# What we believe happened in the May 16, 2006, Regional Transportation Authority (RTA) bond election in Pima County, Arizona.  By John R Brakey   7.18.2008

### In our opinion, this account reveals profound problems in the Pima County Election Department.

Please watch this video from the HBO movie, *Hacking Democracy*:   It has been re-edited with additional information about Pima County. If you read this article after watching the video, you'll have a good understanding of how we believe the RTA bond election was stolen.

http://video.google.com/videoplay?docid=3172794162427293743&hl=en

In the film, a device called a Cropscanner, a memory card-reader/programmer, is used to modify the memory card in the Diebold Accu-Vote Precinct-Based Optical Scanner (PBOS), the same vendor and equipment used in Pima County. On July 4th, 2005, Black Box Voting (BBV), an election integrity organization, published the results of this Tallahassee, Leon County, FL voting system test. After the release of the BBV report, there was a spike in Cropscanner sales.

Beside vote manipulation, the original use for this device is measuring moisture content in corn.

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*Multispectral Radiometry and Data Acquisition/Control Systems*

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Tucson, AZ 85701

**SHIP TO:**     **INVOICE  0507182**
Pima County Governmental Center
Attn:  Bryan Crane (Tel: 52-740-4270)
Department of Elections
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| Reference Number | Date Shipped | Shipped Via | Col PP. FOB Point | Terms | PO Number | Sales Person | Date |
|---|---|---|---|---|---|---|---|
| | 7/18/2005 | UPS 2nd Day | Rochester, MN | Net30 | None, Order by Email - 7/18/2005 | Del Nantt | 7/18/2005 |

NOTE:  Price/Amount in U.S.A Dollars
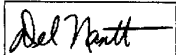
| Quantity | Part No. | Description | Unit Price | Amount |
|---|---|---|---|---|
| | | ———————— P U R C H A S E ———————— | | |
| 1 | MCR | DLC Memory Card Reader/Programmer | $365.00 | $365.00 |
| 1 | RS9M9F-5 | RS232 Serial Cable, DLC/MCR to Terminal/PC, DB9 male - DB9 female (5 feet) | $22.50 | $22.50 |
| 1 | DLCPS-12 | 12 Volt Power Supply/Charger for DLC or MCR (110VAC U.S.) | $25.00 | $25.00 |
| 1 | MCRUM | MCR User's Manual | $12.50 | $12.50 |
| 1 | RWCARDSW | Memory Card Read/Write Software - on Diskette | $75.00 | $75.00 |
| | | Invoice Subtotal: | | $500.00 |
| | | Shipping & Insurance | | $21.71 |
| | | TOTAL: | | $521.71 |
| | | Made in United States of America | | |
| | | Terms: C.I.F. (Cost, Insurance, Freight - Prepaid) | | |
| | | Package 1: 11 x 8 x 7 inches | | |
| | | Weight:  2.5 lbs | | |

Remit Payment (by bank wire transfer/EFT, U.S.A. dollars) to:
Bank of the West
Main at Broadway
Fargo, North Dakota  58124 U.S.A.
SWIFT Code: BWSTUS66   ABA Number: 121100782
CROPSCAN, Inc. Account Number: 926002817

Or Remit Payment
(U.S.A. Funds) to:
CROPSCAN, Inc.
1932 Viola Heights Lane NE
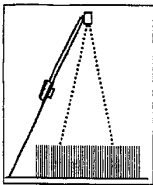Rochester, MN  55906-6924
USA

*Del Nantt*

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The Pima County Election Department bought a Cropscanner on July 17, 2005, less than two weeks after the report and ten months before the RTA election.

In the opinion of computer security expert Harri Hursti, the Diebold Accu-Vote system is compromised in its very design and architecture. Incorporated into the foundation of the Diebold PBOS 1.94w system used by Pima County is the mother of security holes, and no apparent cure will produce system safety. This design would not be characterized as a house with an unlocked door, but rather, in this author's view, a house with an unlockable revolving door. The complete report is at: www.blackboxvoting.org/BBVreport.pdf

Mark Kimble of the Tucson Citizen wrote an article August 11, 2005, "Kimble: 'Mother of security holes' in state voting system"
http://www.tucsoncitizen.com/news/opinion/081105b5_kimble

We learned that Pima County had purchased the "Cropscanner" in a deposition of Bryan Crane. The question was brought up due to the fact that Jim March had learned from Bev Harris (founder of Black Box Voting) that the "Cropscanner vendor told Bev that after the July 4th report a number of election departments had order the devise.

During the RTA election, more than 70 scanners failed at various precincts on Election Day. We believe this may have happened due to tampering with or incorrectly programming memory cards.

As Harri Hursti demonstrates in altering these memory cards, a variety of typos and changes can be introduced, but the process is complex and tricky.

While inspecting precincts on May 16th, 2006, John Brakey discovered many Diebold PBOS scanners failing. Brakey called Representative Ted Downing, Chair of the State Party Election Integrity committee, and asked him to go to the Pima County Election Department. After he arrived,Brakeyl told Downing to call Jim March in Seattle and describe what he saw in the room.  Downing described a Microsoft Access manual being referenced by election department technician Bryan Crane, a blatant violation of election law. Downing then called Donna Branch-Gilby, at that time the Chair of the Pima County Democratic Party, and asked her to bring a camera.  Donna came with her husband, Bob Gilby, and took pictures of the open manual sitting right next to the central tabulator.

