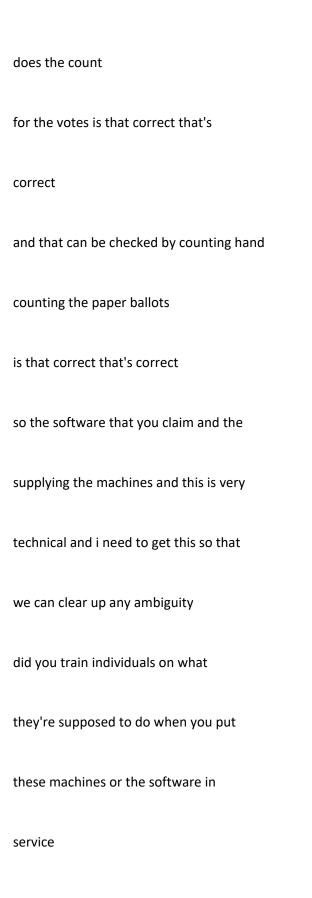
tabulator

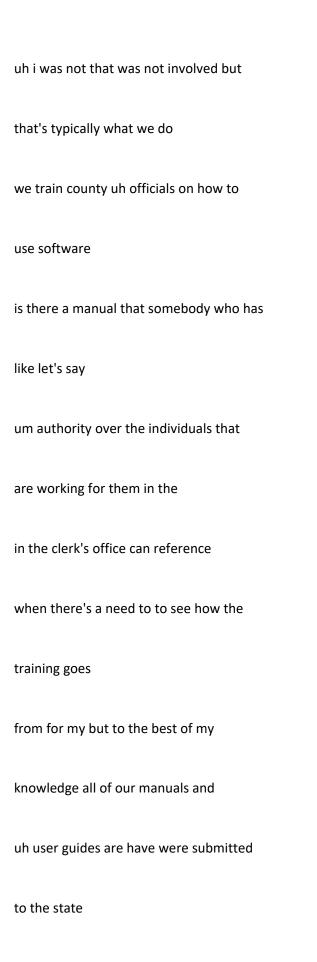to the central location to make sure

that that transmittance

of the data is also done accurately too

uh best practice involves

reviewing the the results that are

uploaded via the memory cards and

comparing them

to the results tape that are printed at

immediately

upon polls close and again multiple

copies

posted publicly in the polling location

and distributed to any poll watchers

and you verify that the results tape

matches

what has been uploaded in this

particular case

the first two errors happened

and because the system was told to

accept memory cards from either one of

those two projects

it allowed an upload from the september

programming

uh even though is expecting a memory

card from the october

programming okay and does the

the software that those um cards are

taken to

at the central location or if the data

is transmitted via modem

the software at the other end that's

receiving those data points

is that your software or is that someone

else's software

yes the software that resides at the

central location

is our software okay and then

is it possible for that data to also be

transmitted to

other uh types of programming such as

excel

spreadsheets so that system is designed

as a standalone system but those results

obviously have to be

transmitted to a central location at the

state level and

it to the media so there are several

ways that poll

election officials can generate results

uh and reports

uh one of them is excel one is through

pdf etc

so that the unofficial results can be

exported

to the state to the media et cetera

thank you

other members of the committee want to

ask questions i i've

i'll share the microphone here okay

vice chair lucito please thank you mr

chairman

thank you mr paulus you're the

are you still ceo of dominion i am

and dominion stands for what is this

just a name you gave it or is there any

uh which doesn't stand for anything it's

just the name

okay dominion voting services has been

around 18 years 2002 you opened up in

toronto canada uh we were formally

incorporated in january 2003

in toronto canada you stood there for a
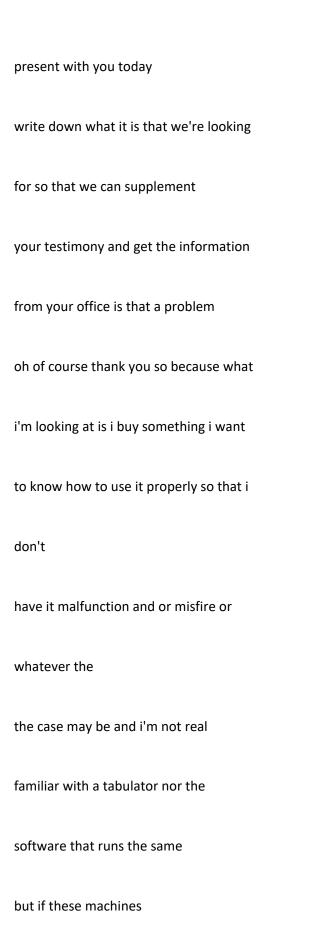
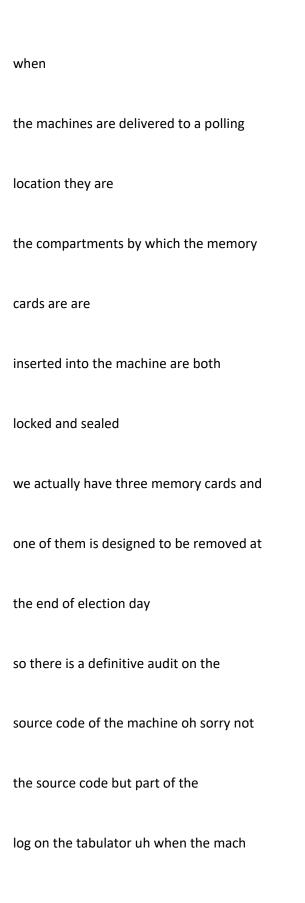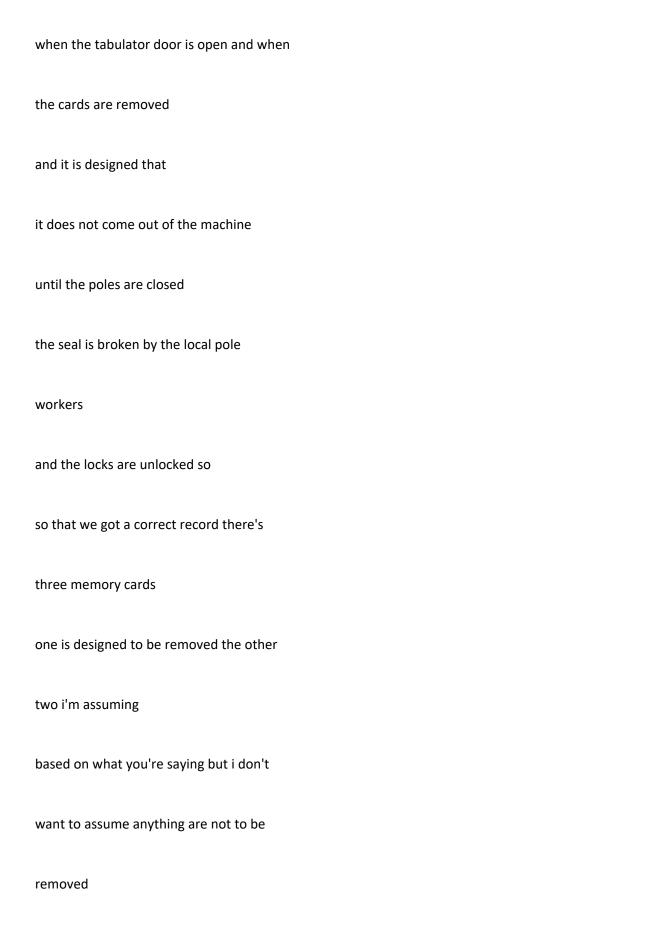couple years and then moved the

operations to

denver colorado we moved our

headquarters to denver in 2010.

you're currently doing business in 28

states that you operate here in the

united states

correct in those 28 states

approximately

well let me go to this let's just deal

with michigan right now

you have about you have a contract for

each and every one of these units that

you place

in service in these counties in which

the votes are taken

um i not i'm not familiar

at the top of my head but i believe we

have a contract with the state and then

we very well may have separate contracts

with counties

but i believe our original contract was

with uh the state entity

so the state of michigan gave you a

contract to go ahead

and use and i'm using your words now

what you said is

we supply machines we do not

run elections is that correct that's

correct

those were your words and the tabulator

does the count

for the votes is that correct that's

correct

and that can be checked by counting hand

counting the paper ballots

is that correct that's correct

so the software that you claim and the

supplying the machines and this is very

technical and i need to get this so that

we can clear up any ambiguity

did you train individuals on what

they're supposed to do when you put

these machines or the software in

service

uh i was not that was not involved but

that's typically what we do

we train county uh officials on how to

use software

is there a manual that somebody who has

like let's say

um authority over the individuals that

are working for them in the

in the clerk's office can reference

when there's a need to to see how the

training goes

from for my but to the best of my

knowledge all of our manuals and

uh user guides are have were submitted

to the state

um on the original state contract and

part of that process

and distributed from the state to the

counties

and i know that in many situations the

counties will generate their own

user guides and manuals based on our

materials

so that i'm clear when you enter into an

agreement with the state of michigan

to supply your equipment your machines

and your software there has to be some

kind of way

to make sure that they're running the

machinery correctly in the software

correctly

would that be fair uh that's that's

correct

all right do you charge a fee

in the contract and i don't really want

to know how much you you know

it's not in my business but do you

charge a fee for that training

uh if it was if there was a fee it would

have been part of the original

upfront purchase how long ago i'm sorry

go ahead i

didn't give you a chance to finish no

and on a county-by-county basis

um counties are free um

to make their own determination

sometimes they get they get supplemental

training either from state officials

sometimes they get supplemental training

as the need

presents itself to the counties that's

not really something i'm expert on

i understand and i only want to limit

your testimony to what you know if you

don't know i'd like you to

mr chairman through the chair i would

like you to give us a

at least to have your lawyer who's there

present with you today

write down what it is that we're looking

for so that we can supplement

your testimony and get the information

from your office is that a problem

oh of course thank you so because what

i'm looking at is i buy something i want

to know how to use it properly so that i

don't

have it malfunction and or misfire or

whatever the

the case may be and i'm not real

familiar with a tabulator nor the

software that runs the same

but if these machines

that are supplied to the counties

to go ahead and make or or to the

communities that

are doing these tabulations of the votes

that software is unique to that machine

it's proprietary right

uh the software that resides on our

tabulators is proprietary

and that is that is that once we certify

at the federal level that's when we lose

control of the software it is

transmitted from

uh the independent um certification

agencies to the counties and then it

transfers into the county's

chain of custody is the memory cards

that you put into the machinery

is that locked down that the memory card

can't be manipulated and or distorted

right so so if i if i wanted to get the

memory card out of the machine

would that get if if we had to remove a

memory card from the machine

could that be possible sure you'd have

to break the seal

during the election i'm assuming you're

asking during the election

uh during the election correct

yeah so um so as i stated when you when

when

the machines are delivered to a polling

location they are

the compartments by which the memory

cards are are

inserted into the machine are both

locked and sealed

we actually have three memory cards and

one of them is designed to be removed at

the end of election day

so there is a definitive audit on the

source code of the machine oh sorry not

the source code but part of the

log on the tabulator uh when the mach

when the tabulator door is open and when

the cards are removed

and it is designed that

it does not come out of the machine

until the poles are closed

the seal is broken by the local pole

workers

and the locks are unlocked so

so that we got a correct record there's

three memory cards

one is designed to be removed the other

two i'm assuming

based on what you're saying but i don't

want to assume anything are not to be

removed

so one of them is designed not to be

removed

and that is internal and two of them

are removable and one of them is

designed not to be removed

just in case somebody eat makes any

allegation on the card that was removed

even though it's securely transferred by

the local

election workers oftentimes accompanied

by a sheriff

there's even and by the way they're

encrypted and signed

um but even on the allegation you could

compare it to the second memory card

that is a redundant copy

that is designed to be uh continue to be

locked and sealed

in the tabulator if i

tell you that somebody removed

a memory card where they shouldn't have

would you have

backup software or alarm systems that

would go off

to report that type of behavior

in your proprietary machine and

software so

if an allegation was made that one of

the memory cards was removed

and let's just for the sake of your

example say that

none of the poll officials noticed it uh

or the bipartisan poll watchers noticed

it or any voter noticed it

um there would be a record of it um and

uh we also have the other card uh that's

in in the machine um and they would be

off

and the machine will not let you

continue uh if one of them has been

removed

do you have any verily

a validation or way to validate whether

a card

memory card was removed from these

machines have you

started your validation i know that

there was three i was

reading some stuff and it says that you

do something before the election process

either your company

or the clerk doing during the election

process or something done regarding

and then after the election process have

you guys started

uh your company started to do an after

election audit as to what happened and

look into what these allegations because

you so eloquently gave your testimony

and i appreciate that

trying to clear up any inconsistencies

or ambiguity

tell me have you started now at this

point and have you completed

your after the election process

right um so i will point back to what i

mentioned in my opening statement we do

not run elections we are not accountable

for running elections

and as such we do not run the test

before the election or we do not run the

test after election so every state

has its own local rules and

quite often there will be a public logic

inaccuracy test done before the election

many jurisdictions will repeat that test

after

after canvas is completed and they will

do a logic inaccuracy test post-election

and then some some jurisdictions take it

a step further and do

exactly what you are talking about

but they don't contract with us to do it

the whole idea is that we shouldn't be
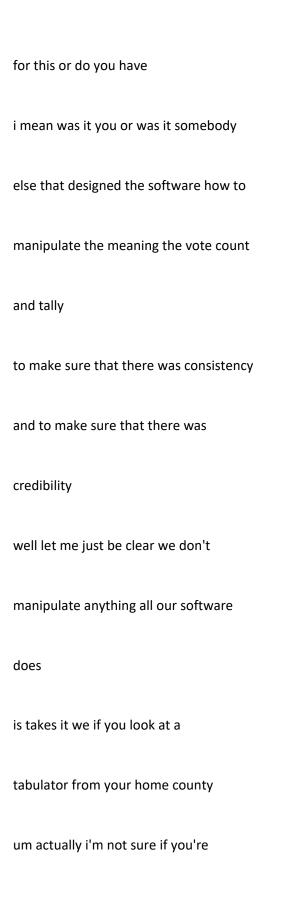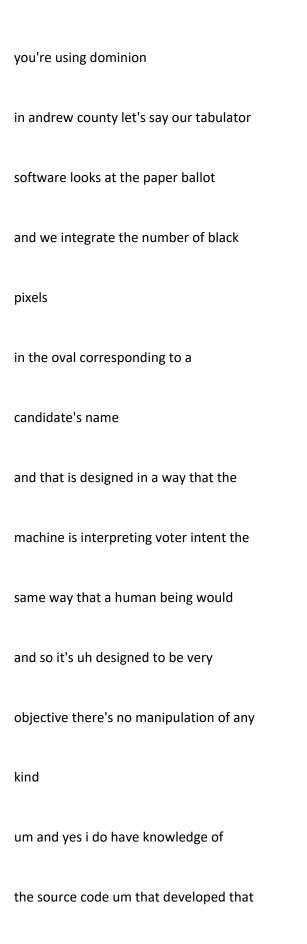
the ones doing it

