EXHIBIT G

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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
                                         )
           Plaintiffs,
                                         )
 6
                                         )
                                            CIVIL ACTION FILE
                                            NO. 1:17-CV-2989-AT
     vs.
 7
     BRAD RAFFENSPERGER, ET AL.,
 8
          Defendants.
 9
10
11
12
                     VIDEOTAPED DEPOSITION OF
13
                           MICHAEL BARNES
14
                           June 27, 2019
15
                             10:09 a.m.
16
              Ross Alloy Belinfante Littlefield, LLC
17
                        500 14th Street N.W.
18
19
                          Atlanta, Georgia
20
21
      Reported By:
2.2
      Robin K. Ferrill,
23
      CCR-B-1936, RPR
2.4
      Job No. 3431556
25
      Pages 1 - 288
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1 on, user name, password, where, where would they 2. store it? I don't know. 3 Α. Did any nonemployee or contractors have 4 access to the ballot builder? 5 They did not. 6 Α. 7 You have described the ballot building Ο. 8 process at high level in response to my questions in the 2016 time frame. 9 Uh-huh. 10 Α. 11 O. At a high level, is that the process that's 12 used today? The same folder structure and how databases 13 Α. move through, yes. 14 15 Are the same -- not the same physical 16 hardware, but functionally the same servers used for 17 the process? 18 Α. No. 19 Q. What computers are used? 20 Α. Today? 21 Q. Yes. 22 Everything today is hardware put in place Α. 23 by the Secretary of State's office. 24 Does the hardware have the same function as 0. it did in 2016? 25

1 Yes, yes. Α. 2 And the counties still today report back in O. writing as to mistakes --3 4 Α. Yes. 5 Ο. -- or problems with the ballots, right? 6 Yes, yes. Α. And then after sign-off and after you do Q. 8 your final review, will you still send by CD the 9 completed GEMS database for each county? 10 Α. Yes. 11 O. And today, is it the same as except in an 12 emergency, a county would not have a GEMS database 13 downloaded directly from a server to the county, 14 correct? 15 It's the Secretary of State's position that Α. 16 everything is physically delivered. There is no 17 electronic transfer of database. 18 Q. Okay. 19 MR. BROWN: Just one second. 20 O. (By Mr. Brown) I'm going to hand you what 21 has been marked, what's going to be marked as Plaintiff's Exhibit 20. And for the record, we are 22 23 continuing the numbering that was started in the 24 Ledford deposition where Exhibits 1 through 19 were 25 marked.

1 I don't know how he did it. Α. 2 Okay. Do you have any doubt that he did do Ο. it? 3 Α. I have no reason to say someone has -- is 4 5 not saying accurately what they did. 6 He then says: After running the script to 7 completion, I had acquired multiple gigabytes of 8 This data was comprised of many different 9 files and formats, but among them were, and then he lists a bunch of different files. 10 11 Are you with me? 12 Α. Yes. 13 He says he accessed voter registration databases filed with personally identifiable 14 15 information of over six million voters. Do you see? 16 Α. That I do. 17 And do you have any reason to doubt that that statement is incorrect? 18 19 If he is stating that that file was present Α. on that server on August 24th of 2016, then I would 20 21 have reason to debate that. 22 And why, what's the basis for doubting O. 23 that? 24 Just understanding the time line of when we Α. 25 would build this particular data file. If it is a Page 47

1 polldata.db3 file containing the full voter set for 2 an election, that file is not built for an election until 10 days prior to that given election. So there 3 was no election schedule that I'm aware of within 10 4 5 days of August 24th, 2016. 6 Could it have been the file for a prior Ο. 7 election? 8 Α. I don't know. 9 Q. Could have been? 10 Α. I don't know. 11 O. Other than the file for the upcoming 12 election having not being built by the time that --13 in August of 2016, do you have any other reason to disbelieve that he acquired it by download, voter 14 15 registration databases filled with personally 16 identifiable information of over six million voters? 17 I don't know. Α. You don't have any other reason for 18 Q. 19 doubting that. 20 Α. No. 21 And that if he did do that, that data would Ο. 22 include driver's license numbers, birthdays, full 23 home addresses, the last four digits of Social 24 Security numbers, correct? 25 Α. Driver's license number, yes; birth date, Page 48