At that time, Rep. Downing requested of Pima County Elections Director Brad Nelson that an immediate backup "snapshot" of the election data be made and that it be left with the Pima County Sheriff's Office until the situation was resolved. This request was refused.

Both Ted and Donna were told that they had no oversight rights because it was a nonpartisan election, thus stopping them from discovering if the central tabulator was networked to other computers in the office and if the Microsoft Access program was being used to read the system.

By the time we were able to check the computer almost a year later, the program was gone.

The Diebold Global Election Management System (GEMS) software is built on the Microsoft Access consumer-grade database program. It is illegal by state law for election departments to use software such as Microsoft Access which has not been approved and/or certified by the Secretary of State's office. This is because the Microsoft Access program can be used to bypass security measures, including the GEMS audit log and the login security, and introduce unauthorized and illegal changes.

Microsoft Access is not legal anywhere near a certified voting system. It is a known election burglary tool, able to subvert all of Diebold's inadequate-at-best security measures. The same is true of the Sequoia voting system. We did find Microsoft Access in the Maricopa County Election Department, which counts 58% of the vote statewide.

For the RTA election, Bryan Crane processed 13,618 early ballots on 5/10/06, six days prior to Election Day. He did a backup at 12:27 PM, then ran the "CARD CAST report," the correct way to check the tally without revealing election results. He left at the end of the day.

### Diebold GEMS Audit Log From The May 16, 2006 RTA Election

| | |
|---|---|
| 5/10/06 8:21 AM | User admin: Reset election |
| 5/10/06 8:22 AM | User admin: Printing Summary Report  (Brakey Note:  these two summaries are called Zero reports and are OK) |
| 5/10/06 8:38 AM | User admin: Printing Summary Report  (Brakey Note:  these two summaries are called Zero reports and are OK) |
| 5/10/06 12:27 PM | User admin: Backed up election to D:\Program Files\GEMS\Backup\pima consolidated 051606 EARLY DAY1.gbf |
| 5/10/06 12:27 PM | User admin: Previewing Cards Cast Report **(the proper way to verify that the 13,618 ballots were counted )** |
| 5/10/06 12:28 PM | User admin: Backed up election to D:\Program Files\GEMS\Backup\pima consolidated 051606.gbf |
| 5/10/06 12:28 PM | User admin: Closing GEMS |

In open court, it was shown that Crane was illegally taking home database backups and during the RTA counting, Crane had at least one other computer networked with the central tabulator.

The next morning, 5/11/06, at 9:55 AM, Crane began an unusual procedure that led to the destruction of the original vote tallies and database from the day before, and their replacement with another database of identical name. Crane then illegally printed two copies, ten minutes apart, of the election "SUMMARY report," a detailed outline of who's winning and losing. By law, these reports are NOT to be printed until one hour after the polls close on Election Day.

To summarize, Crane ran what looked like normal actions on 5/10/06 and made a "snapshot backup" of the file when counting was done for the day.  On the morning of 5/11, he WROTE OVER the database from the day before, destroying its integrity. He then printed two copies of the "who's winning and losing" summary report, ten minutes apart.

This pattern of illegally making off with database backups, then overwriting data and printing summary reports is the model for hacking an election. First a false database is created or obtained, then the false data is used to replace existing data, and last, the winning and losing summary reports are printed to confirm that the hack was successful.

Crane later said under oath that morning backups were standard, but a review of the audit logs shows that to be false. He never did them as he stated to Judge Michael Miller in Court. (More on this below)

| 5/11/06 9:55 AM | User admin: User Login  **(Note time in the next 5 rows)** |
| 5/11/06 9:55 AM | User admin: Open Election:  Consolidated Election, May 16, 2006 (pima consolidated 051606) admin Host |
| 5/11/06 9:56 AM | User admin: Backed up election to D:\Program Files\GEMS\Backup\pima consolidated 051606 EARLY DAY1.gbf |
| 5/11/06 9:56 AM | User admin: Printing Summary Report **(NOT supposed to be printed until one hour after the polls close)** |
| 5/11/06 10:06 AM | User admin: Printing Summary Report |
| 5/11/06 12:06 PM | User admin: Previewing Cards Cast Report **(proper way to check if ballot are counted correctly**) |

In a meeting Attorney Bill Risner, Donna Branch-Gilby, Jim March of Black Box Voting and I had with Director Brad Nelson several days after the RTA election, he was asked if Jim March could enter the election counting room, take pictures, inspect the cables and look around but touch nothing. The reason for this request was that the network-connected printer was not in the count room and we wanted to know if the central tabulator's network was connected to any other PCs. Nelson refused saying, "Ladies and gentlemen, I can't do that, I have a live election going on." Nelson was referring to the Oro Valley election. We have pictures of the count room from that meeting. The lights were off and no one was in that room. Nelson apparently didn't want us to inspect.  Much later in the lawsuit we learned from Robbie Evens of Pima County that the central tabulator station was cross-connected to Bryan Crane's computer at that time.
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We believe this connection allowed Crane to load the database on to his office computer. Then using MS-Access, make changes to the database and if necessary at home that night and then overwrite the original database the next morning.

Nothing in our analysis conflicts with this theory.