the federal system that was put in place

after the 2000

presidential election with the creation

of the eac as a bipartisan

commission uh that

does their own accreditation of separate

third-party labs that are accredited

the whole purpose of that is that no

voter or stakeholder has to blindly

trust any technology provider

so the test that you are asking uh

is part of the local officials process

and best done uh by an eac accredited

lab

i will say uh we have several customers

especially

in light of the basis allegations that

have been

levied our way in the recent weeks that

have contracted

a variety of of these eac accredited

independent test labs

to do exactly as you say and their

checks are

there's various number of checks that

they perform and i'm certainly no expert

at what they do but

the way i think of it is they are

verifying that the software

that was run in the election was

unchanged that it is in fact the same

certified software

they can run a variety of forensic tools

to ensure that

what you're describing if it did happen

they would know what happened

and they do that all independent of us

how do i know as a voter

mr polis that i

didn't have any irregularity of the

software being manipulated

how can i be sure of that right it's a

great question

so uh the fact that somebody has made an

allegation

uh is cause enough um in my opinion

uh to do a hand count audit and recount

and that has been requested um in in a

number of our jurisdictions

um and at the end of the day you have to

remember

that the ballot box was secure and empty

at the beginning of the day

and at the end of the day there was a

number of ballots that each voter

deposited into that sealed and locked

ballot box

those voters and their eligibility were

verified by the local

poll workers under the watch of the

local poll workers and bipartisan poll

watchers

and those ballots haven't gone anywhere

they've been under

secure control of the poll workers so

even the allegation in an environment of

like we're seeing right now which is

unprecedented

um it's in my opinion it's exactly why

the michigan secretary of state's office

is working with antrim county to perform

that hand count

did you provide any training films and i

know that you said

training manuals booklets i think you

call them any training films that would

physically give a video to

or a a link to um

um a training film so that the

individuals would learn

properly how to utilize your machine and

your software

uh sir we provide a variety of training

tools

uh i'm the contract the original

contract in the state of michigan i

believe was in 2017

we regularly uh rely on a host of

different training techniques

um and design it uh in collaboration

uh with the with with a with the end

customer it be it the county or state

so that would have been what secretary

of state jocelyn benson that would have

been the one you would have contracted

with

um she was the secretary of state in

2017.

