Introduction and Qualifications

1.   I am the owner of RSM Election Solutions LLC, an election technology and cybersecurity consulting and advising company organized in Washington, District of Columbia, registered as a foreign LLC in Oklahoma, and operating out of Tulsa, Oklahoma. RSM Election Solutions LLC's core principle is: Resiliency in the election infrastructure = Securing election technology + Mitigating risk to the democratic process.

2.   I declare that the following facts that are based on my personal knowledge or on my review of documents and records created, maintained, and retained in the ordinary course of business. I have not had access to the Antrim County voting equipment, or any voting equipment in the State of Michigan.

3.   I am a subject matter expert on election technology, security, and policy. In this capacity, I have developed strategies and advise the election community on ways to build resiliency in the election infrastructure. I engage directly with election officials to identify risks to the election infrastructure and processes, as well as highlight mitigative measures, compensating controls, and best practices that election officials and private sector partners can implement to manage the risks. Previously I was the Acting Director of U.S. Election Assistance Commission (EAC) Voting System Testing and Certification Program, where I was the lead on modernizing the Voluntary Voting System Guidelines (VVSG), version 2.0,[1] which focus on ensuring all voting systems are secure, accurate, and accessible. I developed the 17-Functions process model that defined the scope of the VVSG 2.0 so that non-traditional election technologies could be tested to the same standards as traditional voting systems. In that role, I managed multiple applications and

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[1] https://www.eac.gov/sites/default/files/eac_assets/1/6/VVSGv_2_0_Scope-Structure(DRAFTv_8).pdf (last accessed December 15, 2020).

testing campaigns by Dominion Voting Systems, including the Democracy Suite 5.5 Voting System that is used in the State of Michigan. Prior to joining the EAC, I spent 10 years with the California Secretary of State developing and implementing legislation, policies, and procedures on election technology and security, including overseeing all voting system testing and certification.

Expert Analysis

1.   My review of the Allied Security Operations Group (ASOG) Antrim Michigan Forensics Report (Report) determined that ASOG has a grave misunderstanding of the DVS D-Suite 5.5 voting system, a lack of knowledge of election technology and process, and therefore, has come to a preposterous conclusion. Much of this conclusion was derived by regurgitating unsubstantiated claims of misinformation and disinformation about voting system companies and voting system software, many of which are not used in Antrim County.

2.   The Dominion Voting System's (DVS) Democracy Suite (D-Suite) 5.5 was certified by the United States (U.S.) Election Assistance Commission (EAC) – a bipartisan commission that overseas the administration of elections and the federal voting system certification process – on September 14, 2018.[2] It was certified to the EAC's Voluntary Voting Systems Guidelines (VVSG) version 1.0.[3] Testing against the VVSG as well as obtaining EAC certification is voluntary and not mandated by federal law, as indicated in the Report. Further, there are references to accuracy requirements of the Federal Election Commission (FEC) 2002

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[2]
  https://www.eac.gov/sites/default/files/voting_system/files/DSuite55_CertConf_Scope%28FINAL%29.pdf (last accessed on December 15, 2020)

[3] https://www.eac.gov/sites/default/files/eac_assets/1/28/VVSG.1.0_Volume_1.PDF (last accessed on December 15, 2020)

Voting System Standards (VSS), as well as the VVSG version 1.1, neither of which are applicable to the certification of the voting system that was reviewed.[4]

3.   The D-Suite 5.5 voting system is comprised of multiple software, hardware, and firmware components. The back-end computer server system, known as the Election Management System (EMS), is a suite of multiple independent software applications. Further, there are multiple tabulators to facilitate the scanning and tabulating of paper records.

4.   Antrim County has not purchased, installed, and did not use the full suite of the DVS D-Suite 5.5 voting system. Rather it has a subset of the EMS applications and only one of the tabulators. The EMS software that Antrim County utilizes are the Election Event Designer (EED) version 5.5.12.1 and Results Tally & Reporting (RTR) version 5.5.12.1. The tabulator that Antrim County uses to scan paper records and tabulate the results is the ImageCast Precinct (ICP).

5.   Antrim County does not own a license for, nor has it installed the EMS Adjudication software applications and services. The version of this optional software that was certified with the DVS D-Suite 5.5 voting system is EMS Adjudication version 5.5.8.1. Additionally, Antrim County does not own the hardware, software, and firmware for the ImageCast Central tabulator, which is the only tabulator that is compatible with Adjudication software.

