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1 IN THE UNITED STATES DISTRICT COURT
2 FOR THE NORTHERN DISTRICT OF GEORGIA
3 ATLANTA DIVISION

4 DONNA CURLING, ET AL., :
5 :
6 PLAINTIFFS, :
7 vs. : DOCKET NUMBER
8 : 1:17-CV-2989-AT
9 BRAD RAFFENSPERGER, ET AL., :
10 :
11 DEFENDANTS. :

12 **TRANSCRIPT OF BENCH TRIAL - VOLUME 14A PROCEEDINGS**
13 **BEFORE THE HONORABLE AMY TOTENBERG**
14 **UNITED STATES DISTRICT SENIOR JUDGE**
15 **JANUARY 29, 2024**

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21 ***MECHANICAL STENOGRAPHY OF PROCEEDINGS AND COMPUTER-AIDED***

22 ***TRANSCRIPT PRODUCED BY:***

23 ***OFFICIAL COURT REPORTER:*** ***SHANNON R. WELCH, RMR, CRR***
24 ***2394 UNITED STATES COURTHOUSE***
25 ***75 TED TURNER DRIVE, SOUTHWEST***
ATLANTA, GEORGIA 30303
(404) 215-1383

UNITED STATES DISTRICT COURT
OFFICIAL CERTIFIED TRANSCRIPT

A P P E A R A N C E S O F C O U N S E L

**FOR THE PLAINTIFFS DONNA CURLING, DONNA PRICE, JEFFREY
SCHOENBERG:**

DAVID D. CROSS
MARY KAISER
RAMSEY W. FISHER
MATTHAEUS MARTINO-WEINHARDT
BEN CAMPBELL
AARON SCHEINMAN
MORRISON & FOERSTER, LLP

HALSEY KNAPP
ADAM SPARKS
KREVOLIN & HORST

CHRISTIAN ANDREU-VON EUW
THE BUSINESS LITIGATION GROUP

**FOR THE PLAINTIFFS COALITION FOR GOOD GOVERNANCE, LAURA DIGGES,
WILLIAM DIGGES, III, AND MEGAN MISSETT:**

BRUCE P. BROWN
BRUCE P. BROWN LAW

ROBERT A. MCGUIRE III
ROBERT MCGUIRE LAW FIRM

**FOR THE PLAINTIFFS LAURA DIGGES, WILLIAM DIGGES, III, and MEGAN
MISSETT:**

CARY ICHTER
ICHTER DAVIS

ON BEHALF OF RICARDO DAVIS:

DAVID E. OLES, SR.
LAW OFFICE OF DAVID E. OLES

(...CONT'D...)

1 (...CONT'D...)
2

3 **FOR THE STATE OF GEORGIA DEFENDANTS:**

4 VINCENT RUSSO
5 JOSH BELINFANTE
6 JAVIER PICO-PRATS
7 EDWARD BEDARD
8 DANIELLE HERNANDEZ
9 ROBBINS ROSS ALLOY BELINFANTE LITTLEFIELD, LLC

10 BRYAN TYSON
11 BRYAN JACOUTOT
12 DIANE LAROSS
13 DANIEL H. WEIGEL
14 DONALD P. BOYLE, JR.
15 TAYLOR ENGLISH DUMA
16
17
18
19
20
21
22
23
24
25

I N D E X T O P R O C E E D I N G S

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P R O C E E D I N G S

(Atlanta, Fulton County, Georgia; January 29, 2024.)

THE COURT: Good morning. All right. Good morning. I'm going to do as well as I can and hopefully have a relatively full day, but I can't tell you that it is going to work. We'll see.

So what do we have before us now?

MR. MILLER: Your Honor, the State is prepared to call Dr. Juan Gilbert as our first witness, and we anticipate hearing from plaintiff Ricardo Davis just after Dr. Gilbert.

THE COURT: Okay.

THE DEFENDANTS' CASE (Continued.)

COURTROOM DEPUTY CLERK: Please raise your right hand.

(Witness sworn)

COURTROOM DEPUTY CLERK: Please have a seat. If you would, loudly and clearly state your name and spell your complete name for the record.

THE WITNESS: My name is Juan Gilbert, J-U-A-N, last name Gilbert, G-I-L-B-E-R-T.

Whereupon,

JUAN E. GILBERT PH.D.,

after having been first duly sworn, testified as follows:

DIRECT EXAMINATION

1 BY MR. MILLER:

2 **Q.** Dr. Gilbert, good afternoon. Thank you for being here
3 with us today.

4 Dr. Gilbert, could you tell the Court a little bit about
5 your educational background.

6 **A.** I have a Bachelor of Science degree in systems analysis
7 from Miami University in Ohio. I have a master's and Ph.D.
8 degree in computer science from the University of Cincinnati.

9 **Q.** And, Dr. Gilbert, following your academic studies, what
10 kind of employment positions have you held?

11 **A.** I started my career at Auburn University in the year 2000.
12 I spent nine years there and rose up through the ranks of
13 assistant associate to full professor.

14 Then I moved to Clemson University in South Carolina. I
15 was there five years. I was there as a chair of a division in
16 the school of computing called Human-Centered Computing.

17 And then I joined the University of Florida, and I have
18 been at Florida almost ten years as an endowed chair and full
19 professor and chair of the computer information science and
20 engineering department.

21 **Q.** And at the University of Florida, do you run any kind of
22 laboratories?

23 **A.** Yes. I run a lab that's called the Computing for Social
24 Good Lab. I have had different names of the lab over the years
25 depending on the focus of the research and where we were. But

1 we are the Computing for Social Good Lab at this time, and we
2 have active projects in human-computer interaction, artificial
3 intelligence. The longest running project in the lab has been
4 our voting technology research and development.

5 **Q.** So just to follow up on a couple of things there, could
6 you describe to the Court what you mean by human-computer
7 interaction and what that field entails.

8 **A.** Human-computer interaction or HCI deals, as you can
9 imagine, with the two parts of the name, humans and computing,
10 and then the interactions between them. So it deals with the
11 design of technologies. It deals with the evaluation of those
12 technologies with humans in a relevant context and maybe other
13 stakeholders.

14 So design and evaluation of technologies and their
15 interactions with people would be a general way to put it.

16 **Q.** And you mentioned earlier too voting technology research
17 and development in your lab.

18 Can you describe what you have done in that arena?

19 **A.** Yes. In the year 2003, we created an open source voting
20 technology called Prime III. It was meant to be useable,
21 secure, and accessible. And it had a universal design. And to
22 my knowledge, it was the first universally designed voting
23 system.

24 And that technology we created has served as a seed for
25 many of the current technologies and ballot-marking devices

1 with regard to accessibility features, printing ballots, and
2 some other features that we've implemented that have not made
3 it yet. And there's some other innovations in Prime III.

4 And we worked on other areas in voting, but that is the
5 biggest core project has been the Prime III project.

6 **Q.** And the Prime III voting system, has that been used in
7 elections?

8 **A.** Yes. The State of New Hampshire adopted it and used it
9 statewide. At that time, it became the first open source
10 system to be used in state, federal, and local elections.
11 There have been other ballot-marking devices that have borrowed
12 from our designs, for example.

13 And so New Hampshire used it, the State of Ohio is using
14 it as their absentee -- accessible absentee option, and Oregon
15 used it in a pilot.

16 Those are off the top of my head of uses that I can think
17 of, yeah.

18 THE COURT: What did you mean by accessible absentee
19 ballot?

20 THE WITNESS: If an individual who is blind wants to
21 vote absentee, they can request to do so in Butler County,
22 Ohio -- that is where it has been adopted -- where they can use
23 their own device to go online through our software, mark --
24 create a ballot, print it, and mail it in.

25 THE COURT: And relative to New Hampshire, is

1 everyone using it or is it particularly used for voters with
2 disabilities?

3 THE WITNESS: In New Hampshire, it was everyone.

4 THE COURT: And it continues to be everyone?

5 THE WITNESS: No. They haven't used it for a couple
6 of years now. I think they have gotten a vendor now to do
7 that.

8 THE COURT: So what period of time was it used for?

9 THE WITNESS: Wow. I don't know the exact dates. I
10 think it was maybe two years that they have used it. I would
11 have to look it up.

12 THE COURT: And the one that was you said Butler
13 County, is that in Ohio?

14 THE WITNESS: Yes, your Honor.

15 THE COURT: And there was one other place you
16 mentioned.

17 THE WITNESS: Oregon used it in a pilot. So Oregon
18 had an election, and they used it in a small area, pilot,
19 and -- oh, there is another one. Wisconsin used it in an
20 election, I think, as a pilot as well.

21 THE COURT: Did those states ever adopt it?

22 THE WITNESS: No. Wisconsin did not. Oregon did
23 not. New Hampshire did, and Butler County, Ohio, have.

24 THE COURT: Thank you.

25

1 BY MR. MILLER:

2 Q. When you say that it is an open source technology, can you
3 describe what that means to the Court?

4 A. I made it available to anyone that wants access to see it.
5 We used a general public license, and anyone that wanted it
6 could have it. I had posted it online as well, but we just --
7 we did not keep the code secret.

8 Q. Okay. So you say it is posted on -- the source code that
9 it operates on is just available online for anybody that wants
10 it?

11 A. That version we put on GitHub, and we always made it
12 available, and anybody could request it.

13 Q. And have you published any academic articles or delivered
14 presentations concerning voting technology over your career?

15 A. Yes, we published numerous articles and have given many
16 talks on the subject matter.

17 Q. And have you received any grant funding for your work in
18 voting technology?

19 A. Yes. The work we've done has been funded by the National
20 Science Foundation. It has been funded by United States
21 Election Assistance Commission. I believe ES&S -- yeah, ES&S
22 has funded some of our work. Yes, those are the ones.

23 MR. MILLER: Mr. Martin, do we have the screen
24 control for us?

25

1 BY MR. MILLER:

2 Q. And, Dr. Gilbert, in addition to that grant funding --

3 MR. MILLER: I'm sorry. For Mr. Montgomery. I
4 apologize.

5 BY MR. MILLER:

6 Q. I understand you have been recognized by two different
7 presidents for your work; is that right?

8 A. Yes, that's correct.

9 Q. And as I understand it -- well, actually, let me back up.
10 Can you describe those recognitions and awards that you
11 received?

12 A. Yes. President Obama, I received the Presidential Award
13 for Excellence in Science, Mathematics, and Engineering
14 Mentoring.

15 And President Biden, I received the National Medal of
16 Technology Innovation from President Biden.

17 Q. And have you testified to Congressional committees on
18 voting technology and security?

19 A. Yes, I have.

20 Q. And what kind of committees are those?

21 A. I believe it was a Senate hearing, for one. I can't
22 recall the other off the top of my head, but I have had
23 Congressional testimony.

24 Q. And I understand you've previously been admitted as an
25 expert in secured voting systems; right?

1 **A.** Correct.

2 **Q.** And I understand that you were a member of the National
3 Academies of Science, Engineering, and Mathematics Committee on
4 the future of voting; is that right?

5 **A.** Yes, that's correct.

6 MR. MILLER: I'm going to ask Mr. Montgomery if you
7 could pull up Defendants' Exhibit 728.

8 This is already in. I've got some paper copies here
9 too.

10 Your Honor, may I approach?

11 THE COURT: Sure.

12 MR. MILLER: It is quite a thick document, but just
13 so we've all got it.

14 And, Mr. Montgomery, if we could go to the second
15 page of the PDF there.

16 BY MR. MILLER:

17 **Q.** Dr. Gilbert, do you recognize the document I just handed
18 up to you?

19 **A.** Yes, I do.

20 **Q.** And what is this document?

21 **A.** This is the consensus report that we produced from the
22 National Academies Committee.

23 THE COURT: Is this the 19 -- the 2017 report?

24 THE WITNESS: Yes.

25 THE COURT: Okay.

1 BY MR. MILLER:

2 Q. If we go to the next page, I believe, I think it was --
3 Dr. Gilbert, do you see on that next page on the screen --
4 does that refresh your recollection as to when the report was
5 produced, the copyright there?

6 A. Yes. That is what I thought. 2018, I was going to say,
7 yeah.

8 THE COURT: I'm just trying to get clarification
9 because -- is this the same report that there were an enormous
10 amounts of -- there was testimony thereafter in front of
11 Congress and other -- and it was put out by the National
12 Academies and it had this exact same title?

13 So I just want to make sure it is the same one that
14 has been referenced extensively in preceding orders of the
15 Court and its submissions of affidavits.

16 THE WITNESS: Yes. As far as I know of, but this is
17 the authoritative report. It was released in -- yeah, it was
18 released 2018. But we spent two -- two years, maybe a little
19 longer, producing the report.

20 THE COURT: All right.

21 MR. MILLER: Your Honor, if I may, this is the report
22 that has been referenced in the Court's prior orders before --

23 THE COURT: That's what I'm just trying to confirm.

24 MR. MILLER: We've spent a lot of time discussing
25 this report, yes, Your Honor.

1 And if we go to Page 6 of the PDF, Mr. Montgomery.

2 BY MR. MILLER:

3 Q. Dr. Gilbert, do you recognize these folks on the page
4 here?

5 A. Yes, they are members of the committee and the co-chairs.

6 Q. Okay. And this is the committee that worked to reach the
7 consensus and produce the report; right?

8 A. Yes.

9 Q. There may be some --

10 A. There may be some missing, but this is -- those are the
11 co-chairs, and there's the staff.

12 But yeah, that is the committee.

13 Q. Okay.

14 MR. MILLER: And if we can go back to that prior
15 page, Mr. Montgomery.

16 BY MR. MILLER:

17 Q. I recognize some familiar names in addition to yourself,
18 Dr. Gilbert.

19 You see at the top there Andrew Appel.

20 Are you familiar with Dr. Appel?

21 A. Yes.

22 Q. And how do you know Dr. Appel?

23 A. We served on the committee together, and we have talked
24 several times after the committee, and I've visited him. He
25 has visited me.

1 He is familiar with work that I have done, so I would
2 consider him a colleague.

3 **Q.** Okay. And, Dr. Gilbert, I'm going to show you one
4 additional document, which probably is longer than it needs to
5 be for our purpose today.

6 MR. MILLER: May I approach, Your Honor?

7 THE COURT: Yes.

8 MR. MILLER: Mr. Montgomery, if we can pull up
9 Defendants' Exhibit 40, and we'll start at the -- yeah,
10 perfect.

11 BY MR. MILLER:

12 **Q.** So, Dr. Gilbert, you have submitted a few declarations in
13 this case; right?

14 **A.** Correct.

15 **Q.** And if we can -- we'll go to one more page through.

16 Do you recognize this to be one of those declarations?

17 **A.** Yes.

18 MR. MILLER: If we could, Mr. Montgomery, jump down
19 to Page 10.

20 BY MR. MILLER:

21 **Q.** And so you recognize this? That is your signature; right?

22 **A.** Correct.

23 MR. MILLER: And if we could jump again.

24 Mr. Montgomery, scroll a couple of pages or one page down.

25 There you go.

1 Now, if we could jump down to Page 47 of this
2 document.

3 BY MR. MILLER:

4 **Q.** Dr. Gilbert, do you recognize this to be your signature on
5 another declaration?

6 **A.** Yes.

7 **Q.** Then attached to that, Page 49 of the PDF, do you
8 recognize this document?

9 **A.** Yes.

10 **Q.** Okay. If we can go one more page.

11 What is this document that I'm showing you?

12 **A.** It is a version of my CV.

13 **Q.** And this is the version from 2020; right?

14 **A.** Yes. Whenever I publish my CV, I make sure the date of
15 that version is included, so that would have been June 21st,
16 2020.

17 **Q.** Okay.

18 THE COURT: This is all Exhibit E?

19 MR. MILLER: So, Your Honor, the exhibit that you
20 have with the first page, Exhibit E, it was attached to
21 preliminary junction motions before, so that is why Exhibit E
22 is repeated. It is all of the declarations and his CV in one
23 document.

24 THE COURT: So this page that you described as
25 Page 47 --

1 MR. MILLER: Yes, Your Honor. I'm referring to the
2 electronic document, so Page 47 of the PDF itself.

3 Because it is multiple documents together, it skips
4 around. But actually, his CV has a CM/ECF number at the top,
5 at Docket Number 821-7, begins on --

6 THE COURT: I see his signature.

7 MR. MILLER: It begins on Page 49.

8 BY MR. MILLER:

9 Q. And, Dr. Gilbert, I'll show you one more document here
10 with respect to your --

11 MR. MILLER: May I approach, Your Honor?

12 THE COURT: Yes.

13 BY MR. MILLER:

14 Q. Dr. Gilbert, I think you mentioned this before.

15 You post your CV online?

16 A. Correct.

17 Q. Okay. And so I'm showing you now what we've marked as
18 Defendants' Exhibit 1254.

19 MR. MILLER: Mr. Montgomery, if you could pull up --
20 perfect. If we will scroll down to the next page.

21 BY MR. MILLER:

22 Q. Dr. Gilbert, do you recognize this document?

23 A. Yes. It is an updated version of my CV as of October 28,
24 2023.

25 Q. Okay. Is that the most current version of your CV?

1 **A.** It is the most current published version of my CV.

2 **Q.** And does this accurately reflect your education, work, and
3 accomplishments?

4 **A.** It does, up to that date.

5 **Q.** Okay. Up to October 28th?

6 **A.** Correct.

7 MR. MILLER: And, Your Honor, I'll move to admit
8 DX 40 and DX 1254.

9 MR. ANDREU-VON EUW: Your Honor, we have no objection
10 to 1254. DX 40 is hearsay.

11 MR. MILLER: Oh, just the declarations. Yeah, I can
12 clear that up. I'm only admitting it for the purpose of the CV
13 attached to the end of it, which was the one I provided
14 you-all. So I can stipulate that it is not coming into the
15 truth for the declarations before it.

16 MR. ANDREU-VON EUW: If counsel would like to remove
17 the declarations from the exhibit and submit -- excuse me --
18 remove the CV from the exhibit and submit that portion, we have
19 no objection.

20 MR. MILLER: That is fine, Your Honor. I just --
21 because that is the version on our exhibit list, that is all I
22 was providing.

23 THE COURT: All right. Well, I think it would also
24 simplify the docket if you would just provide only the CV.

25 **(There was a brief pause in the proceedings.)**

1 MR. MILLER: Your Honor, we'll just restamp this when
2 we take a break. I can pass up the limited version.

3 THE COURT: Okay. That's fine.

4 MR. MILLER: And, Your Honor, at this point too, I'll
5 move to tender Dr. Gilbert as an expert witness in the field of
6 voting system technology and security and human-computer
7 interaction.

8 MR. ANDREU-VON EUW: To the extent that includes an
9 expert in cybersecurity, we would object. Dr. Gilbert has
10 testified he is not that. Otherwise, we would not object.

11 MR. MILLER: And I'm not tendering Dr. Gilbert as a
12 cybersecurity expert but with respect to voting systems
13 technology and security.

14 THE COURT: Well, you have tagged on security.

15 MR. ANDREU-VON EUW: Yeah, I'm a little confused what
16 that means, Your Honor.

17 Maybe counsel can explain.

18 MR. MILLER: Sure.

19 BY MR. MILLER:

20 **Q.** Dr. Gilbert, can you explain the difference to us between
21 voting systems security and cybersecurity?

22 **A.** Yes. The two are not the same. And I am not a
23 cybersecurity researcher or expert. My area is voting
24 technology, and that includes the usability, accessibility, and
25 security of voting technology. So voting security encompasses

1 more things than necessarily cybersecurity would.

2 The word cybersecurity obviously includes cyber; whereas,
3 voting may just be on paper. There could be different aspects
4 of security for voting. So there is a distinction.

5 And again, I'm not cybersecurity. I am strictly in voting
6 with respect to security.

7 **Q.** So if there were -- I'll back up.

8 MR. MILLER: Your Honor, does that help clarify the
9 difference? We're not offering Dr. Gilbert as an expert in
10 cybersecurity but as to voting --

11 THE COURT: It is a little confusing, I have to say.
12 I think even though I've listened to Dr. Gilbert before -- and
13 I don't quibble with his expertise as a whole. I just don't
14 think that distinction has been as precise before.

15 So would you like to examine -- let me see if counsel
16 wants to just examine the witness to try to bring clarity about
17 this.

18 MR. ANDREU-VON EUW: Yes, Your Honor. Just one or
19 two questions.

20 VOIR DIRE EXAMINATION

21 BY MR. ANDREU-VON EUW:

22 **Q.** Good morning, Dr. Gilbert -- or good afternoon,
23 Dr. Gilbert.

24 **A.** Good afternoon.

25 **Q.** My name is Christian Andreu, and I represent the Curling

1 plaintiffs.

2 Give me one second here.

3 So, Dr. Gilbert, you've designed a BMD, a transparent
4 ballot-marking device; correct?

5 **A.** It's -- yes, transparent voting machine.

6 **Q.** And you have conducted studies on it?

7 **A.** Yes.

8 **Q.** And when it came time to discover whether or not the
9 transparent voting machine was hackable, you wrote to Drs.
10 Halderman, Appel, Stark, and DeMillo and asked them if they
11 could make your machine flip votes; is that correct?

12 MR. MILLER: Your Honor, just to clarify this, I
13 thought we were doing voir dire.

14 THE COURT: We are. I don't know -- this is not just
15 like he sat down. This is you were questioning, and I
16 understood you were questioning, what did it mean that he was
17 being offered also for -- voting system security as opposed to
18 cybersecurity. And that is what I thought -- if you're trying
19 to get at that, which I could understand.

20 MR. ANDREU-VON EUW: I am, Your Honor. I think what
21 the point is he relies on others for cybersecurity advice.

22 THE COURT: Well, I'm just -- all right. Go ahead
23 and ask that, but then try to elicit for the Court what the
24 differences are --

25 MR. ANDREU-VON EUW: Yes, Your Honor.

1 THE COURT: -- so that I don't have you popping up
2 later saying he is not prepared to testify about this.

3 MR. MILLER: And, Your Honor, if the question is if
4 Dr. Gilbert relies on others for cybersecurity, that is not at
5 issue here with respect to tendering as to the subject matter.
6 We're talking about -- speaking past each other, it seems.

7 THE COURT: All right. Go ahead and answer the
8 question.

9 THE WITNESS: I sent a request to several colleagues
10 of mine who have worked in voting security in a way to assess
11 the security of a technology I created. For example, if you
12 create a technology and you hack it and say that it can't be
13 hacked, you can see the conflict of interest with that.
14 Therefore, you need, for example, a peer review -- think of it
15 that way -- to assess the hackability of your innovation.