i i i don't recall who i think it's 2017

is that was she

no sorry to interrupt you mr vice chair

but joslyn benson's turn began in

19. 19 yes okay 2019 the chair cleared

it up

could you tell me about the process

though

um because you're still acting as a ceo

even though you just indicated

i think in your testimony the majority

of the company was sold

yes in 2018 okay and uh

this was your company that you from

birth basically i'm going to say that

you you're the one that

did you design the song no not my not my

birth senator uh

companies for it oh could you tell me

did you design the software that went

for this or do you have

i mean was it you or was it somebody

else that designed the software how to

manipulate the meaning the vote count

and tally

to make sure that there was consistency

and to make sure that there was

credibility

well let me just be clear we don't

manipulate anything all our software

does

is takes it we if you look at a

tabulator from your home county

um actually i'm not sure if you're

you're using dominion

in andrew county let's say our tabulator

software looks at the paper ballot

and we integrate the number of black

pixels

in the oval corresponding to a

candidate's name

and that is designed in a way that the

machine is interpreting voter intent the

same way that a human being would

and so it's uh designed to be very

objective there's no manipulation of any

kind

um and yes i do have knowledge of

the source code um that developed that

the warranty and i use the word warranty

i don't know other another word maybe

you can help me about post elections

to to ensure the security and the trust

of the election

is there some kind of warranty that goes

with that for the state when they

purchase this unit

and software that it's going to act

in a manner consistent with you

uh your your your statements as we as

well as

how you have the intended use of the

unit

i have to we'll have to get back to you

upon looking at the state contract

if somebody didn't properly download

software

would that change a result and i'm going

to

every single item i can think of to see

how these allegations how these

affidavits that we've taken from

so many people through across the state

i want to validate

what they saw what they looked at what

they heard

as opposed to what really happened so if

you weren't there and i think

there was representatives of dominion

at like this tcf center was there not

is that standard and a customary in the

industry

of your machinery being placed in the

service to have people from

dominion there the night of the election

uh so you senator you mentioned a few

things

first of all in terms of the affidavits

and

any pertaining to the accuracy of the

tabulation

i am not aware of any that have been

found to be credible

certainly none that i've seen and i

don't know of any uh judge that have

found any of those allegations credible

with specific regards to whether or not

it's normal

to have uh on-site technical support

from tech the tabulation companies

um it it it depends uh it's at the sole

discretion of the county and

in the case of the tcf center we did

have on-site technical support there

they are not part of running the

election and they are

expressly there to answer any questions

uh from the election officials

whose job it is to run the election was

there a separate contract that was

considered with consideration that was

utilized as a result of coming to that

election

at tcf here in the state of michigan

i'm not aware of it off the top of my

head that's something we can get back to

you on

is is it like you i said not normal is

it customary let's use that word not

normal

was there any other uh counties in the

state

other than wayne that had assistance

through dominion being there

meaning do you recall based on michigan

has been spotlighted and shown

throughout the country

do you recall of any other county of the

83 companies in the state

i don't know i don't think so okay so

the only one that you do recall is that

there was support staff there from

dominion correct

in wayne county correct and the only i

think so as i said i

i don't know senator um but that sounds

right

do you recall how many people that came

from dominion to assist

in answering questions from election

officials in wayne county

no i don't you know what i mean is this

customarily done have you seen this in

your 18 years i think

where people people go they do right yes

okay did you have any in wisconsin

or pennsylvania mich uh georgia or texas

uh sorry one at a time uh

georgia yes uh pennsylvania yes

um wisconsin i don't know uh

texas i don't know uh what was it did

you mention another one

michigan but you gave us an answer okay

and right now is there a written

report that was received from the

individuals that were at the tcf

center on behalf of dominion and working

on behest of wayne county

no not that i'm aware of did they report

back to anybody in the company

to give information as to what these

allegations were

and i don't know

so in conclusion somewhat

how do you validate what has been

tabulated

if there's no system in place that you

can run

or if there's no software that validates

it other than hand count

is there any other way to avoid a hand

count

from the software and the hardware that

you put in service

to validate this is the vote

this is true accurate representation of

the vote

um well first off there is a very well

documented system

and it starts at the eac level before

long before any system is sold

with third-party testing and

accreditation

in this testing center these independent

labs

that are trained on election process

they go through every single line of

source code

line by line they test every facet of

every feature of the machine

uh under a lot of different permutations

and combinations

of elections um in addition to that

before that system is it can be sold for

example in the state of michigan

it gets certified after a federal

certification once again

by the uh state authorities in michigan

uh so to say that there's not a weld

document

there's a very well documented system

that is extremely accurate

i appreciate accuracy wait a minute i

guess i'm asking something else

even though they have like they do like

automobiles they go through a check

test like they check everything

check the boxes but if we want like

access control

only authorized individuals are running

the machine and i understand what you

said

we don't run elections encrypted

end to end so that no one can manipulate

the data

and end points that hold the data that

those

endpoints weren't breached could you be

specific

on what systems do you have on your

software

that can ensure that access control

encryption

end-to-end and endpoints that hold the

data were

not breached

uh fair question so the as part of the

federal

certification guidelines there is very

well and rigorous

rigorously documented security

requirements

of the media where votes are recorded

and translated

the i think you're to your question in

terms of

a uh a check after a car rolls off the

assembly line so

um our source code remains unchanged

uh and that is exactly what

post-election

activities should verify after every

election

uh they they check that the hash code

is exactly the same as the certification

patch code and and that gives the local

officials

the the knowledge that the source code

was exactly the source code that was

certified and tested

the check of the actual election because

the programming and this is not

in the source code of the system but

this is now how you program

an election with because the candidates

change

uh the contest change from election to

election uh this is what's done

uh at every election this is what

the logic inaccuracy testing done in a

public form

allows you to verify uh that it's that

it's correct and complete

the rank choice voting is it the clerk

that flips it or dominion when they do

the ranked choice voting

there's no flipping of any votes at any

time on any system

ranked choice voting is something

completely different that was not used

in michigan okay then the last one then

is the post-election

activity should be verified that was

your statement

what post-election activity should be

verified in our state

uh i uh my personal recommendation

yes and which i've seen work in other

states is an authorized

independent test authority accredited by

the eac uh should be doing exactly what

you

are looking for and verifying that the

system was exactly

used in a certified manner did you make

that recommendation to anyone here in

the state at this time

the state the state is the one that came

up with it in the first place years ago

uh and i think that they've used it

probably i i'd have to double check on

the first time it was used but it's not

this is a common practice okay thank you

mr chairman i'll probably have some

follow-up after

i know that the other senators have

questions

thank you vice chair lucito and i just

want to have a quick follow-up to one of

the vice chair's questions and then

we'll take a little break if that's all

right with you mr polis

of course um the vice chair was just

mentioning the any rank choice voting

and you've mentioned a couple of times

in your opening and now

that that's not an option um that

antrim county had but but it is part of

your

programming right it is something that

the software itself offers as

an option that's used in some place

ranked choice voting is a requirement in

some jurisdictions

it was not used anywhere in michigan and

this is something that an

independent test authority can easily

verify

as as can any uh election official

you you need look no further than just

the paper ballots

but there is a whole audit that an

independent test authority can use

uh to look and just and answer that

definitively

is it possible for that option to be

simply turned on accidentally even or

intentionally but you know even

accidentally is it possible that antrim

could turn that on

no the answer is no and and even if they

could do that which they can't it would

not go undetected and as i said an

independent test authority credited by

the esc could easily determine that for

you

could you and i don't want to

do a lot of these all day where we get

into the real technical weeds but

on this one could you share with us why

that is

why you believe that's impossible what

what are the technical specifications

that

make that impossible for it to

accidentally be turned on

well you'd you don't need to look any

further than the actual paper ballot

so if you knew what a ranked choice

voting

ballot look like you could see that

there's uh different columns for each

candidate

where voters can select their first

preference and then the second and third

and so on

as i said it's not certified for use in

michigan

it's not allowed for use in michigan

it's

not something that election officials

can just turn

on and even if they could it's easily

detectable okay

at this point then members i'd like us

to take a 10 minute recess

and we'll come back mr polis thank you

10 minutes

great thank you

the senate committee will return to

order i thank you members

um mr polis uh thanks for patience

um i guess i'd like to just

come back to my last question about this

ranked

how do we call it ranked voting rank

ranked choice ranked choice voting yes

thank you

so what i'm really trying to find out

from you is the

the functional inhibitions in the

software

you say that it's not that they can't

access it but what does that mean i mean

do they see a button on the screen but

it's grayed out so it doesn't work

what would it take to turn it on i mean

is that saying you guys turn on when you

when you sell the software to michigan

how is that how is it inhibited from

being

accidentally or purposefully turned on

well that's correct senator

so um it is not installed um

uh when we went when the election

officials took

possession of their system whenever that

was back in 2017-18

um they would have had to separately

install

a module that would be part of the

record

that again as i've said any independent

testing authority could verify this so

you don't necessarily have to take my

word or even a poll official word for it

one of the claims that i think um i've

seen

that may be related to this is the uh

the allegation of fractions in our

reporting software

um as i said in my opening statement

there is no fractional voting

that's just not a feature of our system

and any uh audit of our database would

show this

we don't allocate fractions and

certainly don't do any switching or

deletion

of these votes so when the ranked

voting occurs in the states that do

allow that is there a fractional

vote count that comes out in those

situations or is it still whole numbers

now the so the report that i happened to

see

in um it was i think another hearing in

your state

and it was attributed to our system i i

can tell you that's false

and i haven't seen any report of where

that report came from it looked like it

was just created on powerpoint

i can tell you that that it does not

come from any report on our system

and that's something any one of your

counties that use our system could

verify for you in the states that do use

rank choice voting it is a separately

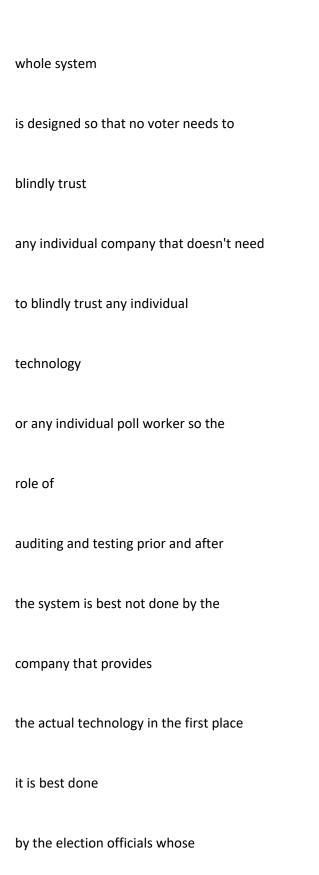installed module with separate trading

and the telltale sign of whether or not

it's on is you look at the ballots

so beside sender senator mcbroom's name

on a ballot

there might be um if it's a vote for

five there might be four

different columns so i could vote for

you as my first choice or my second

choice third or fourth choice

the rules on this vary in the in in the

jurisdictions that use them

but again it is not allowed for use in

michigan it has nothing to do with

michigan

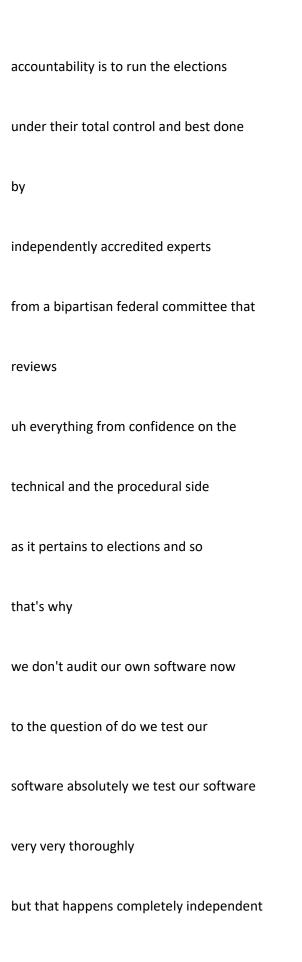it wasn't used for michigan and that's

something something that can be easily

and independently verified so

on with the fractional voting issue

since you bring this up and i

i would have one of the other committee

members hadn't

this i've seen a page that appears to be

a

screenshot that demonstrates fractional

votes

and at the bottom of it it says dominion

software

is there any screen in your software

that would

allow that to happen and if not where

did this come from

absolutely not it does not come from our

software

our reports typically don't have from

dominion software on the bottom of our

reports our reports can be obtained

through the secretary of state's office

or counties that use our systems

um and as to the

uh all important question of where that

uh

screenshot came from to me it looked

like it was an actual

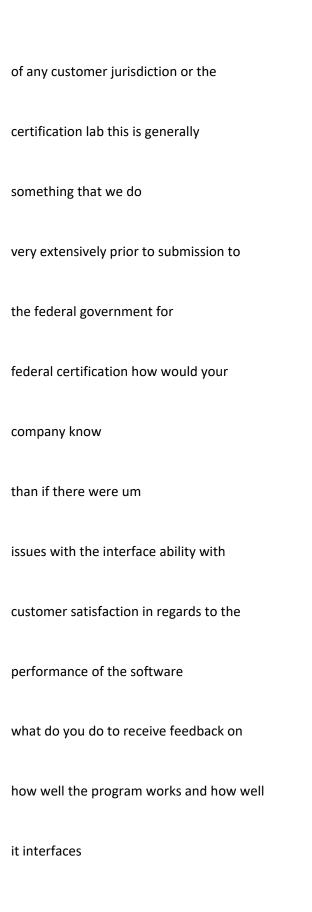uh powerpoint report um your guess is as

good as mine all i can tell you is it

did not come from our system

i'm gonna go back slightly and it's not

that i won't come back to fractional

voting but i'm gonna mull over what you

said and perhaps will come back from a

different angle

but the you were mentioning how

in the post election

these your software the machinery is

audited by the eac

or potentially by a third party correct

you know the federal process

specifically requires

it to be thoroughly tested including

source code review

accuracy test volume test environmental

test

it's very comprehensive the manual is

thousands of pages of

requirements why doesn't dominion

do some of its own

auditing of the systems at the

completion of the election afterwards i

mean do you

come to any of the counties take back

machinery or software and reevaluate how

it performed yourself

that's a great question senator the

whole system

is designed so that no voter needs to

blindly trust

any individual company that doesn't need

to blindly trust any individual

technology

or any individual poll worker so the

role of

auditing and testing prior and after

the system is best not done by the

company that provides

the actual technology in the first place

it is best done

by the election officials whose

accountability is to run the elections

under their total control and best done

by

independently accredited experts

from a bipartisan federal committee that

reviews

uh everything from confidence on the

technical and the procedural side

as it pertains to elections and so

that's why

we don't audit our own software now

to the question of do we test our

software absolutely we test our software

very very thoroughly

but that happens completely independent

of any customer jurisdiction or the

certification lab this is generally

something that we do

very extensively prior to submission to

the federal government for

federal certification how would your

company know

than if there were um

issues with the interface ability with

customer satisfaction in regards to the

performance of the software

what do you do to receive feedback on

how well the program works and how well

it interfaces

uh well it's an iterative exercise uh

through continued conversations

uh collaborative in nature with our

customers that use our software systems

and now turning my attention and i'm

sorry to kind of bounce around here a

little bit on you no no worries

when when we look at the antrum report

that's recently come out

there's specifically uh notes

regarding the absence of logging within

the steps

of the adjudicated ballots you went

through for us what the adjudicated
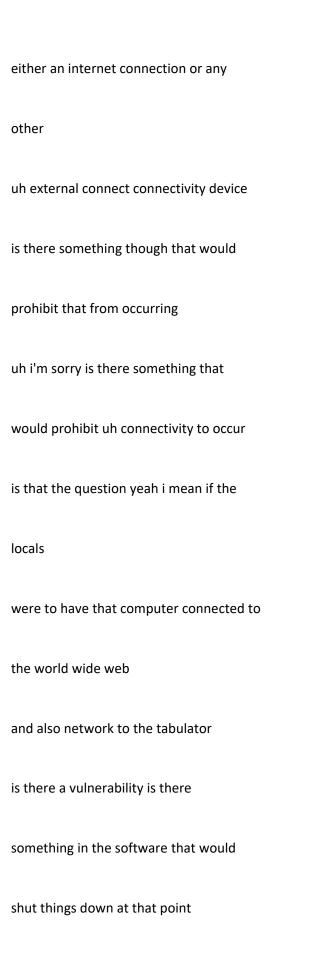
ballot is and what that entails but

where you mentioned there's both an

automated and a non-automated

system for uh for adjudication which one

is it that antrim county had

and where are these logs that the report

that came yesterday says are missing

there's no automated process for

adjudication

the two different systems are one that

is manual in nature

that requires local bipartisan

adjudication committees

to remake new paper ballots based on

mistakes

that they agree on that a voter who is

uh

who is voting absentee have made and the

second

is the same process but instead of

remaking a paper ballot

they can they they make a

their selection and they their

determination

electronically that is attached to the

original image

and so antrim county

used the manual process

they do not license the digital
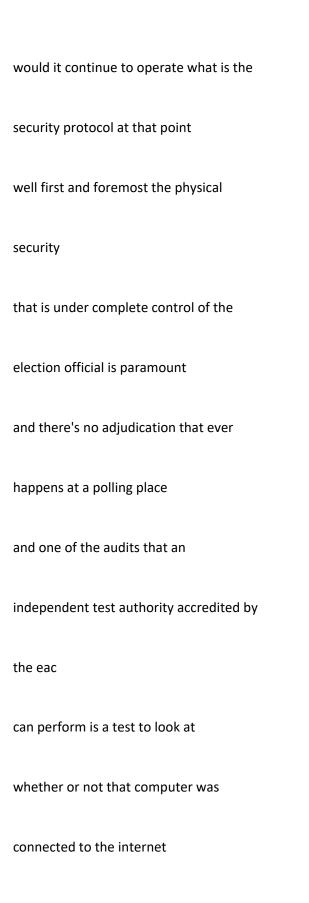
adjudication software

and we know for a fact that they could

not have used it because they did not

record

absentee ballot images which is a

prerequisite to use a

digital adjudication so in my pr

in my township and i'm i'm part of a

small township

and by the way just for the record

because i'll get in trouble later if i

don't correct you andrew

county is state not in the u.p just it's

close to the u.p but it's downstate

um fair enough as as you might have

surmised senator i've

uh we have not been i have not been to

andrew county

um it's on my it's on my to-do list it's

a beautiful

county it's a beautiful place i hope

you'll get the chance um

regardless um so in my precinct

i don't see any computers there at all i

mean there's one

tabulator and so

does that mean then that if they need to

do adjudication of ballots there for an

absentee ballots

they're going to have a manual process

then correct that that's correct

if a place has a digital process they

would have to have a computer there

that interfaced with the tabulator

that's correct

okay and so are those networked

is the computer then network directly to

the tabulator

on a local area network

the systems are designed to be closed

networked which means they are connected

to each other in a local area network

but they are not designed to be

connected to the outside world through

either an internet connection or any

other

uh external connect connectivity device

is there something though that would

prohibit that from occurring

uh i'm sorry is there something that

would prohibit uh connectivity to occur

is that the question yeah i mean if the

locals

were to have that computer connected to

the world wide web

and also network to the tabulator

is there a vulnerability is there

something in the software that would

shut things down at that point

would it continue to operate what is the

security protocol at that point

well first and foremost the physical

security

that is under complete control of the

election official is paramount

and there's no adjudication that ever

happens at a polling place

and one of the audits that an

independent test authority accredited by

the eac

can perform is a test to look at

whether or not that computer was

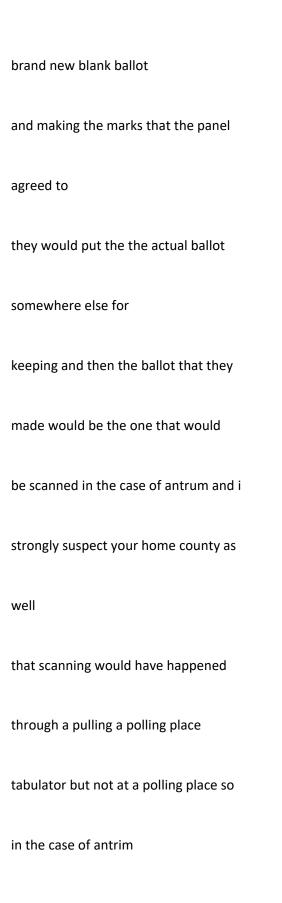connected to the internet

which of course it's designed not to

i thought that you might have just said

that adjudication doesn't take place at

the polling place but

i'm not sure is that what you meant to

say because i mean isn't that where

if there's a ballot with an overvote

isn't that adjudication going to take

place there at the polling place

okay fair enough so i did say that so

let's take a couple steps back make sure

we're on the same page

please um in a county uh

like antrim uh or your county
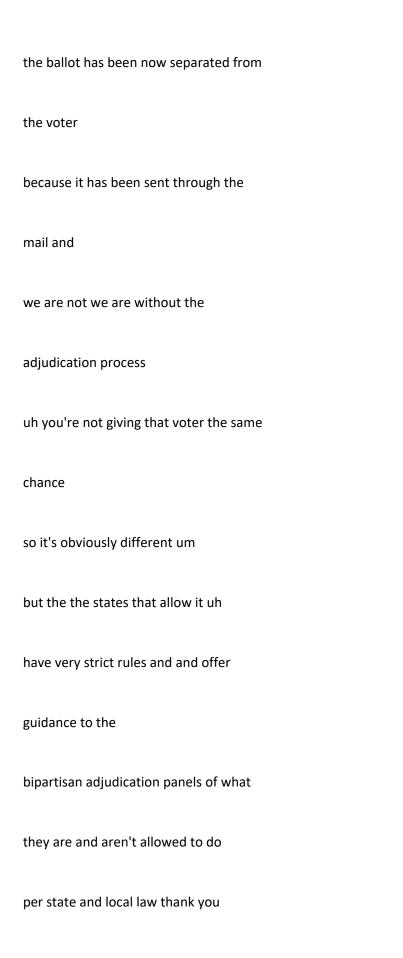
uh where they are using a a manual

