

Voice of the Voters 3/7/07 Radio Interview with Dr. Rebecca Mercuri www.WNJ1360.com: presented by Coalition for Voting Integrity

M = Mary Ann Gould, Co-Founder of Coalition for Voting Integrity, R=Rebecca Mercuri

M We would like to welcome Dr. Rebecca Mercuri. (See biography below) ...Besides her wonderful sense of humor, is her downright ability to put into simple language some of the most complex and gobbledygook language about voting that exists in the U.S. today. We need that input..... So we are going directly to Dr. Mercuri and get her comments. Welcome Rebecca!

R Well, thank you very much, I really appreciate the opportunity to be on the show, and I appreciate all the hard work you are doing over in Bucks County, PA in trying to get things straightened out, and get things back on the right track.

M Do we have to straighten things out?

R Absolutely!

M What kind of problems do we have to deal with?

R Well, looks like your [Bucks] County unfortunately has gone for the Danaher machines, and I know that there are a lot of questions about them. The State of Pennsylvania unfortunately has not been very pro-active about making sure that there is the ability to do a recount of the votes in the state. I think things are pushing forward along those lines [recounting, etc.], thanks to a lot of the good work that you and many of your other associates have been doing.

M What about the US at large? Is there such a thing as vanishing votes?

R Well, I've been seeing them vanish! I mean, whether they are vanishing for computer reasons, or a whole variety of reasons, people are very concerned about that. We know that people have become less and less confident about their vote, especially since the 2000 elections, and some people have been turned off by that, and the number of voters have been dropping very steadily. We look at that number, and that really has not much to do with the machines per se, but if people don't have confidence that their votes are actually going to be counted, then that does impact on their ability to want to go out and spend time voting.

I personally only vote on paper – I register as a permanent absentee in New Jersey where we have that “no fault absentee” and I will vote absentee until I am confident that the machines at the polls are going to be accurately counting, and able to do an independent recount. In many other states, such as California and Florida where they have the permanent absentee laws, more than 30% -- even in some cases 60 to 70% of the people – they are sort of voting with their vote – are voting absentee, and we saw these great numbers, often in NJ with the current absentee program. Those numbers are getting higher and higher, because people want to vote on paper, and they're going to do it, one way or another. So fortunately, this is an opportunity to do it. I hope they don't change that program, but right now we have that option to be able to vote on paper as an absentee.

M And that's important. It is interesting that there have been numerous surveys and polls, and it repeatedly comes back that 80- 90% of the people want to have some type of proof of the original intent of their vote. Why doesn't Congress get this?

R Basically they do get this, whether they are capable or are able to pass legislation that would adequately reflect that, and would be amendable, is another question. If you look at the debate going on in Congress, I think it is relatively unprecedented, I

think there were only two times in US history where there was a debate over the Presidential election right in Congress and I watched it on C-Span – the debate going on about the fact that they couldn't recount the votes in Ohio, and many of the problems that happened there.

We heard many Congress people getting up to the podium for the couple of hours that they were debating [the 2004 Presidential election] in January of 2005 – they did get it. They certainly do get it. But whether that can get translated into laws that make sense, that are implementable, that are short and to the point, that is the question...

I appreciate your comment about how I'm able to take this gobbledygook and relate it – and it is gobbledygook. Unfortunately there is a bill on the floor right now, and it is a 44 page bill – it is bloated up in its various versions to the point where parts of it seem to be self-contradictory—there's no equipment available that can satisfy this [requirements] —and although the are claims that there is, many people will tell you that there's not. And how are we supposed to implement these types of laws if the laws don't really take into consideration the problems that actually exist with this equipment?

M For citizens listening in – can you sort of sum up, what is the problem that we are having with voting in this country today?

R Well, I think we have, we have a number of different problems. But if we just focus on the machines themselves, we've become complacent. People are very willing to give their vote over to the electronic type of tallying and totaling at the end of the day, in greater and greater numbers. I don't think people are necessarily aware of the problems that exist when you do that. And so the first wave of this was the punch card, and the optically scanned. That in and of itself was not really a problem per se. But it is a problem when you have a computer that is scanning these things in, and then you say that this is going to be a secret computer, and we are not going to be allowed to look at its code, in fact even if you have a lawsuit, we're still not going to [be allowed to] look at its code, even if you think that there is a very high probability that there were some problems with this code, and that the code could have caused problems in the election results, we still aren't going to let you look at this code. Well, there is definitely a problem with that! We don't have any transparency in an election, and that's just for paper alone.

