

Dan Rather Reports

Episode Number: 534

Episode Title: Das Vote

Description: As Americans prepare to vote-many of them by electronic machines-millions of Europeans are going back to paper and pencil. Germany is just one of three European countries to buy electronic voting machines, only to throw them out after hackers demonstrate their vulnerabilities. Also, one American's fight against voting machines in his state.

TEASE:

DAN RATHER (VOICE OVER)

TONIGHT...LESS THAN A MINUTE, THAT'S ALL IT TOOK FOR HACKERS TO CHANGE AN ELECTION OUTCOME ON ELECTRONIC VOTING MACHINES.

ROP GONGGRIJP, HACKER

We've made a software for it that would always make the Fraud Party 2006, which is a special party that we invented, made it win the elections and we put that on little chips that you could put in the machine and once these chips are in, that party always wins.

RATHER (VOICE OVER)

AND THAT LED THREE COUNTRIES IN EUROPE TO PULL THE PLUG ON ELECTRONIC VOTING MACHINES, AND RETURN TO PAPER BALLOTS.

RUDOLF MELINGHOFF, JUSTICE, GERMAN CONSTITUTIONAL COURT

The problem with these machines was that you only could cast your vote and you really didn't know anything about it.

RATHER (VOICE OVER)

PLUS ON THE EVE OF AN ELECTION, WHO IS OVERSEEING VOTING MACHINES IN THIS COUNTRY?

LAWRENCE NORDEN, SENIOR COUNSEL, BRENNAN CENTER FOR JUSTICE,
NEW YORK UNIVERSITY SCHOOL OF LAW

There is no federal agency that is keeping track of the problems that we have with these systems unlike toasters or automobiles or-- most of the commercial products that are out there in the United States.

RATHER (VOICE OVER)

WE'LL BRING YOU THE NEWS, TONIGHT ON DAN RATHER REPORTS.

DAS VOTE:

RATHER (ON CAMERA)

GOOD EVENING FROM WASHINGTON, D.C... THE UPCOMING MIDTERM ELECTION WILL BE HISTORIC ... NOT BECAUSE OF THE OUTCOME OF THE VOTE, BUT THE WAY WE VOTED. FOR THE FIRST TIME, ALL 50 STATES WILL USE SOME FORM OF ELECTRONIC VOTING MACHINES TO TALLY THE BALLOTS.

RATHER (VOICE OVER)

NEW YORK STATE BECAME THE LAST TO INTRODUCE COMPUTERIZED VOTING WHEN NEW YORK DEBUTED THESE OPTICAL SCANNERS IN THE SEPTEMBER 2010 PRIMARIES.

IN RECENT YEARS, THE UNITED STATES AND A NUMBER OF COUNTRIES ABROAD HAVE RUSHED TO REPLACE OLD STYLE VOTING, SUCH AS PUNCH CARDS AND PAPER BALLOTS WITH COMPUTERS...SO-CALLED E-VOTING, FOR ELECTRONIC VOTING MACHINES ARE SAID TO RECORD VOTES FASTER AND MORE ACCURATELY.

AND IN THE PAST EIGHT YEARS, THE US GOVERNMENT HAS FUNNELED NEARLY \$4 BILLION TO STATES TO BUY ELECTRONIC MACHINES.

THE HELP AMERICA VOTE ACT WAS PASSED TO PREVENT ANOTHER FLORIDA... YOU REMEMBER THE 2000 PRESIDENTIAL ELECTION...THE ONE WITH THE HANGING CHADS AND BUTTERFLY BALLOTS.

WASHINGTON MADE A BIG BET THAT COMPUTERS WOULD PREVENT FUTURE CONFUSION.

RATHER (ON CAMERA)

BUT IN EUROPE, WHERE THE MACHINES HAVE ALSO BEEN USED, COMPUTER SAVVY ACTIVISTS HAVE RAISED SERIOUS QUESTIONS -- QUESTIONS THAT CUT TO THE VERY ESSENCE OF A DEMOCRACY...NAMELY, HOW CAN THE PUBLIC BE SURE EVERY ELECTRONIC VOTE IS COUNTED AND COUNTED ACCURATELY.

ROP GONGGRIJP, HACKER

It's very important that to expose that lie because you can't have the security of your elections hinging on -- on -- on a blatant lie.

RATHER (VOICE OVER)

MEET ROP GONGGRIJP...THIS RENOWNED DUTCH COMPUTER HACKER IS KNOWN WORLDWIDE FOR HIS ABILITY TO PENETRATE SOME OF THE WORLD'S MOST SECURE NETWORKS...AND HE'S THE MAIN REASON TENS OF MILLIONS OF DOLLARS WORTH OF EUROPEAN ELECTRONIC VOTING MACHINES ARE NOW STACKED IN WAREHOUSES OR STRUNG ABOUT IN SCRAP PILES.

FROM HIS FLAT IN AMSTERDAM, GONGGRIJP ORGANIZED A SMALL-BAND OF ACTIVISTS...AT FIRST GLANCE; YOU'D THINK THIS GROUP, MADE UP OF LIFELONG COMPUTER ENTHUSIASTS, WOULD BE THE LAST TO OPPOSE COMPUTERIZED ANYTHING.