16 BY MR. ANDREU-VON EUW:

17 Q. But you don't have -- you're not an expert -- excuse me --
18 Dr. Gilbert, in computer security; correct?

19 A. I am not an expert in cybersecurity. I would say I'm an
20 expert in voting system security.

21 Q. I'm sorry. Maybe my question wasn't clear. I know I
22 speak too fast sometimes.

23 You are not an expert in computer security; correct,
24 Dr. Gilbert?

25 A. Computer security, I'm not sure what that is.

1 Cybersecurity, I understand that. That is a known term.

2 THE COURT: So how do you distinguish them?

3 THE WITNESS: Cybersecurity includes things like
4 banking transactions, network --

5 THE COURT: Let's put it in the voting context, the
6 voting system context.

7 THE WITNESS: In voting, before -- in the beginning
8 of voting, we vote strictly on paper with pen and paper and
9 humans counted the votes. There are security issues with that,
10 such as ballot stuffing. That is a security vulnerability. It
11 has no computer involvement at all.

12 So you can have a voting security issue that is not
13 computer-related as an example to distinguish the two, if that
14 helps.

15 THE COURT: Yes, that is helpful.

16 Is there -- is that what you meant, essentially, when
17 you said, I'm an expert in voting security but not
18 cybersecurity, relative to election security?

19 THE WITNESS: Yes, Your Honor. Yes, Your Honor. I
20 understand the security around voting. I would not claim that
21 my expertise is around the general area of cybersecurity with
22 respect, like I said, to network security and things like that.
23 But as it relates to voting, that is where my expertise is.

24 THE COURT: So just so we don't end up going back and
25 forth, I think I understand what you are saying, but -- but are

1 you saying you are -- your expertise extends to the operation
2 and protection of voting machines?

3 THE WITNESS: Yes.

4 THE COURT: All right. Well, then we have to -- then
5 I'm going to allow counsel to explore that.

6 BY MR. ANDREU-VON EUW:

7 **Q.** Dr. Gilbert, would you agree that computer security can
8 cover networks, as you said a second ago, and also computing
9 devices?

10 **A.** Again, I'm not computing -- computer security. I'm
11 familiar with cybersecurity.

12 Can you define what computer security is, please?

13 **Q.** Sir, will you agree that computer security can be designed
14 as covering -- excuse me -- defined as covering networks in all
15 kinds of computing devices?

16 **A.** I don't know that I would agree with that because it is
17 not a familiar term to me. As I said, I'm familiar with
18 cybersecurity. That is what my colleagues and people discuss.

19 If computer security is security of computers, then yes,
20 it would encompass networks in that case because networks would
21 be -- well, computer networks, I should say. It would
22 encompass computer networks.

23 **Q.** So you would not agree that computer security can cover
24 networks in all kinds of computing devices?

25 **A.** If you are defining computer security as any security of a

1 computer, then I would say it would encompass that.

2 Q. I think you agreed. I just want to make sure.

3 Would you agree that computer security can cover networks
4 in all kinds of computing devices?

5 MR. MILLER: Your Honor, I will object to this as
6 asked and answered four times.

7 THE COURT: I'm finding it very confusing, so I don't
8 think -- he may have intended to have answered, but I'm finding
9 it confusing, so that is why I'm listening further.

10 So have a seat.

11 And I say that with all due respect to you. I think
12 we're just having some -- if you know people who are working on
13 something -- looking at your report, for instance, about even
14 part of the report that you contributed to that was published
15 in 2018 that you identified, there is a whole concern, among
16 other things, about cybersecurity and whether -- the multitude
17 of ways that an outside source can alter or affect the election
18 and functioning of the voting system -- forget the election,
19 just the voting system itself -- in a particular jurisdiction.

20 Do you consider that within your range of expertise,
21 or do you say that that is a cybersecurity issue?

22 THE WITNESS: That is within my range as it relates
23 to voting, yes. That is definitely within.

24 THE COURT: All right. So what do you -- because I
25 think -- all right. So then what do you think is distinctive

1 when you send something out, for instance, to Dr. Halderman or
2 some of his colleagues who definitely work in cybersecurity?
3 What is distinctive about the arena that they are also -- that
4 they are handling that is different than what you handle?

5 THE WITNESS: Thank you, Your Honor.

6 Voting security is different because it does have
7 unique properties. As we all know, in voting, you have the
8 secrecy of the ballot. That is often contrasted with, again,
9 banking wherein many years ago there was a debate of trying to
10 say that we should be able to vote online. We can bank online.
11 So why can't we vote online?

12 And people would argue that they are both security
13 issues, but the voting scenario has a unique attribute that
14 doesn't exist in banking.

15 So in banking, you can check your account and verify
16 your association with your account and know your balance. In
17 voting, once you cast a ballot, you can no longer do that. You
18 are detached from it. You don't have the ability to associate
19 that vote with a person.

20 That is an attribute unique to voting where they can
21 share security issues. Such as if I'm voting online, you can
22 have denial of service attacks and things that are similar.
23 But that is one example where voting is different than
24 cybersecurity.

25 THE COURT: But what does cybersecurity mean in the

1 election arena?

2 Because when you said no, they are -- I'm not a
3 cybersecurity expert.

4 What does that mean when you say that relative to the
5 election field when there are people who represent -- like
6 Dr. Halderman who represent, among other things, that they are
7 an expert in cybersecurity, not just that, but in cybersecurity
8 in the election area?

9 THE WITNESS: Yeah. For them, they are experts in
10 cybersecurity, and they are experts in voting security or work
11 in voting security as well. You can be -- it doesn't have to
12 be exclusive that they can be only cybersecurity and not
13 voting. I am making the statement for me that I don't do
14 cybersecurity.

15 I am in the voting security or voting technology
16 innovation area where -- you know, those are the big
17 differences. They are -- they have a bigger piece of the
18 security area. And that includes cybersecurity and voting;
19 whereas, I'm only in the voting aspect of it.

20 THE COURT: Now, I understood from previous
21 testimony, as well as your affidavits before, that the
22 primary -- one of the -- at least one of the primary focuses of
23 your work has been in the development of accessible voting
24 technology.

25 THE WITNESS: That's correct.

1 THE COURT: And rather than in security issues per
2 se.

3 THE WITNESS: I wouldn't go that far because I am
4 very much unique in that there is -- it is a lonely island to
5 be on, to be one of maybe one academic to actually build voting
6 systems and make them work. You can't create a voting system
7 that doesn't have security in the absence of security
8 considerations.

9 So by going in this area, we have to have usability,
10 security, and accessibility.

11 THE COURT: Okay.

12 BY MR. ANDREU-VON EUW:

13 **Q.** Sir, you said a second ago you can't build a voting system
14 in the absence of security considerations; correct?

15 **A.** Correct.

16 **Q.** And for your voting system, you asked Dr. Appel,
17 Halderman, DeMillo, and Stark to --

18 **A.** And several others. Several others. They were the
19 minority.

20 **Q.** So coming back to where we were earlier, Doctor, I have
21 asked you if you agree with the statement, computer security
22 covers networks and computing devices.

23 Yes or no?

24 **A.** Computer security as defined as security of all computers,
25 yes, it covers that.

1 Q. And you have expertise in election security, not computer
2 security; correct?

3 A. I have expert in voting system security.

4 Q. But not computer security; correct, Dr. Gilbert?

5 A. No. My expert is in voting system security that includes
6 computers, but it doesn't encompass all of computer security.

7 MR. ANDREU-VON EUW: May I approach, Your Honor?

8 THE COURT: Yes.

9 MR. ANDREU-VON EUW: Just in the nick of time.

10 THE COURT: More notebooks just in the nick of time.

11 BY MR. ANDREU-VON EUW:

12 Q. Dr. Gilbert, could I ask you to turn to Tab 5?

13 A. Yes.

14 Q. You were deposed in this case on October 29, 2021;
15 correct?

16 A. Yes.

17 Q. And I direct you to Page 20 of this deposition.

18 In your deposition, there was a similar exchange. And on
19 Line 3 of Page 20, Mr. Cross asked you, what is the difference
20 that you are drawing there?

21 Do you see that?

22 A. Yes.

23 Q. And you responded --

24 THE COURT: I think you need to ask the preceding
25 question.

1 MR. ANDREU-VON EUW: Thank you, Your Honor.

2 BY MR. ANDREU-VON EUW:

3 Q. So before you said that, you said, I am an independent
4 researcher specializing in election security, not computer
5 security.

6 Do you see that?

7 A. Yes.

8 Q. You said that?

9 A. Yes.

10 Q. Okay. Then you were asked, what is the difference that
11 you are drawing there?

12 Do you see that?

13 A. Yes.

14 Q. And you answered, computer security can cover networks and
15 all kinds of computing devices. I have expertise in election
16 security, not computer security.

17 You said that; right, Dr. Gilbert?

18 A. Yes.

19 MR. ANDREU-VON EUW: Again, Your Honor, we object to
20 Dr. Gilbert being offered as an expert in computer security or
21 cybersecurity.

22 MR. MILLER: And, Your Honor, they could have saved
23 us a lot of time. We are not offering him as an expert in
24 computer security and cybersecurity.

25 THE COURT: Well, it sounded like you were, frankly.

1 So yes, it could have saved us a lot of time if you had
2 delineated it. Thank you.

3 All right.

4 DIRECT EXAMINATION (Continued)

5 BY MR. MILLER:

6 Q. So, Dr. Gilbert, just to be clear there, when I tendered
7 you as an expert in voting systems technology and security, a
8 computer can be utilized in a voting system; right?

9 A. Correct.

10 Q. Okay. But security of computers that do all kinds of
11 different things, not necessarily within the realm of voting
12 systems technology security; right?

13 A. Correct.

14 MR. MILLER: Your Honor, are we -- at this point I
15 ask for some guidance from the Court? Are we --

16 THE COURT: I don't know whether you just tried to
17 tuck back in where there's things that got clarified.

18 MR. MILLER: So, Your Honor, to be clear, what we
19 were talking about -- what I have tendered him as is voting
20 system technology and security and human-computer interaction.
21 Voting systems, of course, sometimes include computers.

22 Dr. Gilbert is not an expert in the field of all
23 computers in the world. But to the extent it is within a
24 voting system, that is within his expertise. And I'm not
25 offering him as cybersecurity or even the hacking of a voting

1 system.

2 MR. ANDREU-VON EUW: And again, Your Honor, we would
3 object to him being offered as any sort of an expert in
4 computer security. He testified that he is not an expert in
5 computer security, including -- and I quote -- all kinds of
6 computing devices.

7 So to the extent he is being offered as an expert in
8 the security of computing devices including voting systems, we
9 would object.

10 THE COURT: What he says later on within lines of his
11 deposition in '21: I didn't say I don't have that expertise --
12 now he is talking about hackability and detectability of
13 hackability -- my expertise is in election systems and
14 technology security. You used the term computer security, and
15 I said that does not apply to me.

16 This is, again, Page 20.

17 So, I mean, I think this dance was done in some other
18 form when this deposition was originally taken in '21.
19 Obviously, the witness has expertise in computers to the extent
20 that he has been building a computer, but he does not have --
21 but he does not profess expertise in computer security.

22 To the extent that he says, I have knowledge, I mean,
23 he's generally professing to have expertise in election systems
24 and technology security.

25 It is unfortunately a little more loosey goose than I

1 would like, but I'm going to treat it like that. Clearly, he
2 does not profess here, though, throughout his deposition and
3 then other times I have heard the doctor testify, to being an
4 expert in -- particularly in election computer security.

5 It doesn't mean he doesn't have some measure of
6 expertise because he's building these things, he evaluates
7 them, he operates them.

8 So with that qualification, I'm going to allow him to
9 testify. But he so straightforwardly denies having an
10 expertise in computer security and that not applying to him
11 that I think you'll have to be very careful about how you
12 proceed here, Counsel.

13 I mean, I will allow him to testify about his
14 expertise in election systems as a whole. And to the extent
15 that sometimes security is interacted with that and his design
16 of systems, he can do that.

17 But when he -- if he starts professing opinions that
18 are really directly on a higher level about election or
19 computer security, which he has denied, or computer security in
20 particular because the BMDs and other machines are computers, I
21 think we'll run into troubles. We won't be able -- he won't be
22 able to testify as to that.

23 MR. MILLER: I think that will be fine, Your Honor.
24 I suppose we'll see how many objections I draw or how much
25 other testimony is elicited on cross.

1 THE COURT: All right. That's fine.

2 BY MR. MILLER:

3 Q. Dr. Gilbert, I would like to go back to Defendants'
4 Exhibit 728. This is the NASEM report that is on the stand
5 there with you.

6 A. Yep.

7 COURT REPORTER: What kind of report?

8 MR. MILLER: NASEM report, N-A-S-E-M, National
9 Academies of Science, Engineering and Mathematics.

10 BY MR. MILLER:

11 Q. Dr. Gilbert, can you explain, to your knowledge, how the
12 National Academies goes about selecting folks to serve on
13 committees like this?

14 A. Sure. The National Academies has an extensive resource to
15 identify experts in various domains, and they are able to call
16 upon those experts to serve on committees, such as the one we
17 were on, a consensus committee, to do research and develop
18 reports -- consensus committee reports.

19 MR. MILLER: Jim, if we could go back to the sixth
20 page of the PDF of this document.

21 BY MR. MILLER:

22 Q. And so when the National Academies went to appoint experts
23 on accessible, reliable, and verifiable technology in voting,
24 they invited you to join this committee; right?

25 A. Yes.

1 MR. MILLER: So, Mr. Montgomery, if we could go back
2 one page to Page 5.

3 BY MR. MILLER:

4 **Q.** I was looking for what the National Academies is seeking
5 in this consensus study report. I found this statement here.

6 Does that comply with your understanding of the consensus
7 study report process of the Academies?

8 **A.** Yes.

9 **Q.** And so in there, you're documenting the evidence-based
10 consensus on the study's statement of task by an authoring
11 committee of experts; is that accurate?

12 **A.** Yes.

13 **Q.** And then I understand that this report was also subject to
14 an independent peer review process; is that right?

15 **A.** Yes.

16 **Q.** And how does that work?

17 **A.** The committee and the staff develop the report. Then that
18 report is sent out by peer review. The committee doesn't
19 participate in that. And it goes out for review, and then
20 comments come back, and then we discuss or edit. And it may go
21 out for another review. And then it is accepted by, I think,
22 another panel and then published.

23 **Q.** Okay. So the committee drafts the starting point and then
24 sends it out; is that accurate?

25 **A.** Right. There is an initial version of the report that is

1 sent for review.

2 **Q.** Okay. And when the comments come back in, does that come
3 back to the committee or come back to somebody else too?

4 **A.** I think it goes to staff, and then it comes to the
5 committee, but there may be a step in there -- because we're
6 separated from it when it goes out. The staff handles that,
7 and then they will call a meeting and say we have these
8 comments or feedback and things like that.

9 **Q.** Okay. And then the committee debates or discusses the
10 comments and feedback presented back to them; is that accurate?

11 **A.** Right.

12 **Q.** If we scroll down to Page 17 of Defendants' 728, I noticed
13 a couple of familiar names under the reviewers in the second
14 paragraph there.

15 When these comments were submitted, did you have an
16 understanding necessarily who they were coming from as to what
17 particular issue or does the committee just kind of discuss
18 them as a whole?

19 **A.** No. I don't know that it would have said a particular
20 individual said this. I believe these are anonymous. Now, the
21 staff may know, obviously, but the committee -- consensus
22 committee experts, we don't know that. We don't engage with
23 the reviewers.

24 **Q.** Okay. So in terms of the charge to the committee for
25 documenting the evidence-based consensus, if we could go to

1 Page 24 on to -- Page 24 on to Page 25, and I see there the
2 charge to the committee and four items listed out.

3 Do you recognize that?

4 **A.** Yes.

5 **Q.** Does that reflect, in your understanding, of what the
6 committee's task was and what the committee did in producing
7 this report?

8 **A.** Yes.

9 **Q.** And in this report, the committee did, in fact, offer on
10 Number 4 there recommendations that provide a vision of voting
11 that is easier, accessible, reliable, and verifiable; right?

12 **A.** Yes.

13 **Q.** Okay. So relevant to this case, what kind of technology
14 did the committee recommend for use in voting?

15 **A.** The --

16 MR. ANDREU-VON EUW: Objection. Hearsay.

17 THE COURT: I think we have this in the record. This
18 is taking -- if you want to point him to where the
19 recommendation is, you can illuminate it that way.

20 MR. MILLER: Sure. Okay.

21 Jim, if we can go to Page 27 on to Page 28. And if
22 you'll scroll down.

23 BY MR. MILLER:

24 **Q.** Do you see there, Dr. Gilbert, relative to voting
25 technology? Do you see that?

1 **A.** Voting systems -- yeah, I see it. Yes.

2 **Q.** And you see there at 4.11, it states, elections should be
3 conducted with human readable paper ballots. These may be
4 marked by hand or by machine (using a ballot-marking device).
5 They may be counted by hand or by machine (using an optical
6 scanner).

7 Do you see that?

8 **A.** Yes.

9 **Q.** And then it goes on to say, re-counts and audits should be
10 conducted by human inspection of the human readable portion of
11 the paper ballots, and voting machines that do not provide the
12 capacity for independent auditing should be removed from
13 service as soon as possible.

14 Do you see that?

15 **A.** Yes.

16 **Q.** Okay. And does that accurately reflect your understanding
17 of some of the recommendations of this committee?

18 **A.** Yes.

19 THE COURT: I think you deleted what was in the
20 parenthesis.

21 MR. MILLER: I was -- yes, e.g., machines that do not
22 produce a voter verifiable paper audit trail, just to be clear.

23 THE WITNESS: (Witness nods head affirmatively.)
24 Yes.

25

1 BY MR. MILLER:

2 Q. And what about auditing? Are you familiar with any
3 recommendations there from the committee?

4 A. Yes. We made recommendations for auditing. We discussed
5 risk-limiting auditing as part of our recommendation.

6 Q. Now, are you familiar with any similar consensus report
7 that has since been published?

8 A. No, I'm not.

9 Q. So, Dr. Gilbert, moving on toward some of the
10 particularities as to this case, you're aware that this case
11 involves a claim that the Dominion BMDs system used in Georgia
12 is unconstitutionally insecure; right?

13 A. Correct.

14 Q. Do you have an opinion on that?

15 A. I do not agree with that assessment.

16 MR. BROWN: Objection, Your Honor.

17 MR. ANDREU-VON EUW: Objection. Foundation and legal
18 conclusion.

19 MR. MILLER: I'm not offering it as a legal
20 conclusion.

21 THE COURT: He's asked him, does he have an opinion?
22 He can give his opinion, but it is going to be worthless unless
23 you elicit it.

24 MR. ANDREU-VON EUW: And the objection was also with
25 regard to the Dominion BMD specifically, as I understand it, at

1 least at the time of the deposition.

2 THE COURT: You are talking too low.

3 MR. ANDREU-VON EUW: The objection was also with
4 regard to the Dominion BMDs specifically, which I understand
5 that at least of the time of Dr. Gilbert's deposition he has
6 never personally examined.

7 MR. MILLER: Your Honor --

8 THE COURT: Will you clarify the scope of your
9 question?

10 MR. MILLER: Sure.

11 BY MR. MILLER:

12 **Q.** Dr. Gilbert, do you have an opinion as to the use of
13 ballot-marking devices for in-person voters as to being so
14 insecure it cannot be reasonably used?

15 **A.** I --

16 MR. ANDREU-VON EUW: Objection. Calls for an opinion
17 on cybersecurity.

18 THE COURT: I'm sorry. You are going to either need
19 to stay seated and use the -- because of your height, or else
20 you are going to have to talk a lot more. Because this is a
21 struggle otherwise.

22 MR. ANDREU-VON EUW: I can stay seated, Your Honor.
23 I'm sorry.

24 I said, objection. Calls for an opinion as to
25 cybersecurity.

1 MR. MILLER: Your Honor, the Court can -- to the
2 extent that Dr. Gilbert's opinion delves into or brings in or
3 relies on cybersecurity, the Court can also obviously disregard
4 that to that extent. It is not where we are going here, Your
5 Honor.

6 THE COURT: Well, I'm going to disregard it now. I
7 mean, it is not what he was proffered as an expert about.

8 MR. MILLER: I'm not asking him about cybersecurity,
9 Your Honor. Nothing in my question asked about cybersecurity.

10 THE COURT: Well, it was broad enough that somebody
11 would think it was.

12 BY MR. MILLER:

13 Q. Dr. Gilbert, do you have an opinion as to whether a voting
14 system utilized for in-person voters utilizing BMDs is
15 insufficiently insecure?

16 MR. BROWN: Your Honor, I would object as to
17 relevancy because he has already carved out any expertise in
18 cybersecurity.

19 And so the question is, apart from its hackability,
20 is a BMD secure, which is not going to yield a relevant answer.

21 MR. MILLER: And, Your Honor, this is where the
22 intent of the plaintiffs to require cybersecurity be the focus
23 of any aspects of voting system security becomes circular.

24 You know, at this point we're talking about the
25 manner in which these devices can be secure. That is wholly

1 separate and apart from whether there is malware necessarily on
2 the device.

3 This may be easier if I excuse the witness because I
4 don't want to draw an objection for what I'm about to say, Your
5 Honor.

6 THE COURT: All right. We're going to excuse the
7 witness at this point. We'll get you back in in a few minutes.

8 MR. CROSS: Your Honor, could I offer one suggestion
9 before Dr. Gilbert leaves that might help?

10 He has declarations. If Mr. Miller wants to just
11 point him to the opinion he has offered in this case, we can
12 figure out if we have an objection to the scope of that. I
13 mean, that is how this is normally done.

14 MR. MILLER: Sure. Your Honor, again, I believe it
15 would be best if we excuse the witness.

16 THE COURT: All right.

17 **(The witness exited the courtroom.)**

18 MR. MILLER: Your Honor, just to be clear, what
19 Dr. Gilbert will testify to is that he does not dispute
20 whatsoever that Dr. Halderman can, you know, do the attack that
21 he demonstrated in court yesterday, for example.

22 Mr. Cross played his deposition just the other day
23 where he said, no, I don't dispute that Dr. Halderman could do
24 that.

25 The difference here is, number one, whether that can

1 be carried out in real life and then, number two, whether that
2 is any different from the ways in which paper ballots can be
3 hacked to a similar extent.

4 And Dr. Gilbert is not going to sit here and talk
5 about some coding error that Dr. Halderman made, but that is
6 where the voting system security fits in here, so I just want
7 to be clear where we're headed.

8 THE COURT: I want to see his declarations --

9 MR. MILLER: Sure.

10 THE COURT: -- because if I have to read the entire
11 deposition again -- I have heard the gentleman speak in a prior
12 hearing. I think that you are taking him a little bit broader
13 than his actual scope of professed expertise. But that is -- I
14 want to see what you're --

15 MR. MILLER: Your Honor, the declarations are in that
16 Exhibit 40. I think I might have handed one up already.

17 MR. ANDREU-VON EUW: Your Honor, I think it might be
18 helpful. Mr. Miller said he's going to ask about whether the
19 hacks can be carried out in real life. I don't remember that
20 in his declaration. But if pointed somewhere, I could be
21 proved wrong.