And then people wanted to move to even an even higher tech type of thing – as you know in this country, we are very enamored with high-tech. Heck, I am too – I have a Ph.D. in computer science and various degrees in computer science and engineering – it's my field, I love it. But I also know its limitations. And when people started moving in the direction of fully electronic machines, which we call DREs, not only do you not have any paper that you could at least independently recount, but everything was going into the computer – we had no way of knowing whether the totals or these records that are internally cast have any way of reflecting what the voters actually did, and we certainly know of new instances that are compiled, every single election, of more and ever greater numbers of defects, problems that have occurred, disenfranchisement of people, either because their votes completely vanished, or because they were denied access to the machines at the polls because the machines were down in great numbers...

And so, again this is due to complacency. But that complacency seems to be over, and now there are millions of people who are complaining about this. And as I said,

people are voting with their vote – when they have the opportunity to vote on paper, as opposed to vote on machines, many millions of people are choosing to vote on paper, so I think we are seeing the tide turning, and it is really through these sort of state by state efforts.

M I think that's going to make the difference. I especially loved the title of your thesis, because I continually talk about the need for independent checks and balances. The very fact that the genius of our founders was the creation of a government of independent and separate checks and balances. And I continually say, if that's what works for our country it should work for our vote. How do you see independent checks and balances as to the vote itself?

R Well, yes, I agree with you, and thanks for the complement about the title. I worked as a poll worker in Pennsylvania, actually in Bucks County, for about 10 years, and I was a committeewoman also, and occasionally served on the election board as a poll worker in the precinct level, and I went over to New Jersey, and I also did that there too. In both places, we had the lever machines. The poll workers play a very, very important role: they are making sure people are who they say they are, if you are a poll worker for many years, you know your neighbors, you know the people who are stepping up, and if somebody moved – and you know – hey “you shouldn't be here,” you know, that sort of thing. So the poll workers are a big part of that grass roots checks and balances at the precinct level. The fact that people are doing that in teams in multi-partisan ways, they have challengers, all those people who have legitimate authorizations to be at the polls – they perform the type of checks at that very basic level.

The person has to sign in the book, and then are [not] allowed to vote, unless they have a voting authority slip in their hand. And there are checks at the very end too – at the very end of the day, the poll workers would open up the machines, and you would start to count the votes on the back. And one of the things you had to do was you had to compare the number of people who had signed into the books with the number of votes that were on the machine. And if those things didn't account exactly 100%—one name for every number of votes in the machine—then the poll workers had to write out an explanation, and they had to fill out various forms explaining why those numbers didn't match. There were cases where the numbers didn't match up, but you had to explain that. And there was some accountability taken there, and that's a very important role, and it was taken seriously.

Now I came back from Ohio, and I've been back and forth to Ohio because there is still a contested race there, from the 2006 election, and this happens to be in Franklin County, Ohio – good old Franklin County

M Good old Franklin County

R Good old Franklin County.... (laughs) Over there in Franklin County, and what we discovered in the course of this – it is a judicial race, a county judicial race that is being contested – and what we found after much public information requests and going back and forth doing actual counting ourselves manually of the signature books, was that (the county even admitted to this in court), 86% of the precincts in Franklin County did not have the exact same number of signatures in the books as there were on the iVotronic voting machines, or in the vote totals!

Now this didn't make any sense. This says to me, this should be the next race, but 86%! I mean this is crazy, I'm not saying it was off by 86%, I'm saying that 86% of the precincts had a discrepancy. Sometimes there were ones and twos, which

sometimes can be understandable, but again, in NJ and PA, I never saw anything like that 86% – that is insane. I think maybe in 20 years of doing this in 2 states, I maybe saw two or possibly three times, in all of those times, of all the elections per year. But in any event, they said, “well this is normal!” Well maybe it is normal for Ohio, but in some of the cases, some of the votes were off by as many as 20 – either way, more votes on the machines, or less votes on the machines. I have no explanation for this. They just said it was normal!

Now this isn't normal. Maybe it is normal for Ohio. But it certainly isn't normal for many other states, and places where poll workers take their responsibility seriously, there should be again a paper trail of them writing notes about why these numbers don't add up at the end of the day. Now you know, this is what is going on. Now we might be lucky because we live in counties where people do take of these things, and make sure the numbers add up at the end of the day, but I was astonished. I've never seen anything like that, and quite frankly, that's what I told the judge. I said I've never really ever seen anything quite this astonishing in terms of these discrepancies. And so the question is, where are those votes going? Now certainly, if there are more votes in the machines than there are signatures in the poll book, something is going on, I mean again, it could be the computer going crazy, or it could be out-and-out fraud. We have no way of really knowing, because we can't get inside the computers to figure it out.