GONGGRIJP

I'm very much into technology, so my -- one of my main topics in my life is telling people that yes you can do all sorts of things with technology but the technology also has drawbacks and it has things it can't do.

RATHER (VOICE OVER)

AND GONGGRIJP, WHO NOW MAKES A LIVING AS A COMPUTER SECURITY EXPERT, SAID TECHNOLOGY SIMPLY CANNOT BE TRUSTED TO RELIABLY COUNT VOTES. COMPUTERIZED VOTING MACHINES HAVE BEEN WIDELY USED IN HOLLAND SINCE THE 1990S -- IT WAS THE FIRST COUNTRY IN EUROPE TO DO SO...BUT THE NEW STYLE E-VOTING MACHINES DIDN'T ARRIVE HERE IN AMSTERDAM UNTIL 2006 -- AND THAT'S WHEN GONGGRIJP FIRST SAW HOW VULNERABLE THEY WERE.

GONGGRIJP

To me it was obvious that total trust was placed in the people building this machine and nobody seemed to care, nobody at the polling station, nobody I talked to at the municipality seemed to care that this was the case.

RATHER (VOICE OVER)

GONGGRIJP QUICKLY LEARNED HE WASN'T THE LONE SKEPTIC -- THROUGH THE INTERNET, HE JOINED A LOOSE CONFEDERACY OF FELLOW HACKERS, CRYPTOLOGISTS, SELF-DESCRIBED GEEKS...PEOPLE WITH A

CLEAR UNDERSTANDING OF HOW HACKABLE THE E-VOTING MACHINES WERE. THEIR GOAL WAS TO GET THE NETHERLANDS TO GO BACK TO PAPER AND PENCIL BALLOTS BEFORE THE NATIONAL ELECTION THAT WAS JUST A FEW WEEKS AWAY.

GONGGRIJP

We tried to tell people that this was -- that this was not right, we tried to show what was going on and that got some media attraction, it got attention, people started writing about it, wondering about it but it wasn't--it didn't really get attraction until we got hold of one of these machines.

RATHER (VOICE OVER)

IT WASN'T EASY. GONGGRIJP AND THE OTHERS SPENT DAYS FRANTICALLY CALLING AROUND DOZENS OF TOWNS AND PRECINCTS TO SEE WHERE COULD BUY A SURPLUS MACHINE THAT THEY COULD DISSECT.

GONGGRIJP

And we called them and we said we needed the machine for our workers union elections and they happily sold it to us. And this was actually a couple of days after the Dutch government started sending out letters to all the municipalities, "Please keep track of your machines and don't sell them to anybody, don't loan them to anybody, you need to make very sure these pesky activists don't get hold of them" but this particular municipality hadn't opened that letter yet.

RATHER (VOICE OVER)

ONCE GONGGRIJP AND HIS TEAM GOT A HOLD OF THE MACHINE, ACTIVISTS IN GERMANY AND THE NETHERLANDS SPENT SEVERAL WEEKS OF ALL-NIGHT HACKING SESSIONS TRYING TO FIGURE OUT HOW IT WORKED...THEY WERE DETERMINED TO PROVE THAT THE MACHINE COULD EASILY BE TAMPERED WITH BY A VOTER -- A MALICIOUS POLL WORKER...EVEN SOMEONE AT THE MANUFACTURING PLANT.

GONGGRIJP

Taking the machine apart, reading the software out of the chips, photographing the circuit boards in high detail just basically with a whole bunch of people finding out how this worked and sharing their bits of knowledge.

RATHER (VOICE OVER)

IN THE END, THE HACKERS PROVED IN THIS VIDEO RELEASED TO THE

MEDIA THAT THEY COULD REMOVE THE MEMORY CARD IN LESS THAN 60 SECONDS...AND REPLACE IT WITH A NEW CARD THAT WOULD ALTER THE RESULTS OF AN ELECTION...

GONGGRIJP

We've made a software for it that would always make the Fraud Party 2006, which is a special party that we invented, made it win the elections and we put that on little chips that you could put in the machine and once these chips are in that party always wins. The number five party has gotten six votes, so the 2006 Fraud Party is the winner of this election.

RATHER (VOICE OVER)

THE 60 SECOND VIDEO DEMONSTRATION OF THE HACK SHOOK THE FOUNDATIONS OF HOLLAND'S DEMOCRATIC PROCESS. AND BEYOND...THE GOVERNMENTS OF IRELAND AND GERMANY HAD INVESTED IN THE SAME MACHINES...AND HAD BEEN FIGHTING OFF DOUBTS CAST BY LOCAL ACTIVISTS, WHO SAID THE MACHINES COULD EASILY BE TAMPERED WITH. BUT GONGGRIJP'S EVIDENCE WAS IRREFUTABLE -- ROCK SOLID.

IN 2008, THE DUTCH GOVERNMENT, THE FIRST IN EUROPE TO USE ELECTRONIC VOTING MACHINES, ALSO BECAME THE FIRST TO DITCH THEM...AND, AS GONGGRIJP HAD HOPED, HOLLAND WENT BACK TO THE BASICS: PAPER AND PENCIL BALLOTS.