22 MR. MILLER: Well, his declaration refers to the
23 security aspects that are brought about --

24 MR. CROSS: What paragraph?

25 MR. MILLER: -- by the risk-limiting audits

1 contained --

2 THE COURT: What paragraph?

3 MR. CROSS: Which paragraph, please? Which
4 declaration, and what paragraph?

5 MR. MILLER: Paragraph 39 of the initial declaration
6 which talks about the difference -- that talks about
7 hand-marked paper ballot audits and re-counts.

8 MR. CROSS: What date?

9 MR. BROWN: Mr. Miller --

10 MR. MILLER: We just went through all of this.

11 MR. BROWN: I have three -- pardon me, Counsel, but I
12 have many declarations in front of me.

13 Which is the docket number of the one you're
14 referring to?

15 MR. MILLER: Unfortunately, I can't read the docket
16 number because this one is filed multiple times.

17 MR. BROWN: Is it August 26, 2020?

18 MR. MILLER: The first one would be November 13,
19 2019.

20 MR. ANDREU-VON EUW: Are you referring to
21 Paragraph 3 --

22 THE COURT: Page 17 on the bottom -- of the affidavit
23 that is on the bottom? It says Page 17.

24 Is that what you want?

25 MR. ANDREU-VON EUW: I don't have it.

1 THE COURT: Auditability, re-counts, and voter
2 intent?

3 MR. MILLER: Your Honor, the --

4 THE COURT: Are we looking at something else?

5 MR. MILLER: -- let me back out as to a bigger
6 picture of this particular affidavit, which is the initial
7 affidavit that was filed for this Court in advance of the 2020
8 preliminary injunction hearing which essentially sets out the
9 differences and similarities between ballot-marking devices and
10 hand-marked paper ballots, the auditability of both types of
11 systems, and what Dr. Gilbert views as the pros and cons, in
12 his opinion, of the various different types of voting systems.
13 For example, the hackability of hand-marked paper ballots with
14 less sophistication that doesn't require a computer security
15 degree. That is the first declaration. It specifically
16 responds to -- it goes on towards the back end.

17 MR. CROSS: Your Honor, since I lived through this,
18 if I could add, that declaration predates Dr. Halderman's
19 findings by almost two years. It cannot be the basis of any
20 opinion on whether those specific vulnerabilities can be
21 exploited in an election. The only thing that Dr. Gilbert has
22 ever addressed is auditability and to some extent the degree to
23 which voters review their ballots.

24 We have no objection to him addressing those points
25 within the scope of his declarations.

1 MR. MILLER: Your Honor, with respect to
2 Dr. Gilbert's July 15 of 2021, declaration in which he had 15
3 days to respond to a report that Dr. Halderman worked on for
4 ten months, yes, there is a limitation as to what he responded
5 on there. But that is completely different to the baseline of
6 what he addresses in his initial declaration, but it also
7 responds to other declarations of Dr. Stark and Dr. Halderman
8 which refer to these bugs, misconfigurations, or malicious
9 hacking causing the BMD to print something other than the
10 selections the voters made on the touch screen or accessible
11 interface. Dr. Gilbert directly responds to that in his
12 November 2019 declaration.

13 MR. CROSS: Your Honor, he can --

14 **(Unintelligible cross-talk)**

15 MR. MILLER: The second portion of the testimony is
16 going to revolve around the human-computer interaction
17 expertise relative to how voters react when a vote has been
18 flipped on the machine.

19 THE COURT: All right. Let's stop for a second. I
20 was told that everything was going to be -- I would get the
21 answers to my questions by looking at Defendants' Trial
22 Exhibit 40.

23 So the first exhibit -- I just want to get
24 clarification on this. The first exhibit is an affidavit that
25 is dated the 25th day of August, 2020. I don't see any 2019

1 one.

2 MR. MILLER: That one, Your Honor, has not been taken
3 up.

4 THE COURT: But if you're referring to it, it is
5 pretty hard for me to understand where you are coming from when
6 you are referring to it.

7 MR. MILLER: I understand, Your Honor.

8 THE COURT: Then the next one, it starts -- again,
9 because I can't see the bottom -- the top part of the page, so
10 I can't give you that. But it seems to be -- follows
11 immediately after the 2021, and that is a 75-paragraph
12 affidavit signed on November 13th of 2019.

13 Maybe that is the one you are referring to?

14 MR. MILLER: Your Honor, sequencing-wise, there are
15 three. This is the third one here.

16 So with respect to sequence, Dr. Gilbert provided an
17 affidavit in 2019 when the plaintiffs first amended their
18 complaint and filed their first preliminary injunction motion.
19 That ended up not being taken up by the Court.

20 In 2020, when they reasserted the same preliminary
21 injunction motion, we filed the additional affidavit that Your
22 Honor referred to a moment ago. In the course of discovery in
23 this case, he's provided expert disclosures that were due two
24 weeks after Dr. Halderman had ten months to produce his report.

25 If I may approach, I'll pass this up to Your Honor.

1 MR. CROSS: Your Honor, can I just speak quickly to
2 the 15 days?

3 We keep hearing this from Mr. Miller, and it is a
4 very unfair thing to say, and here is why. The parties agreed
5 that in November of 2022 they would supplement their expert
6 reports.

7 We did that. That gave them an opportunity to have
8 Dr. Gilbert talk about anything he wanted that developed in the
9 record. The original findings, even though he opted not to do
10 more before. The CISA vulnerability advisory that came out in
11 the summer of '22, the Coffee County and everything, everyone
12 agreed.

13 November of 2022, there is a lot of water under the
14 bridge, go ahead and put in reports. And they said that they
15 would do it. They told us they would supplement it under Rule
16 26(e). It is the same thing we see witness after witness in
17 this case. They made a decision. Now we live with it.

18 He does not have a single declaration that responds
19 to Dr. Halderman except for July of 2021. He did not dispute
20 any findings, and he did not comment in any way on the ability
21 of voters to exploit that or anyone, insiders or others.

22 THE COURT: All right. Let me look at the affidavit.

23 Do y'all have it, Annie?

24 You're looking at it on the docket.

25 What is the docket number, just so you have it?

1 I just want to make sure you're looking at the same
2 thing I'm looking at.

3 MR. MILLER: I think this one has not been filed on
4 the docket, the July 1 report.

5 THE COURT: All right. Would you provide it to my
6 law clerks? Thank you.

7 MR. MILLER: The others have previously been filed on
8 the docket.

9 And, Your Honor, as to --

10 THE COURT: I can't read and --

11 MR. MILLER: Oh, I'm sorry.

12 THE COURT: -- at the same time.

13 **(There was a brief pause in the proceedings.)**

14 THE COURT: Which -- who wanted to look at this
15 particular exhibit?

16 MR. CROSS: Sorry, Your Honor.

17 What was the question?

18 THE COURT: Was it you or was it defense counsel who
19 wanted me to look at this addendum?

20 MR. CROSS: Is that the July '21 declaration?

21 THE COURT: Yes.

22 MR. CROSS: That was defense counsel.

23 MR. MILLER: Your Honor, just to be -- I can go back
24 and look at the transcript. I thought the line of questioning
25 was that July 21 was limited, which it was, and the Court

1 wanted to see it, which -- so I handed it up.

2 THE COURT: All right.

3 MR. MILLER: The point, Your Honor, would be that, of
4 course, it incorporates his prior declaration, which, in
5 looking here at Paragraphs 44 through 56 are talking about
6 Dr. Halderman's various plausible attack scenarios and why
7 either of those are the same as they would be on a hand-marked
8 paper ballot or unrealistic with respect to voters recognizing
9 the issue. That is from the initial declaration from 2019.

10 So what Dr. Gilbert is going to testify to is that by
11 Dr. Halderman's own study with respect to verification and
12 voters noticing changes on their ballots, and with respect to
13 the real world where changes are made on ballots, that that
14 stuff gets -- is noticed in a real election.

15 He is also going to testify as to the, you know,
16 issues of these varieties of hacks. Similar hacks that can
17 either cause chaos or flip an election can be carried out on a
18 hand-marked paper ballot system, which is what he discusses in
19 his 2019 declaration. That is the testimony, Your Honor.

20 MR. CROSS: There is no basis for that in a couple of
21 ways. We did ask for Mr. Miller to point us to the declaration
22 where these opinions derived. You can see it is not in any
23 declaration.

24 MR. MILLER: Just -- just --

25 THE COURT: Wait. Let him finish.

1 MR. CROSS: The July of 2021 one doesn't offer any of
2 these opinions. They are trying to say, well, he incorporated
3 his prior declarations.

4 Okay. He didn't know what the vulnerabilities were
5 in the prior declarations, so he could not offer an opinion on
6 whether those vulnerabilities can be exploited. And one of the
7 key opinions that we've emphasized many times in this case in
8 filings and hearings that Dr. Halderman has offered -- I think
9 it is in his response to Gilbert if I remember right, but it
10 certainly is captured in the report -- is that a voter could do
11 exactly what he did in this courtroom in a voting booth.
12 Dr. Gilbert has never disputed that once.

13 And they had not 15 days, but a year and a half until
14 November of 2022 to put in a supplemental declaration or report
15 disputing that.

16 THE COURT: All right.

17 MR. CROSS: And the last point I'll make, Your Honor,
18 is there is no foundation either. Dr. Gilbert has never
19 examined any of the equipment. He has never even seen an ICX
20 before we deposed him. He has never been to an election in
21 Georgia. We have heard themselves raise objections that people
22 can't talk about what happens at the polling sites if they
23 haven't been there.

24 And so it is foundation and a Rule 26.

25 MR. MILLER: Your Honor, it sounds like a

1 cross-examination to me. But I will also note that with
2 respect to these issues, you know, Dr. Gilbert hasn't examined,
3 for example, Dr. Halderman's source code because he was not
4 available to go do it in the week span over Christmas and New
5 Year's.

6 THE COURT: All right. Enough. Enough. I mean --

7 MR. CROSS: He testified he didn't need it. This is
8 very unfair what we are hearing. He testified he did not need
9 the source code. Mr. Miller has to stick to the facts. They
10 matter.

11 THE COURT: I'm going to take a five-minute break.
12 Thank you.

13 COURTROOM SECURITY OFFICER: All rise. Court is in
14 recess for five minutes.

15 **(A brief break was taken at 1:21 PM.)**

16 THE COURT: Have a seat. I was looking over
17 Dr. Gilbert's October --

18 MR. MILLER: Your Honor, I want to mention, I think
19 Dr. Gilbert came back in the room on the break.

20 THE COURT: I don't think anything I'm saying here is
21 going to be a problem. It would probably be helpful for him to
22 understand where I'm coming from.

23 I read over his -- at least the relevant portion of
24 his October '21 deposition. And this is what I would say is
25 that Dr. Gilbert views himself, from reading this, as an expert

1 in designing voting equipment and systems, and particularly the
2 focus additionally on access for disabled voters, but generally
3 as open a system as possible.

4 He describes that he focuses on fixing systems -- and
5 that is his word -- in trying to make things work as well as
6 possible, openly. He describes Dr. Halderman as the one who
7 addresses more what can go wrong and what breaks the systems in
8 trying to understand how to identify those and address those.
9 And that includes his design of various hacking methods and
10 then -- they both end up assessing how voters react at points
11 to the voting experience.

12 But what is true here is Dr. Gilbert does not in any
13 fashion profess really to be an expert on the -- what can go
14 wrong, the hacking, or other ways in which somebody's vote
15 could be not verified because of the -- software actions. And
16 it is a different -- you know, it is simply a different focus,
17 a different expertise.

18 So, I mean, he's very proud, and understandably so,
19 that he's focused on -- Dr. Gilbert, that is -- on trying to
20 create solutions. He also confirms that he had not -- he has
21 never used the Georgia system or -- and never had access to it
22 and did not -- and so he does not have any specific knowledge
23 of the Georgia system other than, of course, I'm sure he's read
24 something by now by far. He's an intellectually thorough human
25 being and scholar.

1 So just to be clear, he can testify -- so that we're
2 not going in circles, he can testify about equipment and his
3 assessment of, you know, what protects a system in his mind
4 that is the positive parts. He is not -- so he clearly is not
5 an expert on the issues of hacking or detectability or why
6 machines then also become -- why those can be undetectable.
7 That is just simply not what he describes as his expertise.

8 MR. MILLER: Your Honor, let me be clear, because
9 particularly the voter verification issue in the recognition of
10 the voters, frankly, is what Dr. Gilbert focuses on.

11 THE COURT: And he can testify that to a limited
12 degree. But even from his testimony today, I have no idea,
13 frankly, whether he is even -- you know, whether he -- he never
14 mentions the scanner as an interface or a QR code.

15 So I am clueless as to what he has looked at since he
16 indicates, at least in '21, that he had never seen any of the
17 equipment or the software, so --

18 MR. MILLER: Okay. Your Honor, to be clear, so his
19 2019 declaration starts out with his -- Mr. Cross is right. It
20 was not him examining the source code of the Dominion machines
21 or anything like that.

22 But as to the fundamentals, the BMD, the ballot with
23 a QR code and text, the scanner, all of that is listed out in
24 his initial declaration.

25 THE COURT: What was the date of the 2019 affidavit

1 since we didn't have BMDs in 2019 other than in sample
2 jurisdictions?

3 MR. MILLER: It was filed at the time that the
4 initial preliminary injunction motion was filed, November 13,
5 2019. As Your Honor will recall, at that time, plaintiffs
6 amended their complaint, filed a preliminary injunction motion.
7 We had a hearing in early 2020. It was actually the last thing
8 I did before COVID happened. Your Honor denied that motion,
9 permitted expedited discovery in August of 2020. The same
10 motion was refiled, and then that is when Dr. Gilbert's 2020
11 declaration was filed.

12 MR. ANDREU-VON EUW: And, Your Honor, I want to
13 correct one thing for the record. I don't think Mr. Miller
14 will disagree.

15 In the declaration, Dr. Gilbert says he examined
16 documentation about the QR code, the BMD, the scanner,
17 et cetera. To our knowledge, and at least certainly as of the
18 day of his deposition, he had not examined any of the
19 equipment.

20 That is Paragraph 17 of the 2019 declaration, Your
21 Honor.

22 MR. MILLER: I don't think that matters as to the
23 substance. I don't dispute that being in his declaration. I
24 don't think that matters as to the substance of his opinion.

25 THE COURT: Well, I think that is what he says again

1 in '21, I haven't seen any of the equipment.

2 MR. MILLER: Right.

3 THE COURT: He hasn't interfaced with any of the
4 equipment.

5 I think it is relevant, but I think -- so anyway,
6 with that said, that is as bright line as I can get in terms of
7 your not taking the witness into territory that is not covered
8 by his particular -- the particular focus of his expertise.

9 MR. MILLER: Okay.

10 THE COURT: Dr. Gilbert, do you want to come back up?
11 BY MR. MILLER:

12 **Q.** Dr. Gilbert, apologies for the interruption there.

13 We'll pick up where we just left off.

14 What is your understanding of the component pieces of the
15 BMD system used in Georgia that the voter interacts with?

16 **A.** Ballot-marking devices, there is the BMD, the actual
17 computer itself with the touch screen. There is the printer.
18 The voter interacts with the BMD. It depends on their ability
19 or disability. It could have a headset. They make selections,
20 and it prints the ballot, just at a very high level.

21 **Q.** And what does the voter do with that ballot?

22 **A.** The ballot goes into the proverbial ballot box, but it is
23 scanned and goes into -- and saves at that point.

24 **Q.** And you understand that the ballots in Georgia contain
25 both a QR code for tabulation and a summary of the voters'

1 selections with text; right?

2 **A.** Correct.

3 **Q.** And I want to back up a little bit to something we were
4 discussing earlier, just at a high level.

5 Can you describe to the Court the meaning of the term
6 software independence as it relates to voting systems?

7 **A.** Yes. Colleagues of mine, Ron Rivest, John Wack, have put
8 together this notion of software independence. Essentially,
9 what it says in laymen's terms is an undetectable change in the
10 software, whether it is intentional or error or accidental,
11 cannot cause an undetectable change in the outcome of the
12 election.

13 If that is the case, you are software independent.

14 THE COURT: If that is the case, what?

15 THE WITNESS: You are software independent, meaning
16 if it is a case that an undetectable change, either intentional
17 or unintentional, cannot cause an undetectable change in the
18 outcome of an election, that is software independence.

19 BY MR. MILLER:

20 **Q.** And, Dr. Gilbert, considering that, do you have an opinion
21 as to whether the BMD system used in Georgia is software
22 independent?

23 **A.** Yes, it is.

24 **Q.** And why is that?

25 **A.** It produces a paper ballot of record which is -- goes back

1 to the National Academies report. That is where the
2 recommendation comes in that you have to have the paper ballot
3 of record, and that gives us software independence.

4 **Q.** And where does voter verification fit into the picture
5 here?

6 **A.** Voter verification happens when the ballot is -- well, in
7 a BMD scenario, voter verification can happen on-screen and
8 then it happens on the paper itself.

9 **Q.** And why does voter verification matter?

10 **A.** It matters, because without voter verification, we
11 essentially are in a world where ballots could be manipulated
12 and you lose software independence, essentially.

13 **Q.** And, Dr. Halderman [sic], there has been a lot of
14 discussion in this case about voter verification in a
15 particular study by Matthew Bernhard and Alex Halderman
16 concerning voters' review and verification of BMD ballots.

17 Have you reviewed that paper?

18 **A.** Yes.

19 **Q.** And have you conducted any research of your own in this
20 area?

21 **A.** Yes. If I'm not mistaken, we were the first in the United
22 States to do a vote flipping study with paper.

23 **Q.** And when was that?

24 **A.** Oh, wow. I don't remember the year. I would have to look
25 at my CV, but it is on there.

1 We did a vote flipping study where it was in response to
2 on-screen, and we printed results, and we documented where
3 people noticed either on-screen or on paper.

4 **Q.** And I believe Bernhard and Halderman came up with a
5 6.6 percent number, if I remember correctly, of recognizing the
6 vote flip.

7 Do you recall that?

8 **A.** Yes, I recall that number.

9 **Q.** And do you have an opinion on whether that is reflective
10 of a real election scenario?

11 **A.** I don't think it is. I think the protocol that was used
12 in the study was valid. I think Dr. Halderman was doing a
13 human-computer interaction study. And the 6.6 percent seems
14 alarming.

15 But at the same time, I, as you know, did a study with a
16 transparent voting machine and observed what is known in HCI as
17 the Hawthorne effect, which refers to individuals who are being
18 studied can behave differently when they know they are being
19 studied.

20 And in my study, I observed that 41 percent of my
21 participants were exhibiting the Hawthorne effect, meaning they
22 noticed a vote being flipped but they didn't speak up. And the
23 only way to know that is to directly ask the participant. And
24 if I'm not mistaken, I don't think that occurred in the study
25 that was done in Michigan.

1 Q. So when you say directly ask the participant, like say,
2 why didn't you tell me? Is that what you mean?

3 A. So in the study that I did, I created a transparent voting
4 system. And what was occurring was when a vote flips, the -- I
5 noticed that the participants had a physical reaction at times.
6 As an example, a vote would flip and the participants would
7 make a face or move a certain way. And after voting, the
8 question would be asked, how did it go?

9 It went well.

10 And that was it.

11 THE COURT: What was the system you were using?

12 THE WITNESS: It is a transparent voting machine. It
13 is -- the premise is it is a glass interface that sits in front
14 of a printer. Essentially, it is making paper like a touch
15 screen.

16 So I created this technology, and we were studying --
17 following some of the protocol to study we did first and then
18 the study that was in Michigan, the study done at Rice by
19 flipping votes.

20 And that is when I would ask the question after the
21 study, did you notice one of your votes was flipped?

22 And participants would say -- 41 percent would say
23 yes. And then I would ask them to identify the flip on the
24 paper, and they correctly identified it. So that gave me
25 evidence that they knew, and they would say they -- it is a

1 study.

2 THE COURT: They would say what?

3 THE WITNESS: That it is a study. That is why they
4 wouldn't speak up.

5 So if people doing these studies don't ask that
6 question, you may miss individuals who you think did not
7 observe a vote flip, but they simply didn't speak up because of
8 the Hawthorne effect is what is called, meaning they didn't --
9 it is a study.

10 BY MR. MILLER:

11 Q. So on that topic, are you familiar with a situation in
12 Northampton, Pennsylvania?

13 A. Yes.

14 Q. And can you describe to the Court, to your understanding,
15 what occurred there with respect to vote flipping?

16 A. They were using a ballot-marking device, and it had an
17 error in the code. And down ballot, there was a flip that
18 occurred, and it was observed early.

19 From the work that I have done and in the studies that I
20 have done, I term this observation effect as the power of one,
21 meaning when we look -- my colleagues often will look at
22 statistics and say numbers tell us few people would notice, but
23 that ignores the human condition.

24 So in the field of human-computer interaction, again we
25 deal with people. The power of one refers to the fact that if

1 a vote is flipped for one person, that individual could alert
2 staff and others that a malfunction, error, hack, whatever you
3 want to call it -- something wrong has occurred, and the power
4 of one could be sufficient to cause notification that something
5 is broken.

6 **Q.** And so can you connect the interrelation between that and
7 the ballot-marking device system in Georgia and the types of
8 hacks that you have seen demonstrated or theorized by
9 Dr. Halderman?

10 **A.** Well, it is essentially vote flipping, and there are
11 different scenarios of vote flipping.

12 You could -- vote flips, one scenario is just change a
13 vote in the QR code, but make the human readable portion
14 correct. There is the vote flip scenario where you flip both
15 of them.

16 **Q.** Okay.

17 **A.** So in the first scenario, this is where the risk-limiting
18 audits come in. The intent is if the QR code has the wrong
19 vote in it, the risk-limiting audit can catch that.

20 Furthermore, if the QR code doesn't match the human
21 readable portion of the ballot, you have again what I call
22 written in stone, meaning you have evidence that a hack has
23 occurred or error or something because the two don't match.

24 Now, in the second scenario where you actually flip both
25 of them, you are relying on voters not to notice and not to

1 speak up. You have to have both conditions.

2 Then that is where, again, the power of one comes in,
3 where a voter would notice and speak up and you have to
4 respond. And we saw that in Northampton. In my studies, we
5 notice that as well, meaning voters -- some voters would get
6 very vocal when candidates were flipped.

7 And so it is hard to say, is there a specific percentage?
8 It is hard to say that because you will have the power of one
9 in a real election.

10 **Q.** When you say there is a specific percentage that is hard
11 to say, do you mean like a specific minimal percentage of
12 verification required?

13 **A.** Absolutely. Yes.

14 **Q.** I want to talk for a second about hand-marked paper
15 ballots.

16 You're not offering an opinion in this case that the use
17 of hand-marked paper ballots are an unacceptably insecure form
18 of voting; right?

19 **A.** No, I am not.

20 **Q.** So in your opinion, between hand-marked paper ballots and
21 a ballot-marking device-based system, is there one advantageous
22 over the other or similar footing?

23 **A.** They are not similar footing. For example, hand-marked
24 paper ballots are not accessible. Blind people, for example,
25 would need assistance.

1 THE COURT: All right. I understand that. But just
2 to expedite the program -- the proceedings, since everyone who
3 has testified already has talked about the need to have some
4 devices be fully accessible, so I don't think that it would be
5 useful -- useful to spend too much time on that.