M Well that's another part of it. You were just talking about where the numbers don't match up. But we don't even know if the numbers that they put out, that even the poll matched up for, are accurate.

R Right, we don't know. If they match, we don't know. But at least match up with the number of votes and the numbers of signatures. That is the basic thing. We are not even saying that the votes are recorded correctly. But if you have 100 voters come in, you should have 100 votes on the machine. There is no two ways about it, they come in, they vote on the machine, at the end of the day there should be 100 ballots recorded on the machine. Now maybe they are recorded incorrectly, but there shouldn't be any discrepancy. And so this doesn't make any sense at all to me. Why is it allowed to persist? What is going on?

M Fraud. It is important. In statistics we have a saying, “In God we trust, all others bring data.” And I think that is what is really missing with some of [these] electronic voting machines.

R Exactly.

M We just don't know.

R Right. And it is interesting that you should bring up statistics, because in statistics, we have a thing called “a dead heat.” So if you have something that is within the margin of statistical error, and when you run the math, statistically you can't decide... In other words, you may be running a medical test or some sort of thing, and you can't decide, the results aren't suspicious, there are results in there, but they are not sufficient for one side or the other to give a yes or a no. It's within that margin of error. And that is the interesting thing in voting. We don't allow for a margin of error. We know there is a margin of error, and in fact these voting machines, even the optically scanned ones, we know that there is an error, and it is required that it be within this error, but there is certainly an error rate on these machines, and they aren't tested to a particular error rate. So what happens is, that when we have a race that comes out dead even, or as I recently heard, there is a

California race going on where there's 7 votes difference between the candidates, well that's within the statistical margin of error for this equipment. So what we say in statistics, is that's a "do-over." That we don't have a "you win" or "you lose," if you are within the margin of error. There needs to be a do-over. Now we don't do this in our lives, and I'm not necessarily saying that we should, but that isn't what statisticians do. So what happens is, there is a fight that breaks out, and people are in court battling over "did this vote count," or "did it not count," etc. and trying to figure out whether one candidate should win or another.

But this is inappropriate when you are working with equipment that has an error margin, and when it comes close, you need to do a run-off election. That's exactly what should be occurring.

- M We need that independent system of checks and balances so we have something to check against. Over here in Chester County, we had a very close race—I may be off a little bit—there was a difference of 19 votes. But fortunately they put in a precinct based optical scan, and after they went back, in 2 days, counted all the [paper] votes and they did mix in some of the absentees that weren't put in the machines, and the overseas ballots, it turned out that there was just a 5 vote difference. So it did show that the machines did pretty good. But the most important thing that gave confidence to the people, was that the person elected had the right votes both by machine and by the original ballots. But many counties don't have that option.
- R They don't have that option, and you bring up a really important point about the ballot, and about doing the recount. Which is that the ballots are really the ballots of record. And they need to be recounted in their entirety. You don't just count 3% of them, because how do you know that the mistake didn't occur further down the line? You know, you can't just do a partial recount, and then declare that "well, that came out okay, so everything else is all right." Those need to be the real ballots, and if there is any question, they need to all be recounted. And they should all be done by hand. It can be done in a very efficient way. There are plenty of countries that still count by hand, even well-developed countries like Canada, UK, etc. They count by hand, and there are very efficient ways of doing this, it is not really a problem. It shouldn't cause ridiculous sources of angst. People are saying "we can't possibly count them all," but it's done in many places and there really isn't a problem with doing it.
- M I think maybe it all gets back to getting citizens into this. I know I hear from towns in New England, when it becomes a count at the end of the evening—citizens come back, and actually watch the count. I think we have to start thinking of voting as a community activity, because we've lost that. What I would like to talk about though, is a major issue that is before all of us, that we are all going to have to a say. And that is that Congress is trying to figure out what to do. My concern is that we don't have (such as we did have in HAVA – the Help America Vote Act) more band-aids on the system. What is going on in Congress especially with HR 811, is whether will this work, will it fix our system?
- R Well, it's hard to really say. HR811, the newly introduced Rush Holt bill, is a very lengthy legislation, is very confusing, it is difficult to understand what it is actually saying should be done. But it doesn't go far enough, many people feel. One of the things is, that it still allows the electronic voting systems to be used, the fully electronic systems, the ones that print out paper ballots, which many people refer to as VVPATs – voter verified paper audit trails. Whether those are really ballots, or

whether they are really an audit trail—the legislation does say that these would be ballots, and they would be counted at least in certain percentages, based on whether elections were close or not—but does that really make them ballots? Again, they are not all being counted. What the voter sees is this paper ballot, which may in fact be correct, but they don't see what is actually going on inside of the computer, and the election night results, which are the ones they are using to define whether it is a close election or not, are coming out of the computer, not off of the paper!