adjudication process

adjudication does not happen at the

polling location

adjudication happens only as it pertains

to absentee ballots that are received

at whatever location that county

may be processing the absentee ballots

that come in

so the county runs their independent

process

in verifying the absentee pros ballots

that come in

um verifying voter

eligibility for whatever rules they have

and then the ballots are then processed

usually into my knowledge exclusively at

a centralized location

that is physically controlled by in

every respect

by the local election officials so

in a county such as antrim the

adjudication would have been done by

hand

any paper balance that needed to be

adjudicated

would have been done by remaking taking

a problem ballot

if there was agreement by the

adjudication board and creating taking a

brand new blank ballot

and making the marks that the panel

agreed to

they would put the the actual ballot

somewhere else for

keeping and then the ballot that they

made would be the one that would

be scanned in the case of antrum and i

strongly suspect your home county as

well

that scanning would have happened

through a pulling a polling place

tabulator but not at a polling place so

in the case of antrim

what i just learned the other day was

out of the 18 tabulators that they had

two of them i believe uh were

dedicated for absentee ballot scanning

through accounting board

okay so

and and i will add at this in this lay

in this scenario um there is no

connectivity

no connectivity of any kind we were

mixing

digital adjudication when when you're

doing digital adjudication but in the

scenario that we are talking about now

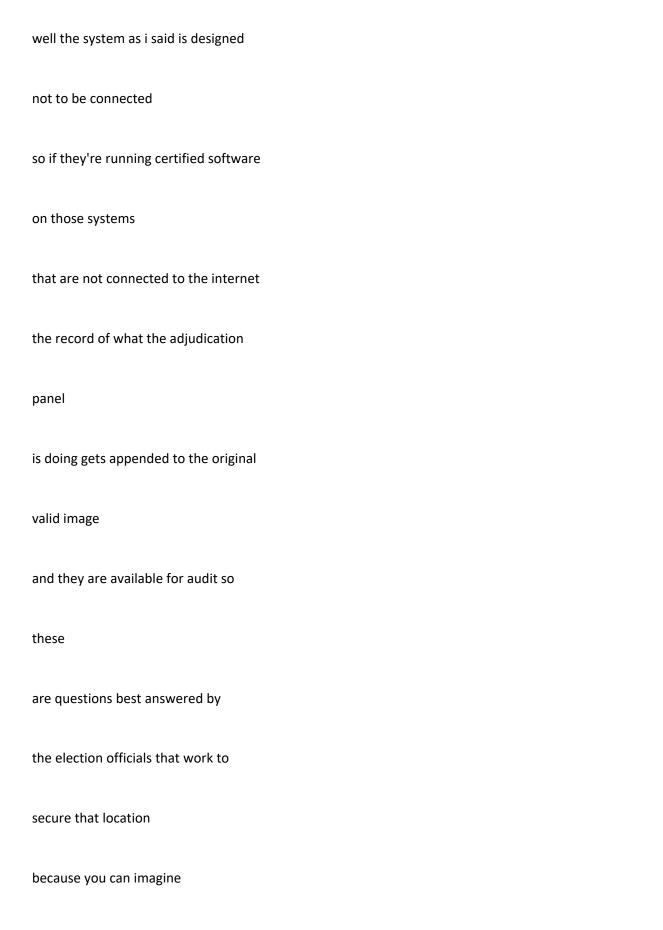as it pertains to your county or interim

county

there is no internet connectivity at all

okay thank you and but it does open up

kind of the can for the other

you know major thing that we've talked

about where obviously in tcf

they were using um digital adjudication

well let's come back to that in a second

i just want to clarify

one thing so the reason why we don't

need

adjudication for in-person voting

that is if a voter made the same mistake

in a

in a local uh precinct where they are in

person

the voter has the the tabulator will

prompt the voter

about their error and offer the voter a

second chance

to correct their bout so in in a hand

count

in a hand mark paper ballot scenario if

the

if the voter selects your name and then

crosses

or fills in the oval besides your name

and then crosses it out and fills in an

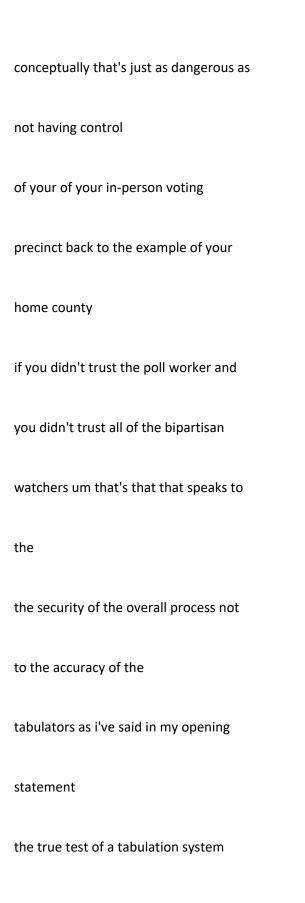oval below your name in the same contest

and it was

only a vote for one contest they're the

ones that in

in-person voting the voter themselves is

is feeding their ballot in the tabulator

and the tabulator

will prompt them of their mistakes so

they have a chance to correct it

themselves

you don't need an adjudication panel

because the voter can correct it for

themselves

the issue arises in absentee voting

where the

the ballot has been now separated from

the voter

because it has been sent through the

mail and

we are not we are without the

adjudication process

uh you're not giving that voter the same

chance

so it's obviously different um

but the the states that allow it uh

have very strict rules and and offer

guidance to the

bipartisan adjudication panels of what

they are and aren't allowed to do

per state and local law thank you

in the situations where they choose to

use digital

adjudication such as at tcf or other

mostly larger counties and a computer

then is

local area network connected to

the tabulator what is to

you you answered earlier it's up to the

locals to provide the security

but if they were to allow that computer

to be connected

to outside networks does that present a

vulnerability to the tabulators

programming

well the system as i said is designed

not to be connected

so if they're running certified software

on those systems

that are not connected to the internet

the record of what the adjudication

panel

is doing gets appended to the original

valid image

and they are available for audit so

these

are questions best answered by

the election officials that work to

secure that location

because you can imagine

conceptually that's just as dangerous as

not having control

of your of your in-person voting

precinct back to the example of your

home county

if you didn't trust the poll worker and

you didn't trust all of the bipartisan

watchers um that's that that speaks to

the

the security of the overall process not

to the accuracy of the

tabulators as i've said in my opening

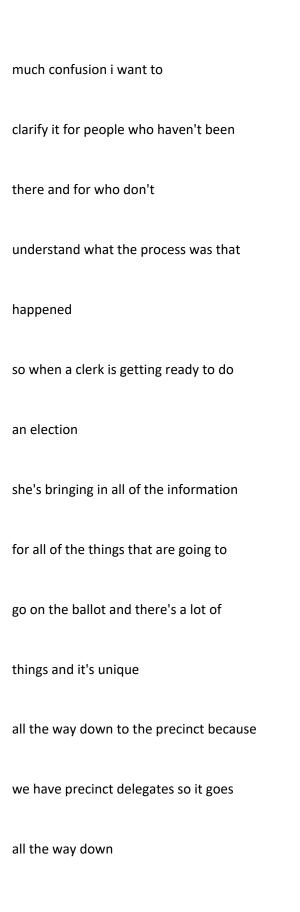statement

the true test of a tabulation system

such as ours

is in the manual recount and an audit

that is taking place

and that is something that is always

available to do

and i guess what i'm trying to come back

to because i started off with this

question about logging

of security and so is

would changes would outside manipulation

if somebody

had these things connected and obviously

that's not the case in antrim county but

potentially possibly the case in other

counties

would those security logs represent if

somebody were to

attempt some manipulation well certainly

not

i don't think so that's really a

question for

election investigators i'm not aware of

anything that has been found to be

credible

but as i said this really is a question

for the officials that control the

physical custody of the ballots

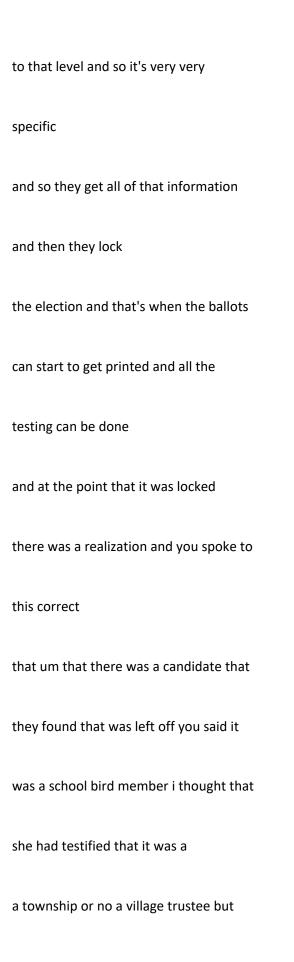our machines are responsible for the

accuracy

in regards to counting the paper ballots

and and that's exactly what they do

in the antrim back to antrim and i know

we're bouncing around

in antrim county the report says that

there are is a

period of time where there isn't any

security logs

what is the explanation for that

so senator i've only had a cursory

review

of what i consider

the biased report uh that came up

um i've also had a chance to cursor

a cursory review i should say um

of the secretary of state's response uh

which i frankly agree with

the response that was issued um recently

to that report um as i've mentioned

earlier dominion did not program

antrim county uh we have no access to

their systems

uh we are still not in possession of any

of the logs

uh or any of the databases or any of the

election material from

interim county um and so

as i said a lot of the arguments were

incomprehensible to me but then again i

haven't seen

uh any of the the uh files so i can't

comment on what it is they're looking

for other than i know some of the

conclusions were

were wrong um and false

senator tyse has some questions

hello there thank you for being with us

today i very much appreciate that

thank you for the opportunity um so

there's a lot of confusion i want to

start with antrim i know we've been over

it and

but and i don't mean to beat a dead

horse but there's a because there's so

much confusion i want to

clarify it for people who haven't been

there and for who don't

understand what the process was that

happened

so when a clerk is getting ready to do

an election

she's bringing in all of the information

for all of the things that are going to

go on the ballot and there's a lot of

things and it's unique

all the way down to the precinct because

we have precinct delegates so it goes

all the way down

to that level and so it's very very

specific

and so they get all of that information

and then they lock

the election and that's when the ballots

can start to get printed and all the

testing can be done

and at the point that it was locked

there was a realization and you spoke to

this correct

that um that there was a candidate that

they found that was left off you said it

was a school bird member i thought that

she had testified that it was a

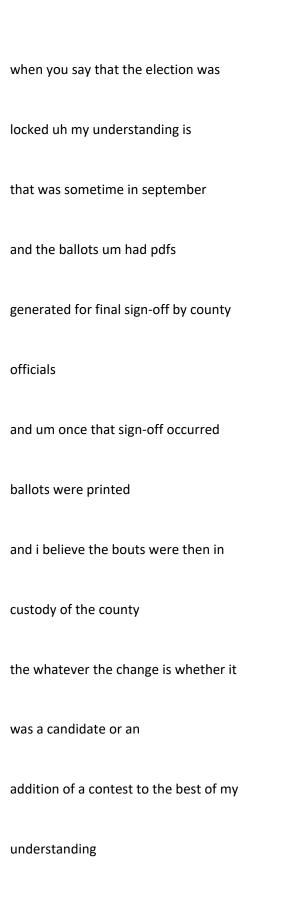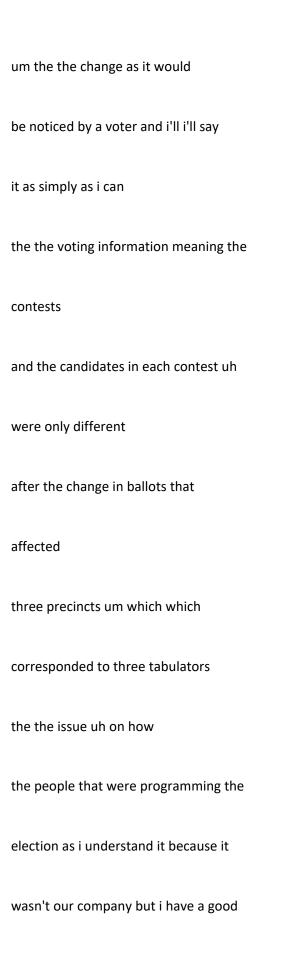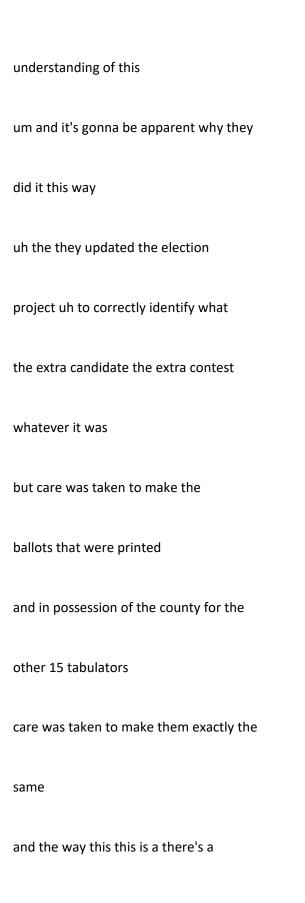a township or no a village trustee but

but not sure which it was anyway it was

it was very well be correct i'm not sure

on exactly what was

uh all i know is the programming changed

on correct and on ballots that

affected three precincts and i thought

maybe there was

something else like a millage or

something else too but nonetheless it

would have changed

the format of the ballot once they were

reprinted it would have looked

different even there would have been

additional information

on the ballot that hadn't existed there

previously

so for that particular precinct

it looked different would that have

affected

outside areas beyond that precinct

such that all of it needed to be

reprogrammed my understanding was it did

is that true so the entire county needed

to be reprogrammed

for the tabulators not just the one

precinct is that correct

uh well i'll try to answer it this way

um

the when you you're correct in your

when you say that the election was

locked uh my understanding is

that was sometime in september

and the ballots um had pdfs

generated for final sign-off by county

officials

and um once that sign-off occurred

ballots were printed

and i believe the bouts were then in

custody of the county

the whatever the change is whether it

was a candidate or an

addition of a contest to the best of my

understanding

um the the change as it would

be noticed by a voter and i'll i'll say

it as simply as i can

the the voting information meaning the

contests

and the candidates in each contest uh

were only different

after the change in ballots that

affected

three precincts um which which

corresponded to three tabulators

the the issue uh on how

the people that were programming the

election as i understand it because it

wasn't our company but i have a good

understanding of this

um and it's gonna be apparent why they

did it this way

uh the they updated the election

project uh to correctly identify what

the extra candidate the extra contest

whatever it was

but care was taken to make the

ballots that were printed

and in possession of the county for the

other 15 tabulators

care was taken to make them exactly the

same

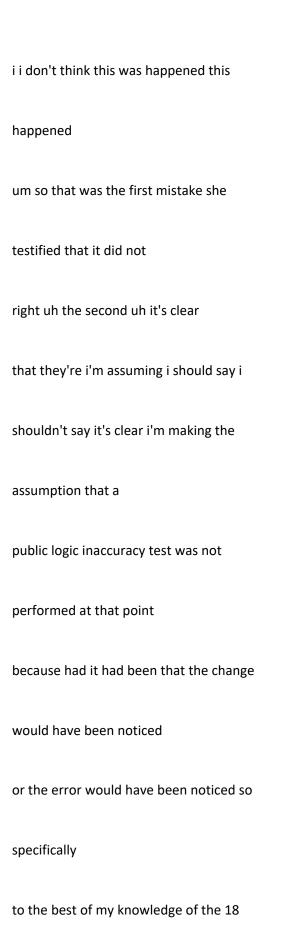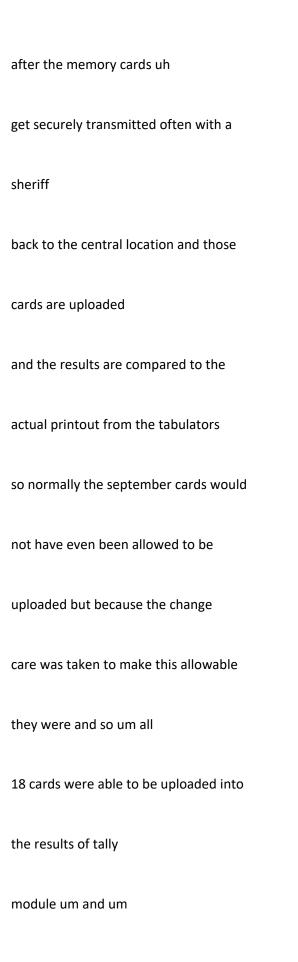and the way this this is a there's a

good reason for that this feature exists

because a lot of jurisdictions uh have

the requirement where there

might be a last-minute court order to

remove a candidate or to add a candidate

and they simply it's simply impossible

to reprogram thousands of machines

overnight from 11 p.m to 7 a.m

so so this is why the feature exists

in this case it was deployed to uh

to save the ballot printing um of what

was

already in possession so the from again

best of my understanding

they only really had to destroy ballots

uh the blank ballots that were

uh set to go for three tabulators and

they only reprinted

the the the ballots associated with the

change

now where the error happened was

there was there's as i said there was

two different human errors

that were compounded by the way it was

programmed so the first error

uh there was there was instructions

given as i understand it

to re-burn all 18 memory cards

for each of the tabulators

i i don't think this was happened this

happened

um so that was the first mistake she

testified that it did not

right uh the second uh it's clear

that they're i'm assuming i should say i

shouldn't say it's clear i'm making the

assumption that a

public logic inaccuracy test was not

performed at that point

because had it had been that the change

would have been noticed

or the error would have been noticed so

specifically

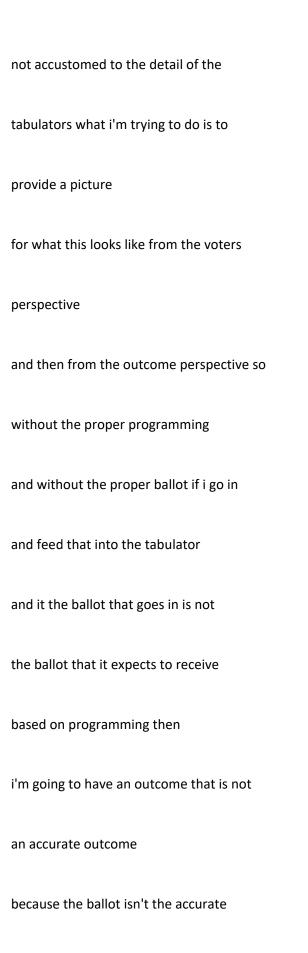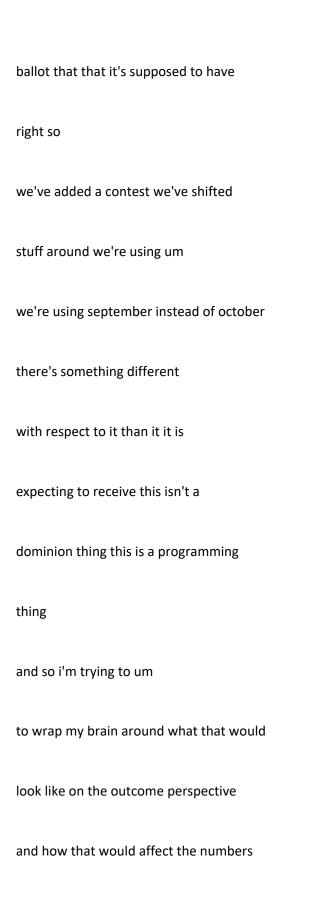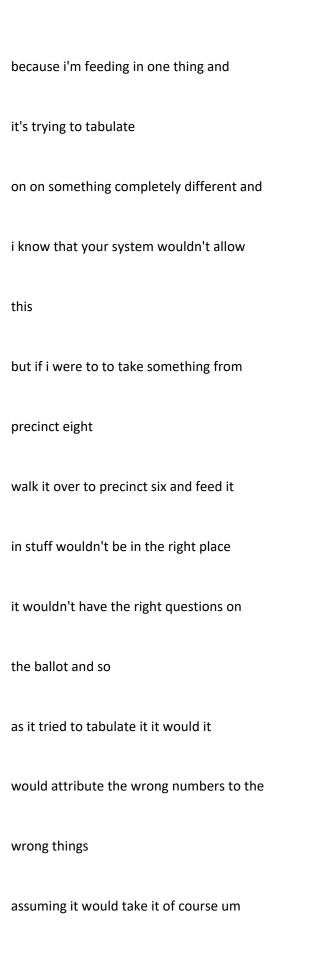to the best of my knowledge of the 18