6 MR. MILLER: And, Your Honor, with respect to that
7 one accessibility, I recognize that there is always going to
8 have to be one.

9 BY MR. MILLER:

10 **Q.** Dr. Gilbert, do you have an opinion as to whether that --
11 your use of those voting systems primarily by disabled voters
12 has a positive or negative effect of the security of the voting
13 system?

14 **A.** Yes. When you have -- when the Help America Vote Act
15 passed, I was alarmed. I knew it was good intention, but did
16 it have that condition that there would be one accessible
17 voting machine in the voting place. I was alarmed because I
18 saw us creating a separate but equal way of voting, and
19 separate but equal connotations don't function very well.

20 And so doing so can disenfranchise another group of
21 people, one. And from a security perspective, it makes it an
22 easier target. If all I have to do is be concerned with blind
23 voters, that is an easier target to change votes.

24 So we created Prime III in response to that very question,
25 meaning we were designing universally designed technology

1 that -- that could be used by anyone independent of their
2 ability or disability.

3 **Q.** What other types of hacks, for lack of a better term, can
4 be carried out on hand-marked paper ballots?

5 **A.** Well, there's two in particular. There is the overvote
6 hack is what I call it and undervote hack.

7 An overvote hack scenario occurs where you have two
8 candidates and the voter selects one, Candidate A. Later, an
9 insider fills in the oval for Candidate B, which causes an
10 overvote scenario. It doesn't give a vote to any candidate,
11 but it takes away a vote for Candidate A in that scenario.

12 Undervote hack occurs when voters decide, I don't want to
13 vote for whatever reason, or they just miss a contest, and they
14 don't vote for anyone, so it leaves all candidates available,
15 and so an insider could later complete a vote in that contest.
16 And that is taking advantage of an undervote.

17 **Q.** And can overvotes occur on a BMD system?

18 **A.** The overvote hack cannot occur in a BMD system that I am
19 aware of. If it is a BMD system that is printing ovals on an
20 existing ballot, I guess you could do an overvote or maybe even
21 undervote hack in that scenario.

22 But the BMDs that print what is called a ballot summary,
23 no.

24 **Q.** And when you say you guess you could in that scenario, it
25 is not a voter could accidentally vote for two candidates in

1 one race?

2 **A.** Correct. They could not -- they couldn't do over -- what
3 I'm speaking to is the overvote hack.

4 **Q.** Got it.

5 **A.** Overvoting BMDs can prevent that, yes. That can be
6 completely prevented.

7 **Q.** And are you aware of any research -- well, let me back up.
8 We talked earlier about verifiability and research about
9 how voters verify their BMD ballots; right?

10 **A.** Uh-huh (affirmative).

11 **Q.** Are you aware of any similar research on verifiability of
12 hand-marked paper ballots?

13 **A.** Yes. A colleague, Dr. Michael Byrne and his team at Rice
14 University, they did a study on hand-marked paper ballots and
15 identified essentially -- what was it? -- 11 percent of
16 hand-marked paper ballots contained some sort of an error.

17 **Q.** And what about with respect to undervotes and overvotes,
18 whether intentional or not, on the first instance in Georgia?
19 Are you familiar with anything relative to that?

20 **A.** There was a --

21 MR. ANDREU-VON EUW: Objection. I think this may be
22 outside the scope. I may be mistaken, Carey.

23 Can you point me to the declaration?

24 MR. MILLER: Yes. His first declaration, if you go
25 to -- I'm sorry. It is a footnote on it.

1 MR. ANDREU-VON EUW: Specific studies --

2 MR. MILLER: The 21st Century report cited in his
3 first declaration, Page 14, Footnote 1 goes on to Page 15.

4 MR. ANDREU-VON EUW: Thank you.

5 BY MR. MILLER:

6 **Q.** And, Dr. Gilbert, you were talking earlier about whether
7 you were familiar with any similar study or review of data
8 specific to Georgia.

9 **A.** Yes. And the report was showing that --

10 THE COURT: I'm sorry.

11 What was the year of the report?

12 MR. MILLER: Your Honor, this was the transition to
13 the DRE report. So it would have been 2000 -- I'll pull the
14 citation out of the --

15 THE COURT: What year?

16 MR. MILLER: 2001. It was at the time of
17 transitioning from paper ballots in Georgia to the prior DRE
18 system.

19 COURT REPORTER: You said 2001?

20 MR. MILLER: 2001.

21 BY MR. MILLER:

22 **Q.** Go ahead.

23 **A.** In summary, it was showing that there was a
24 disproportionate number of undervotes happening in minority
25 populations with these hand-marked paper ballots.

1 THE COURT: And we've had testimony in this case
2 years before, I think, prior to current counsel's presence
3 about that issue with the former Secretary of State here.

4 But just by virtue of the date, 2001, I would have to
5 assume that there was no comparison. I mean, it was an
6 analysis -- the Century Study analysis was of the problems with
7 the hand-marked ballot, that there were people who did
8 undervote, and, in fact, that people did many different things
9 that were perhaps not --

10 THE WITNESS: To my knowledge, that is correct.

11 THE COURT: But you're not comparing it with
12 something else?

13 THE WITNESS: I am not.

14 THE COURT: Because I don't know that we have data on
15 undervotes at this point on the BMDs, do we? What that
16 actually means by race?

17 THE WITNESS: An undervote on a BMD -- so undervoting
18 is legitimate, meaning I don't care to vote in this contest, I
19 don't want to.

20 The issue is, on a hand-marked paper ballot, I
21 explained undervote hack. On a BMD, what we've seen is they
22 can write a comment saying no selection. They can make it
23 aware that this is an option that has not been selected;
24 whereas, that is not available in the standard hand-marked
25 paper ballots.

1 THE COURT: Well, that could be made available to us
2 in the standard ballot too, a hand-marked ballot, couldn't it?
3 I mean, I don't remember the -- but that seems like a box
4 anyone in either capacity you could deal with.

5 THE WITNESS: I would think so. It just has not
6 translated to practice.

7 THE COURT: Okay.

8 BY MR. MILLER:

9 **Q.** Dr. Gilbert, on that note, if the scanner were programmed
10 to reject an overvote or undervote, does that cause any issue
11 relevant to ballot secrecy?

12 **A.** Scanners are programmed to reject overvotes because that
13 is considered an error. Undervotes, you can't -- that would
14 cause potential issues to program them for undervotes because
15 undervotes are legitimate, so you can't assume that an
16 undervote is an error.

17 **Q.** A voter may intentionally decide, I don't like anybody
18 running in that race, or they may neglect and skip past it on
19 accident?

20 **A.** Exactly.

21 **Q.** So, Dr. Gilbert, you talked earlier about the two
22 different types of hacks of -- or two main types of hacks
23 presented in this case relevant to flipping both a QR code and
24 a human readable text versus flipping one and not the other;
25 right?

1 **A.** (Witness nods head affirmatively.)

2 **Q.** So have you reviewed the testimony of Dr. Halderman in
3 this case?

4 **A.** Yes.

5 **Q.** And I realize you were not physically present, but I want
6 to talk about Dr. Halderman's in-court demonstration that he
7 testified about hacking a BMD with a pen.

8 What do you understand, generally, about that attack?

9 **A.** From the transcript, it appeared he had a BMD present
10 here. He was able to get into the BMD and modify the ballot
11 definition file and was able to demonstrate a vote being
12 flipped.

13 If I'm not mistaken, he voted for George Washington and it
14 printed Benedict Arnold. So it was showing a vote flip.

15 **Q.** And can you describe to the Court what a ballot definition
16 file is?

17 **A.** Ballot definition files --

18 MR. ANDREU-VON EUW: Objection. Outside of the scope
19 and foundation.

20 MR. MILLER: I can lay the foundation here, Your
21 Honor. The point is so that he can -- he just mentioned ballot
22 definition files -- saying what it is generally.

23 THE COURT: He can do that.

24 Go ahead.

25 THE WITNESS: Ballot definition files, for those

1 manufacturers and researchers such as myself who build these
2 systems, we create what is called ballot definition files,
3 which are the representation of the ballot. So they contain
4 the contest, the candidate, and relative corresponding IDs for
5 those contests and candidates.

6 BY MR. MILLER:

7 Q. And let me ask you this: Is a -- replacing the ballot
8 definition file, is that the same as inserting malware, to your
9 understanding?

10 MR. ANDREU-VON EUW: Objection. Outside the scope
11 and still foundation.

12 BY MR. MILLER:

13 Q. Dr. Gilbert, can you explain to me what malware is as
14 opposed to a ballot definition file?

15 MR. ANDREU-VON EUW: Objection. Outside the scope of
16 his expertise and his declarations.

17 THE COURT: I think it is outside the scope of his
18 declarations. It is not outside, likely, of his expertise.

19 But you have to tell me where you are going.

20 MR. MILLER: Your Honor, the only point is
21 Dr. Gilbert, being a rebuttal expert -- I'm establishing that
22 what was described by the transcript is not malware, and that
23 is purely it. It is a change of the ballot definition file.

24 If we don't need to establish that, we can move on.

25 MR. ANDREU-VON EUW: That is undisputed, Your Honor.

1 MR. MILLER: Okay.

2 MR. ANDREU-VON EUW: And -- I'm sorry. Just to be
3 clear for the record, Dr. Halderman demonstrated a number of
4 attacks, one of them --

5 THE COURT: A number of what --

6 MR. ANDREU-VON EUW: A number of attacks. One of
7 those attacks was the ballot definition file, and we are not
8 disputing that that attack did not use malware.

9 THE COURT: But there were others as well?

10 MR. ANDREU-VON EUW: There were other attacks that
11 did use malware.

12 THE COURT: That did use malware.

13 And is he offering an opinion on those, or does he
14 know anything about them?

15 MR. MILLER: Your Honor, I was really just
16 establishing here what we saw was swapping out the ballot
17 definition file. That is the only question I had on it.

18 THE COURT: All right. Fine.

19 BY MR. MILLER:

20 **Q.** So, Dr. Gilbert, from Dr. Halderman's report, you recall
21 that he offered the opinion that his hacks are undetectable and
22 uncorrectable.

23 Do you have an opinion about that?

24 **A.** Yes.

25 MR. ANDREU-VON EUW: Objection. Misstates the

1 report, and it is also outside the scope of his declaration.

2 MR. MILLER: It is specifically what he --

3 THE COURT: Would you mind just taking -- do you
4 have -- where is the microphone?

5 MR. ANDREU-VON EUW: I'm sorry, Your Honor. Let me
6 repeat my objection. Objection. Misstates the report.

7 THE COURT: Would you like to state what the
8 report --

9 MR. ANDREU-VON EUW: The report says that the hacks
10 can be made undetectable and expressly says -- because I was
11 demonstrating, I did not go through those steps.

12 BY MR. MILLER:

13 Q. Let me ask it this way then, Dr. Gilbert.

14 Are you aware of whether Dr. Halderman has created such an
15 undetectable attack that he theorizes about and had it verified
16 by anyone else?

17 MR. ANDREU-VON EUW: Objection. Foundation.

18 THE COURT: Sustained.

19 BY MR. MILLER:

20 Q. Dr. Gilbert, you were asked earlier on voir dire about
21 examination of your new equipment.

22 Do you recall that?

23 A. Yes.

24 Q. Did you ask any of the plaintiffs' experts to examine your
25 equipment?

1 **A.** Yes. I asked cybersecurity experts that work in voting
2 technology, including the plaintiffs' experts, to take a look
3 at the security -- voting security of my new invention, and
4 unfortunately, none of them would be willing to look at it,
5 test, try it, anything.

6 **Q.** And, Dr. Gilbert, you recall being deposed in this case
7 too; right?

8 **A.** Yes.

9 **Q.** And I seem to recall pretty extensive questioning over
10 verifying whether certain hacks were, in fact, undetectable.

11 Do you recall that?

12 **A.** Yes.

13 **Q.** What was the basis for your opinion that Dr. Halderman's
14 statement of undetectability was not supported?

15 **A.** I have yet to see Dr. Halderman hack a voting machine and
16 then make it available to see if it can be detected. Given the
17 nature of voting, just as Dr. Halderman and -- what I call the
18 Michigan study, the Rice study, and the Florida study, the one
19 that I ran where we were looking at voter verification, in
20 voting, we deal with people, and we want to verify the accuracy
21 of our hypotheses.

22 So in this case, one of voter verify, can the malware
23 actually be detected? Can you actually insert malware to flip
24 votes? Can that be done? Rather than, I think it would be
25 conflict of interest for an individual to take a machine, hack

1 it, and say, I was able to flip votes, shoot a video of it, and
2 then say, see, I can do it and it is undetected, but never
3 allow the third party to evaluate or assess that.

4 That just is not a scientific way of doing research, from
5 my perspective. And, again, it may be differences in
6 disciplines where in human-computer interaction we're
7 experimentalists. We run experiments with real people in the
8 real world.

9 And I'm not a cybersecurity person, and cybersecurity has
10 requirements where they run studies independent of people.
11 They can just run things through a network and see how many
12 bits and bytes make it and report on that.

13 So there may be just differences. But in the area of
14 voting security, in the area of voting technology, I think it
15 should be required that you have to experiment with people, you
16 have to have a third party validate your claims.

17 **Q.** I want to go back to your discussion of the overvote and
18 undervote hacks.

19 MR. MILLER: Your Honor, may I approach?

20 THE COURT: Yes.

21 BY MR. MILLER:

22 **Q.** Dr. Gilbert, I'm displaying here what we will identify as
23 Defendants' Demonstrative 2, which is a sample ballot for the
24 November 2023 municipal elections in Adairsville, Georgia.

25 MR. MILLER: Your Honor, I apologize. I've been

1 corrected. We're on Defendants' Demonstrative 3, just for
2 clarity.

3 THE COURT: What is the topic?

4 MR. MILLER: So this is a sample ballot for
5 Adairsville, Georgia, for the municipal election, November 7,
6 2023.

7 BY MR. MILLER:

8 **Q.** Dr. Gilbert, to replicate a ballot voted by the voter,
9 we're going to take this pen and mark my choices.

10 For clarity of the record, I am marking a vote for the
11 candidate in the first position, Mr. Kenneth Carson for mayor,
12 as the voter. I have decided that I don't want to vote for any
13 of the candidates in the city council post one. I'll mark a
14 vote for Mr. Holcomb in post 2.

15 MR. MILLER: Your Honor, may I approach?

16 THE COURT: Yes.

17 BY MR. MILLER:

18 **Q.** Dr. Gilbert, I'm going to hand you this sample ballot and
19 a Sharpie.

20 Can you hack that ballot?

21 **A.** Yes.

22 **Q.** How so?

23 **A.** I can do an overvote hack, or there is an undervote here,
24 so I can do an undervote hack.

25 MR. BROWN: Your Honor, I object because it is not

1 clear from the demonstration whether this is after the voter
2 has scanned it or --

3 MR. MILLER: We'll get that.

4 MR. BROWN: -- before. In other words, is the
5 attempt at a hack by Dr. Gilbert on the voter as he approaches
6 the scanner or after it has already been recorded in permanent
7 memory?

8 MR. MILLER: We'll get to that, Your Honor. I'm not
9 sure it is an objection, but we will cover it.

10 THE COURT: Well, I don't know the purpose at the
11 moment, so it probably does help me to know what you are doing
12 here.

13 MR. MILLER: Sure.

14 BY MR. MILLER:

15 **Q.** So, Dr. Gilbert, can you go ahead and do an overvote hack
16 on that ballot?

17 **A.** Yes.

18 THE COURT: If you are just trying to show me -- I
19 understand what an overvote -- he has already described this
20 already. This is a waste of my time.

21 What is the purpose other than to show me --
22 physically do it when we have already discussed it at some
23 length?

24 MR. MILLER: Your Honor, there will be a subsequent
25 purpose if -- just a minor bit of grace, minor bit of grace.

1 THE COURT: Move ahead.

2 BY MR. MILLER:

3 Q. So, Dr. Gilbert, if you could go ahead and commit an
4 undervote hack on that ballot.

5 A. (The witness complies.)

6 Q. And just for clarity, these are the -- this is now
7 Defendants' Demonstrative 3; correct? Do you see that on your
8 screen?

9 A. Yes.

10 Q. So this hack could be carried out on, say, an absentee by
11 mail ballot prior to scanning; right?

12 A. Yes.

13 Q. And in which case, what would be the recovery mechanism,
14 if any, to understand which of these marks were the mark made
15 by the voter versus the mark made by the hacker?

16 A. There are none.

17 Q. Now, do you recall in Dr. Halderman's testimony that this
18 would not work on a ballot scanned in the precinct because the
19 ballot image would be stored on the scanner; right?

20 A. Yes, I do.

21 Q. And we're on the same page that this type of theoretical
22 hack on a precinct scan ballot would be carried out by, say, an
23 insider?

24 MR. ANDREU-VON EUW: Objection. Leading.

25 MR. BROWN: Objection. Leading.

1 THE COURT: Okay. Rephrase your question, please.

2 BY MR. MILLER:

3 Q. Who could carry out this type of hack on a precinct
4 scanned ballot?

5 A. It would be anyone who has access to the ballots after
6 they are scanned. They could be anyone who has access to the
7 ballot. Anyone.

8 Q. Now, were you surprised to hear Dr. Halderman reference
9 the ballot image as being the safety net?

10 A. Yes, I was. Honestly, I know him well enough to say I
11 believe he misspoke, and I think he would correct his words
12 today.

13 In order for that to be the case, that means that the
14 digital ballot scanned on the scanner would be the ballot of
15 record, and that violates everything that any of my colleagues
16 and I have said with respect to the NASEM report.

17 For example, we made it clear, given the current state of
18 technology, there is no known way to secure a digital ballot,
19 period. And to say that the digital record would be the
20 record -- the ballot of record, you just can't do that. That
21 goes against -- that is saying, let's go back to DREs.

22 And again, I think he just misspoke. That is all.

23 Q. And so for clarity under terms of the precinct ballot, by
24 the time, you, the hacker have got ahold of this, the ballot
25 has been scanned already?

1 **A.** Yes. I don't know of a way to intervene between the
2 scanner and the voter. This would be afterwards.

3 **Q.** So setting aside the issue of, you know, the ballot of
4 record being the electronic ballot, how would you get rid of
5 the evidence with respect to the scanner, if you could?

6 MR. ANDREU-VON EUW: Objection. This has been going
7 outside the scope of his report for a minute.

8 MR. MILLER: Your Honor, Dr. Gilbert talks about
9 undervote and overvote hacks throughout his initial
10 declaration --

11 THE COURT: Move forward.

12 MR. ANDREU-VON EUW: That is true, Your Honor. He
13 does not speak about getting rid of the evidence.

14 BY MR. MILLER:

15 **Q.** Dr. Gilbert, are you familiar with any of the hacks
16 Dr. Halderman performed on the scanners in his report?

17 MR. ANDREU-VON EUW: Objection. Relevance.
18 That's --

19 MR. MILLER: I don't understand how that is a
20 relevance objection. That is the basis of plaintiffs' claim.

21 BY MR. MILLER:

22 **Q.** Are you familiar with any of the hacks Dr. Halderman has
23 carried out on these scanners in his report?

24 **A.** Yes.

25 **Q.** And with respect to ballot images and tabulation records,

1 do you have an understanding as to if Dr. Halderman was able to
2 open the door such that malfeasance could occur with them?

3 **A.** Yes. He was able to, I guess, decrypt ballot images and
4 get access to ballot images. And in these scenarios, we've
5 discussed in our community potential threats of deleting files,
6 meaning just erasing ballot images from the scanner.

7 And that was discussed, going back to DREs, meaning the
8 scenario could be -- and I introduced this myself -- the threat
9 has always been people would change votes undetected, and
10 rarely would people discuss what I call a chaotic scenario.
11 Instead of changing votes, this is why we encrypt files, so
12 that people couldn't change them.

13 But what if we just removed them all, just deleted them
14 all? That is way simpler. Encryption doesn't protect against
15 deletion. So if you get access, digital ballots can simply be
16 erased.

17 **Q.** And erased by anyone with access to the system, the
18 tabulation system itself; is that right?

19 **A.** Anyone with access to the tabulation system could and
20 permission -- proper permission could erase files. And again,
21 encryption does not protect against deletion.

22 **Q.** To be clear, that would be anyone with access and a
23 Sharpie; right?

24 **A.** The Sharpie empowers you to modify the paper ballots, the
25 hand-marked paper ballot. The access to the scanner empowers

1 you to manipulate, delete files.

2 **Q.** Dr. Gilbert, just for clarity, with this hack, you're not
3 offering -- I think I asked you this before.

4 You're not offering an opinion that hand-marked paper
5 ballots cannot be utilized; right?

6 **A.** No, I am not.

7 MR. MILLER: Your Honor, I'll reserve the remainder
8 of my time for redirect.

9 THE COURT: All right.

10 CROSS-EXAMINATION

11 BY MR. ANDREU-VON EUW:

12 **Q.** Hello again, Dr. Gilbert. Give me one second to gather my
13 notes, please.

14 **A.** Okay.

15 **Q.** So I want to first go back to the beginning of your
16 testimony. You were asked about New Hampshire.

17 Today, New Hampshire uses a hand-marked paper ballot-based
18 system; correct?

19 **A.** I guess so. I haven't checked with them to see what they
20 replaced it with.

21 **Q.** Okay. Thank you.

22 Could we turn to the Securing the Vote report that you
23 were asked about.

24 THE COURT: Is this the system that you designed, the
25 one in New Hampshire, or is that something else we're talking

1 about?

2 THE WITNESS: They replaced my system with something
3 else, and I'm not sure what it was.

4 THE COURT: All right.

5 MR. ANDREU-VON EUW: Exhibit 728.

6 BY MR. ANDREU-VON EUW:

7 Q. This is a report that came out in 2018; correct?

8 A. Yes.

9 Q. Okay. Now, first, if you could look at Section 4.11 on
10 Page -- it is the section your counsel asked you about. I'm
11 sorry. Page 80.

12 THE COURT: 28 or 29?

13 MR. ANDREU-VON EUW: I'm sorry, Your Honor?

14 THE COURT: 18 or 19?

15 MR. ANDREU-VON EUW: Section 4.11 on Page 80, 8-0.

16 THE COURT: Okay.

17 BY MR. ANDREU-VON EUW:

18 Q. So the section your counsel pointed you to said elections
19 should be conducted with human readable paper ballots; correct?

20 A. Correct.

21 Q. Now, you would agree that QR codes are not human readable;
22 correct?

23 A. Correct.

24 Q. Okay. Now, at the time this report came out -- looking up
25 a little higher, again, this is 2018 -- right above the

1 recommendations, it says that, as of 2018, additional research
2 on ballots produced by BMDs will be necessary to understand the
3 effectiveness of such ballots; correct?

4 **A.** Correct.