So, if they want to make it a 10% margin, well maybe it will come out as a 10% margin, and you won't have to do as much of a recount. But this is a grave concern. You don't want to have something where the computers are still in control of the results and the decision made on the election night by the computers are the decisions that are going to prevail. So there are problems with that.

There is another problem with the bill, in that if the VVPATs appear to be defective or damaged, and they can prove that they've been tampered with, the electronic totals will prevail, because you can't trust the paper results. Now....

M You can't tell what really happened because the programming is secret.

R Exactly. And there is nothing in the bill that goes the other way around. In other words there is nothing in the bill that says, if we can prove that this is a voting machine that was malfunctioning on election day—as we know all around the country, these machines do this vote flipping—you press for one candidate, and it flips over to another candidate. We have plenty of witnesses, including here in New Jersey, who have seen it happen on electronic voting machines, and so if we can prove that there are voting machines that are doing that, well why can't they be thrown out? They should not be allowed to give their results on election night, because that is a defective voting machine. How can we trust it? And there is nothing in the bill that allows for that or requires that. I'm very, very concerned, that there still is nothing that allows us in either in this bill, or in any of the voting system standards, that allows us to decertify voting machines. I even raised this with Rush Holt and his people, directly, and had hoped that they would put that in this bill. Right now, voting machines are certified, and there's no way to ever decertify them. It doesn't matter whether they are defective, doesn't matter whether someone comes from Finland and shows you that you can hack them, it doesn't matter, they are certified, and they'll be used, and people will continue to buy them, and they will be continued to be used.

M And there are serious questions about the certification standards in the first place.

R Right, absolutely, there's plenty of concerns about the certification. I have been involved very heavily in the certification effort – you can see my many comments on the various websites such as the Election Assistance Commission. I've shown up at their hearings, and been allowed to speak briefly. Many, many engineers—there were over 6,000 from all over the country—come and with regard to the 2000 HAVA standards, they are saying that there were problems with these standards. And in fact, they issued a revised document which essentially corrected a bunch of definitions, and I read the revision, and it is ridiculous. So there are serious problems. One of the problems you have in the standard, is that voting machines are allowed to be defective, and fail at the rate of about 10% off...

M 10 percent!

R Yes, and it has a, what they refer to as mean time between failures rating, and if you work that out mathematically, you actually find that about 10% of the voting

machines can fail. Now they can lose their votes, but if they fail, how can you know that they did or didn't?

M So elections can be decided with a 10% margin.

R Oh, absolutely! And not only that, you can have disenfranchisement. And so what they are doing in some places, is putting a lot of paper ballots out there, as emergency ballots in case people need to use them because the machines are defective. Well if you are going to print out paper ballots because of defective machines, well, you might as well just print them out to be utilized.

M How do you know if the machines aren't defective inside?

R We don't know, but these are just obvious defects.

M Right, that's what I'm saying. This is just because ...

R Because they are all failing at that rate. We have had Vote Trust USA, and many of the Voters Unite, and other Voting groups going around being election monitors, and when they come up with their data at the end of election they have found in many election municipalities, many of them in Maryland, and other places, about 10% of the machines are breaking down. But this is ridiculous! How come we're allowing in the standards that 10% of the voting machines can break down on Election Day? Again, no Federal legislation is trying to fix this! We've been complaining about this, and plenty of engineers and computer scientists have been complaining vigorously about these terrible standards that are so lax, and allow the vendors to get away with unloading really defective voting equipment on the community.

M Now I know you have a tremendous respect for Congressman Rush Holt, and that he was probably the Paul Revere in Congress to raise the alert, that we have problems. Do you feel that this bill could be amended to improve?