1 yes; full home address, last four of Social, I do not 2. know. 3 Okay. He also says that he acquired the Ο. election management system GEMS databases in dot-GBF 4 5 and dot-MDB extensions. Do you have any reason to 6 doubt that statement? 7 Α. I have reason to doubt an MDB extension. 8 Okay. What is an MDB extension? O. Microsoft Access. 9 Α. Okay. But doesn't the GEMS management 10 11 system database run on a Microsoft Access 12 application? 13 Α. That is the -- GEMS -- you enter data through GEMS, it then resides in Microsoft Access 14 15 tables. 16 O. Right. So you don't think he got -- he had access to the files with the MDB extension? 17 18 I do not believe so. Α. 19 Okay. What about GBF extension? Ο. 20 Α. It's possible that there was a training 21 database on that server that a county may have asked for to do their own local training exercises at that 22 23 time. 24 So it's possible that he received a full 25 database, full GEMS database, correct? Page 49

1	A. A training database.
2	Q. But it was a full GEMS database.
3	A. A training database. Yes, it was a GEMS
4	training database.
5	Q. But it was a GEMS database that had been
6	constructed for training people how to use GEMS,
7	correct?
8	A. Correct. Mainly constructed to train
9	people how to train poll workers.
10	Q. But it was a fully functional GEMS
11	database, correct?
12	A. It didn't have everything that would be in
13	a normal election GEMS database. Like in relation to
14	number of races, how it you know, how its
15	precincts may or may not have been constructed would
16	not have been same to that, but it would have been a
17	usable database for training purpose.
18	Q. But it would be would it look like a
19	database before information was put into it?
20	A. Yes.
21	Q. So the architecture of the database would
22	be there, if not the data that informed the database
23	as to the particular ballots being built?
24	A. Yes.
25	Q. He then says: I was able to access and
	Page 50

1 download GEMS databases for at least 15 counties. Do 2 you see that? Α. 3 I do. 4 And do you have reason to believe that that statement is not true? 5 I have no recollection of there being 15 6 7 GEMS databases for any purpose posted to that web 8 server for distribution to a county. 9 Q. They should -- they should not have been there, correct? 10 11 Α. They should not have been there. 12 Q. And you do not recall them being there. 13 Α. I do not. Did -- okay. I'll come back to that 14 Ο. 15 question. 16 He then says: These GEMS databases use 17 poor encryption allowing third parties to extract user names and passwords from multiple databases. 18 Do 19 you see that? 20 Α. I do. 21 Do you have any reason to doubt that? Q. 22 I honestly do not know the level of Α. 23 encryption within the databases, so I don't know 24 whether it would be considered poor or not poor. 25 He then does, in fact, identify a training Ο. Page 51

1 video; do you see that? 2. Α. I do. And it included a video? Ο. 4 Α. Yes. 5 Ο. Okay. And then do you see that he also found pdfs of election day supervisor passwords? 6 7 you see that? 8 Α. I do. And is that information that he would have 9 Ο. had access to? 10 11 Α. We did post onto -- inside the county 12 folder password memos for Express Poll use. And that would have been accessible to --13 Q. to -- some of that -- Logan Lamb, in this instance? 14 15 They were inside the folder at the county Α. 16 level. 17 Inside the folder at the county level and 18 that folder was where? 19 That was on the web server. Α. Okay. And then what are the Windows 20 Ο. 21 executable and DLLs that he describes? Do you know what those are? 22 23 Α. Yes. 24 What's the system data SQL Lite? 0. 25 Α. That is a DLL file that is placed on a Page 52

1 compact flash card for Express Poll that works in 2 combination with the EXP report.exe file that's also listed. 3 4 Ο. So those work together. 5 Those work together. He then says in paragraph 15 -- and again 6 7 I'm still at document 258-1, page 131 of the Federal 8 Court filing in page 6 of this declaration. 9 paragraph 15, Mr. Lamb says that the Express Poll units are specialized Windows PCs; is that correct? 10 11 Α. Yes. 12 Ο. Okay. And those Express Poll units are 13 specialized PCs that reside in the counties; is that right? 14 15 Α. Correct. 16 Ο. Actually, it would be one in each poll 17 location, correct? 18 At least, yes. Α. 19 Okay. He then says: An attacker can modify these files and affect the behavior of the 20 21 Express Poll units. If an attacker could modify those files, they would affect the behavior of 22 23 Express Poll units, correct? 24 That's what it states. Α. 25 Ο. But do you have any reason to disagree with Page 53

1 that? 2 My question would be what files is he 3 referring. Okay. What -- what files with respect to 4 Ο. 5 which if you did modify them would affect the 6 behavior of the Express Poll units at the polling place? 8 The, the file that you would want to modify Α. 9 in order to change how an Express Poll operates? 10 Ο. Yes. 11 Α. The only file that I have ever seen is a 12 resource file. 13 What's a resource file? Q. 14 Α. It controls the buttons that an Express 15 Poll displays. 16 Ο. Okay. When -- getting back to Exhibit 21 17 and the e-mails from Merrill King to you and then you to Mr. Gay and others on August 28, 2016, did you or 18 19 your office make any attempt to determine what files Mr. Lamb had downloaded? 20 21 I have a hard time recalling what all steps we took at the process of this. I believe our first 22 23 step was to look and see if data was there, why it 24 was there that shouldn't be there. And then remove 25 said data to make sure it was no longer present.