6.   The report purports to have performed "forensic duplication of the **Antrim County Election Management Server** running **Democracy Suite** 5.5.3-002" (Paragraph 20, Page 12). This is factually incorrect, as there is not a Democracy Suite 5.5.3-002. Rather 5.5.3-002 is the version of the ImageCast Precinct tabulator (i.e., the scanner voters place their ballot into), not the

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[4] https://www.eac.gov/voting-equipment/voluntary-voting-system-guidelines (last accessed on December 15, 2020)

election management server. This alone demonstrates gross negligence in the research, review, and forensic analysis performed. Further, this is the only reference to any voting system software. All other references are the underlying Windows Operating System or ballot definition (i.e., database configuration) files. The ballot definition files are the files that the State of Michigan and Antrim County have identified as having an error prior to the election and therefore needed to be updated in advance of the election. These configuration files are not part of the certified voting system software, are unique to every election, and are regularly updated in advance of the election.

7.   Many of the unsubstantiated claims of fraud allude to the ability of the Adjudication software to have "[b]allots sent to adjudication can be altered by administrators…" (Paragraph 11, Page 2). This is the software that the county does not own nor would it have the capability to use because its voting system tabulators are not compatible.

8.   The report distorts the Adjudication software with the process of adjudicating a ballot – where an election official or bipartisan team determines the voter intent. It implies that any ballot that is distinguished as needing to be adjudicated as being fraudulent because an administrator can change a vote in the Adjudication software. As previously described, Antrim County does not have the Adjudication software and any ballot that would need adjudication would be conducted manually (i.e., by duplicating a ballot or manually determining the validity of a write-in candidate).

9.   Further, the Report states "all adjudication log entries for the 2020 election cycle are missing…Removal of these files violates state law and prevents a meaningful audit…We must conclude that the 2020 election cycle records have been manually removed." Since Antrim County does not have the Adjudication software, there should be no record of Adjudication software files. Without the Adjudication software there would not be any Adjudication software logs. All ballot

adjudication and ballot duplication would have been conducted manually and therefore any logging of that process would have also been conducted manually (i.e., on a piece of paper). Therefore, the forensic audit of the software would not have turned up any records.

10.   Section J of the report, entitled "Error Rates" is based on a lack of understanding of the voting system. It describes three settings "divert," "reversed," and "override". Each of these settings are parameters that are set on the ICP tabulator to handle ballots with exceptions, not "errors". Divert is a parameter that will physically separate a ballot in the ballot box when the ballot is marked by the voter with specific conditions (i.e., voter voted for a write-in or overvoted a contest). Reversed is a command for the ICP tabulator to kick the ballot back out - or reverse the ballot – to the voter because the ballot is unrecognizable (i.e., damaged timing marks or ballot for the wrong precinct or county). Override is a setting that allows a voter cast a ballot that has a voter initiated error or mark on the ballot, such as when a voter overvotes a ballot. In this instance the voter marks more candidates than allowable (i.e., marks all candidates for president), the ballot is then reversed to the voter and notifies the voter of the error they made when marking the ballot, yet provides an opportunity for the voter to override and count the ballot as marked with the voter initiated error – a voter may do this as a protest vote or may not want to spoil their ballot and take the time to mark a new one. In conclusion, any logging of "divert," "reversed," and "override" is not an error, as the machine is accurately handling the ballot based on the voting machine configuration. To draw an analogy, calling these an error would be synonymous with stating that you reviewed a car's logs and for each instance that the gas light turned on we will call it an error.

11.   Paragraph 3 of Section J mentions "an algorithm used that will weight one candidate greater than another (for instance, weight a specific candidate at a 2/3 to approximately 1/3 ratio). In the logs we identified that the RCV or Ranked Choice Voting Algorithm was enabled

(see image below from the Dominion manual)." The version of D-Suite (version 5.5) used in Antrim County does not have the capability to run the RCV algorithm – the screenshot provided is for the D-Suite 5.11 voting system.

12.   The implied voter fraud is based off a description of software Antrim County does not own, for versions of the software that are not compatible with the version of the voting system Antrim County owns and would require hardware Antrim County does not have. The Report concluded that this perceived fraud should invalidate the results of the election in Antrim County and the entire State of Michigan. The main point to emphasize is that the results of an election are certified based on the results of each valid vote and Michigan has a paper record for each valid vote, which can be – and will be in Antrim County - hand counted to validate the outcome of the election.

Conclusion

13.   Based on my review of the ASOG Antrim County Forensic Report with my expertise in election technology, I conclude that the majority of the findings are false and misleading due to the fact that the entities reviewing the system lack knowledge and expertise in election technology. Further, I conclude that the majority of the findings do not pertain to the version of the voting system in use in Antrim County and therefore, were intentionally derived, based on biases and a predetermined outcome, to spread mis and disinformation that has been previously disputed by the election community, federal government, and experts alike. I concur with each of these individuals that "The November 3rd election was the most secure in American history." There is nothing in this report that would prove otherwise.

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Ryan Macias