R Well, I'm glad you say that – I do have a tremendous amount of respect for him, I campaigned for him in the very early days of his seeking to become a Congressman, I worked very hard for him, and have supported all of his bills up until this one. I have provided comments, including on this bill in the draft rounds, but we're very disappointed in this bill. Because we think it is just too huge, and I don't think you can fix it. You have a bill that's 44 pages long, with all sorts of things you are trying to do, that may be in conflict with each other and you are trying to satisfy everybody, by saying well, we'll use all voting machines, as long as you just retrofit them with paper, even though we don't necessarily even have retrofits for all of the voting machines with paper. "They're all okay, and by the way, we'll give you \$300 million to do this in the entire United States!" I don't think it's possible. I don't see how this bill is amendable. There is not enough money behind the bill, and I'm not encouraging that we spend another 3 billion dollars, like we did with the HAVA bill to buy even more defective voting equipment. I think people need to be sitting down, and taking a look at what it is they are really asking for.

I think one of the serious problems with this bill, as I said, is regard to this funding. If you are going to create a mandate, and it is an unfunded mandate, how are you expecting the states to do that? Are the states going to replace all their voting machines? And how are they going to afford this? Some of them are still paying off the voting machines that they just bought.

M I bet the vendors will be very happy.

R Absolutely, it's just putting more money into their pockets. And this is exactly what we are seeing. And I have been at meetings, where not just myself, but public

meetings where vendors have said to our faces, that they are not going to create the voter verified paper ballot for the electronic voting machines, and that this would never become the law. Well it has become a law. It has become a law in more than two thirds of the states, either by law or by convention, and unfortunately, here in New Jersey, we created this law, it is supposed to be available by our 2008 election cycle, but we have yet to see a single one of them. The vendors have not bothered to get them certified, and we really can't buy them because they are not certified. This is ridiculous. And again this bill doesn't do anything about that. One of the problems we had was that everything about HAVA got delayed. All of the time-lines, the establishment of the EAC, the deadlines for when the states were supposed to have a plan, everything got delayed. But the one thing that didn't get delayed, was that "we're going to do everything else, we're not going to have the standards and the guidelines out, we're not going to have the EAC to advise you, but you are going to have to buy those voting machines on time." And this is ridiculous!

And this Holt bill, the HR811, is that going to be the same thing? We're not sure what its timetable is – it may be 2008, it may be 2010. But we certainly know, from past experience, that everybody is going to sit there and cool their heels on it, and then at the very end, they're going to say, we don't have any very good voting machines for you with VVPBs or audit trails, but you're still going to have to buy whatever we happen to have out there, otherwise we're going to sue you. And as we know, the Department of Justice did try to start to sue.

M Absolutely, we did have threats here in PA.

R Exactly. You have the threats there, and New York has threats there, and NY has appeals in, and they are still using their lever machines. It's not that they don't want to use something that might be a bit more acceptable, certainly for the disabled, they want to do these things. We want to do the right thing, we're certainly not saying in any way that we don't want to do the right thing. But if the vendors are going to make sure that there isn't anything out there, and then you are going to get sued if you don't go ahead and buy whatever junk they happen to be offering, well, this is ridiculous! And unfortunately, what I see, is that the Rush Holt bill, this new one, is basically going to do the same thing! There are no stop-gaps in it at all that says if this equipment isn't available, etc. etc. There are not brakes on it, there are no mandatory sets of things on it. Why don't we make the governments create the new voting machines if the vendors aren't going to cough up something? Why don't we commission? We are the United States; we have great engineers and scientists here. We're on the information super-highway. Why don't we commission people to do it, if the vendors are going to refuse?

M That is an interesting question; we have been trying to push for it. Why in the world are we leaving it to vendors, and why don't the states or Federal government design a machine, a verifiable counter? It is easy enough to do, and have it manufactured, and have the control and ownership be completely in the states hands. Do you see it as that big of a problem?

R I don't see it as auditable. I worry that, again, the states could be co-opted, or whoever is implementing that [could be corrupted]. But again, it would have to be open – if it is open, you know, there are no laws against the states doing that, and in fact I do know that in Massachusetts, they are actually doing it, there are some very weird things in Massachusetts with regard to what they do, like proportional voting in some of their municipal elections, and there aren't any vendors that can really count the ballots the way they have this – they used to do it by hand. But you got

people up at MIT who can do pretty great math. So they are used to doing—in Cambridge City elections—some pretty sophisticated math on some of those elections. So they actually wrote their own software, and I don't think there is any law against that. And you know, the people who are doing that, are doing a legitimate job, and I believe it might even be available and accessible for people to read, though I'm not sure about that...

