



SACRAMENTO REGISTRAR OF VOTERS

Election 2020

A Limited Case Study

"A secure and resilient electoral process is a vital national interest and one of our highest priorities."

Department of Homeland Security

<https://www.dhs.gov/topic/election-security>

OVERVIEW

In December 2020 our cyber election team was invited by Mrs. Courtney Bailey-Kanelos, the Registrar of Voters in Sacramento County, California to review Sacramento's election system, and to audit the 2020 election results. The cyber election team was offered a \$1.00 contract by the Registrar of Voters to perform the work (see Exhibits). The cyber election team accepted, and placed a technician on a plane to Sacramento within 24 hours.

ENVIRONMENT

Unfortunately, if one has spent any time in Washington, DC, one understands that the town is filled with people who have extremely sharp elbows, and frequently put their own agendas above the interests of the American people. In this instance, a bad actor got word that a technician was on a plane headed to Sacramento, and proceeded to blow-up phones in Sacramento. Before the cyber election team's tech landed in Sacramento, the audit effort had been squashed, as others in the County were now involved and the brakes put on the planned contract. Obviously, this was a great disappointment.

LIMITED CASE STUDY

The cyber election team's technician did, however, receive a tour of the election facility by Mrs. Bailey-Kanelos, who was and continues to be extremely gracious in all dealings. The cyber election team's technician was escorted to every part of the building by Mrs. Bailey-Kanelos and allowed to take photographs of anything he wished.

In this brief document, we will post some of these photographs, and explain their significance, as they demonstrate how an election official, with the best of intentions, can expose this complicated election system to bad actors and potential manipulation.

BACKGROUND

- Mrs. Chris Bish, a local real estate agent, was a Republican Candidate for California's 6th Congressional District in November 2020 (<https://bishforcongress.org>).
- Mrs. Bish lost her political race to Doris Matsui (<https://results.saccounty.net/resultsSW.aspx?type=REP&map=MPRC&shape=Nov2020>).
- Over the course of Mrs. Bish's political campaign, she toured the Sacramento County Voter Registrar 4 times and communicated directly with Sacramento County employees.
- After Mrs. Bish's second visit to the voter registrar, she received a link to the Sacramento County Grand Jury Report (see Exhibits) showing flaws in the voting system and security, and calling on cyber security audits of the Sacramento election system.
- Mrs. Bish learned that the Grand Jury ordered that Homeland Security audit the Sacramento election system prior to the November 2020, but it is the cyber election team's understanding that this audit has been delayed until 2021.
- Mr. Mark Cook, an IT Security Consultant, was contacted by Mrs. Bish and asked if he would be available to perform a security audit of the Sacramento County 2020 election system and result.
- Mr. Cook prepared a brief contract proposal (see Exhibits) for Sacramento County, and forwarded the proposal to Mrs. Bailey-Kanelos, per Mrs. Bailey-Kanelos' instructions.
- Mr. Cook boarded a plane within 24 hours, and met the same day with Mrs. Bailey-Kanelos at their offices in Sacramento, California.
- Mrs. Bailey-Kanelos was gracious enough to provide Mr. Cook with a tour of the Sacramento facility, allowing him to take photographs of the facility and contents.
- Mr. Cook was informed during this tour that there was another party who sought a contract to conduct the election audit, and that the contract award process would now be handled by Sacramento County administrators for an official bidding process, as Mrs. Bailey-Kanelos no longer had sole authority to issue said contract.
- Mrs. Bish sent a Freedom of Information Act (FOIA) to the Sacramento Registrar of Voters requesting information and data that would effectively allow the cyber election team to conduct an audit remotely (see Exhibits).

FOIA RESPONSE

- The County Counsel for Sacramento County denied the FOIA request (see Exhibits).
- In its response, Sacramento County effectively stated that the release of requested information would call into question the security of future elections, and that the public was better served by not releasing this information.

PRELIMINARY FINDINGS: PHOTO GALLERY

Photo #1

Name: Made in China

Discussion: The pallet racks in the warehouse were filled with approximately 100 boxes labelled as Dominion Voting, MADE IN CHINA.