1 And my recollection was that Executive 2 Director King then relayed to Mr. Dean to begin, you 3 know, working with KSU IT to harden the web server to remove -- to strengthen its ability to hold those 4 5 data files in a secure manner. 6 Did, did you determine what data was there? Did you or your office determine what data was there? 7 8 Α. My recollection is we didn't start looking 9 to see what was there. We just got rid of whatever That we removed it. It cleared the 10 was there. 11 folders. 12 Ο. Did you keep a record of what was there? 13 I do not recall. Α. You are not aware of any record of what --14 Ο. 15 I don't recall. Α. 16 O. Okay. Did you attempt to do any sort of 17 forensic work to see if you could check the files that Mr. Lamb had downloaded? 18 19 Α. I do not know. 20 Ο. You said you just got rid of all the data. 21 Could you describe that? My recollection is that the folders were 22 Α. 23 cleared of the data. The data still existed. 24 data is still maintained within the Center, but the 25 folders were cleared of data so that they were no

1 (Plaintiffs' Exhibit 24, Ballot image 2 printout from GEMS computer, marked for identification.) (By Mr. Brown) Can you identify Exhibit 24? 4 0 5 It appears to be a ballot image printout from the GEMS computer. 6 7 Ο. And can you tell looking at it what county 8 this would have come from? 9 Α. I don't see a county designation on it. I see a precinct designation. 10 11 So if you knew where Red Oak was, you would 12 know what county it was? 13 Yes, I could -- I could -- I could Α. determine, yes. 14 15 Okay. And what is a ballot image report Ο. 16 used for? 17 A ballot image report can be generated from Α. GEMS to show what was captured by specific DRE 18 19 machine. 20 Ο. And what was captured by a specific DRE 21 machine for a particular voter? 22 Α. Not for a particular voter, but a ballot 23 cast. 24 What's the difference between a particular Ο. voter and for ballot cast? 25 Page 93

1 Α. When we cast a ballot, there's not an 2 identifying element that's connected to the ballot at the time of cast. It is simply ballot style. And 3 when the ballot style, when the touch screen hits 4 5 cast, when you hit cast vote on the touch screen, it 6 then assigns a numeric value to the collection of data it just received from that interaction. 8 Ο. And the numeric value is then associated with the ballot, not with the voter? 9 10 Α. Correct. 11 Ο. And how is the numeric value generated? 12 How it generates a random number, I don't 13 know how it generates, but a random number is assigned to that at the time the ballot is cast. 14 15 It's by random number generator rather than 16 sequence; is that your understanding? 17 Α. Right. And then that random number then is stuck 18 Ο. 19 to, for lack of a better expression, that cast ballot; is that right? 20 21 That would be correct, yes. Α. 22 The -- this particular printout does not Ο. 23 show a voter SN; do you see that? 24 I do. Α. Why is there a field for a voter SN? 25 Ο. Page 94

1 Α. I do not know. 2 0. Is there an option in GEMS to show the voter SN there? 3 I do not know. 4 Α. 5 And the voter SN would be the way to 6 identify a voter? 7 Α. I do not know. 8 O. So it could be that if you configured the report differently, the ballot image report could 9 identify the voter; is that right? 10 11 I have never seen a way to configure the 12 report. 13 MR. BROWN: Let's take a break for a 14 second. 15 THE VIDEOGRAPHER: The time is 12:34 p.m. 16 We are off the record. 17 (WHEREUPON, a recess was taken.) 18 THE VIDEOGRAPHER: Stand by. The time is 12:35 p.m. We are back on the 19 20 record. 21 (By Mr. Brown) You testified that the voter -- do you know what the SN would stand for? 22 23 Α. I do not. 24 That blank is not used now, as far as you know? 2.5 Page 95

1 envelope, opening the inner envelope, removing the 2 ballot and then getting the ballots stacked however 3 they may want to stack them so that they can then be processed through the optical scan devices. 4 5 Once they have finished processing a -- you 6 know, a set of ballots or completing the process, 7 they then send a what's called an ender through the 8 optical scan device and the ender card tells the 9 optical scan device, the election's ended, you can print a tape now. So the optical scan then prints 10 11 out a tape and it shows the results calculated -- you 12 know, collected by that device through the scanning 13 process. And, again, three tapes are printed and 14 15 then that memory card is removed and brought over to 16 the GEMS environment where it is also uploaded. 17 Okay. Amazing. So the ender card --Ο. Uh-huh. 18 Α. 19 Q. -- is that -- is that like a paper ballot? 20 Α. Yes, yes. 21 So it's not like a memory card? Q. 22 It is -- it is a physical piece of paper. Α. 23 Q. And the stacking of the ballots to process through the optical scan, is that because the optical 24 25 scanner can process multiple ballots at once?