machines some were

running september project and some are

running

october project and some of the ballots

were september ballots and some of them

are october balance

so a couple things normally

if programmed in a usual way

the september memory cards would not

have been allowed

to be uploaded into our results and

tally

application and this is the part of the

application

after the memory cards uh

get securely transmitted often with a

sheriff

back to the central location and those

cards are uploaded

and the results are compared to the

actual printout from the tabulators

so normally the september cards would

not have even been allowed to be

uploaded but because the change

care was taken to make this allowable

they were and so um all

18 cards were able to be uploaded into

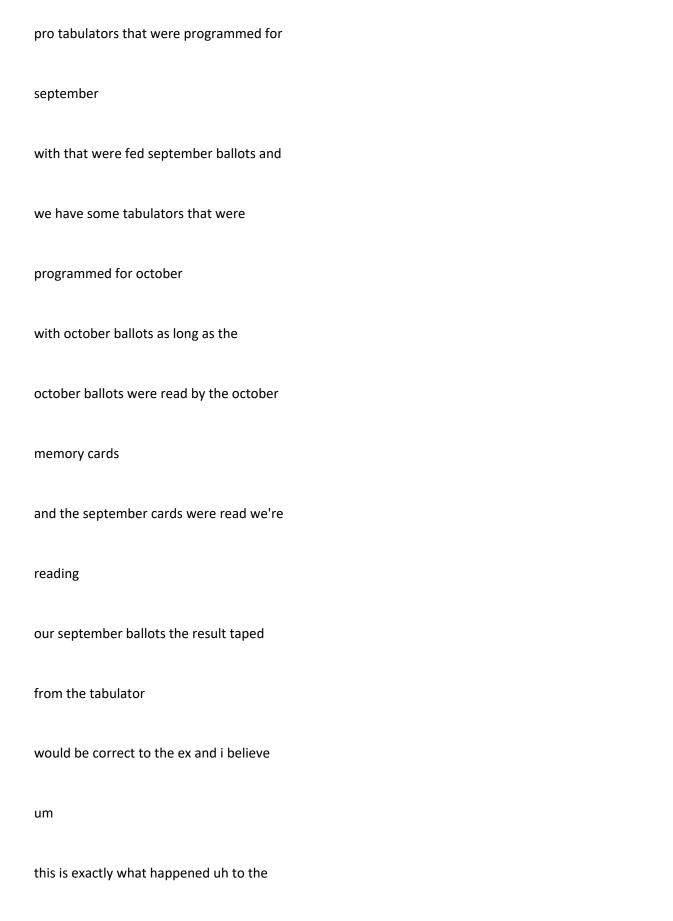the results of tally

module um and um

and that's and that's where there was an

error in the unofficial report

so as i mentioned that's

a very big reason why we do canvas or

why election officials do canvas

because that's where this was noticed

identified

and corrected long before results were

made official

so you've testified to all of this but

what you're doing is getting into the

excruciating detail and making it

extremely difficult to see the bigger

picture for the people who are not

not accustomed to the detail of the

tabulators what i'm trying to do is to

provide a picture

for what this looks like from the voters

perspective

and then from the outcome perspective so

without the proper programming

and without the proper ballot if i go in

and feed that into the tabulator

and it the ballot that goes in is not

the ballot that it expects to receive

based on programming then

i'm going to have an outcome that is not

an accurate outcome

because the ballot isn't the accurate

ballot that that it's supposed to have

right so

we've added a contest we've shifted

stuff around we're using um

we're using september instead of october

there's something different

with respect to it than it it is

expecting to receive this isn't a

dominion thing this is a programming

thing

and so i'm trying to um

to wrap my brain around what that would

look like on the outcome perspective

and how that would affect the numbers

because i'm feeding in one thing and

it's trying to tabulate

on on something completely different and

i know that your system wouldn't allow

this

but if i were to to take something from

precinct eight

walk it over to precinct six and feed it

in stuff wouldn't be in the right place

it wouldn't have the right questions on

the ballot and so

as it tried to tabulate it it would it

would attribute the wrong numbers to the

wrong things
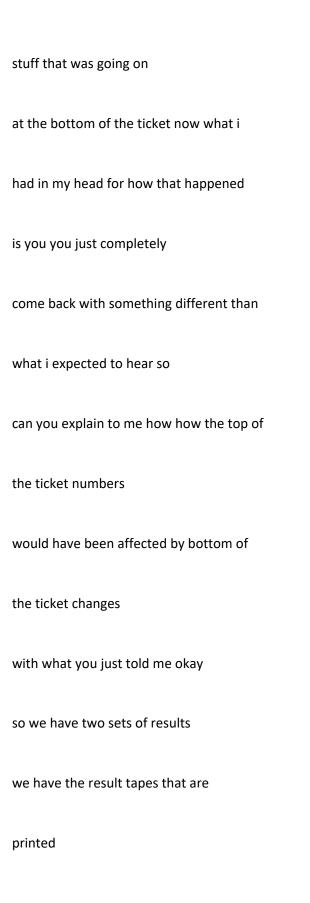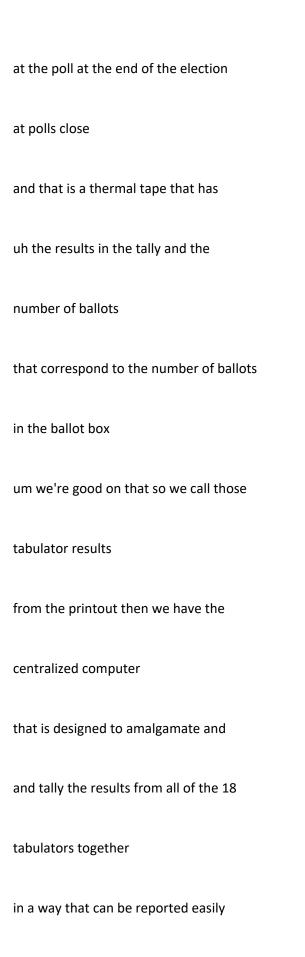
assuming it would take it of course um

and and then i'd have the wrong numbers

in the wrong place it seems to me

in my non-election brain that that's

similar to what happened here if you get

step out of the detail and you look at

the frame

you look at the outcome does is that

um i i i think i understand and i

apologize for getting into the weeds i'm

accused of that quite often actually

um but if you look at it from a 30 000

foot level

uh from the best of my understanding we

have some

pro tabulators that were programmed for

september

with that were fed september ballots and

we have some tabulators that were

programmed for october

with october ballots as long as the

october ballots were read by the october

memory cards

and the september cards were read we're

reading

our september ballots the result taped

from the tabulator

would be correct to the ex and i believe

um

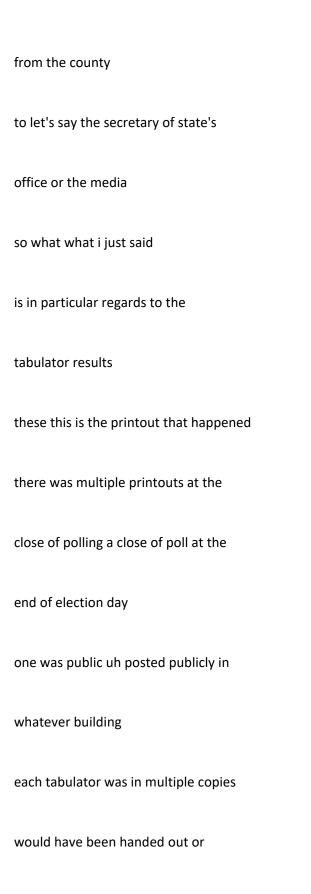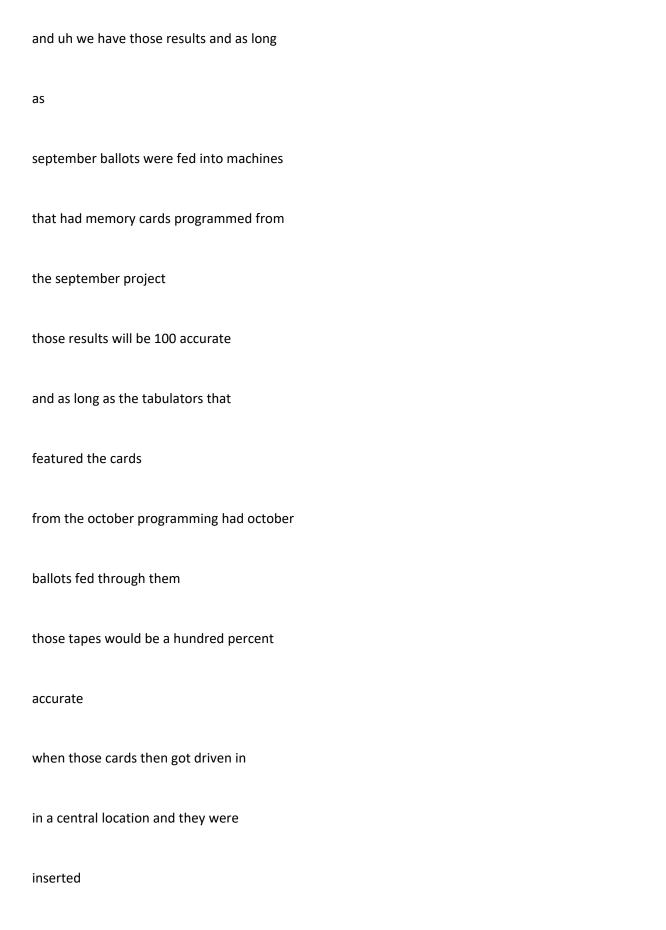this is exactly what happened uh to the

extent that there was one location

and one tabulator that was using a

september memory card

with october ballots and it had this

extra person or contest

that is there there wouldn't be any

changes to

the top of the ballot contests um

but there there very well may be

a change uh to the affected race

and to my knowledge that's precisely why

the secretary of state's office together

with antrim county officials

are working to do a hundred percent

audit

on the presidential race to confirm that

the results on the tape actually match

100 percent

the results of the paper ballots which

of course had been securely stored

under the custody of the local election

officials

so that is not my understanding of how

that whole process worked and it doesn't

um

[Music]

the numbers that we saw should not have

been

affected at the top of the ticket for

stuff that was going on

at the bottom of the ticket now what i

had in my head for how that happened

is you you just completely

come back with something different than

what i expected to hear so

can you explain to me how how the top of

the ticket numbers

would have been affected by bottom of

the ticket changes

with what you just told me okay

so we have two sets of results

we have the result tapes that are

printed

at the poll at the end of the election

at polls close

and that is a thermal tape that has

uh the results in the tally and the

number of ballots

that correspond to the number of ballots

in the ballot box

um we're good on that so we call those

tabulator results

from the printout then we have the

centralized computer

that is designed to amalgamate and

and tally the results from all of the 18

tabulators together

in a way that can be reported easily

from the county

to let's say the secretary of state's

office or the media

so what what i just said

is in particular regards to the

tabulator results

these this is the printout that happened

there was multiple printouts at the

close of polling a close of poll at the

end of election day

one was public uh posted publicly in

whatever building

each tabulator was in multiple copies

would have been handed out or

and uh we have those results and as long

as

september ballots were fed into machines

that had memory cards programmed from

the september project

those results will be 100 accurate

and as long as the tabulators that

featured the cards

from the october programming had october

ballots fed through them

those tapes would be a hundred percent

accurate

when those cards then got driven in

in a central location and they were

inserted

into a desktop computer

or tally server that the county

has in their sole possession and control

the september cards should not have even

been allowed

to download the results

if it was programmed in a regular way

the only way

and this is where this is what

confounded the two

human error issues because the

programming was allowed to accept

on the back end on the on the tally

computer

that tally computer was instructed to

read

cards from the september project and the

october project

and that is where the reporting error

from the night of the election through

to the next morning at some point

that is where the results were very off

because that database was expecting

structures in different ways than they

actually were given on those memory

cards

and that's that that is what confounded
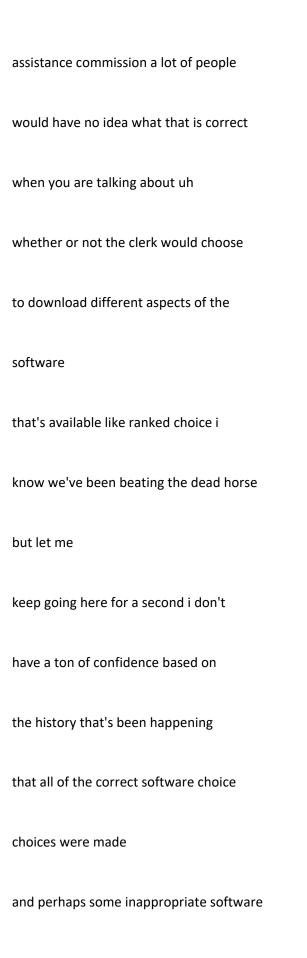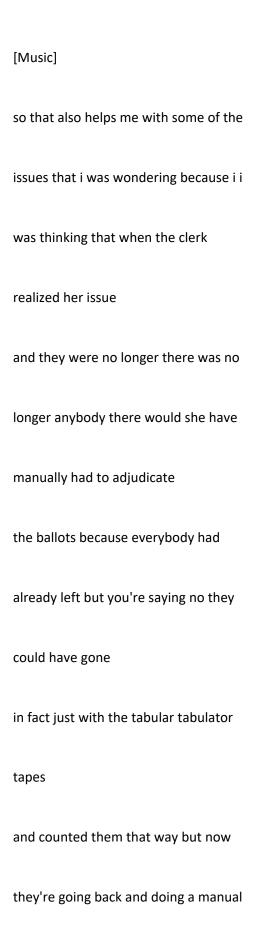
the problem