5 **Q.** Okay. Turning back one page to the footnote, Footnote 75
6 on the bottom, the consensus opinion was -- turning -- starting
7 with furthermore on the second line, the consensus opinion was
8 that it may be difficult to review a long or complex
9 BMD-produced ballot. This has prompted calls for hand-marked
10 as opposed to BMD-produced paper ballots whenever possible;
11 correct?

12 **A.** Correct.

13 **Q.** Okay. Now, again, this is the consensus opinion as of
14 2018?

15 **A.** Yes.

16 **Q.** Okay. Same page, two paragraphs up, the last sentence in
17 the penultimate paragraph begins with the word less.

18 Do you see that?

19 **A.** Yes, I see it.

20 **Q.** Even in 2018, the consensus opinion was that unless a
21 voter takes notes while voting, BMDs that print only selections
22 with abbreviated names/descriptions of the contests are
23 virtually unusable for verifying voter intent.

24 That was a consensus opinion as of 2018; correct?

25 **A.** Yes.

1 Q. Now, studies have shown that, unfortunately, only a small
2 fraction of voters read paper ballots that are produced by
3 ballot-marking devices; correct?

4 A. Can you repeat that for me?

5 Q. Yes. You've said before -- I'll make it easier for you --
6 that studies have shown that, unfortunately, only a small
7 fraction of voters read the paper ballots that are produced by
8 ballot-marking devices; is that correct?

9 A. Yes.

10 Q. And that's a true statement?

11 A. Yeah, I would -- I would say that statement should say
12 suggest; I wouldn't say shown, but suggest.

13 Yes, the studies suggest -- the studies -- the Michigan
14 study, the Rice study have shown that.

15 Q. So you have said that recent studies have shown that,
16 unfortunately, only a small fraction of voters read the paper
17 ballot carefully enough to catch errors?

18 A. Yes.

19 Q. And that is a true statement; correct?

20 A. That is a true statement. I would modify my statement to
21 say suggests.

22 Q. Okay. And --

23 A. In light of new data that I ran, a study that contradicted
24 and showed completely different and also introduced new
25 knowledge that those studies were not accounting for the

1 Hawthorne effect, which now changed everything.

2 THE COURT: Listen. Just wait. You'll be given an
3 opportunity to explain, but you're going beyond the scope of
4 the question.

5 THE WITNESS: Okay.

6 THE COURT: I will allow him to explain. Or do you
7 want to ask a question for him to explain?

8 MR. ANDREU-VON EUW: I think we're going to turn to
9 that study in a second.

10 THE COURT: All right. Fine.

11 BY MR. ANDREU-VON EUW:

12 Q. And you said that is a problem because errors printing the
13 paper ballots cannot be caught by re-counts; correct?

14 A. Correct.

15 Q. So why don't we turn to that study.

16 MR. ANDREU-VON EUW: Could we pull up PX 617, please.

17 BY MR. ANDREU-VON EUW:

18 Q. This is your study; correct?

19 A. Correct.

20 Q. A study of ballot anomaly detection with a transparent
21 voting machine; correct?

22 A. Correct.

23 Q. Okay. One second. Let me put it here.

24 Can you turn to Page -- excuse me -- Tab 7 in your binder.
25 It has the study.

1 THE COURT: Do I have a notebook?

2 MR. ANDREU-VON EUW: You should, Your Honor.

3 THE WITNESS: You said 7? I got it.

4 MR. ANDREU-VON EUW: It is with the declarations you
5 had, but here is another copy.

6 THE COURT: Okay. Just give that to them.

7 I'm sorry.

8 BY MR. ANDREU-VON EUW:

9 **Q.** I want to focus you first to the sentence that ends at the
10 bottom of the first column -- or starts, excuse me, at the
11 bottom of the first column.

12 THE COURT: On what page?

13 MR. ANDREU-VON EUW: This is the first page of the
14 study. It is Page 57.

15 THE COURT: All right.

16 BY MR. ANDREU-VON EUW:

17 **Q.** It says, a threat to the validity of the election can
18 arise if a vote printed on the ballot is different from what
19 was selected on the machine.

20 That is a true statement; right?

21 **A.** Yes.

22 **Q.** Next, it says, if the paper ballot contains an error,
23 whether due to the fault of the voter, the machine, or a
24 malicious actor, a risk-limiting audit (RLA) is moot as it may
25 return a correct threshold of accuracy though the voter's true

1 intentions were not captured.

2 That is also a true statement; correct, Dr. Gilbert?

3 **A.** Yes.

4 **Q.** Now, this study was conducted, I think, as you said, with
5 your transparent voting machine; right?

6 **A.** Yes.

7 **Q.** And you received a patent on that machine; correct?

8 **A.** Yes.

9 **Q.** I'm going to show you a video. See if we're talking about
10 the same thing.

11 MR. ANDREU-VON EUW: Tony, can you please pull up PX
12 623?

13 MR. MILLER: Your Honor, I'm not sure if this is
14 impeachment or what.

15 MR. ANDREU-VON EUW: I want to see what we're talking
16 about in the study.

17 MR. MILLER: Okay.

18 BY MR. ANDREU-VON EUW:

19 **Q.** This -- I'll represent to you, Dr. Gilbert -- before I ask
20 you a question -- this comes from a YouTube video that I
21 believe you posted. I'm going to show to you seconds 15 to 50
22 of the video.

23 MR. ANDREU-VON EUW: Can you play that, please?

24 **(Playing of the videotape.)**

25

1 BY MR. ANDREU-VON EUW:

2 Q. This is your transparent BMD that we just saw on the
3 screen; correct?

4 A. Yes.

5 Q. Is this a video you made?

6 A. Yes.

7 Q. Now, your BMD, it prints a human readable vote for each
8 race immediately after the voter makes a selection for that
9 race on the BMD; correct?

10 A. Yes.

11 Q. So voters verify each vote within a second of each
12 individual vote; correct?

13 A. I don't know the time, but they verify each vote.

14 Q. So with your BMD, voters don't have to wait until the end
15 of the process to verify their votes?

16 A. Correct.

17 Q. With your BMD, voters don't have to remember all of their
18 votes until the end of the process?

19 A. Correct.

20 Q. And that is one of the reasons, at least you think, is an
21 improvement on current BMD technology; correct?

22 A. That is one.

23 Q. Okay. Now, your study found that 37.6 percent of voters
24 noticed the vote flip on your transparent voting machine and
25 said something to the researcher; correct?

1 **A.** Correct.

2 **Q.** Okay. And I know you said that other voters were able to
3 recall or say they recall something when prompted later, but
4 there were also 23 percent of voters, even when they were
5 seeing their votes print out as they pressed the button, did
6 not identify a vote flip; correct?

7 **A.** I thought it was 41 percent who did not speak up.

8 **Q.** No. I'm talking about voters who even after you prompted
9 them and tried to get them to tell you there was a vote flip,
10 they still remembered no vote flip; correct?

11 **A.** I thought that was 6.6 percent that could not note -- did
12 notice and did not identify.

13 **Q.** We'll come back to that, Dr. Gilbert.

14 You were talking earlier about -- I forget the name --
15 it's the Hawthorne effect; is that correct?

16 **A.** Correct.

17 **Q.** Are you aware of -- let me get the name correctly.

18 Are you aware that the State -- could you turn to Tab 9 in
19 your report.

20 **A.** Say that again.

21 **Q.** Could you turn to Tab 9 in -- I said your report, but I
22 meant in your binder.

23 **A.** Tab 9?

24 **Q.** Yeah.

25 Are you aware of this study in Tab 9, the Georgia voter

1 verification study of January 22, 2021?

2 **A.** I have seen this.

3 **Q.** Did you consider it in forming your opinions?

4 **A.** In forming opinions about what?

5 **Q.** The opinions about voter verifiability you presented in
6 this case.

7 **A.** The study I ran was independent of this. I'm not sure I
8 understand -- so the answer is, this did not inform my opinion
9 of the study that I ran in any way. It is --

10 THE COURT: I'm sorry. You said, this did not.
11 What is this?

12 THE WITNESS: This report that he -- Tab 9.

13 BY MR. ANDREU-VON EUW:

14 **Q.** Dr. Gilbert, the exhibit PX 451 is a study that observed
15 real voters in a real election in Georgia; correct?

16 **A.** Yes.

17 **Q.** And you did or did not consider this opinion in forming
18 the opinions you presented -- excuse me -- you did or did not
19 consider this study, this Georgia voter verification study in
20 forming your opinions about voter verifiability?

21 **A.** My opinion on voter verifiability is informed by -- I'm --
22 my opinion on voter verifiability is informed by the studies
23 that I have conducted and others in the field with BMDs.

24 And as I mentioned earlier, to my knowledge, we were the
25 first to do the study, and so those are my -- that is what is

1 informing my opinion is those studies and the research that I
2 have done personally.

3 **Q.** Correct. And I believe you said that Dr. Bernhard's
4 study -- Dr. Bernhard and Dr. Halderman's study, and your
5 study, according to you at least, suffer from the Hawthorne
6 effect in that it is a study and not a real election; correct?

7 **A.** Correct.

8 **Q.** And Tab 9 shows a study commissioned by the Georgia
9 Secretary of State on real voters in real elections; correct?

10 **A.** Correct.

11 **Q.** And you did not consider this study in forming your
12 opinion?

13 **A.** It did not inform my opinion on ballot-marking device
14 studies that we have -- no.

15 **Q.** No. Okay.

16 And you spoke earlier about a study from 20 -- 2001, I
17 believe.

18 I think it was a 21st Century study?

19 **A.** Yes, the hand-marked paper ballot study.

20 **Q.** 23, 24 years old at this point; correct?

21 **A.** Correct.

22 **Q.** You mentioned that it had findings about the way different
23 demographic groups filled out hand-marked paper ballots;
24 correct?

25 **A.** It had findings of different demographic groups filling

1 out ballots here in Georgia.

2 **Q.** Okay. Could you look at Page 5 of the Georgia study we're
3 talking about, Table 3.

4 **A.** Okay.

5 **Q.** The findings of the more recent, I believe it is -- yeah,
6 2021 Georgia study showed that with respect to BMDs, Black,
7 Hispanic, and Asian voters are less likely to verify their BMD
8 ballots; is that correct?

9 **A.** Yes, I see that.

10 **Q.** Any reason to disagree with that?

11 **A.** No, I don't have any reason to disagree with that.

12 **Q.** Okay. You also discussed the Northampton election,
13 correct, in part talking about detectability?

14 **A.** Yes.

15 **Q.** Were you aware that in Northampton after vote flipping, as
16 you call it, was discovered, some poll workers instructed
17 voters to vote the opposite of what they intended; correct?

18 **A.** I can't confirm that. I believe there were allegations of
19 that, but I don't have a confirmation of that.

20 **Q.** Do you know one way or the other whether it is true that
21 other poll workers instructed voters to keep voting the same
22 and that it would be adjusted afterwards?

23 **A.** I am not aware of that.

24 **Q.** And you don't know one way or the other whether other
25 polls were just shut down while they figured things out?

1 **A.** That, I don't know.

2 **Q.** Okay. Now, I believe you said that if a QR code is
3 flipped, a risk-limiting audit would catch that; correct?

4 **A.** Correct.

5 **Q.** But a risk-limiting audit does not review every ballot
6 cast; correct?

7 **A.** Say that again. Does not --

8 **Q.** A risk-limiting audit does not review every ballot that
9 was cast in an election; correct?

10 **A.** It depends on how far the audit goes. There is a point at
11 which it goes and then it turns into a full re-count, and that
12 scenario would review every single one is my understanding, but
13 that is not my area of expertise.

14 THE COURT: But isn't it typical, in terms of your
15 knowledge, that most RLAs are not for the entire population?

16 THE WITNESS: That is correct.

17 BY MR. ANDREU-VON EUW:

18 **Q.** They are intended to confirm election outcomes, not
19 individual votes; correct?

20 **A.** Correct.

21 **Q.** And even then to determine that a QR code was -- didn't
22 match a human readable text, somebody would have to go back and
23 confirm that that is the source of the error after a
24 risk-limiting audit; correct?

25 **A.** It depends on the type of RLA. My understanding, there

1 are RLAs that have screens where they put up what's in the QR
2 code and the actual ballot human readable portion. That may be
3 a way to detect that in real time. But if you don't have that
4 capability, you would have to do that, I guess, investigation
5 to find it.

6 **Q.** You have no reason to think that is done in Georgia;
7 correct?

8 **A.** Yes. I don't know how they do it, to be honest.

9 **Q.** So you have reviewed and responded to the expert report of
10 Dr. Andrew Appel; right?

11 **A.** Which report?

12 **Q.** Dr. Andrew Appel.

13 **A.** Which report?

14 THE COURT: Which report of his, he wants to know.

15 BY MR. ANDREU-VON EUW:

16 **Q.** Let me --

17 MR. ANDREU-VON EUW: Tony, can you pull up
18 Exhibit 424? And we can see the dates there.

19 BY MR. ANDREU-VON EUW:

20 **Q.** June 28, 2021.

21 **A.** I don't recall -- I reviewed Appel reports. I don't know
22 them by date.

23 **Q.** And I'm sorry, Dr. Gilbert. I don't have a copy in front
24 of me, so you'll have to tell me which tab is the June 28,
25 2021, report.

1 THE COURT: Do you need mine?

2 MR. ANDREU-VON EUW: I'm sorry?

3 THE COURT: Do you need mine if you don't have one?

4 MR. ANDREU-VON EUW: Please, Your Honor.

5 THE WITNESS: June 28th, that is Tab 5.

6 BY MR. ANDREU-VON EUW:

7 Q. You reviewed this report; correct?

8 A. I would have to look over it. I reviewed several. I just
9 don't know if this is the exact report.

10 Q. Well, I'm going to ask you whether you disputed certain
11 findings, so why don't we shortcut the whole report, and I'll
12 ask you about that.

13 A. Okay.

14 Q. So if you could turn to Page 23, Paragraph 72.

15 In this paragraph, Dr. Appel said that a voter who
16 believes the BMD changed his vote has no way of proving to the
17 poll worker or anyone else that the vote was changed because
18 nobody else saw which candidate the voter indicated on the
19 touch screen.

20 You have not disputed that in any report you submitted;
21 correct?

22 A. Let's see.

23 MR. MILLER: Your Honor, I just want some clarity in
24 how we're using the exhibit. It sounds like we're reading
25 Dr. Appel into evidence here. I just want to make sure we're

1 on the same page what we're doing.

2 There has not been impeachment of Dr. Gilbert saying
3 one thing and --

4 THE COURT: What is the purpose of eliciting this?

5 MR. ANDREU-VON EUW: I'm sorry. I can take
6 Dr. Appel's testimony off and ask Dr. Gilbert.

7 BY MR. ANDREU-VON EUW:

8 **Q.** You don't dispute that a voter who believes his vote was
9 changed has any way of proving that -- has no way -- excuse
10 me -- of proving that to a poll worker; is that correct?

11 **A.** Their vote was changed -- so is the -- the voter uses a
12 BMD and makes an allegation that their vote was changed.

13 And the question is, can they prove that their vote was
14 changed?

15 **Q.** Correct.

16 **A.** No, they cannot prove that their vote was changed.

17 **Q.** And conversely, if voters were to claim their votes were
18 changed in order to cast doubt on an election, there would be
19 no way for a poll worker to prove that the voter was lying;
20 correct?

21 **A.** There is no way to prove that the voter is lying in real
22 time.

23 **Q.** There is no way to prove that the voter was lying, period;
24 correct?

25 **A.** I wouldn't agree with that statement.

1 Q. Why not?

2 A. Because there's -- because there's ways to create voting
3 technology, such as the transparent voting machine, that could
4 have evidence and ways to prove that it was not hacked, and all
5 it would take is a peer -- external peer reviews to take a look
6 to validate that claim.

7 Q. I'm sorry. Dr. Gilbert, my question was not clear.

8 With existing commercial BMD technology, there is no way
9 for a poll worker to prove that a voter who claims their vote
10 was changed is lying or telling the truth; correct?

11 A. Without evidence, I do not believe there is an absolute
12 way to do that.

13 Q. Now, when you responded to Dr. Halderman's report, you
14 never access -- you never asked for access to the BMDs that
15 were the subject matter of the report; correct?

16 A. Correct.

17 Q. You testified that you did not think that was -- it was
18 relevant for you to access the equipment yourself; correct?

19 A. Correct.

20 Q. One last question.

21 Do you recall, again, during the same deposition that you
22 were shown a real Georgia BMD?

23 Excuse me. That is an untrue statement. Let me ask you
24 the question correctly.

25 Do you recall during your deposition that you were shown a

1 real Georgia BMD ballot during your deposition?

2 **A.** I don't recall that right now.

3 **Q.** You don't recall being asked to identify selections on the
4 ballot that were not Republican candidates?

5 **A.** No, I don't recall that. If you show me a picture of it,
6 it might.

7 **Q.** Well, why don't we just play the video.

8 **(Playing of the videotape.)**

9 BY MR. ANDREU-VON EUW:

10 **Q.** You don't dispute that it took you approximately
11 20 seconds to identify all the Republican candidates on that
12 ballot; correct?

13 **A.** I was not watching the timer. If you play it again, I
14 could watch the timer and tell you how long it took me. I was
15 not paying attention to that.

16 **Q.** If you need that, we can do that, sir.

17 **A.** If that is what you would like.

18 MR. ANDREU-VON EUW: Play it, Tony.

19 **(Playing of the videotape.)**

20 BY MR. ANDREU-VON EUW:

21 **Q.** So, Doctor, I wasn't watching the timer, so maybe you can
22 give me a more precise response to my --

23 **A.** 18 seconds.

24 **Q.** Thank you.

25 I want to turn back to your transparent BMD study, which

1 is Page -- I'm sorry. Excuse me -- Tab 7. I want to direct
2 you at the table on the top of the third page, which is
3 Page 59.

4 **A.** What page you said?

5 **Q.** Page 59, the table at the top left corner.

6 MR. ANDREU-VON EUW: Next page, please, Tony.

7 BY MR. ANDREU-VON EUW:

8 **Q.** So here is what you were saying earlier. Only
9 35.76 percent of voters with your one vote printed at a time
10 transparent BMD noticed the change in vote and said anything
11 before turning in their ballot; correct?

12 **A.** Correct.

13 **Q.** And you were saying that some others noticed after you
14 asked them, did you notice; correct?

15 **A.** No, that is not what I said. What I said was I noticed
16 they made a response. I asked them if they had noticed I
17 flipped one of their votes, and the response was yes. And they
18 correctly identified the flipped ballot.

19 **Q.** Can we turn back to Page 50, please, the flowchart on the
20 bottom left?

21 So this flowchart describes your process; correct?

22 **A.** Yes.

23 **Q.** So the first number is spoke up.

24 So 35.6 percent of voters said something on their own?

25 **A.** Yes.

1 **Q.** But 23. -- so then after you asked, did I change your
2 votes, 23.17 percent of voters said no; correct?

3 **A.** 23.1 percent said they did not notice.

4 **Q.** Thank you.

5 MR. ANDREU-VON EUW: No further questions.

6 CROSS-EXAMINATION

7 BY MR. BROWN:

8 **Q.** Good afternoon, Dr. Gilbert. It's good to meet you in
9 person rather than on Zoom.

10 I want to go back to the very last answer that was given
11 for some transition.

12 I believe you said 23 percent on -- that was on your
13 system; correct?

14 **A.** 23 percent of my participants claimed that they did notice
15 the vote flip.

16 **Q.** And your system is better at prompting voters to review
17 the ballots than the Dominion BMD that is used in Georgia;
18 correct?

19 **A.** I wouldn't say it that way. I would say it is more
20 accurate at voter verification.

21 **Q.** You're too modest. We have seen the demonstration.

22 It is really much better in making sure the voter verifies
23 their ballot, isn't it?

24 **A.** From what I would say, it has more accuracy, yes.

25 THE COURT: Do you mean it prompts more accuracy --

1 THE WITNESS: It is not -- I don't consider it a
2 prompt, but I can see where most people would say that it is --
3 because it is transparent and it is not designed to prompt them
4 in a sense.

5 BY MR. BROWN:

6 **Q.** But it is also requiring interaction with the human after
7 each vote on either a race or a --

8 **A.** That's correct.

9 **Q.** And that is not the way a BMD does it; right?

10 **A.** There is no market BMD doing that today.

11 **Q.** Getting back to the BMDs that we're challenging in this
12 lawsuit, there are studies, both the Georgia study and the
13 Bernhard-Halderman study, that test the impact of prompts upon
14 the voter verifying their votes.

15 Are you with me?

16 **A.** Yes. Those studies, and the Rice study.

17 **Q.** And the Rice study.

18 And what struck me was what little impact the prompts had
19 upon the voters actually reviewing their ballots.

20 For example, in Georgia -- in the Georgia study, voters in
21 precincts that were given a screen reminder on the screen,
22 check your ballot, were only 5.3 points more likely to have
23 checked their ballot.

24 Is that consistent with your recollection?

25 **A.** I don't remember the numbers, but I know it was -- there

1 was some sort of improvement, so that sounds accurate.

2 **Q.** And in the Bernhard-Halderman report, without prompting,
3 6.5 percent; with prompting, only 13 percent; correct?

4 **A.** I believe that is accurate.

5 **Q.** And you were asked before your overall assessment that,
6 you know, sadly, voters don't review their ballots, and you
7 explained that there are more recent studies or observations or
8 insights that might have changed your current statement from
9 show to suggest.

10 Are you with me?

11 **A.** Yes.

12 **Q.** And one of those observations is the Hawthorne effect.

13 Are you with me?

14 **A.** Correct.

15 **Q.** But the Hawthorne effect -- doesn't the Hawthorne effect
16 do the exact opposite? Doesn't the Hawthorne effect make
17 participants in a study improve better rather than worse so
18 that test results -- you're going to get even higher percentage
19 of people saying they checked their ballots?

20 **A.** The Hawthorne -- that is correct for Hawthorne. The fear
21 was that Hawthorne effect would adrenalize people in a study in
22 some scenarios and they would perform better.

23 **Q.** And so in these studies, the Georgia study is different
24 because that is not -- that was a real time thing.

25 But in the Halderman report, that would -- their results

1 would be an exaggeration of how voters actually perform?

2 It would be even higher.

3 The 13 percent, as low as it is -- because of the
4 Hawthorne effect, the real number would be even lower than a
5 pitiful 13 percent; right?

6 **A.** If the voters in that study were told in advance, we're
7 studying to see if you notice vote flipping, then we would have
8 gotten numbers that were exaggerated.

9 **Q.** Right. We're on the same page then.

10 Now, you would agree that an election must be auditable;
11 right?

12 **A.** Yes.

13 **Q.** And that an auditable system is, by definition, software
14 independent; correct?

15 **A.** I've never thought of it that way.

16 Is an auditable system automatically software independent?

17 Yeah. I guess so. That -- I hadn't thought -- I have
18 never heard anyone say that.

19 **Q.** It is actually in the NAS report?

20 **A.** Yeah.

21 **Q.** And --

22 **A.** I didn't write that.

23 **Q.** You didn't write that report?

24 **A.** As I said, I'm not the audit expert, but --

25 **Q.** Just one second.