M Let me ask you an important question that a lot of people are asking—at least I am, and I know others along with me. Why aren't we raising this question about banning these DREs, these touch-screen, touch-button machines altogether? They are not ready for prime time; it doesn't look like they are going to be ready for several years, so why don't we just get rid of them?

R Well, I think people are raising that question, and a lot of places are actually saying that. But again, one of the things I've learned—having been looking at this question since 1989, some 18 years now—is that voting is very much a matter of state's rights. And what we see is that a state can decide what they are going to have as their voting system. And as long as it is within understandable rules of fairness and etc., then they are allowed to do that. So in fact, that what we are seeing is, "we're not going to use this junk any more, we're just going to use optically scanned, or we're just going to hand count, or whatever we're going to do." And in fact, one of the unfortunate things about this Federal legislation is that we're now starting to see [people saying] in the states, "well we're scared about making a law about that, because..."

M That's exactly it – we're seeing it in Pennsylvania.

R Exactly, we saw that in the recent news articles, about some of your work that just came out this past week. I was down in Maryland the week before, where I testified before the MD state Senate, and we heard legislators there say "well we're sort of scared to create a bill or a mandate that we get rid of the DREs." Maryland is just about ready to get rid of them. I heard quite a few legislators on both sides of the aisle at that hearing saying they really don't want those DREs any more. They bought 'em, they got lulled into it, but now they think they need to get rid of them. But unfortunately what we're seeing there in Maryland, and as I said, in Pennsylvania, and we're seeing in other places, is that people are afraid to create a law that may conflict with an unknown [Federal] law, or an unknown set of rules. So again, this is why, and this is not a private thing, I've made it known to Rush Holt's people, that I feel very strongly that the bill should be withdrawn. Because, unless the bill is going to be very clear when it gets introduced, and it has been introduced—but since it is not clear about what needs to be done, people don't know. And who's going to decide? The EAC? Congress? Who's going to decide what's going to be legal in the states? The Department of Justice? Are they going to sue more people? That to me, just shows that if that type of question is going on, and if it is stopping states from moving forward with their own state concerns about their voting system, then there is something wrong with the bill, it needs to be taken off the table, until something can be put out there that makes it very clear what the states' requirements are going to be.

M What would be the 2, 3 or 4 things that would be critical for a bill in Congress?

R Well, I think there should be multiple bills. I think we need to address multiple different things. First of all, the disability community. They are very concerned, they want to have accessible voting machines, and voting equipment, and ballots.

They want to have the ability to create and cast a private ballot without assistance. And unfortunately, all we're seeing in this legislation is, that if you are disabled, somehow you are going to have to manage to get yourself to a precinct, or a place where there is a voting machine, like maybe at the county, and then you could cast a vote on it, if it actually accepts your disability, and has features for that particular disability.

M If you can get into the polling place, because some of those polling places are not handicapped accessible.

M Exactly, I saw that in Maryland, where you had to climb up an entire flight of stairs in order to use an accessible voting machine, and I don't know how anyone with a wheelchair could get up there, and there is no law in regard to that either. So this is the type of thing that you should have just a special bill that addresses all of the disabled. If someone is home-bound or hospital bound, they should all be entitled to have a private ballot. Why is it just that . . . a person has to come to a polling place, if they could possibly make themselves get there. It's rude, and we need to just strip that out, and have a very special bill just to address those needs, and address them finally and properly, the way they should have been addressed, not lumped in with HAVA, not lumped in with these other bills. It needs to be done separately.

There are a number of other things, which are in the Rush Holt bill, which are great by themselves, but which should be taken out and addressed separately. Like for example, auditing. How do we perform the audit? Who's going to pay for the audit? What are we going to do about these audits? Are these audits going to really count? Or are the machine counts going to really count? There should just be a bill about auditing. Then there should just be a bill about the accuracy and integrity of voting equipment. It does put a lot of things on the table, but I think by trying to mix everything all together, then you get problems. Problems that you don't understand [such as] it has to be accessible, but it has to be voter verifiable, or it has to be this, or it has to be that. You know, you can't possibly have a mish-mash of everything in one bill, because you can't figure out what the intentions are for those particular aspects. So I think it should all be broken out, and should be addressed separately, in separate, good, clear-cut bills, with time-lines and stop-gaps in case there are problems in implementing things.

M Would you include the outlawing of the DREs for now?