Photo #2

Name: Ballot Printing Station

Discussion: This laptop contains the Dominion ballot printing software and is connected to the ballot printer.

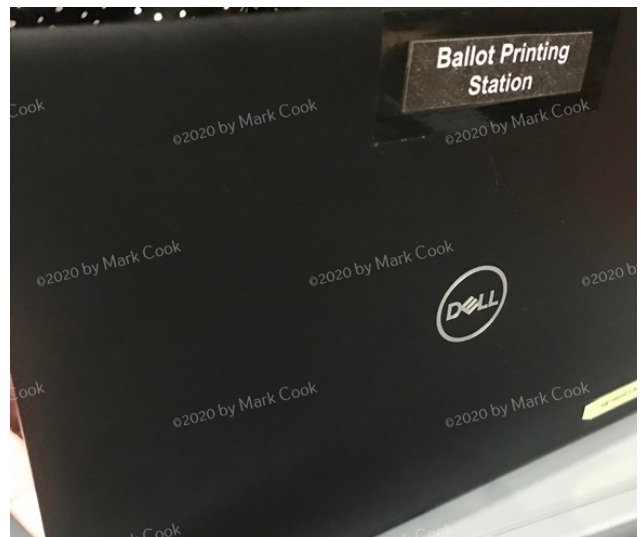


Photo #3

Name: Ballot Printing Station Password

Discussion: The password for accessing the Dominion ballot printing software and printing ballots is taped to the laptop for any user to see and use.

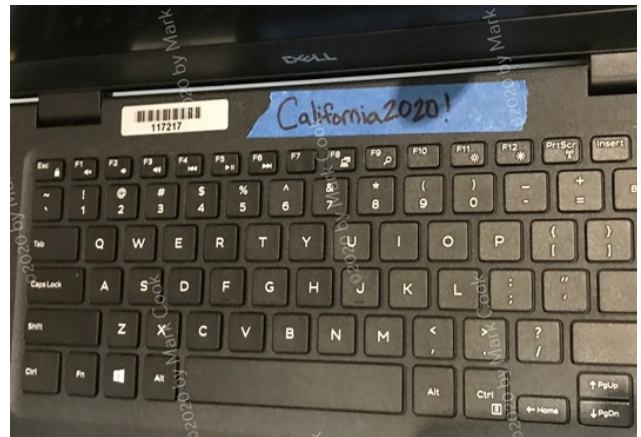


Photo #4

Name: Ballot Printer

Discussion: The ballot printer is connected to the ballot printing station. The ballot printer was full of blank ballot paper, as shown.

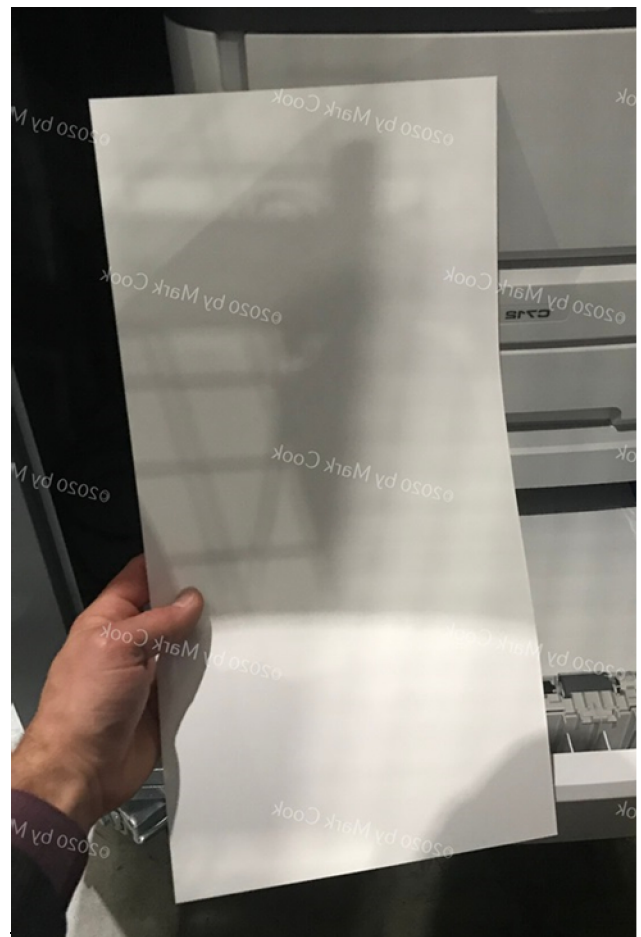


Photo #5

Name: Adjudication Room

Discussion: Our cyber technician was told that this room was where the adjudication terminals and staff were located on election day.