1 **A.** I guess software independence leads itself to
2 auditability. The more I think about it, that's what --
3 because you would have the ability to verify -- yeah, that does
4 lend -- I don't know if you could have software independence
5 and not have auditability.

6 **Q.** Right. And just for reference, according to an affidavit
7 that was submitted in 2018 by Dr. DeMillo in this case -- and
8 that is 285-1 at Page 4 -- he quotes -- I'm just getting
9 reference, but he quotes that the National Academies of Science
10 report is saying, quote, an auditable voting system is software
11 independent, period, close quote.

12 And that is -- he cites at NAP 25120, Page 82.

13 Now, and just to back up a little bit, you gave the
14 difficult but textbook example that is hard for me -- textbook
15 definition of software independence in your earlier testimony.

16 And let me just repeat it so that we're on the same page.

17 Quote, software independence says that an intentional or
18 unintentional change in the software cannot create an
19 undetected outcome in the election.

20 Does that sound right?

21 **A.** Right.

22 **Q.** And I believe you also testified that the Dominion BMD
23 system used in Georgia is software independent if voters
24 checked their ballots; right?

25 **A.** The vote -- the Dominion ballot-marking device is software

1 independent.

2 **Q.** If voters check their ballots, but it is not software
3 independent if they don't; right?

4 **A.** If they do not check their ballots, is it software
5 independent?

6 I don't know.

7 **Q.** Well, let me drive that further. Let's go back to the
8 definition of software independence.

9 **A.** Right.

10 **Q.** If they don't check their ballots, then an undetected
11 change in the computer that changes how the computer records
12 the ballot will not be detected in the outcome of the election,
13 will it?

14 **A.** If they don't check their ballots, will an undetected
15 change be detected?

16 There could be.

17 **Q.** It could be if it was a QR code mistake?

18 **A.** No, no. The human readable part is what I'm getting to.
19 But if -- this is an interesting question. If voters -- if
20 zero voters verified their ballot, if zero voters check a
21 ballot, could the outcome of the election be changed to be
22 undetected?

23 I think it could be. If no one checks theirs, and you are
24 changing -- flipping votes, as the studies we've been talking
25 about happen, then you could effectively change the outcome of

1 the election, and it wouldn't matter if you had a QR code or
2 not.

3 **Q.** Right. And so unless voters checked their ballots, the
4 Dominion BMD system in Georgia is not software independent;
5 correct?

6 **A.** It would take a large number to not -- or some kind of
7 sophisticated way to make sure no one can check their ballot to
8 do that.

9 **Q.** Okay. Now --

10 **A.** I'm not aware of any way to prohibit voters from checking
11 their ballot.

12 **Q.** Right. That is not the question.

13 The question is whether --

14 **A.** Sorry.

15 **Q.** -- they actually do; right?

16 **A.** Yes.

17 **Q.** And if you are determining auditability of a system, it is
18 not whether they should or they have an opportunity to or
19 whether their neighbors do? It is whether they actually have;
20 right?

21 **A.** Exactly.

22 **Q.** And they also have to do it carefully; right?

23 **A.** No. I don't agree with that.

24 **Q.** Sir, you are saying that it is sufficient if -- to
25 establish software independence, it is sufficient for a voter

1 to simply glance at a vote?

2 **A.** Yes.

3 **Q.** Okay. And that is because of the one is many? What did
4 you call it?

5 **A.** The power of one, but that is not the reason for why I'm
6 saying that.

7 **Q.** Okay.

8 **A.** The reason I'm saying that is we have a presidential
9 election 2024. The high target is the presidential contest.
10 If I attack that contest, which will be the contest where
11 people would most likely verify and glance at, they may not
12 attune to the ballot.

13 So it would take literally -- depending on the names. So
14 if I use Don Grape as a name and put JP as a name, I can
15 distinguish the difference between those two candidates in less
16 than a second, so I don't have to attune to the ballot.

17 **Q.** Right. So are you saying that we won't know until
18 November 2024 whether Georgia's system is, in fact, software
19 independent? Is that what you are saying? Because it depends
20 on the type of a hack?

21 **A.** No, that is not what I'm saying.

22 **Q.** You said that in your answer about a QR code mistake,
23 okay, you said that an RLA will catch a QR code mistake.

24 Are you with me?

25 **A.** Yes.

1 Q. And you call that because there is evidence in stone;
2 right?

3 A. Yes.

4 Q. But if you have a mistake in the human readable, there is
5 no evidence at all, is there?

6 A. If --

7 Q. It is not in stone. It is not in anybody's recollection.
8 It is not a video.

9 Nobody knows what the voter actually chose. Because at
10 one moment in time, that voter chose in privacy their
11 selection, and that moment is lost forever right?

12 A. No. What I was describing was a discrepancy, meaning the
13 QR code doesn't match the human readable portion. The RLA will
14 catch that.

15 Q. RLA will not catch what I just described?

16 If the voter touches that screen --

17 A. Correct.

18 Q. -- and the ballot prints out a different name, that RLA
19 will never catch that mistake, will it?

20 A. An RLA will catch that mistake if it does not agree with
21 the QR code.

22 Q. Okay. Let me change my hypothetical. We'll get there.
23 Okay. Let me ask it again.

24 If a voter that one second in time votes on the screen,
25 that moment in time is lost forever, there is no record of that

1 except what the computer says the voter did; right? It is rank
2 hearsay, isn't it?

3 **A.** I don't understand rank hearsay.

4 MR. MILLER: Object --

5 BY MR. BROWN:

6 **Q.** And so the computer is -- the computer then --

7 THE COURT: Wait a second.

8 Did you have an objection?

9 MR. MILLER: He's asking the witness about what is
10 hearsay. I'm not sure --

11 THE COURT: Well, don't --

12 MR. BROWN: I'll take hearsay out of it.

13 MR. MILLER: He is not saying what is --

14 THE COURT: Yeah. Let's not use the term.

15 BY MR. BROWN:

16 **Q.** All we have after the voter does that is not what the
17 voter says but what the computer says the voter says; right?

18 **A.** All we have after that is what the computer says the voter
19 says?

20 All we have is what the voter selected and verifies. Now,
21 you are saying that --

22 **Q.** I'm not talking about verification.

23 **A.** Okay.

24 **Q.** I'm talking about the only evidence we have of what that
25 voter selected is what the computer created; correct?

1 You don't have a video of it. You can't --

2 **(Unintelligible cross-talk)**

3 BY MR. BROWN:

4 **Q.** You don't have a video of it for privacy reasons?

5 **A.** Right. No video.

6 **Q.** You can't believe the voter because he or she may be
7 lying; right? The only evidence you have for your
8 evidence-based election is what that BMD prints out on the
9 ballot card; correct?

10 **A.** Evidence of what?

11 **Q.** The voter's intent.

12 **A.** Is what the -- yes.

13 **Q.** Okay.

14 **A.** That's the voter's intent.

15 **Q.** And so that evidence of voter intent is only trustworthy
16 if the voter himself verifies every selection on there;
17 correct?

18 **A.** Trustworthy -- I wouldn't say trustworthy. I would say it
19 is accurate if the voter -- it is verified if the voter
20 verifies it.

21 **Q.** Right. We go back to where we were before is that the
22 system is not software independent unless the voter checks --
23 every voter checks every selection; right?

24 **A.** No.

25 **Q.** Okay.

1 MR. BROWN: Your Honor, may I have a couple of
2 minutes?

3 I have some other things to cover, but I need to --

4 THE COURT: All right. Let's take a break for
5 five minutes.

6 MR. BROWN: Thank you.

7 COURTROOM SECURITY OFFICER: All rise.

8 **(A brief break was taken at 3:10 PM.)**

9 MR. BROWN: Mr. Gilbert, we do not have any more
10 questions. Thank you for your time today. Safe travels
11 tonight.

12 CROSS-EXAMINATION

13 BY MR. OLES:

14 **Q.** Good afternoon, Doctor -- or Professor. My name is David
15 Oles. I represent Ricardo Davis, one of the plaintiffs in the
16 case.

17 I have just one question for you this afternoon, and that
18 is this: Isn't it true that a risk-limiting audit can never
19 audit what the BMD device showed to the voter?

20 **A.** That's correct.

21 MR. OLES: Thank you. Nothing further.

22 REDIRECT EXAMINATION

23 BY MR. MILLER:

24 **Q.** Dr. Gilbert, just a couple of questions for you.

25 You were asked on your first cross-examination of whether

1 risk-limiting audits confirm election outcomes rather than
2 individual votes.

3 Do you recall that?

4 **A.** I do.

5 **Q.** Are you aware of any election system which preserves
6 ballot secrecy and also confirms individual votes after
7 depositing the ballot?

8 **A.** I am not aware of any voting system that does that. In
9 fact, the voting systems that use statistical methods, such as
10 end-to-end verifiability, are founded on the basis of not every
11 voter verifying their ballot, and a sufficient number, and they
12 have statistics to prove that, which is, again, the same method
13 of RLA, meaning it doesn't require every voter -- every ballot
14 to be -- go under the audit, but it is an escalating thing.

15 So I'm not aware of any voting system that has that
16 requirement.

17 **Q.** Dr. Gilbert, you were shown a video of your deposition
18 testimony.

19 Do you recall that?

20 **A.** Yes.

21 **Q.** You took that deposition by Zoom; right?

22 **A.** Yes.

23 **Q.** When you were reviewing the ballot, you were looking
24 through your laptop screen; right?

25 MR. ANDREU-VON EUW: Objection. Leading.

1 THE WITNESS: Yes.

2 BY MR. MILLER:

3 Q. What were you looking at that ballot through?

4 A. Say that again.

5 Q. When you were shown a ballot during your deposition, do
6 you recall that?

7 A. Yes.

8 Q. How did you see that ballot when you were giving a
9 deposition by Zoom?

10 A. I was looking at it through my laptop.

11 Q. How big is the screen on your laptop?

12 A. It is the 13 -- 11 -- 13-inch MacBook Pro.

13 Q. Dr. Gilbert, you were asked on several different occasions
14 about whether a voter would have evidence to prove that a BMD
15 is flipping their vote.

16 Do you recall that?

17 A. I do.

18 Q. And, Dr. Gilbert, I know that you're not from Georgia, but
19 you're aware that following the 2018 elections, Stacey Abrams
20 claimed -- or offered affidavits of voters who said their votes
21 had flipped on the DREs?

22 Are you aware of that?

23 MR. ANDREU-VON EUW: Objection.

24 MR. BROWN: Relevancy.

25 MR. ANDREU-VON EUW: Leading and relevancy.

1 BY MR. MILLER:

2 Q. Dr. Gilbert, are you aware of the post 2020 election
3 litigation here in Georgia?

4 A. Yes.

5 Q. Some allegations from supporters of President Trump?

6 A. Yes.

7 MR. ANDREU-VON EUW: Objection. Relevance and scope.
8 It is outside the scope of his opinion --

9 MR. MILLER: Your Honor, the --

10 MR. ANDREU-VON EUW: -- and beyond the scope of
11 cross, Your Honor.

12 THE COURT: I don't know what the question is, so it
13 is hard to rule on it -- what the objection -- without knowing
14 what the question is.

15 MR. MILLER: Is that the finish of the objection?

16 Sorry. Your Honor, the simple point -- well, may I
17 finish the question?

18 We may get an objection. Honestly, I'll be done
19 after this either way.

20 BY MR. MILLER:

21 Q. Dr. Gilbert, are you aware of whether in that post 2020
22 election there were, in fact, allegations of flipping BMD votes
23 at all?

24 A. No, I'm not.

25 Q. Okay. But you are aware there were allegations of bamboo

1 fibers --

2 THE COURT: Wait a second. Now you're leading the
3 witness: You are aware.

4 MR. MILLER: Thank you, Dr. Gilbert.

5 MR. ANDREU-VON EUW: Your Honor, I have no further
6 questions. I do notice that I forgot to move PX 623 into
7 evidence. That's the video of the transparent voting machine.

8 MR. MILLER: That was which video?

9 MR. ANDREU-VON EUW: The video of the voting machine
10 that Dr. Gilbert authenticated.

11 MR. MILLER: That's fine, Your Honor.

12 THE COURT: It is admitted.

13 EXAMINATION

14 BY THE COURT:

15 **Q.** This is probably as much as anything else apparent, but
16 your invention, the transparent voting machine behind the piece
17 of glass, where does the ballot come out?

18 **A.** The transparent voting machine in the video that was
19 shown, I often say that is the paper airplane. That was the
20 first prototype version.

21 It won't look like that in a manufactured device. We have
22 another version we will be releasing. But where will it come
23 out is yet to be decided.

24 **Q.** I see.

25 **A.** So it could be handled by the voter. It could be a direct

1 deposit. I suspect what I will do is have conversations with
2 others to see what people recommend and what is going to be the
3 best practice.

4 But it has not been fully developed into something that is
5 a product at this stage.

6 **Q.** Okay.

7 **A.** So we are still going to figure that out.

8 **Q.** Well, good luck with that.

9 **A.** Thank you.

10 **Q.** Is that your major outstanding project, or is there some
11 other project that is your major project other than teaching
12 and --

13 **A.** That is the major product right now. I think the results
14 from our study were so promising, and even my colleagues
15 acknowledge that this works, so I am trying to do what it takes
16 to translate into the real world, which is not an easy thing to
17 do. But that is the next step.

18 So I'm -- that's why I did open source. I'm an open book.
19 I'm open to input. I want to make voting work for everyone.

20 **Q.** Well, I described it before, and I don't want to be the
21 one giving testimony.

22 But do you still sort of hold to your analysis before that
23 you gave in your deposition that -- that Dr. Halderman's
24 primary focus is what can break the system -- what may break it
25 is of concern because of that, and yours is trying to, as you

1 have said, be an innovator and resolve issues?

2 **A.** Yes. We're like yin and yang from that perspective. He's
3 extremely crafty, very well at, like I say, breaking things,
4 and it is my job to make them work.

5 It is unfortunate we're on opposite sides of the aisle
6 here. I would love to have an opportunity to shake his hand
7 and say, look, let's try this thing together and do something.

8 But that is where we are at this point.

9 **Q.** But isn't it part of the whole field in which you are or
10 in academia as a whole but also in reality that breaking it
11 doesn't mean that you are trying to break the system? You are
12 trying to address a threat to the system?

13 **A.** I would agree with that. I don't think breaking --
14 breaking can be seen as a harsh term. Now that you say it that
15 way, I can see it. It doesn't necessarily mean ill intent or
16 anything of that nature.

17 It just was a different -- maybe talent, skills, or
18 something. There's some differences there, but I think those
19 perspectives are necessary in particular in voting for the sake
20 of our democracy, in my opinion.

21 But at the same time, I think you must have the ability to
22 innovate and improve as well.

23 **Q.** Thank you very much, sir. I know you were going to
24 testify earlier today. I'm sorry I couldn't be with you
25 earlier, but thank you very much.

1 **A.** Well, I hope you feel better.

2 **Q.** Thank you very much.

3 THE COURT: Is this witness excused?

4 MR. MILLER: Yes, Your Honor, for the State.

5 MR. ANDREU-VON EUW: Yes, for the Curling plaintiffs,
6 Your Honor.

7 MR. BROWN: Yes, Your Honor.

8 THE COURT: Thank you very much. Safe travels.

9 MR. MILLER: Your Honor, if I may, the State will
10 next call plaintiff Ricardo Davis. Ms. Hernandez is going to
11 handle the questions for us. Ms. Davis is being called as an
12 adverse witness -- or Mr. Davis. I'm sorry.

13 And, Your Honor, if I may be excused so I can allow
14 Dr. Gilbert to get his stuff out of my car and get to the
15 airport?

16 THE COURT: Sure. Go for it.

17 MR. MILLER: Thank you.

18 COURTROOM DEPUTY CLERK: Please raise your right
19 hand.

20 **(Witness sworn)**

21 COURTROOM DEPUTY CLERK: Please have a seat. If you
22 would, loudly and clearly state your name and spell your
23 complete name for the record.

24 THE WITNESS: Ricardo Davis, R-I-C-A-R-D-O,
25 D-A-V-I-S.

1 Whereupon,

2 RICARDO DAVIS,

3 after having been first duly sworn, testified as follows:

4 DIRECT EXAMINATION

5 BY MS. HERNANDEZ:

6 **Q.** Good morning, Mr. Davis.

7 How are you?

8 **A.** Good afternoon.

9 **Q.** I only have a brief -- couple of brief questions for you
10 today. So I want to start off by talking about your role in
11 the case at the beginning.

12 You've been a plaintiff in this case since it was
13 originally filed in July of 2017; is that correct?

14 **A.** That's correct.

15 **Q.** And Mr. Ichter represented you throughout the majority of
16 this case from 2018 until recently, a few weeks before trial
17 when he withdrew from representing you; is that correct?

18 **A.** That's correct.

19 **Q.** While Mr. Ichter was representing you, do you recall him
20 ever asking you to produce documents related to communications
21 with voter --

22 THE COURT: Now you're asking for attorney-client
23 communication -- an attorney-client communication.

24 MS. HERNANDEZ: Your Honor, I'm just asking if he was
25 asked to produce documents regarding this topic.

1 THE COURT: Well, I will let his counsel address it.

2 MR. OLES: Judge, I think that goes to the contents
3 of the discussion between counsel and his client.

4 MS. HERNANDEZ: I can move forward.

5 BY MS. HERNANDEZ:

6 Q. Mr. Oles currently represents you; is that correct?

7 A. That's correct.

8 Q. Do you believe that your interests are currently aligned
9 in any way with those of the other plaintiffs in this case?

10 A. I do insofar as that all the plaintiffs are seeking the
11 relief in the amended complaint where we are essentially
12 looking for and attempting to prove that there are
13 constitutional deficiencies with the Dominion voting system.

14 Q. So I'm going to walk through each plaintiff, and if you
15 can kind of elaborate on that.

16 How are your interests aligned with the Curling
17 plaintiffs?

18 THE COURT: Counsel, you need to explain to me what
19 the relevance of this is.

20 MS. HERNANDEZ: Your Honor, the relevance is I'm
21 trying to understand what Mr. Davis' remedy -- what remedy
22 Mr. Davis is seeking and how that remedy and/or his interests
23 differ or are similar to the --

24 THE COURT: Then ask him that question.

25

1 BY MS. HERNANDEZ:

2 Q. Mr. Davis, how is the remedy you are seeking similar to
3 the remedy being sought by the Curling plaintiffs in this
4 matter?

5 A. Well, insofar, again, in the amended complaint and then
6 what we are seeking, or at least what the judge said was the
7 scope of this trial in the pretrial order, I believe we are
8 united with regard to finding that the Dominion voting system
9 is actually deficient and cannot be used going forward in
10 conducting federal elections here in the state of Georgia.

11 Q. And when you say the Dominion election system is
12 constitutionally deficient, what do you mean by that?

13 A. That by the evidence presented in the trial will prove
14 that it violates my and the other plaintiffs' constitutional
15 rights.

16 Q. At any point have your interests in this case diverged
17 from those of the other plaintiffs in this matter?

18 A. No.

19 Q. Okay. Mr. Davis, I would like to show you an email
20 message that your attorney, Mr. Oles, sent on your behalf to
21 the other counsel in this case.

22 MS. HERNANDEZ: Your Honor, may I approach?

23 MR. OLES: Your Honor, may I see that?

24 THE COURT: Yes.

25 MR. CROSS: Your Honor, could we get an explanation

1 of the relevance of this?

2 THE WITNESS: I would like a copy too.

3 MS. HERNANDEZ: I'm sorry.

4 THE WITNESS: Thank you.

5 THE COURT: What is the relevance?

6 MS. HERNANDEZ: Your Honor, as previously stated, the
7 relevance of this is to understand if Mr. Davis' interests are
8 the same or different from those of the other plaintiffs. It
9 also goes to understanding, you know, if he has standing and
10 how, like I said, his claims are similar or different to those
11 of the other plaintiffs.

12 MR. CROSS: He's already answered that, and I still
13 don't understand how an email exchange with counsel matters.
14 It seems like they just wanted an excuse to put this in front
15 of you or something.

16 MS. HERNANDEZ: Your Honor, this is a statement of a
17 party opponent where counsel describes plaintiff Ricardo Davis'
18 position.

19 THE COURT: Well, this is not -- I mean, this is his
20 attorney's communication with other counsel, and that is sort
21 of a different thing in terms of his having to vouch and
22 address the letter that he didn't write. And I mean, they --

23 MS. HERNANDEZ: I understand, Your Honor. But this
24 email was sent from Mr. Davis' counsel. This is the same --

25 THE COURT: Well, you haven't even established that

1 he is aware of the letter.

2 MS. HERNANDEZ: That was my next question, Your
3 Honor. I was just addressing Mr. Cross' relevancy objection.

4 THE COURT: I would say it has marginal relevance,
5 but I will let you proceed.

6 MS. HERNANDEZ: Okay.

7 BY MS. HERNANDEZ:

8 Q. Mr. Davis, have you seen this email before?

9 A. I don't recall this email.

10 Q. Okay. At the top where it says, from, does that say David
11 Oles, who you previously stated was your attorney?

12 A. Yes.

13 Q. Okay. Do you have any reason to doubt that your counsel
14 did not send this email?

15 MR. OLES: Judge, my client already said that he
16 doesn't recognize it, so --

17 THE COURT: The letter does not copy him. Maybe he
18 was blind copied, but we don't have any evidence of that.

19 MS. HERNANDEZ: I understand.

20 THE COURT: You can ask him -- since he doesn't know
21 the letter, you can -- you can't examine him about the letter,
22 but you can ask him about, you know, did you believe XYZ?

23 But you can't examine him about a question -- a
24 letter that he can't verify having seen or any of the other
25 correspondence unless he's copied on other correspondence.

1 MS. HERNANDEZ: Understood, Your Honor.

2 THE COURT: Okay.

3 BY MS. HERNANDEZ:

4 Q. Mr. Davis, do you believe that the Curling plaintiffs no
5 longer consider their interests aligned with yours and you are
6 not aware of any common interests between you and the other
7 plaintiffs?

8 MR. CROSS: Again, Your Honor, relevance. He can't
9 speak to what we believe.

10 And they are also conflating the legal privilege
11 issue of a common interest. Well, I don't quite know what she
12 is trying to do, but with some merits issue in the case, those
13 are two distinct things. I'm lost.

14 But he can't speak to what the Curling plaintiffs
15 believe or not.

16 THE COURT: All right. Stay away from what the
17 Curling plaintiffs believe.

18 MS. HERNANDEZ: Understood.

19 BY MS. HERNANDEZ:

20 Q. To your knowledge, do Curling plaintiffs no longer
21 consider their interests aligned with your interests in this
22 litigation?

23 THE COURT: No, you can't -- he can't testify about
24 what the Curling plaintiffs believe. You can ask him about
25 himself.