so the results were never um

validated they were never certified

and that is exactly the process of

canvas and why they were caught

the day after is that does that help

in the explanation or that does so the

tabulators provided that they were

accurately programmed for the particular

ballots that were being fed into them

regardless of whether they were

september

or october are fine it's not until the

point of time

that we're we're bringing together all

of the information from all of the

separate tabulators into an

individual um uh where we're con

conglomerating all of the information

it's not until that point in time where

we

were mixing then the october and

september uh election

uh plans uh you call them projects um

where it becomes an issue and that at

some point there was an override

uh from the sep where september was

forced in

as well as the october that should not

have been allowed and that's what

created the problem

okay thank you and i will add

that we are confident that the top of

the ticket so the presidential race

uh was not affected on the the tabulated

results the tapes

from the 18 tabulators but of course

this is going to be

the recount will will be the ultimate

judge of that

so yes thank that's thank you that's

good

i just wanted to clarify a few things so

eac is something that we've been

referencing a lot that's the election

assistance commission a lot of people

would have no idea what that is correct

when you are talking about uh

whether or not the clerk would choose

to download different aspects of the

software

that's available like ranked choice i

know we've been beating the dead horse

but let me

keep going here for a second i don't

have a ton of confidence based on

the history that's been happening

that all of the correct software choice

choices were made

and perhaps some inappropriate software

downloads happened is that possible

or or do you not even think that that's

possible no i don't think that's

possible

this is not some feature that can be

accidentally turned on

it is it is a distinct module that

starts with

the election definition um and that

leads to

the way the ballot looks so this is not

some feature that can accidentally be

turned on

okay

[Music]

so that also helps me with some of the

issues that i was wondering because i i

was thinking that when the clerk

realized her issue

and they were no longer there was no

longer anybody there would she have

manually had to adjudicate

the ballots because everybody had

already left but you're saying no they

could have gone

in fact just with the tabular tabulator

tapes

and counted them that way but now

they're going back and doing a manual

to compare the tabulator tapes and the

numbers to the manual ballots

um you've confused me on that one were

we are we specifically talking about

antrim county yes

just interim so again the any

adjudication

would have happened only on the absentee

ballots that were mailed in

well so as i it was my perspective

that because this election had happened

and then she realized her arrow

error after that when these ballots had

already been fed in that something else

would have had to happen but you

corrected me on that so thank you

yeah again antrim county did not

and could not uh have used digital

adjudication

and the manual adjudication would have

been done prior

to her closing the polls on the two

tabulators

that ultimately printed out a results

tape

okay thank you and i want to i want to

shift a little bit

um i want to clarify something you keep

talking about the bipartisan watchers

for things that are ongoing

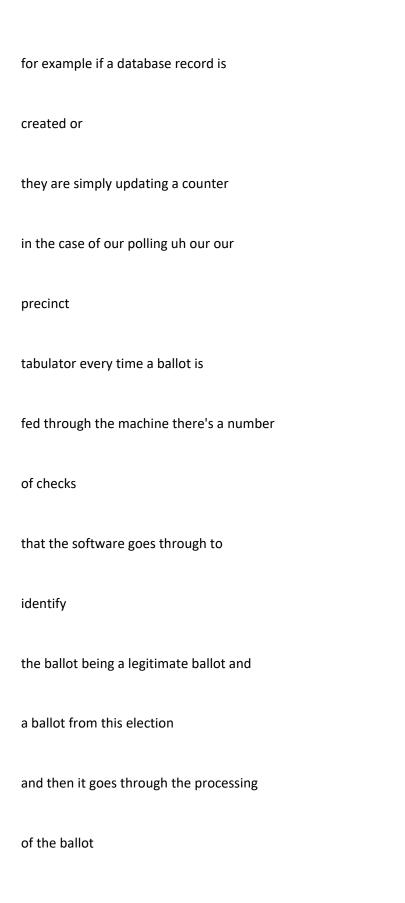they're not always available in all

areas in all places

and in some places they're easier to

find than others and so

part of the issues that we're dealing

with as an oversight committee

is they weren't always available

in in order to make sure that everything

was done in the forthright manner that

you describe

and and that's not your problem but that

is it doesn't always happen that way and

we

we want to make sure that it does do you

uh so you have uh

equipment that are that that's the

tabulators do you guys also provide the

high speed tabulators

yes we do all right they don't have do

they have a

a box that the ballots go into also or

are they accessible to you at both the

beginning and the end of the scan

well they're never accessible to

dominion staff i'm sorry

to the person handling them right

they are accessible they're well they're

always accessible so

um any high-speed scanner the way it

works

uh to get a high throughput speed um

usually has a u-shape uh scan head

to minimize the frequency of jams

especially with ballots that have been

folded

um and passed through the mail twice

and handled by a number of different

individuals

so the ballots there there is an

incoming trade and an outgoing trade

okay that makes a lot of sense to me i

may have some

further questions later let's see uh oh

i did want to ask if we could get uh

from you because you you referenced the

contracts and you're not sure where what

we have contracts with i don't want the

details of your contracts that's between

you and whomever you contract with

but i would like to know with whom you

have contracts for our state

so i know you do with the state of

michigan obviously interim county

uh but if we could get that information

that would be helpful

yeah so i i don't think we have a

contract with andrew county but

we will certainly get that for you

senator it could be their counties are

contracting with the state in order to

have access to that too

that's possible

and then you said the on-site technical

support is part of the contract

generally when it happens

uh i wouldn't say generally uh it's

definitely not out of the norm

um and um it's just a in a lot of places

it's a regular

um part of our process okay

thank you very much for your time and

patience with me i appreciate it

no thank you thank you senator tights

senator mcdonald thank you chairman

thank you for being here um i'm going to

go back to some of the

technical questions if you don't mind

can you tell us what programming

language is used and if it includes any

database

system uh not like

not off the top of my head but that's

something certainly i can get for you

i would appreciate that um can you walk

us through the business logic of what

happens when a ballot is processed

for example if a database record is

created or

they are simply updating a counter

in the case of our polling uh our our

precinct

tabulator every time a ballot is

fed through the machine there's a number

of checks

that the software goes through to

identify

the ballot being a legitimate ballot and

a ballot from this election

and then it goes through the processing

of the ballot

and then everything of course is logged

and

saved so to your knowledge is it

possible for somebody to change a record

value either locally or remotely

no to my knowledge it's not and even if

it were

they certainly wouldn't be able to do it

undetected

someone leave like a log entry if it was

possible

would it leave any trail it would leave

a trail uh there would be a mismatch

from

the other card uh and there's several

checks and balances in the machine

that can identify whether or not such a

thing uh happened which of course i

don't think it can

okay thank you and this has become a big

issue

do you have any knowledge about the

solar winds breach

are you familiar with at all because all

i know is that we don't use

uh the uh solarwinds orion

um package that was the subject of the

dhs report from the 13th i guess

yesterday

is it possible for somebody to insert a

usb drive that could have manipulated

the database

or data or software is that possible to

your knowledge

in in which in our tabulators no i don't

think it's possible and again

even if even even at the central um

computer even if it was it would be

detected

i just have two more questions that's

okay um sure

small towns in wayne county adjudicated

in detroit or

at the local precinct and if so how is

the data transferred

i don't know the answer to that okay

last question um

how do you electronically match voter to

identity so the voter can vote

so we can catch it so they can't vote

more than once

uh well that's really a question that

it's really a question for the

election officials whose job it is to

verify eligibility it's not something we

do

okay yeah i just thought i'd check that

okay um i may have more questions but

for now thank you

thank you so much thank you

thank you senator um

mr polis i'm going to go back to

a question that i've hit from a couple

of different angles before but i just

want to be really clear that we're

talking on the same wavelength here

if whether it's at a tcf

or a facility that uses digital

adjudication

where they have a tabulator connected

in a closed network to a computer

if by accident or intent that computer

is not secured properly and is also

connected to a network

a wider network

is it possible for someone to

maliciously and unknown and unknowing

without us knowing it hack into the

tabulator and alter the results

no i don't think that's possible but

again even if it were it would be

detectable

can you share with us how it would be

detectable what what are the assurances

that we can have to to that

um well what i would recommend would be

an independent test authority um to do

the analysis

um from everything on looking at all of

the structures and the audit logs of

that computer

and perform the battery of tests

that they do and i know that they offer

this as post election services

uh to to election officials in all

across the country

and verify definitively

whether or not such a thing happened

does the software that

is it your design within the software

that dominion designs to keep security

logs that would

flag unauthorized alteration of the code

yes absolutely and and there's also

ways for election officials to check

that

and with every ballot scan

that we do when it's when we're talking

about digital adjudication we actually

have

a audit mark appended uh to aversion to

to the same ballot image that

can show to any concern citizen any

voter

a clear understanding of what the ballot

uh was that was scanned and what how the

tabulator interpreted that

what's the um

trying to how would how would we underst

uh would there be some sort of flagging

that would happen though that would

cause

poll workers to look would the would an

error message come up would the

machinery

stop working or would this only be

caught if somebody were to perform an

audit

well the machine machinery would stop

working

and you would be you could always check

by going through the audit marked images

of the ballots that were scanned and

what and that's that's above that's

that's not even

before we get into an independent

verification from an ita

now the security of that computer that

is

hooked even to that local network

or the digital adjudication the security

protocols that are put in place on there

are

does your company set a standard and and

provide instructions to the local

workers

on all of the security settings that

that computer should have

is that saying that comes from the state

of michigan does it come

preset where do those security standards

and settings

get placed or who does them

uh well all of the settings uh that are

allowable for use

um as part of a federal certification

are are specifically specified in that

certification

and in addition uh layering on top of

that uh they have to be allowed by

the state of michigan during their

process um

ultimately the physical security

of the entire system including

possession of the paper ballots

themselves

and the scanners that do the high-speed

scanning

of absentee ballots are all

under the control of the local election

official

what do you what can you tell us about

the

um various documentaries news reports

and other things both

right now contemporary ones that i've

seen from even ten years ago

that show university professors and

professional hackers demonstrating how

quickly they're able to compromise

uh election tabulators

yeah it's a great question uh chair

mcgroom um if you're referring to

for example uh the one that i'm familiar

with is i think the seven minute hack

the researcher the professor from i

believe princeton university

that originally

published this video or if it's a video

an article

he's one of i think 50 or so signatories

on a letter that specifically addressed

this

election and how they are completely

different systems

so i have seen some of these videos that

you're referencing

they reference legacy systems that were

developed and installed prior to

the eac's vbsg 2005 standards

and they certainly were designed and

deployed prior

to a lot of the rigorous standards that

we see across the states

specifically california certification

new york certification

um and ultimately um

i i you know i keep saying this paper

paper paper

um these the seven minute hack um

the databases um on the old access

or whatever system that they were using

back in 2000

um didn't feature voter verifiable paper

ballots

at the end of the day you have to ask

yourself

where the the ballots is

securely stored and we you always have a

copy of them

um and they're they're distributed at

your local counties

under lock and key and sealed um

that is uh at the end of the day how you

can trust your election

one of the things that's you know

particularly

troubling from

just a pure easy transparent process in

michigan's

voting is the imbalance of poll books

and i understand that

you know that imbalance is not

necessarily

because of software or equipment but is

usually attributed to

the poll workers and the handling of the

ballots but

is that imbalance something that

dominion

looks into and in this

work and would you say autopsy

does dominion look at the imbalance of

poll books

and and discuss with your customers

whether any of that has to do with the

tabulators and the software

uh chair mcgroom that's really a

question for the election investigators

uh both at the county at the state level

um

so again i'm not aware of anything that

has been found to be credible

and as i mentioned in my opening

statement

we really are part of the process

is very limited to providing tabulation

technology

so that poll workers can use that

technology to accurately count

paper ballots which is what they do

senator ty says she has a to the point

question there please just with respect

to the poll books i believe the entirety

of our electronic poll books were

designed

by michigan for michigan and are unique

to michigan they have nothing to do with

minion

okay thank you senator i'd like us to

take uh uh

if you want to take a few quick

questions then we'll take a break and

then i think that'll be we'll be able to

wrap up

okay thank you senator lucito thank you

so much mr chairman

and uh this is interesting

i'm having a good time with this it's

hard to understand it but

does dominion have any way to remotely

access

any of the information on any of the

equipment

or have remote access within the

machines themselves

no so there is no modem at all in these

machines

the only modem is the one that i

described um

that is has a very very particular

function

on the precinct

um and we do not have access to it and

nor can we modem into that machine

does anybody have access to the best of

your knowledge

no okay but it has a you what is it they

call those uh

usb port on the machine i saw it myself

right what's the usb port

i'm not sure which machine you're

referring to i'm not sure either

i didn't get a serial number but there

is usb ports on

machines that you build correct uh

no i don't mean to be facetious senator

what did the machine look like was it a

touchscreen

yes okay yes there is

and so that touchscreen is a ballot

marking device it does not tabulate

boats

so it's just a pen it's an expensive

fancy pen

that allows uh for voters of any

abilities any physical ability language

ability to privately and independently

create a paper ballot that can be cast

by them privately and independently so

if there was no

wireless re modems included or deployed

in dominion machines or equipment

um

could someone let's say a hacker that's

the best way i can say this

connect a modem

to

to do something that should not be done

which is affect the vote

uh well senator if we're talking about a

polling place

in michigan uh we're likely talking

about two pieces of equipment that come

from dominion

one is that touch screen that i it

sounds like that you

you've seen that does have a usb key

that's obviously locked and sealed

and then there's another machine that is

a paper scanner that sits atop

a secure physically secure ballot box

as i said the ballot marking device

does not tabulate boats it is nothing

more than a

electronic pen if you will a voter

interfaces with that

ballot marking device but at the end of

it walks away with a piece of paper

that has a clear written

um summary of who that

voter voted for and that is the chance

that the voter has to physically hold

their ballot

and to review their selections prior to

casting it

so uh it to my knowledge a hacker

if if they if they tried to put any kind

of

an external device on that vmd um

it would it would fall upon the security

of both the lock and the seal so a we'd

know about it

um and b it's it's it's part of a

polling location um that has physical

security of the poll workers and the

poll watchers

how would you know about it you just

said we would know about it because that

was going to be one of my questions

yeah well first of all do you have some

kind of sensations

is there a signal that says air is there

a signal that says there's

i'm sorry that didn't happen with with

the machinery

did it it didn't stop the machine and

said don't accept the vote it kept

accepting votes

no i don't think anyone has no one is

alleging that somebody broke in

okay no no we're not saying no don't

give me no we didn't say heck

we didn't say the word hack but there

was an error

in and it was of human error according

to the clerk which

let me get through these few questions

um

if you can't remotely access it dominion

what were these two employees or three

employees or how many employees doing at

the tcf center

what were they doing there from your

company

uh so i i think you started the question

asking about antrim county we did not

have any no i want to withdraw

i would draw the questions for times

consideration in your time and i

appreciate you coming be specific what

were they doing

in wayne county at the tcf center that

they were employed by wayne county

that's what you said right

they weren't employed by the secretary

of state were they

no the uh okay so we're not talking

about antrim county anymore we're only

talking about tcf center

right uh and the three we had two um to

my knowledge we had two

dominion employees and one one day

contractor

um so they're discharging their duty as

directed by election officials

so specifically cleaning machines

answering technical questions

uh from election officials um but it's

always done

at the direction of the election

official

uh there are strict instructions um that

are those employees are not running the

election so they should never be

confused with

running the election i didn't i think it

could be as simple as

cleaning one one of the most common

things

is cleaning the glass read head of a

high speed scanner

because as you might imagine when you're

scanning tens of thousands of pieces of

paper

it actually is a pretty dirty process

and flex from the paper

accumulate in the scanning bed of the

scanner

that needs to be cleaned properly

would there be any reason for these two

individuals as you've indicated to

employ

any third parties to be there also

to employ any third parties do you mean

uh contractors well one of them

contractors agents anybody else

uh so we contracted with one contractor

who i believe testified

to your house

hearing so you have you have viewed

these hearings

online uh i have not

seen all of the hearings i've seen

snippets i've obviously seen

the testimony from the contractor um

that we hired for a day who was that one

what was the name of the contract are

you hired for the day so we have it for

the record uh

melissa corone i believe okay and that

was the only one

that the two other contractors or the

one import two

other employees from dominion hired

uh miss corona is that correct i believe

her name was

miss caron so of the three people that

were there sir

uh two of them were employees of

dominion and one of them we hired as a

one-day contractor

okay and these three individuals

i'm gonna ask was there training

involved with the two employees that

went to the tcf center and was there an

outline of delegation of duties in which

they had

when they went to the tcf center meaning

did they go

with this is what the scope of work is

this is what you're going to be paid and

this is what you're going to carry out

on behalf of dominion

right so specifically the contractor

was hired from the temp agency

and she was for us one of several

thousand one day contractors her role

was really limited to a type one type of

technician who provides

[Music]