Photo #6

Name: Adjudication Network Jack

Discussion: In the Adjudication Room our cyber technician was told the adjudication terminals were connected to the red jacks seen in the picture. The technician learned that the red jacks are connected to the building's network wiring.

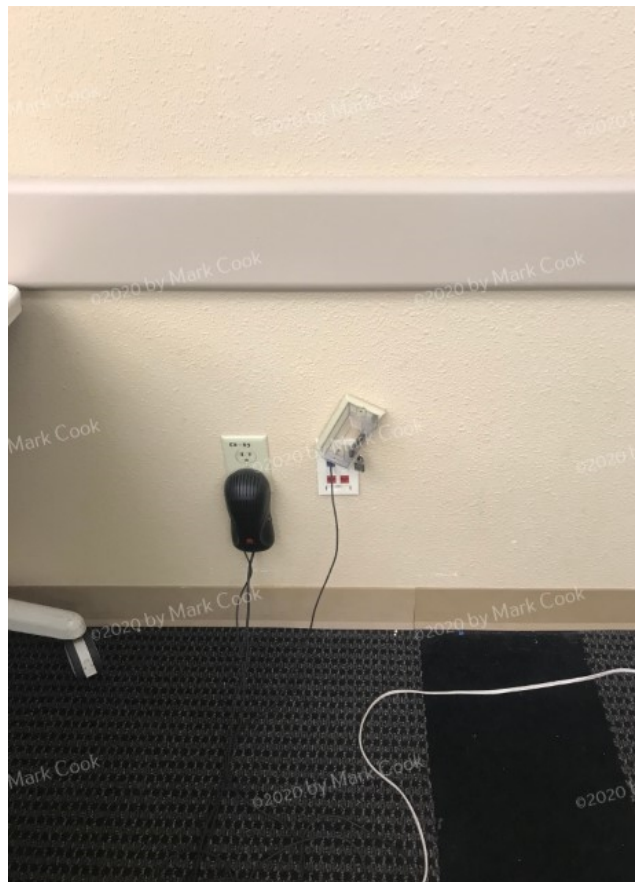


Photo #7

Name: Adjudication Terminals

Discussion: Cyber technician counted 10 adjudication terminals on the shelf in storage.



Photo #8

Name: Adjudication Terminal
Network Cabling

Discussion: Cyber technician found a tub of network cabling that he was told was used to connect the adjudication terminals.



Photo #9

Name: Adjudication Network Cables #1

Discussion: Cyber technician was informed that these network cables, that came through the wall, were also connected to the Adjudication Room.



Photo #10

Name: Adjudication Network Cables #2

Discussion: The Adjudication Network Cables from Photo 9 were laying at the door of the Adjudication Room.



Photo #10

Name: Ballot Definition, Tabulation & Reporting Terminals

Discussion: There are numerous loose USB flash drives sitting on the table and terminals.



Photo #11

Name: USB Flash Drive #1

Discussion: Dominion USB Flash Drive sitting next to Ballot Definition, Tabulation & Reporting Terminal.



Photo #12

Name: USB Flash Drives #2 & #3

Discussion: Dominion USB Flash Drives sitting next to Ballot Definition, Tabulation & Reporting Terminal. In this picture, what is of particular interest is that one flash drive is labelled "BIOS", which allows one to reprogram the operational firmware of the computer.



Photo #13

Name: USB Flash Drive #4

Discussion: Consumer grade flash drive sitting next to Ballot Definition, Tabulation & Reporting Terminal. Election official indicated that this USB was not provided by Dominion, but provided by the county for the employee use.



Photo #14

Name: USB Flash Drive #4 (backside)

Discussion: Back side of USB Flash Drive #4, showing a unique identifier, probably assigned by the county.