1 MS. HERNANDEZ: Okay.

2 BY MS. HERNANDEZ:

3 Q. Mr. Davis --

4 A. Yes.

5 Q. -- do you believe that your interests differ from those of
6 the Curling plaintiffs?

7 A. I am not aware --

8 Q. You are not aware?

9 A. -- if there is a difference.

10 Q. I'm sorry. I can't hear you.

11 A. I am not aware of the diversions of interests.

12 Q. What are the remedies you are seeking in this matter?

13 THE WITNESS: I thought I already stated that, Judge.

14 THE COURT: I think he did. This is not useful. He
15 testified on direct. And if you-all didn't catch that then,
16 then you're not catching it with a second round.

17 MS. HERNANDEZ: Your Honor, the reason we're having
18 the second set of cross-examination is because this information
19 was brought to our attention in this email on January 17th that
20 was after he was previously cross-examined.

21 MR. CROSS: And that is not accurate. Your Honor
22 will recall we made clear during the pretrial proceedings in
23 November, December when Mr. Davis first introduced a new lawyer
24 that we were concerned that there were some differences on
25 positions that has been the subject of objections.

1 This was not new to anyone on January 17th. It was
2 well-known before Mr. Davis took the stand there may be some
3 disagreements in this case.

4 THE COURT: I think that reflects accurately what
5 happened in my effort to deal with this and to the greatest
6 extent possible streamline any differences so that people could
7 address them. And I think the way the case has been managed is
8 that.

9 There clearly are -- the fact that there are some
10 differences doesn't mean that people are -- that they are
11 not -- which is not unusual with a large group of people --
12 doesn't mean that they don't have common interests.

13 They all have concerns -- common concerns about the
14 voting system, and the voting system and the QR code, and it
15 goes to different degrees.

16 But most of the things that you were about to point
17 out had to deal with trial strategy, which is not his to
18 decide; it is his lawyer's. That may change over time.

19 So I think you are just getting into the weeds of
20 something that doesn't work.

21 MS. HERNANDEZ: No further questions.

22 Thank you, Mr. Davis.

23 THE WITNESS: You're welcome.

24 MR. OLES: I have no questions.

25 THE COURT: Okay. Because of all these issues, I

1 don't see the relevance of 1243, and I will omit it -- I will
2 not allow it to be admitted.

3 You can step down. Thank you.

4 THE WITNESS: Thank you very much. Again, we hope
5 you feel better soon.

6 THE COURT: Thank you.

7 MR. BELINFANTE: Your Honor, our next witness will be
8 Ms. Marks. We have got some of the documents that are on their
9 way here. So if I could have just a couple of minutes to go
10 back to our breakaway room and gather that, then I think --

11 THE COURT: Just let us know when you are ready
12 because I'll be ready. But when I go to the office, it is very
13 easy to just be sucked into something else if I don't hear from
14 you.

15 MR. BELINFANTE: Okay. Understood. I apologize for
16 that.

17 THE COURT: All right.

18 MR. CROSS: Your Honor, just for planning purposes,
19 Mr. Tyson and I spoke briefly.

20 Do you want to take up the issues that we talked
21 about in the sealed hearing today, or do you want to wait until
22 tomorrow? How do you want to do that?

23 THE COURT: Well, let's see how long Ms. Marks takes.

24 MR. BELINFANTE: Your Honor, I'm quite confident that
25 it will exceed going to 5:30 given that it is 3:45 and what I'm

1 anticipating in terms of material and also potential
2 objections, even given the sigh from Mr. Cross just a moment
3 ago --

4 MR. BROWN: It depends on how many objections of mine
5 are sustained.

6 THE COURT: What I would like to do is I would like
7 to talk to you about where we are at. I can't do that at the
8 moment with everyone in the room.

9 So if everyone would give us a few minutes, and then
10 we'll just take the break at that point.

11 MR. OLES: Judge, may my client -- he would like to
12 leave for the today. He has a meeting to attend if that is all
13 right.

14 THE COURT: Yes, he can do that.

15 So, Counsel, are you staying in the room -- everyone
16 who signed?

17 MR. BELINFANTE: I'm going to go --

18 THE COURT: You're going to go? That's fine.

19 MR. BELINFANTE: -- just for efficiency's sake and
20 work on the other things.

21 THE COURT: All right.

22 **(The public proceedings were thereby adjourned**
23 **at 3:49 PM and continued at 4:24 PM, as**
24 **follows:)**

25 THE COURT: Have a seat.

1 So -- go ahead.

2 MR. TYSON: Your Honor, I was just going to --

3 THE COURT: I'm just trying to clean up a little
4 here.

5 MR. TYSON: Certainly. I was just going to, for
6 purposes of the record, note that we talked on the break and
7 the Coalition plaintiffs requested we not start Ms. Marks
8 today. We are fine with that.

9 So I believe we have all discussed among ourselves
10 that we could proceed to Rule 26 argument issues regarding
11 Dr. Halderman's data and have that be our concluding item for
12 the day, start Ms. Marks in the morning, followed by
13 Mr. Sterling, and that would be the conclusion of the
14 defendants' case.

15 THE COURT: And that's fine with plaintiffs' counsel?

16 MR. CROSS: Yes, Your Honor.

17 THE COURT: We may still have another item tomorrow,
18 though, you-all recognize. We still have to deal with some
19 other issues related to that because I'm not -- I wasn't
20 thinking we were --

21 MR. CROSS: That's correct.

22 THE COURT: -- and the report and how it was handled,
23 and I haven't obviously read the response you provided to me.

24 MR. KNAPP: Okay.

25 THE COURT: Remind me of the name of counsel sitting

1 next to Carey.

2 MS. HERNANDEZ: Hello, Your Honor. My name is
3 Danielle Hernandez.

4 THE COURT: Listen, I don't normally bite -- have any
5 bite. So I just want to say, you asked the questions you were
6 supposed to ask, apparently, according to your co-counsel, but
7 please don't take anything personally.

8 MS. HERNANDEZ: No, not at all.

9 THE COURT: I don't know why they put you up to that.
10 They usually are a little nicer than that.

11 MR. RUSSO: So -- and, Danielle, thank you very much
12 for stepping in today. We asked her if she wanted to have an
13 opportunity to go today.

14 THE COURT: You said this is really -- you are really
15 going to love this one.

16 MR. RUSSO: Mr. Pico-Prats is out today sick also --
17 he's got whatever -- the bug, I guess, running around the
18 room -- and emailed Josh and I this morning. And since it is
19 Josh's birthday, I said, Josh, we'll see if we can find someone
20 who would be interested in it since you have a birthday today.

21 THE COURT: And he said, here, this is your present.
22 The judge that does not usually bite is going to bite.

23 Anyway, I just wanted to say I appreciate your being
24 in the court, and it is hard to be thrown into that position at
25 any age, but especially when you are a relatively new young

1 lawyer.

2 MS. HERNANDEZ: Thank you, Your Honor.

3 THE COURT: Okay. How do you want to go?

4 MR. CROSS: So if Your Honor is prepared, we can
5 respond to the Rule 26.

6 THE COURT: I'm as prepared as I might be.

7 Go at a good and not too fast of a speed. All right?

8 MR. CROSS: For the record, Your Honor, the first day
9 of trial was my birthday, and I didn't get any presents, but
10 apparently, Josh did. I try not to be offended.

11 THE COURT: Well, that is really not fair.

12 MR. CROSS: I know; right? I know.

13 MR. BELINFANTE: I will say I have had the honor on
14 my birthday of doing exactly what I want to do, defending the
15 integrity of Georgia's elections. I wouldn't want to be doing
16 any other thing.

17 MR. CROSS: Well said, Josh. I'm sure you're younger
18 than I am too. You've got me beat in every respect.

19 THE COURT: Well, you-all have not gotten to the
20 point of -- obviously, is to say, no, I don't really care about
21 my birthday, so --

22 MR. BELINFANTE: I'm getting there.

23 THE COURT: Matt here, my wonderful law clerk, had
24 his birthday on Sunday and clarified that -- I mean, this is a
25 remarkable loss of memory -- that he was turning 32 and not 33.

1 And I just said, oh, for either number.

2 MR. CROSS: All right. Thank you, Your Honor.

3 THE COURT: Can you just tell me one other thing?

4 Before we had these machines, what did we think that
5 everyone did? They still were going around with the boards?

6 MR. CROSS: Yes. Yes. Lots of boards.

7 THE COURT: And we've had -- we don't understand --
8 people still in jury trials bring out boards a lot, and I
9 cannot understand it. They are carrying the boards back and
10 forth, back and forth. It is a mess.

11 MR. CROSS: The nice thing about the board is it is
12 permanent, so it gets to sit there for a while.

13 THE COURT: That is what they hope.

14 MR. CROSS: Right. Exactly. Sometimes it does.

15 And for this, it is really -- you'll see it is just a
16 timeline and to hit some of the -- the documents --

17 Your Honor, as we understand it, the State is taking
18 the position that they have orally made a motion to exclude
19 some portion of Dr. Halderman's testimony. I'm not entirely
20 clear what else that is, but it sounds like it is testimony
21 that corresponds to the demonstrations he did in court.

22 And part of the challenge we've had is, I will tell
23 Your Honor candidly, as I think I told you before, we didn't
24 take what Mr. Tyson said that day as a motion. We went back
25 and looked, and he said, to perfect the record, they were

1 renewing their prior objection.

2 And our first argument, Your Honor, is that is not a
3 proper motion. A motion has to be duly noticed. It can be
4 oral, but they need to actually put on the record: Here is
5 what we're moving for, here is this specific testimony we're
6 objecting to in its boundaries that people can understand, and
7 they need to identify the relief they are asking for.

8 And the only thing he did was to renew an objection
9 to perfect the record. What we thought that was in the moment
10 was merely preserving an objection he had already made and Your
11 Honor had ruled on, and so it was just making sure that that
12 was preserved.

13 We now understand that they intend it to be a motion.
14 But we would submit, Your Honor, that on that grounds alone,
15 the motion would be improper and should be denied.

16 The next argument, Your Honor, is, you can't renew a
17 motion you won, and there's a variety of case law to direct
18 Your Honor to.

19 When he says renew their objection, they are renewing
20 the discovery -- the objection that was briefed in the -- we
21 assume, because of the lack of clarity, but renewing the
22 objection that was briefed in a discovery briefing that
23 overlapped with a motion in limine.

24 THE COURT: Could you just hold a second.

25 MR. CROSS: I'm sorry.

1 THE COURT: I'm still stuck on the realtime.

2 (There was a brief pause in the proceedings.)

3 THE COURT: So when he says renew their objection,
4 they are renewing the discovery. The objection that was
5 briefed in -- again, we assume because of lack of clarity, but
6 renewing the objection that was briefed in a discovery briefing
7 that overlapped with a motion in limine. Something like that.

8 MR. CROSS: That's right. That's right. Yeah.

9 So what I was saying, Your Honor, is we think what
10 they were saying was when they were renewing the prior
11 objection, it is the objection Your Honor ruled on that arose
12 in two contexts. First was the discovery briefing that was
13 filed, I think, in early December.

14 THE COURT: Of this year? Of last --

15 MR. CROSS: Of last year.

16 And I'll tell you what. To make it easy, this is why
17 we put a timeline together, because the dates get really
18 difficult, so let me just jump through this really quickly.

19 All right. Part of our argument, of course, is there
20 is a lack of diligence on this, and so I'm just going to hit
21 that really briefly.

22 Your Honor, the report obviously came out in July of
23 '21, deposition on November 17 of that year. The discovery
24 dispute on source code came to Your Honor on January 6 of 2022.

25 Your Honor had a teleconference on January 26 of

1 2022. In that teleconference, the key dispute was at the
2 time -- Your Honor said that they may be able to get this
3 discovery, but we had to figure out a security protocol because
4 this was really sensitive stuff. Your Honor said to them, I
5 would like, first of all, for the State to provide me what you
6 are suggesting as an appropriate process and protective order
7 for this.

8 You had went on to say, I would like to see this
9 happen ASAP.

10 So that was January 26 of 2022. Everyone knew at the
11 time the expert discovery deadline was February 15, 2022. So
12 under the federal rules, this all had to happen before then.
13 You told them ASAP. They waited until March 4th to provide a
14 proposal at all. And being even generous to them, they missed
15 the deadline to get a protocol, which was the precursor to get
16 this discovery at all. That is the first point of waiver, Your
17 Honor.

18 A month later, they told the Court that it was
19 unresolved and said that they would figure out how to deal with
20 this. Your Honor importantly set another discovery deadline on
21 September 2nd of 2022. The deadline was discovery, but the
22 deadline for all outstanding discovery. That was your
23 language. It was unequivocal. They missed that deadline and
24 did not raise it or pursue it.

25 Then there's another discovery deadline November 22nd

1 of 2022, an additional supplemental expert report deadline. We
2 have talked a lot about that. They didn't raise it or pursue
3 it then either. They then deposed Dr. Halderman on
4 January 23rd of 2023. The issue did not come up. They did not
5 say they needed this for that deposition.

6 So they missed the February 15 deadline, the
7 September 2nd deadline, the November 22nd deadline. They do
8 not raise this issue again between April 7th of 2022, already
9 almost two months after the deadline to complete it, until just
10 before trial on November 15, 2023. It came up in a pretrial
11 conference we had, I think, on the phone. It was the first we
12 had heard of it. There was no meet-and-confer.

13 We did try to work it out with them. But
14 importantly, this is what they said in that pretrial
15 conference, Your Honor. What was the driving force behind this
16 was they said they thought we were going to do an in-court
17 demonstration with the equipment. Mr. Belinfante says, but I
18 think the part about our motions in limine raises another
19 perhaps more substantive issue, which is, if Dr. Halderman is
20 going to testify about his malware, we haven't seen it. We
21 have tried. We have not been granted access to it. I think
22 that that could be potentially at least a material aspect of
23 the case.

24 As you have seen in the timeline, contrary to the
25 argument there, they had not tried. For two years, they had

1 not tried and had not done the precursor Your Honor ordered
2 them in January had to be done to get to this, provide a
3 security protocol. They did not do that.

4 Then Mr. Miller explains, frankly, it is not so much
5 about our experts doing anything, but we have got to be able to
6 adequately cross-examine Dr. Halderman. And really, the reason
7 this arose is that we noticed on the recent exhibit list that
8 there was, you know, equipment to be coming in. If they are
9 not planning on doing that kind of demonstration, then maybe it
10 is not an issue, but we read that to assume that that was the
11 case.

12 And so they said what is driving this now, the reason
13 we haven't mentioned it in two years is because we didn't need
14 it until trial, we saw the equipment.

15 So we said, all right, there is an easy fix to this.
16 The Court won't have to deal with it, and we won't have to deal
17 with it. We reached out to them and said, we won't do an
18 in-court demonstration with the equipment. Incredibly
19 prejudicial to us to give that up. We think it is powerful,
20 but we said we'll just moot this whole issue.

21 They then reversed course and said, no, now our
22 position is that you can't even do a video demonstration.

23 Sorry, Your Honor. I'm trying to get to the guts of
24 this here.

25 So if you look on the email on the left, this is

1 November 17. The important point here is when Mr. Russo
2 stated, to avoid any confusion, State defendants served a
3 specific request for this material upon Dr. Halderman in
4 November 2021 in advance of his deposition, and the State has
5 maintained ever since that this discovery is necessary prior to
6 trial.

7 Again, they have been unequivocal that they made a
8 decision not to pursue this until the eve of trial. As we'll
9 talk about on the law, the Eleventh Circuit and every circuit
10 is unequivocal that does not constitute the diligence that is
11 required, and so they are acknowledging they have not met the
12 diligence standard.

13 Importantly, about Mr. Russo's email, Your Honor,
14 this is part of the confusion here. Every point at which they
15 raised this issue in the timeline we have already been through
16 with Your Honor in January of 2022. And then their argument
17 was over what Mr. Russo references a document request that came
18 with the deposition notice. They did not ever once, to my
19 recollection -- I've gone back to look. I'm sure they'll flag
20 it if I missed it.

21 It was never a Rule 26 argument. It was an argument
22 in a Rule 34 that, because they had served document requests
23 before his deposition, we had an obligation to produce what
24 they requested. That was the position still on November 17 of
25 2023.

1 Here is why that matters: Because what has happened
2 here is they know that the law is unequivocal on their
3 requirement to diligently pursue this, and they didn't for
4 years. So then they came up with the Rule 26 argument just
5 before trial, and now it has become this Rule 26 argument which
6 is irrespective of their document request and the fact that
7 they didn't pursue those. We somehow had our own affirmative
8 obligation to disclose this information even though they
9 weren't pursuing it for years.

10 I'll explain why that is wrong, but that is why we
11 have morphed into this Rule 26 world. But let's be clear.
12 They are now not relying on Rule 34. They are not relying on
13 those document requests in the past. They are not the subject
14 of any briefing with the Court in November and December. It is
15 just Rule 26.

16 And that becomes really important for this reason:
17 Rule 26 is very narrow in what is required to be disclosed. So
18 no matter what they may have requested under Rule 34, the
19 objection that they have renewed that is pending before the
20 Court is the objection that was briefed in December. That is
21 Rule 26.

22 That means the only thing that is at issue would be
23 materials that were relied on by Dr. Halderman and doesn't
24 include the demonstratives, and we'll get to that.

25 So then on January 21, Mr. Belinfante responds, if

1 you're going to do a video demonstration, we're still going to
2 need the discovery. Not what they had said in court on the
3 15th.

4 Joint discovery filing goes in on the 27th. It is a
5 Rule 26 argument. They reiterate that same argument and the
6 motion in limine on December 7th. And here is where we get
7 into how you can't renew a motion you won.

8 On the left, Your Honor, they argued, under these
9 circumstances, the -- this is from their discovery motion, I
10 believe -- under these circumstances, this Court must compel
11 disclosure and afford defendants an adequate opportunity to
12 prepare for trial or otherwise exclude any opinion testimony or
13 demonstration of these attacks from introduction at trial.

14 And they cite Rule 37. It was an either/or. They
15 said you've either got to give us the discovery or you exclude
16 it.

17 Your Honor granted their motion. You granted the
18 motion to give them the discovery they wanted, which then
19 mooted the alternative relief.

20 And the Courts have been clear, Your Honor, *SEC v.*
21 *Alpha Telecom*, 2002, U.S. District Lexis 2597 at star three.
22 It is a District of Oregon case from 2002 that makes the point
23 you can't renew a motion that you won.

24 We have numerous cases here, Your Honor. I'm happy
25 to hand them up at some point. I'm not going to walk through

1 each of them because it would take a lot of time. But we've
2 got maybe ten cases from a variety of Courts.

3 So that is point one -- well, point two. The first
4 is --

5 THE COURT: Do you have a listing somebody can just
6 copy them before you leave?

7 MR. CROSS: We'll do that. Yeah, we'll do that.

8 THE COURT: Okay.

9 MR. CROSS: That was my thought.

10 THE COURT: Because we'll start looking at it
11 tonight.

12 MR. CROSS: I figured. We will get you the complete
13 list.

14 The next point, Your Honor, is, even if you put aside
15 that they actually won the motion, they are renewing an
16 objection they won. Park that to the side. The other sort of
17 most generous view of what they have brought to the Court is a
18 discovery motion. It is not a motion in limine in and of
19 itself because what they have said again is they didn't get the
20 discovery we wanted.

21 Well, that first has to be brought as a discovery
22 motion. The premise of Mr. Persinger's declaration is that
23 there is information they should have gotten in discovery they
24 didn't get. Okay. Well, you have to file that as a motion to
25 compel. Rule 37 is clear, you can't just strike testimony

1 because you didn't get discovery without first bringing that to
2 the Court and giving us an opportunity to cure.

3 And here is where the delay becomes really important.
4 They knew the parameters of the review that was going to happen
5 on January 4th going into that. We've given Your Honor a copy
6 of the Q and A. We answered about 20 questions, laid out what
7 it was going to be. They knew the scope of the protocol, that
8 it was source code only.

9 What Mr. Persinger now claims is that coming out of
10 that inspection they had discovery concerns. There were
11 libraries they didn't get and other things. We were all there.
12 It was a very cordial, very amicable day. I drove Mr. Tyson
13 and Mr. Persinger to lunch. At any point they could have said,
14 we're missing some stuff. What about libraries? What about
15 this? And we would have gladly dealt with it then.

16 So they first waived it by not raising it there.
17 They also raised it by not objecting to any of the protocols
18 that we laid out with the Q and A that said this is not a
19 forensic examination, it is only source code. That is all
20 you're going to get.

21 They then waived it a third way. Despite having
22 these discovery concerns on the 4th, they did not raise them
23 until the 18th. Two weeks. And the timing of that is
24 important for two reasons. One, the declaration was signed on
25 the 15th, so they could have at least brought it to us on the

1 15th, which was several days before Dr. Halderman testified.

2 THE COURT: The 15th of?

3 MR. CROSS: January, 2024. Yes. Thank you.

4 Dr. Halderman testified on January 18, 2024, the same
5 day that they brought in the declaration signed several days
6 earlier.

7 And so, Your Honor, they deliberately set this up in
8 a way where we could not cure it because the point at which
9 they decided to hand us something signed several days before,
10 Dr. Halderman was literally taking the stand that day, and once
11 he took the stand, we couldn't even talk to him about this to
12 figure out what more could we do.

13 Because our view was, if they want libraries, give
14 them the libraries. It wasn't in the scope. It was never
15 requested before. But they have deliberately addressed this in
16 a way so that we couldn't cure.

17 And the courts are clear. You can't do that. You
18 have to first raise it as a discovery dispute. And under the
19 local rules, even for that, they had to meet and confer with us
20 first. Your Honor got it the same time we did sitting in
21 chambers.

22 So they blew the requirements under the local rules,
23 and they blew the requirement to file a discovery motion before
24 seeking to exclude anything under Rule 37.

25 The next basis on which to deny this, Your Honor, is maybe

1 what they really intend is a motion for reconsideration. We
2 have found case law that says if you are renewing a motion that
3 that often may be treated as a motion for reconsideration. The
4 problem with that is they waived that as well. Under the local
5 rules, a motion for reconsideration has to be filed within 28
6 days of the entry of the order.

7 Your Honor first ruled on this on December 13, 2023, at
8 the pretrial conference. You entered a written order on it on
9 December 20. Even if we give them the benefit of the order,
10 the 28 days from December 20 expired on January 17.

11 So notwithstanding they had the declaration on January 15
12 of 2024, by sitting on that until January 18, they blew the
13 deadline for Your Honor to treat and take it as a motion for
14 reconsideration.

15 The next basis on which to deny it, Your Honor, is the
16 failure to pursue any of this diligently. I'm not going to
17 walk through everything here. Your Honor has the historical
18 timeline that we have been through. A couple of points that I
19 was going to hit.

20 This is the Q and A, Your Honor, that I mentioned before.

21 Okay. Again, on the timeline, I'm not going to go back
22 through all the dates. You have seen the lack of diligence at
23 numerous times, missing a number of deadlines. And again even
24 once they had this ordered in December, they should have raised
25 a new objection at the point at which they were there on

1 January 4th. They didn't. They waited until the 18th. We
2 have case law on that, Your Honor, as well on the diligence.