she would have been told how to clean

the glass read heads or at least she

should have been

but really the main job is flagging down

if there's any questions

in technical nature that election

officials have

to flag down one of the two

uh dominion engineers who were there who

could answer the question

was there any tallies or any

evaluations that went back to the

company by these two employees from the

tcf center

outlining what if any issues were raised

at the tcf center like an evaluation

i don't know sir i couldn't hear you i

said i i don't know sir

who would be the one that would be

charged with that duty if you don't know

so we could get something back as far as

feedback go what they claim

happen at the tcf center because we

heard a lot of testimony a lot of

testimony

uh i can certainly gather that for you

thank you

mr chairman at this time there was only

other one question it was

doing with jamming of the machine does

the

tabulators if at machine jams

go ahead and recalculate if the vote was

already counted

um are you referring to the central

scanners

that were at the tcf center i am we

heard

testimony that they have to go through

batches

and if the batches are not deleted when

they scan and it gets jammed up

the system then will run a ballot two

and three times or ten times through

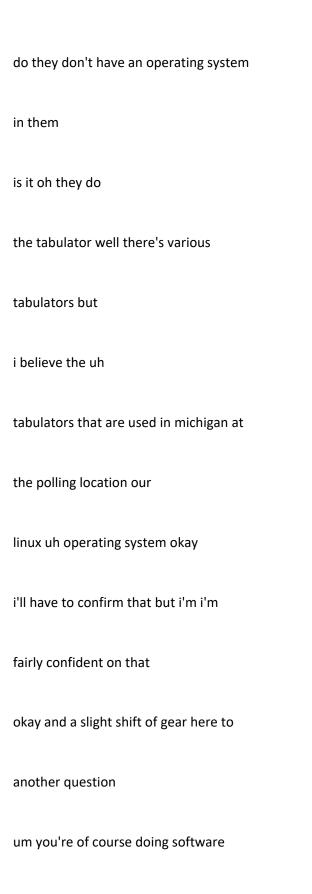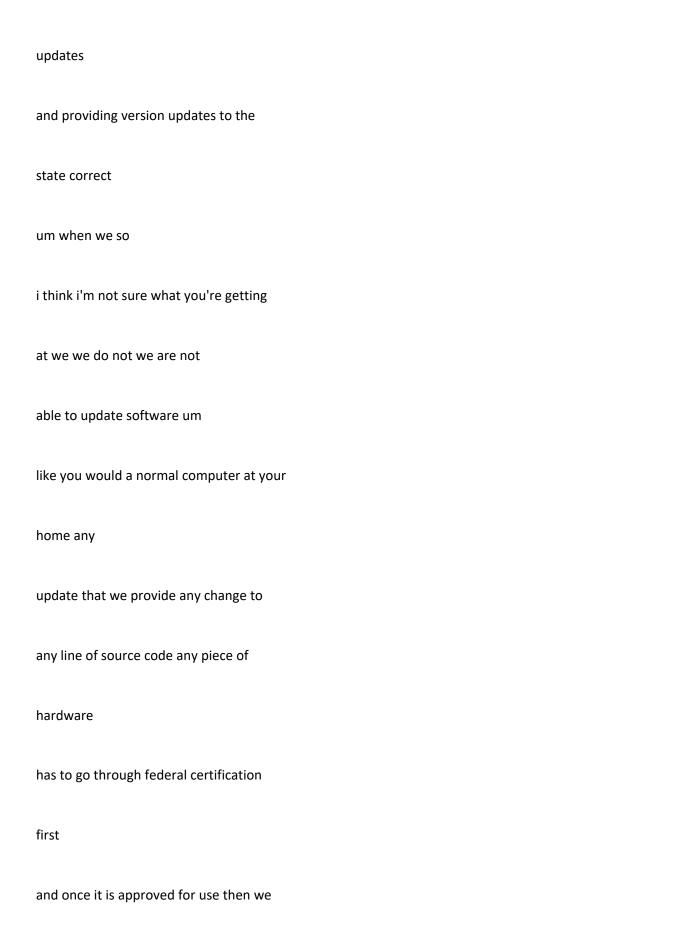this was the testimony mr paulus that we

heard

i'm asking you because you build a

machine if the machine itself is jamming

and it doesn't then tabulate or it jams

it up

and somebody pulls a ballot out how do

you know in the machine if it already

calculated that

ballot yeah i

i did see the testimony and from my

recollection

if there were ballots that were scanned

multiple times

the audit would be off uh from the voter

registration and the poll book records

as part of the canvas process why don't
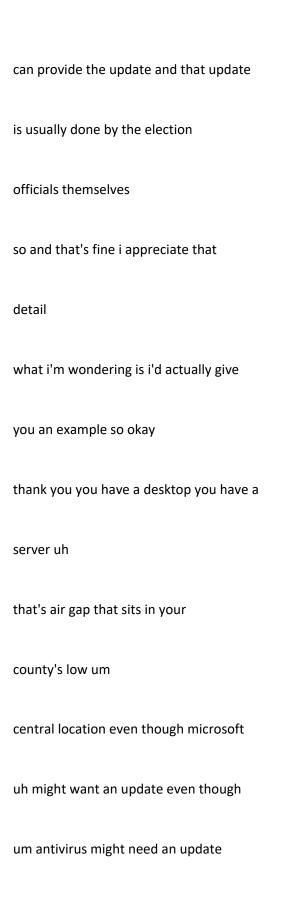
we stop right there mr chairman i want

to pick up that end about the poll being

off so that we can see the

process it sounds good to me we'll take

one last break

come back and and finish up thank you mr

polis the committee is recessed for 10

minutes

thank you

okay

the senate on senate committee on

oversight will return to order

thank you members for your return and uh

let's

continue and hopefully this will be kind

of our last segment

and then we do have we'll finish this

committee adjourn and then recon

will bring the committee back to order

on another meeting that's in another

different location so

if you're wondering what the second

posting is about that's for our

joint meeting with the house briefly to

adopt some additional subpoenas so

that's why it's set up that way okay

um

mr polis um continue to have my thanks

for your participation today

um could you share with us

when it comes to the software do you

design it to operate on

a windows platform or unix i mean what

what

operating system do counties have on the

computers that they're putting

putting your software on

uh depending on the system we use we i

know we operate on

uh different platforms including uh

linux

and windows okay

and the tabulators themselves

do they don't have an operating system

in them

is it oh they do

the tabulator well there's various

tabulators but

i believe the uh

tabulators that are used in michigan at

the polling location our

linux uh operating system okay

i'll have to confirm that but i'm i'm

fairly confident on that

okay and a slight shift of gear here to

another question

um you're of course doing software

updates

and providing version updates to the

state correct

um when we so

i think i'm not sure what you're getting

at we we do not we are not

able to update software um

like you would a normal computer at your

home any

update that we provide any change to

any line of source code any piece of

hardware

has to go through federal certification

first

and once it is approved for use then we

can provide the update and that update

is usually done by the election

officials themselves

so and that's fine i appreciate that

detail

what i'm wondering is i'd actually give

you an example so okay

thank you you have a desktop you have a

server uh

that's air gap that sits in your

county's low um

central location even though microsoft

uh might want an update even though

um antivirus might need an update

we there is no updates are done that

unless they first go
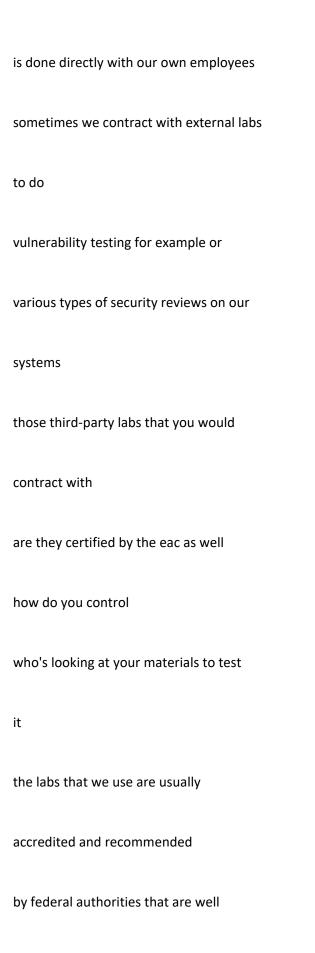
through uh federal certification