R Well, again, I think that is really a matter of the states. And from the Federal government, I think that oversteps their bounds. I prefer that the states do that on their own, and I prefer that the counties who are making the purchases do that on their own. And in fact, that is what we are seeing. So I would prefer that the states still have their states' rights, and the problem is, that if we say only optically scanned ballots are ok, what if tomorrow, someone comes up with the world's greatest voting machine, that is really excellent, that will satisfy all these problems? But if you have any of these [Federal laws], you still won't be able to use it. And this is what we also saw with the voter verified paper audit trails. The people said, well there is no rule for that, so we are going to abolish it.

M Let me turn it around the other way, instead of the negative. Should Congress stand for it, in order to protect the vote, that we have an independent system of checks and balances for our vote?

R Oh, absolutely. And I think that for now, all there really is, is paper for this. So they should mandate, as the Holt Bill does, that there should be paper ballots. But they

should be the ballots, they shouldn't be the after-the-fact paper thing that we are going to check afterwards, after everyone has gone home, and people have messed around with the paper.

M But would a ballot coming off of a printer really be an independent check and balance?

R Again, if that ballot coming off the printer, is the only record, in other words, it is not recorded inside of a machine, if that ballot was printed out, and that is all there is, then there is no conflict. A lot of the problems that we have is that there is a conflict. There is a conflict between what the internal computer totaled, and the totals made from the paper ballots. We just don't record....

M But, what is coming out of the printer, could be not what the voters did, but what the internal machine is telling the printer to print out.

R Well again, it gives the voter an opportunity to verify that, and then they can reject it, and...

M Well you and I will have a slight difference from a quality point of view. One of the biggest things we have done studies on is inspection. People, number one, if they do inspect, which they often won't, people have a tendency to see what they think is there.

R But I also must say, since 2003, I have not really supported anything other than hand prepared—if the person is capable of doing that—hand-prepared paper ballots. In other words, they prepare it themselves. I really only feel that a machine should be preparing the ballot, only if the person is incapable of doing that themselves. That is the only time that anyone [a machine] should be doing that. So all the rest of the ballots are prepared by the person themselves directly on the piece of paper. That's what I feel should be done.

M That is what I am really shooting for, is the idea of that ballot marked by the voter, in the voter's own hand, and that it is put into a machine simply as a verifier and a counter, which can be used to give us the instant [calculation of] the 8:05 pm temporary results. The real vote is that which the voter fills out.

R Right, and beyond that, what should be done, we should not have this audit going on a week after the election, it should be done on election night. In other words, you have this interim total, and then the boxes are opened, and you have a whole team of people that are sitting there, and they are going to be counting the votes, and they don't go home until they can all agree that these are the vote totals. There may be people escaping out, but that's what we need to do. Once you move the ballot boxes from one place to another, they somehow manage to wind up in the Delaware River, and you know, like the Boston Tea Party. You know, they wind up in people's trunks and cars, and all of a sudden, some of them are missing. And so you really want, again, the checks and balances. It is the stuff we used to do with the lever machines. Everybody would gather around, to open the back of them up, and you would look in there, and you would have people from different parties, standing side by side—you wouldn't have just one person read them off.

M You would see the program right there too.

R You would see the stuff right there, exactly. And you would look at the back of the machine, and you would see the numbers, the little dials, the gears, and you would know that this is all what was recorded on the machine, you were actually seeing that. And that is what we used to be doing. I agree with you that people need to step up to the plate, we need to have more citizen oversight. Maybe people should

be drafted to do this like jury duty? Where you get your notice, and you have to show up on election night as part of the counting team.

M I think something like that can be done. Rebecca, we have John Gideon on line and I think you may know John, the executive director of VotersUnite.org. He is supposed to provide news, but he has some questions for you. John:

J Dr. Mercuri, thank you. I've been listening to what you've had to say, and I agree with what you have to say. I probably wouldn't have before November, this last election, but I certainly do now. I worked a lot in that election, and my mind was changed big-time with what was happening.

R I agree – that last election - it certainly changed my mind on things too, because I didn't realize it was as bad as it was.

J That's exactly right. There seems to be the thought, that adding the VVPAT printer to the DRE is going to, it will change everything, it will make a complete difference, and that is the fix that is needed. And in my opinion, it is nothing more than a sugar pill, and it is not really going to change much.