3 Now, here is why Rule 26 matters. The next basis, as
4 I mentioned before on which to deny the motion, Your Honor, is
5 again, under Rule 26, they are only allowed to get what the
6 expert considered or relied on in reaching his opinions.
7 Interestingly enough, right before Mr. -- I think Mr. Tyson
8 makes this renewed objection, he asked in voir dire,
9 Dr. Halderman, did you rely on the malware for your opinions?

10 And Dr. Halderman said no. Because he doesn't. He
11 was very clear. The malware -- the source code that is at
12 issue for these demonstrations is just part of the
13 demonstration. The opinions and the analysis that he relies on
14 are all in his report. Those -- that report, there is no
15 dispute, explains exactly how to do these demonstrations,
16 exactly how to build the malware if someone wanted to, which is
17 why there is also a sealed version of that, because there are
18 sensitive components on that.

19 The malware itself has always only been
20 demonstrative, and so they are not entitled to it at all
21 because he's not relying on it for the testimony he has
22 offered, and we're now in a world where they are relying only
23 on Rule 26, Your Honor.

24 And as we covered before -- we pointed you to case
25 law before -- the Courts have held that demonstratives are not

1 required to be disclosed at all themselves with Rule 26 until
2 they are actually used in court.

3 So Your Honor actually has been quite generous in
4 giving them the discovery they got, which they were then, of
5 course, able to use on cross-examination, Your Honor. And on
6 that point, one of the things we said before, there is
7 virtually no cross-examination of Dr. Halderman that relates to
8 what they did.

9 So their argument you saw from Mr. -- it may have
10 been Mr. Belinfante or Mr. Miller. They were very clear this
11 is not for new reports. They were very clear their experts
12 would not talk about this because the deadlines for that were
13 long gone. They said it was to cross-examine him.

14 Well, they spent half a day looking at this in
15 Michigan, and we've gone through the transcript. We sat here
16 in the courtroom. Mr. Tyson asked virtually no questions about
17 this, not even to create a record, if he was really looking at
18 perfecting the record, on the lack of what they needed. He had
19 Dr. Halderman on the stand. He had Mr. Persinger's
20 declaration. He could have walked through all of the points in
21 that declaration.

22 And while he can't use the declaration in itself, he
23 can use the substance. That was the whole point of this
24 exercise. He could have had an outline that said,
25 Dr. Halderman, did you provide this library? Did you provide

1 this library? Did you provide this library? Isn't this
2 library needed for something you did? Isn't this needed for
3 something you did?

4 He didn't do that. That does not exist in the
5 record.

6 And so where that leaves us, Your Honor, is there is
7 no prejudice to them, which is the last point. They got
8 exactly what they asked Your Honor for. You granted their
9 motion to give them the discovery they wanted. They now have a
10 discovery dispute. They have mishandled that in every
11 conceivable way and blown every possible deadline that could
12 apply to it, no matter how one construes that one as an
13 objection or a different type of motion.

14 And then, ultimately, Your Honor, there is no
15 prejudice because, as we see in the declaration from
16 Mr. Persinger, he came away with a lot of thoughts. Where is
17 the cross-examination that they told Your Honor we needed this
18 for?

19 And so the last thing I will say, Your Honor, is,
20 everyone has spent an enormous amount of time, effort, and
21 money on something they said to the Court was really important
22 for one purpose, to cross-examine Dr. Halderman.

23 We have a lengthy declaration of a variety of
24 concerns from Mr. Persinger that did not feed in to
25 cross-examination. This is much ado about nothing, and I think

1 it is probably clear to all of us that what it really is, is an
2 effort to manufacture an appeal issue, and it has no merit.
3 Thank you.

4 THE COURT: Are you -- the cites of any of the cases
5 that you are relying on, are you -- somebody going to email
6 these to --

7 MR. CROSS: Yeah, we'll provide them to counsel and
8 to Your Honor.

9 THE COURT: All right. You're doing that tonight?

10 MR. CROSS: We'll do that right after this.

11 THE COURT: All right. Fine.

12 MR. TYSON: So, Your Honor, thank you.

13 I don't want to belabor the response here. I think
14 we've all spent a lot of time on this. I just want to fill in
15 a couple of details.

16 First, Mr. Cross referenced the November 2021
17 discovery request to Dr. Halderman.

18 THE COURT: Which year?

19 MR. TYSON: I'm sorry?

20 THE COURT: Which year?

21 MR. TYSON: 2021 with his deposition notice.

22 And the reason why we originally served that is
23 because we had not gotten the Rule 26 disclosures that we felt
24 were required. We should have gotten it under Rule 26, and we
25 didn't, which was the reason to have the additional request.

1 As Your Honor will recall, after we got the
2 January 2022 discovery dispute filed, we had a number of
3 teleconferences talking about all the different pending issues
4 in discovery leading up to the April 2022, I believe it was,
5 conference where there was a discussion of, what do we need to
6 get to summary judgment in this case?

7 And this was one, as we explained in that telephone
8 conference, that we were able to put off until trial, because
9 that was the timeline, and so we agreed to hold you having to
10 rule on this dispute until a later point. We always advised
11 that we would need it for trial, and that is -- just to not
12 again belabor the whole timeline, I think Document 1716 kind of
13 walks through all these different pieces on the time.

14 There was the discussion about what to do with, you
15 know, the kind of negotiation. Plaintiffs were always going to
16 do some sort of video demonstration. The only thing they were
17 offering was not to do an in-person demonstration.

18 And Your Honor did grant us the opportunity to see
19 the source code. But again, the issue for us was then the
20 scope of the review at that point. So we didn't know what we
21 would receive until we got to Michigan to look at what was
22 there.

23 We did ask -- at the beginning, Mr. Persinger
24 requested whether he could take some screenshots as he did his
25 analysis, not of the source code, but of other pieces of the

1 process. Mr. Cross advised us we're going to go right by the
2 protocol. We're not deviating from that, and so we didn't
3 raise any further issues with the review that day.

4 In terms of the timeline for raising it with the
5 Court, as Your Honor will recall --

6 THE COURT: Why didn't you raise it with them that
7 day, we're going to need these extra libraries?

8 I mean, this is -- this apparently has been a bone
9 sticking in Mr. Persinger's throat for some time. I can't
10 believe he didn't mention it to you.

11 So why wouldn't you have attempted to raise it and
12 discuss how to resolve it then?

13 MR. TYSON: So, Your Honor, the only reason that we
14 didn't was we had raised again the prior issue that morning
15 about screenshots and some other pieces of the puzzle, had
16 gotten a hard no, and felt like we were at a point where we
17 just had to proceed with whatever review we could do and didn't
18 expect to have any success raising that issue.

19 So we didn't raise it. That's correct.

20 THE COURT: But then it all ended on my lap. Yet,
21 all of you who never seem to ever hesitate to call me whenever
22 or whatever -- and I don't get any calls; instead, this just
23 blows up.

24 MR. TYSON: And, Your Honor, I guess the other piece
25 of the puzzle for us is then putting together what we needed to

1 do to determine what we didn't have, how to raise that with you
2 was something we weren't exactly sure how to do either, given
3 the strict protocols around the review process.

4 So as you recall, we wanted to reraise this. We had
5 flagged for the Court that we had some issues to raise before
6 Dr. Halderman testified. That's the reason why we raised it
7 with the declaration on the 18th.

8 In terms of, again, I think, the other piece of the
9 puzzle here, plaintiffs were also seeking to exclude -- if the
10 idea was we should have filed a discovery motion first, they
11 are also seeking to exclude evidence regarding 5.17, as we
12 talked about. Never filed a discovery motion about that, to
13 our knowledge on that point.

14 And ultimately, Your Honor, I think for the reasons
15 we raised in our motion in limine in Document 1723, that was --
16 that kind of outlines the legal basis. I still struggle to see
17 how Dr. Halderman can reach the opinion that, you know, vote
18 stealing malware can exist, and his basis for that appears to
19 be that he created that malware. That seems like an opinion
20 that in his report where he's relying on the malware along the
21 way here.

22 So, Your Honor, again, I think that from our
23 perspective, this was an issue where we raised it as best we
24 could, we talked about it at the pretrial conference, you
25 granted us a limited review. We felt that review was not

1 sufficient, thus the basis to reraise the issue.

2 And that is where we stand at this point, so --

3 THE COURT: Okay.

4 MR. TYSON: -- with that, Your Honor.

5 That, I believe, completes what we need to talk about
6 on that point, and we'll stand on our briefs otherwise. Thank
7 you.

8 MR. CROSS: Few quick responses, Your Honor.

9 First, Mr. Tyson said they raised it as best they
10 could. They did not raise it for two years, despite every
11 deadline, despite Your Honor's directive to them in January of
12 2022, that to get this discovery, they had to provide a
13 security protocol ASAP. And they waited until three weeks
14 after the then-existing deadline.

15 Second, Your Honor, they again bring up the point
16 they had a limited review. What they always omit is the
17 protocol was the one that mirrored what they proposed. When
18 the shoe was on the other foot and Dr. Halderman wanted to
19 inspect the GEMS database and they said that was so sensitive
20 it needs a rigid protocol, the protocol we provided we pulled
21 from them on that. So they can't really fairly say it was an
22 unfair limitation.

23 And it was worth reminding the Court that after we
24 went through all of that back-and-forth on the GEMS database,
25 after they said it was so sensitive, we needed this rigid

1 protocol, it came to light that Mr. Merritt Beaver's testimony
2 under oath on that point was not accurate. The GEMS database
3 was actually available on the internet.

4 On the Rule 34 document request, Your Honor, again, I
5 invite them to go back and show this Court in the briefing at
6 that time -- maybe I missed it. I haven't slept a lot. But I
7 do not recall and did not see on a quick review any argument
8 about Rule 26. It was a Rule 34 argument.

9 The first time I ever remember Rule 26 was when they
10 raised it just before trial, Your Honor. And so if there was a
11 Rule 26 argument, that was waived a long time ago.

12 And the last point on that, Your Honor, is, it is not
13 the lawyers who determine what is needed under expert
14 discovery. It is the experts. Dr. Gilbert testified in 2021
15 that he did not need anything more than what he got. He said
16 source code, I didn't need look to at it. It wasn't even
17 relevant.

18 He didn't need to look at the BMD. And that is
19 dispositive of the Rule 26 argument. The expert says what he
20 needs to respond to Dr. Halderman. And he is the only election
21 security expert, no matter how one might define that term, who
22 has provided a rebuttal.

23 They always said again today that they said they
24 always needed this for trial, which always strikes me as odd
25 every time they make that because it is literally the worst

1 argument they could make because of the diligence standard.

2 The way this normally plays out -- and 5.17 is the
3 perfect example of this on why their argument is backwards.
4 They say that we move to strike -- or to preclude evidence on
5 5.17.

6 That's true. But we had no notice that they were
7 going to do that. That is the difference here. The things
8 that they have come in, like Dr. Adida, for example, talking
9 about events that postdate his reports, we had no notice that
10 was going to happen until the courtroom.

11 Discovery is intended to prevent surprise. So in
12 that instance where they are the ones that have the surprise,
13 Rule 37 says we get to keep that out.

14 Here, we were transparent. And as they acknowledge
15 in saying, we always knew we wanted this for trial, we're
16 acknowledging there has never been surprise on this. They have
17 always known that this was going to be an issue for trial. And
18 the Courts are unequivocal. You have to be diligent in
19 pursuing that before discovery lapses, and Your Honor gave them
20 at least three different deadlines by which to do that.

21 We also heard that the scope -- they did not know the
22 scope of the review until they got to Michigan. That is one of
23 the more egregious claims, Your Honor. Because, as I
24 mentioned, 19 questions -- I take it back. I'm wrong. 22
25 questions. 22 questions detailed that they posed that we

1 answered, I believe, on January -- or December 27. I think we
2 answered them within a day. At least within a couple of days.

3 And we told them as soon as Your Honor ordered this,
4 tell us whatever questions you have. Send them all. No limits
5 on the questions you want to pose.

6 This is what they got. This is what we answered. It
7 laid out the protocol in detail of what was going to happen.
8 Your Honor has this. Everyone knew what the scope of that
9 review was going to be. There was no objection. He says they
10 didn't raise any concern on January 4th because they did ask
11 about screenshots. And when we said no to screenshots, somehow
12 they took that to mean they couldn't talk about anything else.

13 Respectfully, Your Honor, I don't think that is a
14 sincere representation. Screenshots are a very different
15 thing. We did not have, as I think -- in fact, I'm certain we
16 said in the moment, we actually did not have authority to
17 authorize screenshots. We were operating under a court order.
18 The court order said you cannot copy anything from this.

19 He was looking at malware and other things on the
20 screen, and I remember saying, even if you wanted to, you would
21 have to get the Court's permission for that.

22 The other things that are in the declaration are all
23 things that we could have discussed, libraries and other
24 things. They didn't come up.

25 That's it, Your Honor.

1 THE COURT: Thank you.

2 MR. TYSON: Your Honor, I do just want to make one
3 final point. I think this shows the challenge of this case
4 that we end up -- it is a misrepresentation. It ends up as a
5 character attack on counsel. I think we have seen that
6 consistently through this, and I just felt like that needed to
7 be said.

8 You know, where we are at this point in the case.
9 We're all working very hard to get this done and done right.

10 MR. CROSS: To be clear, no one has made a character
11 attack. I'm not sure what that was.

12 THE COURT: I know that everyone has -- that these
13 things have floated, but I didn't -- in this case, I did not
14 perceive that there was a character attack.

15 But listen, it is late, and you've all been working
16 hard, so I understand that there can be those perceptions.

17 Let me --

18 MR. RUSSO: Your Honor, I just want to make one more
19 quick point because there have been quite a few discovery
20 disputes in this case.

21 THE COURT: Really?

22 MR. RUSSO: But I do want to direct the Court, since
23 we were told and we heard that this issue hadn't come up after
24 February of 2022, and point the Court to Document 1362 and 1361
25 and the Court's -- the Court's order, which was at 1359, which

1 both of those documents are in response to.

2 And you'll see that that order asked the parties to
3 identify the discovery various disputes that are still in
4 existence, provided us with a chart to check whether the
5 disputes have been completed.

6 Both plaintiffs and defendants checked in response to
7 one of the categories, which is the State defendants' request
8 for discovery related to Dr. Halderman's methods -- and in
9 response to whether the dispute has been resolved checked no.
10 So that was in April of 2022.

11 MR. CROSS: That's in the timeline, Your Honor. I
12 mentioned that. That's the April 7, 2022, where it says in the
13 timeline, parties tell the Court the issue is unresolved.

14 THE COURT: Okay. Are you going to provide us with
15 the timeline that you just --

16 MR. CROSS: Yes. Sorry. Let me do that now.

17 **(There was a brief pause in the proceedings.)**

18 MR. CROSS: Your Honor, I can also hand up the binder
19 that has all the document references and the cases.

20 This has the documents and the cases.

21 **(There was a brief pause in the proceedings.)**

22 THE COURT: Is there anything else on this particular
23 issue that any party wants to address?

24 MR. CROSS: Not from plaintiffs, Your Honor.

25 THE COURT: Okay. Let me just briefly address what

1 happened with Dr. Adida's testimony last week.

2 I conditionally allowed him as a matter of efficiency
3 to go ahead and discuss the method -- the RLA method he used in
4 2022. Though no one had updated -- I don't think the State
5 maybe had updated it, at least as much as I could glean, your
6 responses as to Dr. Adida's testimony. And maybe you had.

7 But it was in heart of trial. I didn't -- certainly,
8 the plaintiff had vigorously argued that. If you think you
9 have, then I would like to know that.

10 And the main concern here is not that it is -- having
11 been in this case as long as I have, it just sort of -- for
12 Dr. Adida to come up and say, I had this wonderful new
13 methodology, this bunch -- is that what it was?

14 MR. TYSON: Batch.

15 THE COURT: Batch -- excuse me -- batch methodology
16 and -- and never described what he -- you know, really enough
17 about it so that I could even understand necessarily is this --
18 I mean, was it done so that the batches were representative,
19 racially, socioeconomically, for instance, if you did it? If
20 you had a batch that was all from the wealthiest part of
21 Buckhead, it might not represent at all other portions of the
22 city.

23 I mean, I have no idea what he did, and I just didn't
24 want to jump into that because I didn't know. And, you know,
25 I'm -- so it was -- it bothered me as I left the trial because

1 I didn't know, and I thought I was conditionally allowing
2 something in that wasn't going to be that much of a surprise.

3 And it wasn't -- so if the State contends that you
4 gave them at least this information, you know, show that or --
5 and obviously copy me, and I'll just -- I just wanted to
6 mention it to you so that we can talk about it a little more
7 thoughtfully when we're not at the end of the day and everyone
8 is tired because I'm not really prepared more than to flag my
9 discomfort about what ended up happening.

10 MR. MILLER: Your Honor, if I may just very briefly
11 on that point. To be truthful, I did not understand the
12 objection at the time for Dr. Adida's testimony to be about
13 that timeline issue. And truthfully, I'm not sure that it is
14 even relevant to the State's case other than to say we are
15 continuing to do audits.

16 I understood the objection to be more about the scope
17 of his testimony in terms of the expert -- subject matter
18 expertise that ended up later. But we'll certainly go back and
19 look through our discovery documents.

20 THE COURT: I will do so too. I stewed on it some on
21 Friday night and then got sick on Saturday morning, so I didn't
22 go back and look at anything. So everyone can go look and we
23 can talk about it a little more.

24 I thought the gentleman from Bartow County was a very
25 impressive person, interesting. I mean, relatively -- putting

1 aside the case and the fact that he had taken on just what he
2 had taken on himself.

3 But anything else we should address?

4 MR. CROSS: Your Honor, the only thing -- just I
5 think I forgot to give you the specific reference. On the
6 Rule 26 argument, Dr. Halderman responds on that in the
7 declaration beginning at Paragraph 62.

8 THE COURT: Of what?

9 MR. CROSS: Of the declaration that we provided
10 today.

11 THE COURT: Okay.

12 MR. CROSS: Just so you know where to look in the
13 declaration.

14 THE COURT: Okay. So if Ms. -- it seems like we have
15 all tomorrow still to be consumed; is that right?

16 MR. BELINFANTE: Your Honor, I think Ms. Marks'
17 testimony will take awhile. I don't think Mr. Sterling's, at
18 least from our end, is going to be -- it will certainly not be
19 as long as Mr. Evans'. I don't think it will be as long as
20 Mr. Barnes' in our case in chief either.

21 But I think we will certainly be going after lunch,
22 but it is certainly my intention and goal to have both finished
23 by 5:30.

24 THE COURT: Okay. That's fine. I was just thinking
25 that we would not get to closing arguments at least because I

1 don't know if they have any rebuttal also.

2 MR. CROSS: Your Honor, one quick point on that --
3 and, Josh, if you guys need time to think about this -- one
4 thing that occurs to me is there may be some testimony from
5 Mr. Sterling that we would do as rebuttal, but I don't know the
6 scope of the direct.

7 So we can either just have the cross not be bound to
8 the scope of direct, or if they want him to rest and then he
9 immediately takes the stand again, they can think about it, but
10 I figured I would flag it to think about.

11 MR. BELINFANTE: That's a good thing to think about.
12 We'll be practical. I think you just mentioned that he rests,
13 just so we have a clear record and then that may work.

14 THE COURT: Okay. Happy birthday.

15 MR. BELINFANTE: Thank you.

16 THE COURT: I'm sorry you have to be here.

17 MR. BELINFANTE: I'm at the age where it just doesn't
18 matter. But thank you.

19 MR. CROSS: I feel like you should sing. I'm ready
20 to sing for you, Judge.

21 THE COURT: Well, okay. Everybody, are you ready?

22 MR. CROSS: Let's do it. Come on. Come on. Let's
23 do it.

24 COURTROOM AT LARGE: Happy birthday to you.

25 Happy birthday to you.

1 Happy birthday dear Josh -- Mr. Belinfante.

2 Happy Birthday to you.

3 MR. CROSS: Speech.

4 MR. BELINFANTE: Thank y'all.

5 MR. CROSS: Shannon, is that in the record?

6 THE COURT: Anything else, folks?

7 MR. ANDREU-VON EUW: Your Honor, I have one more
8 thing, just --

9 THE COURT: Oh, naturally. Go ahead.

10 MR. ANDREU-VON EUW: This is for the sealed
11 proceeding. I can explain off the record.

12 THE COURT: You have something for a sealed --

13 MR. ANDREU-VON EUW: I'll just hand it to the Court.

14 THE COURT: It doesn't look like a recording of happy
15 birthday to me at all. We'll just be satisfied with Josh's
16 birthday. I hope you have a nice time with your family.

17 And we'll see y'all tomorrow at 9:30. I think I'm
18 better. I'm not perfect, but I'm better. I at least could
19 stand up to start at 12:00. That was the main goal.

20 But no, I think I'm fine, all things considered.

21 Thank you. We're adjourned.

22 **(The proceedings were thereby adjourned at 5:20**
23 **PM.)**

24

25

C E R T I F I C A T E

UNITED STATES OF AMERICA

NORTHERN DISTRICT OF GEORGIA

I, SHANNON R. WELCH, RMR, CRR, Official Court Reporter of the United States District Court, for the Northern District of Georgia, Atlanta Division, do hereby certify that the foregoing 163 pages constitute a true transcript of proceedings had before the said Court, held in the City of Atlanta, Georgia, in the matter therein stated.

In testimony whereof, I hereunto set my hand on this, the 29th day of January, 2024.



SHANNON R. WELCH, RMR, CRR
OFFICIAL COURT REPORTER
UNITED STATES DISTRICT COURT

UNITED STATES DISTRICT COURT
OFFICIAL CERTIFIED TRANSCRIPT

<p>BY MR. ANDREU-VON EUW: [24] 20/21 22/16 24/6 28/12 29/11 30/2 82/11 83/6 83/17 86/11 86/17 87/8 87/16 88/18 88/25 91/13 94/17 95/15 95/19 96/6 97/7 99/9 99/20 100/7 BY MR. BROWN: [5] 101/7 102/5 110/5 110/15 111/3 BY MR. MILLER: [48] 5/25 9/25 10/25 11/5 12/16 13/1 14/2 14/16 15/11 15/20 16/3 17/8 17/13 17/21 19/19 31/5 34/2 34/10 34/21 35/3 37/23 38/25 40/11 41/12 56/11 57/19 61/10 64/9 67/5 67/21 69/8 71/6 71/12 72/19 73/12 73/19 75/21 76/7 76/17 77/14 78/2 79/2 80/14 80/21 112/23 114/2 115/1 115/20 BY MR. OLES: [1] 112/13 BY MS. HERNANDEZ: [7] 120/5 121/5 121/25 124/7 125/3 125/19 126/2 BY THE COURT: [1] 116/14 COURT REPORTER: [2] 34/7 67/19 COURTROOM AT LARGE: [1] 162/24 COURTROOM DEPUTY CLERK: [4] 5/13 5/16 119/18 119/21 COURTROOM SECURITY OFFICER: [2] 52/13 112/7 MR. 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