A. It's because the optical scanner is actually limited in its memory size. When -- an example would be in Fulton County. The absentee location, the absentee has to have all precincts assigned to it. Because anybody can vote absentee. And we have to count votes by precincts within the State of Georgia at the absentee level.

So Fulton County has over 300-plus

So Fulton County has over 300-plus reporting precincts, precincts. But an optical scan memory card can only hold up to 22 reporting precincts at a time. So Fulton County has to create a memory card that handles one through 22. And then a memory card that handles precincts 23 through 44 and so forth and so on until they get all of their precincts accounted for.

So when the ballots are received back in the elections office, they have to remove the ballot from the envelope and there are identifiers on the ballot at the bottom that tells you what the reporting precinct is that that ballot is assigned to. So they have to stack the ballots by certain combinations of precincts because that scanner can only read those ballots.

And this scanner over here can only read this other set of ballots and so on forth and so on.

1 So that's why they have to organize the ballots 2 before they start scanning the ballots. 3 Do you have any understanding of how fast Ο. 4 the optical scanner can process certain number of 5 ballots? 6 Well, it processes one ballot at a time. Α. 7 Because the ballot is fed one ballot at a time. 8 how quickly that ballot is processed is a matter of 9 how long is the ballot, how complicated is the ballot. But it's a matter of feeding that ballot 10 one, one feed at a time. 11 12 The scanners that the counties have as part 13 of the State's system are all classified as precinct count, precinct scanners. And they are designed to 14 15 be -- they were actually designed to be at the 16 polling location on Election Day and be fed by the 17 voter directly. But when the State procured this system, there was no central scanner available, it 18 19 was only these precinct level scanners. So we have been able -- we have been using 20 21 a precinct level scanner in a central scanning 22 capacity. 23 Q. And people also vote absentee on DRE 24 machines, correct? 25 Α. That is correct.

1 Does your office conduct or create any 2 trainings related to administering elections on the optical scan ballots? 3 Only in connection with the whole system. 4 5 We have never conducted a training class on using 6 optical scan ballots or election day use, setting up a scanner in the polling location and managing 8 optical scan ballot handout. We have never done anything of that nature. 9 10 Is training on the optical scan ballot 11 process part of the existing training on the rest of 12 the system that your office conducts? 13 Α. We train them on how to use that Right. optical scanner as that central scanner, like I 14 15 referenced earlier. But we have never trained them 16 on how to set the scanner up as a polling place 17 That is -- that's a different scanner. 18 configuration. 19 Are you aware of any cost estimates of what 20 it costs to administer election using the optical 21 scan ballots? 22 Α. I do not. 23 Ο. Has your office studied what it would take 24 to administer an election solely using optical scan ballots? 2.5

1 have to be slightly adjusted, but they would have all 2 have to be adjusted. It would not be something at the county level. It would have to be done at the 3 State level. 4 5 Do you have any estimate as to how much 6 time that would cost? Α. I don't because, again, I would have to 8 look at the database to see how they are organizing their election day polling locations. Is it, you 9 know, one-to-one, multiple to one. So I don't have a 10 11 true estimate of how long it would take. 12 How does the way that they organize their 0. 13 election day polling locations impact the way that the database is structured? 14 15 Again, we talked about earlier especially 16 in the absentee, is when you have to count votes at the precinct level. So whether it was an absentee 17 ballot, whether it's an election day ballot, whether 18 19 it's a provisional ballot, whether it's a mail-in ballot, they all have to be processed back to the 20 21 county to the precinct level. 22 So the polling -- so the scanner that would 23 be used in a polling location has to have the 24 precincts associated to it. In most circumstances, 25 that's a one-to-one relationship. One polling

1	CERTIFICATE
2	STATE OF GEORGIA)
3) ss.:
4	FULTON COUNTY)
5	
6	I, Robin Ferrill, Certified Court Reporter
7	within the State of Georgia, do hereby certify:
8	That MICHAEL BARNES, the witness whose
9	deposition is hereinbefore set forth, was duly sworn
10	by me and that such deposition is a true record of
11	the testimony given by such witness.
12	I further certify that I am not related to
13	any of the parties to this action by blood or
14	marriage; and that I am in no way interested in the
15	outcome of this matter.
16	IN WITNESS WHEREOF, I have hereunto set
17	my hand this 10th day of July, 2019.
18	
19	
20	
21	
22	Dail Jemil
23	CADITY GENT VOO
24	ROBIN K. FERRILL, RPR
25	
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