R I actually agree with you, as many people know, and if you look at my website, people even refer to the VVPAT printers as the Mercuri method. But I can tell you, that none of them out there are the Mercuri method. The Mercuri method was a very specific way of printing out the ballots that did make them the ballot of record, and nothing out there that has been implemented, and offered up as a VVPAT printer like that. And in fact, this is where I saw, where my eyes were really opened, in Ohio, where they had added on those VVPAT printers because of the debacle of their 2004 election. And what we saw was, again, this 10% failure rate. Some of the machines had their rolls put in backwards so that [as it was] thermal paper, it all came out invisible. The vendors claimed, and this was all said in court, they claimed that the machines were supposed to stop if the printer ran out of paper, and in fact, they didn't stop, and we had eyewitness reports of people under oath in court, reports of people who said they saw the machines continuing on, even though they were supposed to shut themselves down when the paper was out.

And then, to add insult to injury, the paper ballots were not impounded correctly, they were supposed to be under lock and key, but they were not, they were sitting out in the warehouse. We believe some [VVPATs] may have been tampered with, some of them certainly were damaged, parts of them were ripped, parts of them were missing. It is a debacle. Again, but this is not the fault of the concept, it is the fault of the implementation. If it had been implemented properly—and it was never the intention of the vendors to implement them properly—I think that is the really important message that people will take away with them, if they were implemented properly, then maybe we could support the VVPAT printers. But they are not being implemented properly, and this is the shame that we are actually seeing.

J I think that a lot of the election integrity community is looking at the way the Holt bill is being written now, and big as it is, and I think to some degree, disingenuously thinking that the Bill as it is right now, requires the vendors to get DREs that will meet the legislation as it passes, so it will do away with DREs. [Because vendors can't meet these standards.] And the case in point, would be the printer, [the bill] would now require a completely different type of printer, that presently does not exist. They say that the bill requires this by 2008, so therefore, the vendors won't be able to meet that date, and therefore the states are going to be forced to go with optical scan.

R Well, that may be an optimistic hope, but it is certainly incorrect, because we saw what happened with HAVA – even if something is not available that would satisfy the requirements, it is going to be shoved down the states’ and county’s throats. And so it is just going to be another sham unless there is some stop-gap method, of which there are none—there is nothing in that bill that says, “if this does not exist, then we will wait another x number of months or years to implement this.” So it is another type of legislation that is enforcing something that doesn’t exist, that doesn’t exist properly, and people are asking me is a bad bill better? “Oh, it gives us VVPAT, and gives us paper ballots – is a bad bill better than no bill?” And I have to say that is wrong - a bad bill is a bad bill. We saw what happened at the upshot of HAVA, and unfortunately, a bad bill is worse than no bill.

I want to also, (since we are running out of time here) take this opportunity to put in a little concern. If you are concerned about VVPAT, you should also be concerned about the optical scanners. If you remember the Harri Hursti hacks, he did two hacks, and one of his hacks was on the optical scanners, which can be hacked just as easily as the other machines too.

M Well Rebecca, I think you’ve covered quite a bit. What can citizens do?

R What John said is really excellent. Citizens need to become informed, they can be looking at the websites, they can be contacting their Congress people, and especially working in their local communities and their states, to make sure the state legislation continues to go through. People should not be afraid of the Federal bills – states do have rights, let the states say what they want to do and what they want to have, and it may have to be battled out at some later point. But the states should go ahead and do the right thing. I think this is a huge grass-roots movement, and we should continue to do the right thing.

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BIOGRAPHY

Rebecca Mercuri has been referred to as "one of the leading international experts on electronic voting." A technology specialist with degrees in computer science and engineering, Rebecca defended her doctoral dissertation, "Electronic Vote Tabulation: Checks & Balances," at the Engineering School of the University of Pennsylvania just eleven days before the 2000 U.S. Presidential election. Subsequently, her testimony and opinions were sought in *Bush v. Gore* and referenced in briefs presented to the U.S. Supreme Court. In 2002 she was contacted by Janet Reno and her legal team to help solve the mystery of the thousands of votes that vanished from the new touch-screen machines being used in Miami-Dade and Broward Counties. Since then, Dr. Mercuri has provided formal testimony and comment to the House Science Committee, the U.S. Commission on Civil Rights, the Election Assistance Commission, the National Institute of Standards and Technology, the U.K. Cabinet, and numerous U.S. state legislatures. Her advocacy work has directly influenced the wording of state, federal, and international election legislation as well as standards and best practices guidelines. Many of Dr. Mercuri's views and papers on electronic voting appear on her website at <<http://www.notablesoftware.com/evote.html>>.