oh even for the virus software and other

materials like that

that's correct okay so there's

absolutely nothing in our system in the

entire environment has to be

uh come from the uh as certified as such

but as your and and where i wanted to go

and these are this is all valuable

information so i appreciate that where i

wanted to go with the question why i'm

asking you you're developing and

designing

software updates correct new versions

yes

so prior to you sending those to the eac

for certification what does dominion do

to check and test the security the

vulnerability

of the software before it sends it out

for certification

ah okay i see so we do our own extensive

testing

that really mirrors a lot of the testing

that is done at the eac level except

that we do it

internally to ourselves sometimes that

is done directly with our own employees

sometimes we contract with external labs

to do

vulnerability testing for example or

various types of security reviews on our

systems

those third-party labs that you would

contract with

are they certified by the eac as well

how do you control

who's looking at your materials to test

it

the labs that we use are usually

accredited and recommended

by federal authorities that are well

trained in this area

uh in the case of state certifications

um

california comes to my mind uh they do

their own security testing

um with their own independent

uh authorities that they separately

accredited

and certify in the eac's accreditation

process are they interested

in security and vulnerability issues or

are they primarily interested in the

uh fidelity of counting votes

well i don't wish to speak for the eac

but i think it's a very fair guess

to say that they're concerned about

every aspect of the voting system

including security uh and accuracy

reliability and operating environment

can but i mean you must get reports back

from them after you send your materials

to them for accreditation

i mean do they yes it's publicly

available on their website

and with a rubric they use for going

through

the materials i don't understand the

question sir

well i mean do they have uh do they have

a standard list of

benchmarks that they're looking for when

they evaluate the software

oh yes there are um

i i i'm going to probably get it wrong

but it's thousands of pages

of guidelines uh through it's called the

voluntary voting system guidelines

um the latest and greatest is named the

vbsg2005

and um

there there are literally thousands of

lines of pages of requirements

and so absolutely and that document

absolutely does

um outline testing guidelines and so

you send the software off to them for

certification

and it doesn't meet some particular

benchmark that they

want i assume they provide that feedback

to you and say you have to

harden this area up or rewrite this area

i mean so you get that kind of feedback

from the eac

um i'm not sure i presume we do

i i'm not really the certification

person so i'm not sure

of the day-to-day interaction when we're

in a certification

campaign okay but i can certainly get

that information for you

thank you in your opening remarks i

believe you mentioned

the national institute of standards and

technology

yes as a reference is this a separate

accrediting agency that you also have to

send the software to

no it is um

the eac uh in their process

um of accrediting independent testing

authorities

as a separate process for for doing that

um and they rely

um on nist uh for a part of that

okay so by being accredited by the eac

do you then receive

you know that you've followed the proper

guidelines for the nist

uh i really can't speak to that we are

not

an accredited independent testing

authority um

by the eac so i'm not

an expert on that by any means okay

was there a significant version

update or change leading into the 2020

election

or are we still operating on the same

version from dominion that we operated

under in 2018

i'm not sure uh what version um

off the top of my head what that you're

operating on in michigan

um i can certainly find that out for you

though

great thank you um

vice chair lucito has some additional

follow-up or no i'm sorry senator tys

thank you thank you thank you mr

chairman thank you

for your patience i know we've got you

sitting in uh in the hot seat for a long

time so thank you very much i appreciate

your patience

um i i want to cover a few of the rumors

that

that i'm getting lambasted with and i

want to i just want to make sure that

we've got them

out front and and you can answer them so

given the recent disclosures regarding

foreign nationals at high levels of

everywhere government and everything

how do you know that you're protecting

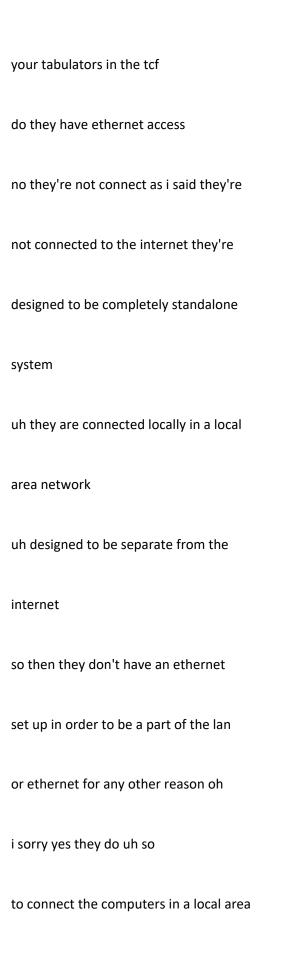your source code and that they're not

embedded in your organization doing

something

uh with with your source code

well that's something that the eac

and throats itas and the state agencies

do they do a line by line review

of all of our source code and so

specifically with regards to

one of the rumors uh that certainly i've

read and re-read

um is that somehow source code has

embedded its way into dominion systems

that somehow originated in venezuela

that is not the case

any independent test authority and

there's several of them

that have reviewed all our code could

verify this

and in fact it is my understanding that

the secretary of state's office in

california

has certified both our our software

along with

uh competitive software from companies

like esn s and hart

and smartmatic and so perhaps they're

the best ones to answer a question to

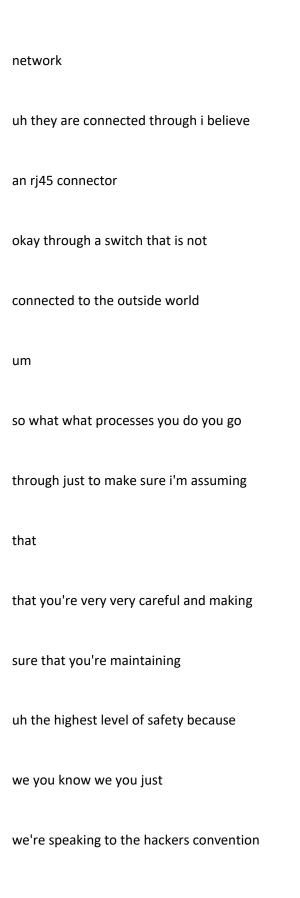verify that there's no common source

code

but it's something certainly i can

attest to you on for dominion systems

thank you very much um i also have been

told that there were at least uh there

were more than

two of your direct employees and and and

one

indirect that there were as many as nine

in the tcf center i don't know that

that's

uh necessarily a problem but that's the

information that i have in front of me

i'm not going to give any names

uh in in the interest of you know all

the issues that you described earlier i

certainly would

prefer that people remain protected and

not threatened uh but i would be

interested in in having that information

if if there's any uh any mistake and

then what their

their roles were in the process right

what was what were their

responsibilities while they were there

i also heard that you received a large

sum of money

from outside the country just recently

uh actually just before the election

would you like to speak to that yes i've

heard that one too

um unfortunately it's not true it's this

one's bizarre

um and completely unfounded um and i

think

uh the claim is something like a

swiss bank uh through chinese

intermediaries uh

paid um uh our

the the company that owns dominion but i

can tell you that that's not true

under oath okay thank you for that and

then

um your equipment your adjudicators and

your tabulators in the tcf

do they have ethernet access

no they're not connect as i said they're

not connected to the internet they're

designed to be completely standalone

system

uh they are connected locally in a local

area network

uh designed to be separate from the

internet

so then they don't have an ethernet

set up in order to be a part of the lan

or ethernet for any other reason oh

i sorry yes they do uh so

to connect the computers in a local area

network

uh they are connected through i believe

an rj45 connector

okay through a switch that is not

connected to the outside world

um

so what what processes you do you go

through just to make sure i'm assuming

that

that you're very very careful and making

sure that you're maintaining

uh the highest level of safety because

we you know we you just

we're speaking to the hackers convention

and all of the things that are going on

we just

i think heard about our treasury getting

hacked uh or and we know how often the

governmental entities are

that people are making efforts to do

that

i'm assuming that as you're working on

your systems that there is a point where

there could be access to it before this

information

gets pushed out and updated into the

different states what

efforts do you guys do you take to make

sure that this

is it that this system is as protected

as it could possibly be

so that it's not accessible to um

to nefarious

people well there's several things that

we do um

we are part of a federal program for a

vulnerable of of

coordinated vulnerability disclosure we

routinely

send our equipment to white hat

white hat hackers for vulnerability

testing
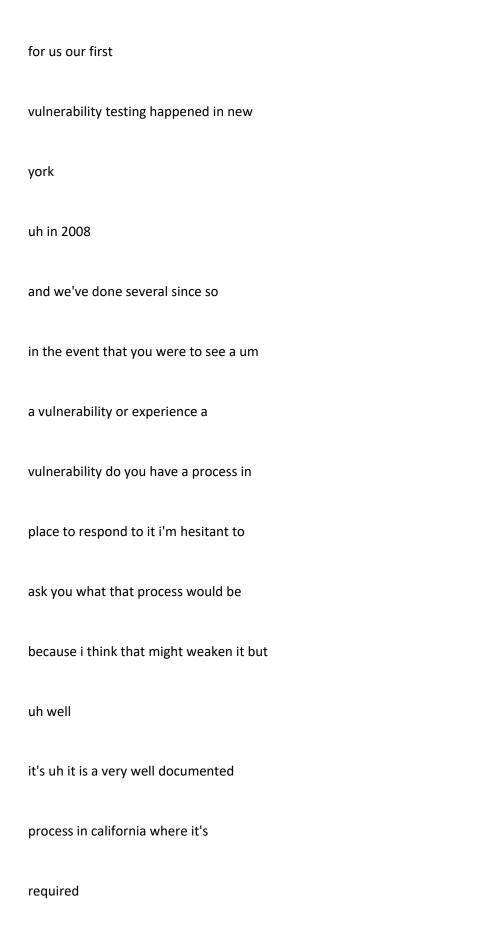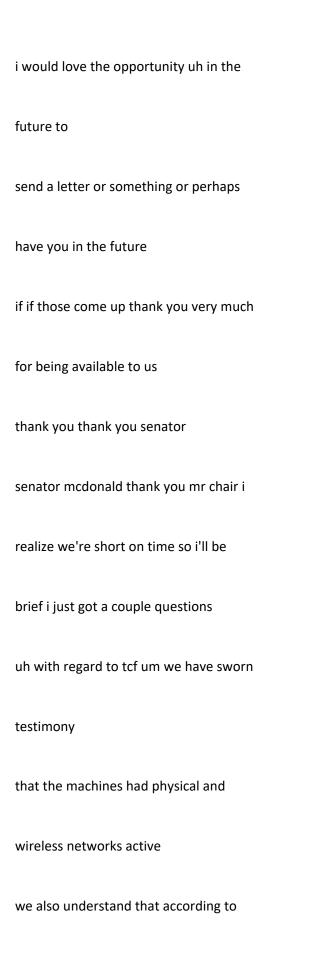
we obviously rely and follow eac
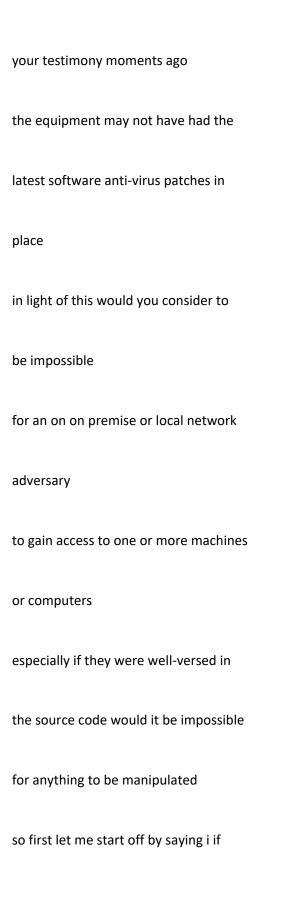
guidelines very closely

we work collaboratively with our

customers

who do their own vulnerability testing

through their own independent test

agencies

to that end and

i don't recall as talking about a hacker

convention

maybe that was during the break but

we've even expressed interest in

participating in a hacker convention as

long as

it made sense in terms of some semblance

of

real ballot security um as opposed to

just ripping apart machines in a way

that's obviously

um obviously would be detected

we actually if you've heard of the

defcon conference

that uh this year i believe it was

cancelled but uh the one that happened

in 2019

uh we had an agreement with uh mr braun

uh we actually sent equipment there and

that invitation was revoked

unfortunately while we were there

but these types of things are not new

for us our first

vulnerability testing happened in new

york

uh in 2008

and we've done several since so

in the event that you were to see a um

a vulnerability or experience a

vulnerability do you have a process in

place to respond to it i'm hesitant to

ask you what that process would be

because i think that might weaken it but

uh well

it's uh it is a very well documented

process in california where it's

required

um with a i think it's within 20 days

we strive to uh report it as soon as we

are aware

of any vulnerability or report or any

problem

from an internal standpoint uh we are

very collaborative with our customers

uh in discussing uh our own internal

security testing and vulnerability

practices

thank you very much i i would

i as always happens i usually end up

coming up with 25 questions after we're

no longer talking

i would love the opportunity uh in the

future to

send a letter or something or perhaps

have you in the future

if if those come up thank you very much

for being available to us

thank you thank you senator

senator mcdonald thank you mr chair i

realize we're short on time so i'll be

brief i just got a couple questions

uh with regard to tcf um we have sworn

testimony

that the machines had physical and

wireless networks active

we also understand that according to

your testimony moments ago

the equipment may not have had the

latest software anti-virus patches in

place

in light of this would you consider to

be impossible

for an on on premise or local network

adversary

to gain access to one or more machines

or computers

especially if they were well-versed in

the source code would it be impossible

for anything to be manipulated

so first let me start off by saying i if

there has been any testimony that has

been found to be credible

um by a judge or by an election official

i'm not aware of it

um i can i've testified today uh

that our systems are designed to be in a

closed

area network and that we do not have

wireless

capability on our systems

and so

was there does that answer your question

um

somewhat is it impossible to

to breach it yes or no i

i certainly think so uh okay but then

again

even if it was possible it'd certainly

be detectable um

and at the end of the day i keep coming

back to the paper ballots because

there's a good reason for it

even if balance if anything like what

you're suggesting is possible and i

certainly don't think it is

um and if there's sworn testimony that

something happened i haven't i'm not

aware of it

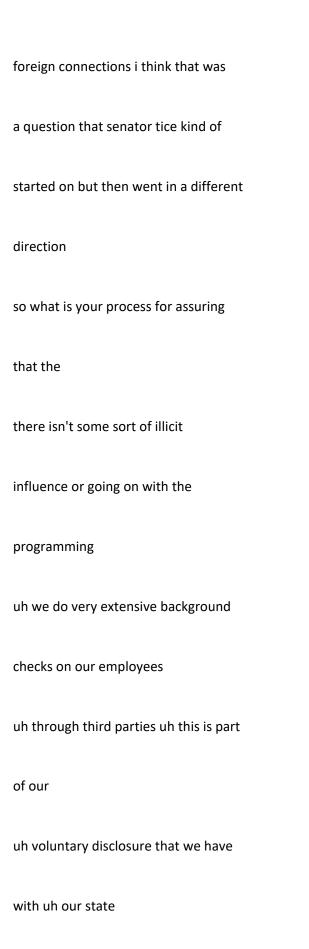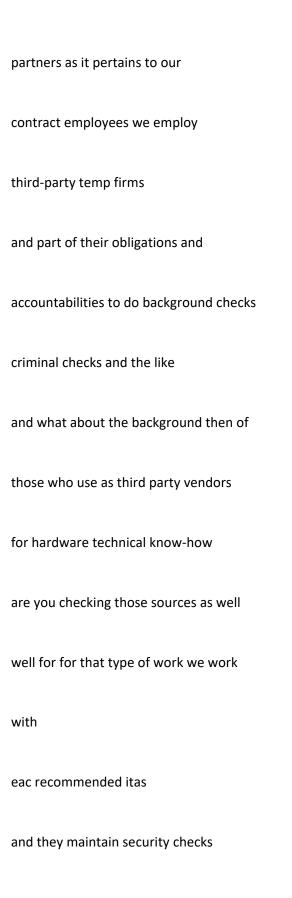if it's been found to be independently

credible um

but the ballots the paper ballots would

not match

the result of the county canvas process

and that's so in in terms of the

accuracy of uh the tabulation

as long as they're you're you're able to

complete and certify canvas process

um you should you you would be

um you would know that your ballots were

accurately counted because you've got

the ballots still in your possession

thank you just one more question sir um

can you provide the check sums of the

voting software when it was certified

and can they be compared with what is

currently on the voting machines

so absolutely you shouldn't get that

from us you should get that from

certification agencies in the

independent test labs

and that is a part of regular

post-election

um reviews okay thank you

thank you sarah mcdonald mr polis uh

how are the employees um

not so much for well even at

dominion how do you go about checking

them make sure that they don't have

foreign connections i think that was

a question that senator tice kind of

started on but then went in a different

direction

so what is your process for assuring

that the

there isn't some sort of illicit

influence or going on with the

programming

uh we do very extensive background

checks on our employees

uh through third parties uh this is part

of our

uh voluntary disclosure that we have

with uh our state

partners as it pertains to our

contract employees we employ

third-party temp firms

and part of their obligations and

accountabilities to do background checks

criminal checks and the like

and what about the background then of

those who use as third party vendors

for hardware technical know-how

are you checking those sources as well

well for for that type of work we work

with

eac recommended itas

and they maintain security checks

background checks on

those that they're making

recommendations for

yes they do

completely different complete switch

here than in line of questioning

the digital images of the ballots

is this something that's only taken of

absentee ballots or are there digital

images taken

of the ballots that are done in in

person polling places as well

digital images can be recorded on all of

our paper scanners

and are those um is that done i mean is

every ballot

kept made an image of it's a county by

county decision so

in the case of antrim county i can tell

you that they were not recorded

which is how we know for certain um

above

all of the other checks that

adjudication digital adjudication could

not have been used there

and so for those who do take digital

images of the ballots

are those what are those files as far as

security goes how can how can we be sure

they don't become modified later

uh well they are digitally encrypted and

signed um

and securely stored in two different

places

and ultimately they would have to match

the paper ballots

any other members have any additional

follow-ups at this time

well mr polis again we want to thank you

for

making yourself available to us and um

i hope that you will avail yourself if

we

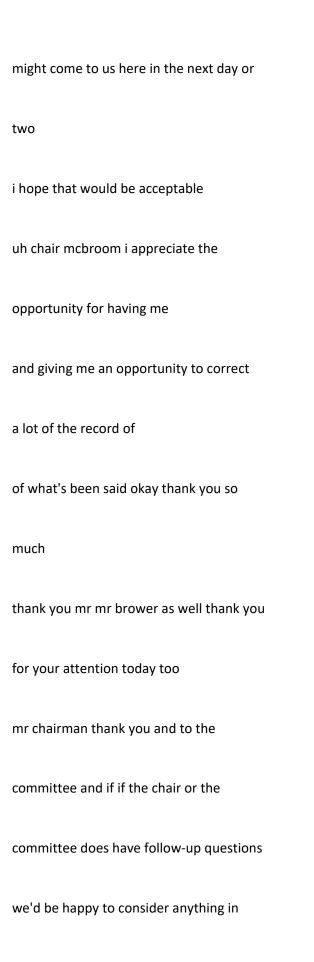ask you to come back i would certainly

try to assure you it would be a shorter

time period if we did have to have you

come back and do some additional

follow-up

and i would likely want to um

you know kind of gather the questions

that we might have such as senator tyse

mentioned

get them written down send them to you

and then ask you to come in and do a

a brief follow-up with us to answer any

questions that

we either don't really have fully

developed in our minds right now or

might come to us here in the next day or

two

i hope that would be acceptable

uh chair mcbroom i appreciate the

opportunity for having me

and giving me an opportunity to correct

a lot of the record of

of what's been said okay thank you so

much

thank you mr mr brower as well thank you

for your attention today too

mr chairman thank you and to the

committee and if if the chair or the

committee does have follow-up questions

we'd be happy to consider anything in

writing you might want to submit

we'll look forward to getting that from

you so thank you very much okay thank

you gentlemen

bye-bye bye members

i will see you across the street at

bogey tower when we

when the senate oversight committee next

convenes which

will be shortly so

paul is that still correct

we're coordinating with the house but

yes so please

head there somewhat directly yes so

uh vice chair lucido moves at the senate

oversight committee adjourn

hearing no objections we're adjourned

you