Photo #15

Name: Reporting & Tabulation Server
Connected to County Server
Rack (rack rear)

Discussion: Election reporting & tabulation server is connected to the county's server rack which is connected to a network as well as the Internet (see cables on far-left side of photo).



Photo #16

Name: Reporting & Tabulation Server
Connected to County Server
Rack (rack front)

Discussion: Here we see the Election reporting & tabulation server with an Internet connected Voice Over Internet Protocol (VOIP) telephone on the floor.

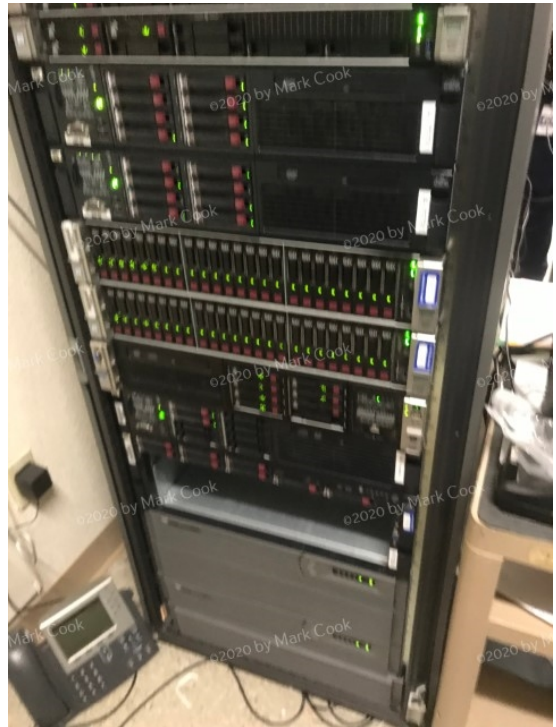


Photo #17

Name: Reporting & Tabulation Server

Discussion: This is the front of the terminal that is connected to the election reporting & tabulation server rack as show in Photo #15. What is of interest in this photo is that there is a case that appears to have contained a portable hard drive.



Photo #18

Name: Pallet of Ballots

Discussion: This photo left more questions to be answered, but denied opportunity to return to ask.

The cyber election team tech saw shelves of sorted ballots in this ballot storage room.

However, this pallet of ballots was separate from the ballots on the shelves, and dated 12/15/20 on the outside of the plastic wrap around the ballot.

Warehouse workers have full and unsupervised access to ballot storage room.



PRELIMINARY FINDINGS: SUMMARY

- Given the photographic evidence above, and the information provided by the voter registrar, our cyber election team concludes that it would have been trivial to:
 - print unlimited ballots while unsupervised;
 - connect the election system to an external network or the Internet during the election;
 - introduce new software, firmware, voted ballots into critical election equipment via USB or portable hard drive;
- Numerous election officials and warehouse workers have unfettered access to key election systems and ballots.
- Sacramento refused to address numerous security concerns as required by Grand Jury prior to the 2020 Election, and instead stated they would address them after the election (see Exhibits).

ELECTION OFFICIALS' PREDICAMENT

- Election official are largely extremely honest, hardworking, diligent, and care deeply out American democracy.
- But unfortunately, we have provided election officials with a technological system that is too advanced to manage and keep secure. They are simply not trained to do so.
- We have the greatest respect for the challenges they face. But election officials simply cannot be successful in the current environment.
- Obviously, this must change.

SACRAMENTO RESPONSE

In the goal of transparency, the cyber election team has provided a copy of this case study to Mrs. Bailey-Kanelos and will post here any and all comments from the County of Sacramento.

EXHIBITS (links)

- \$1 Contract Proposal to Audit Sacramento Election.
- Freedom of Information Act (FOIA) Request by Chris Bish (Dec 16, 2020)
- FOIA Response from Sacramento County (Dec 22, 2020).
- Affidavit of Mark Cook.
- Affidavit of Chris Bish.
- Email of Jan 6th, 2021 to Mr. Cook from Mrs. Bailey-Kanelos.
- Sacramento County Grand Jury Report, page 89 (June 28, 2020)