How U.S. citizen election observers can detect and prevent vote counting fraud

The vote is an American citizen's most sacred act.

Every part of the process must be verifiable in real time so that the tally accurately reflects the votes cast. reople we trusted to guard the vote have exploited it for personal gain

What is Man-in-the-Middle?

As the name suggests, "Man-in-the-Middle" is a person or group with insider access to the data flow as vote totals are communicated from local precinct upstream to the district, county and state vote tabulators. Since this scheme requires authority to tap into data networks (and authorized by a state contract or subcontract), your Secretary of State or a key staffer is generally complicit in Man-in-the-Middle voting fraud, either directly or through surrogates. Such fraud occurred in the 2004 Ohio Bush-Kerry presidential vote. Voting tends to take one or more of three options.



Figure 1: Paper ballot – **Verifiable** and certifiable assuming bipartisan chain of custody is unbroken. Certification without unbroken chain of custody is fraudulent.

1. Paper ballots

With paper ballots, every step of the process can have bipartisan double-checking, assuming that the vote totals are hand delivered up the line to the state tabulator. At no time should any part of this task be delegated to one person, like a law enforcement or election officials. It must be under the eyes of bipartisan observers the entire time.

2. Electronic scanners of paper ballots

Theoretically, an accurate tally of scanned paper ballots can be compared to the actual ballots. However, precincts generally *do not double check the scanner print out with the ballots*. This must be done 100% of the time. Some states do random sample testing. However, at best that only verifies the machines checked. Also, such testing does not detect fraudulent programming routines that can easily conceal themselves when tests are occurring.

Election judges blindly verify the vote tally printed out from each scanner. This is the first "Man-in-the-Middle" audit fix when ballot scanners are used. In this case, the Man in the Middle is an unseen



Figure 2: Electronic paper ballot scanner – **Verifiable** if the ballots are counted and double-checked against machine tally, and chain of custody unbroken. Certification without counting the ballots and unbroken chain of custody is fraudulent.

¹ Deposition of Michael L. Connell, Doc. No. 118-2, Nov. 3, 2008, *King Lincoln Bronzeville Neighborhood Assn., et al., vs. Ohio Secretary of State Jennifer Brunner, et al.,* 06-cv-745-ALM-TPK (S.D. OH 2006)(Filed: 07/15/11).

programmer who can easily rig the software to change the tally. Such programming can be detected and avoided if bipartisan observers do real-time checking of the paper ballots against the scanner print out. *See* the HBO documentary Hacking Democracy (2006).

Precinct tallies should be hand delivered by a bipartisan group to the county tabulator. The group should observe their tally being added to the official county tallies.

The county tallies should be hand delivered by a bipartisan group to the state. No electronic transfers should be permitted since the tally would otherwise be at risk of Man-in-the-Middle "shifting" of votes. If the county insists on an electronic transfer, then observers should install bipartisan monitoring software at the county computer to ensure that the data destination is, in fact, the state tabulator computer (and not a Man-in-the-Middle computer site where tallies can be changed undemocratically).

At the state tabulator, bipartisan county observers must ensure that the county tally is accurately added to the state tally. If the county tally was received electronically, observers should install bipartisan monitoring software at the state tabulator to ensure that the county data came directly from the county tabulator (and not a Man-in-the-Middle computer site where tallies can be changed).

3. Touch Screen Voting Machines

Touch screen voting machines are not easily auditable as currently deployed. Therefore, they should not be used.

A bipartisan audit requires the ability to verify that the tally accurately reflects the votes selected on the touch screen. Unlike with paper ballot scanners, there is no independent record of the voter selection other than the paper tape printout that makes printing noises as the voter makes selections.

Election judges are called upon to suspend logic and go on blind faith that the print out tally from the machine accurately reflects the votes selected.



Figure 3: Touch screen voting machine. Machine tally is <u>unable</u> to be verified. Therefore, any certification of this tally is <u>fraudulent</u> by nature. Also, unbroken chain of custody verification is impossible without bipartisan network monitoring.

Other than the deceptive reassurance of the *sound* of a receipt scrolling by as selections are made, neither the voter, observer or election judge has a way to independently verify that the tally report accurately reflects the votes cast. Any judge that verifies the totals printed from touch screen machines is, by default, fraudulently certifying the vote. They really have no way of knowing and verifying the actual intent of the voter

Without the bipartisan ability to verify the tallies emerging from touch screen voting machines, the precinct vote cannot be certified.

Assuming for a moment that the auditability of touch screen voting machines could be verified, the auditable verifications of the reporting of the tallies would need to follow the bipartisan approaches discussed above for reporting to the state tabulator.

-2-

Unbroken Chain of Custody

The auditing principle is that at no time should the bipartisan chain of custody of the accurate tally be broken by delegating to a single person or unseen bits and bytes on electronic transfers.

Summary of Man in the Middle problems with current voting processes

Ballot type	Vote	Tally	Delivery by	Precinct	Delivery by	County	Delivery	State
		Audit	machine to		precinct to		by county	
		Check	precinct		county clerk		clerk to	
			captain				state clerk	
Paper	Χ	Χ	Bipartisan	Bipartisan	Bipartisan	Bipartisan	Bipartisan	Bipartisan
Paper/scan	Х	Χ	Bipartisan	Bipartisan		Bipartisan		Bipartisan
Touch screen	Х		Bipartisan	Bipartisan		Bipartisan		Bipartisan

Legend: Items in red show segments of the voting process that can be (and likely are) tainted by Man-in-the-Middle vote shifting or which cannot be verified by bipartisan observers.

Table 1: Electronic voting systems are fraught with loopholes. These loopholes are currently filled with Man in the Middle vote shifting schemes all across the country.

Election observers must *immediately* implement ways to conduct bipartisan audits in *real time* at every step of the vote collection, tallying and reporting process.

No part of the process must judges to suspend better judgment. If two or more bipartisan observers cannot *actually* verify the vote or a total, then that method for collecting the vote, tallying the votes and/or reporting the tallies up the chain from precinct and county to the state tabulator must not be used.

Conclusion:

The guideline for a free and fair vote is simple:

Can the process be *verified* and *certified* by bi-partisan observers without a break in the chain of custody, or be forced to believe a machine printout without an ability to audit/double check.²



If **yes**, that process can be used. Bi-partisan observers should be assigned at *precinct*, *district*, *county* and *state* levels to receive and pass the baton until the vote tallies are accurately recorded in the state tabulation.



If no, that process must not be used.

² A machine printout is simply printing totals which may or may not accurately report the candidates or issues selected onscreen. To believe that the printout is accurate because the machine says so is not an adequate auditing standard. People program these machines and can easily tell them to print numbers *other than* accurate totals. For example, show votes tallied unless candidate A has fewer votes than B, then *reverse* the totals reported. Cheating is this easy (it's just one line of programming code).