GONGGRIJP

I think the hacker ethos is about transparency and it's about finding out how stuff works. And claiming the right to find out how stuff really works. And this is one expression of it. And it's also spreading knowledge about technology and spreading knowledge about the benefits but also the risks of technology.

RATHER (VOICE OVER)

THE NATION OF IRELAND ENJOYED THE BENEFITS OF TECHNOLOGY AT THE START OF THIS CENTURY, POSITIONING ITSELF AS ONE OF THE WORLD'S HIGH-TECH CENTERS...IRELAND'S TECHNOLOGY INDUSTRY HELPED FUEL THE SOARING ECONOMY OF WHAT CAME TO BE KNOWN AS THE CELTIC TIGER. BUT THE TIGER STILL VOTED ON PAPER AND PENCIL -- AND DETERMINING THE WINNER OF AN ELECTION REQUIRED A LENGTHY TALLYING PROCESS. THE GOVERNMENT OF IRELAND WANTED ITS VOTING MACHINE TO REFLECT THIS NEW HIGH-TECH STATUS.

BERTIE AHERN, FORMER PRIME MINISTER OF IRELAND

Our silly old system is outdated.

RATHER (VOICE OVER)

AT THIS MEETING OF PARLIAMENT IN 2004, THEN PRIME MINISTER BERTIE AHERN SAID INVESTING IN E-VOTING SYSTEMS WAS A MATTER OF NATIONAL PRIDE.

AHERN

Otherwise we go into the 21st century in this country being the laughing stock with our stupid old pencils.

RATHER (VOICE OVER)

IN 2003, IRELAND SPENT SOME \$50 MILLION EUROS ON WHAT WERE VIRTUALLY THE SAME DUTCH-MADE SYSTEMS THAT WERE EVENTUALLY BANNED IN THE NETHERLANDS.

JOSEPH MCCARTHY, ACTIVIST

They thought it was a great idea. It was going to be modern. It was going to look good for technology. It was going to put Ireland up there with the technology focus that Ireland had. But, in fact, it was a huge mistake.

RATHER (VOICE OVER)

DUBLINER JOSEPH MCCARTHY WAS NAGGED BY THE SAME QUESTIONS THAT HAVE SURROUNDED ELECTRONIC VOTING MACHINES AROUND THE WORLD. LIKE GONGGRIJP, MCCARTHY HAD A LONG CAREER IN COMPUTERS...SO WHEN THE IRISH GOVERNMENT BEGAN SOLICITING BIDS FROM ELECTRONIC VOTING MACHINE MANUFACTURERS, HE KNEW ENOUGH TO BE WARY.

MCCARTHY

We were asking questions about the cost. We were asking questions about the machinery. We were asking questions about the procedures. We were asking questions about where did this come from and what was the benefit for it. And each time we asked these questions, we got an awkward answer-- an-- an answer that made us even more concerned.

RATHER (VOICE OVER)

HE FILED NUMEROUS PUBLIC RECORDS REQUESTS, SPENDING HUNDREDS OF HOURS AND SOME 10-THOUSAND EUROS OF HIS OWN MONEY ON COPIES...BUT THE MORE PAPERWORK HE GOT, THE MORE IT BECAME

CLEAR THAT THE GOVERNMENT HAD NO ANSWERS...

MCCARTHY

We never got the documentation of the software... why? Because it didn't exist.

RATHER (VOICE OVER)

THERE HAD BEEN NO CREDIBLE QUALITY CONTROL OR SECURITY TESTS ON THE MACHINES. WHEN MCCARTHY WENT PUBLIC WITH HIS FINDINGS IN 2004, THE IRISH GOVERNMENT WAS FORCED TO FORM AN INDEPENDENT COMMISSION TO EXAMINE THE MACHINES.

MCCARTHY

So they were stuck. They were a hoist. They hadn't done the job properly. They had spent all the money.

RATHER (VOICE OVER)

IN 2006, THE COMMISSION RELEASED A REPORT THAT ECHOED MCCARTHY'S CONCERNS...AMONG A LONG LIST OF RECOMMENDATIONS: DRASTICALLY IMPROVE THE SECURITY OF THE SOFTWARE USED TO RECORD VOTES. THE EVIDENCE AGAINST THE MACHINES PROVED TOO MUCH. IN 2009, THE GOVERNMENT FINALLY DECIDED TO GIVE UP ON ITS \$50 MILLION EURO EXPERIMENT.

MCCARTHY

The machinery that they'd chosen couldn't work, and it was knocked over by ordinary people asking ordinary questions on a steady basis.

RATHER (VOICE OVER)

MINISTER JOHN GORMLEY MADE THE DECISION TO WAREHOUSE THOUSANDS OF NEVER USED MACHINES. HE SAID MCCARTHY AND HIS FELLOW ACTIVISTS LEFT THE IRISH GOVERNMENT WITH LITTLE CHOICE. GORMLEY.

JOHN GORMLEY, MINISTER, GOVERNMENT OF IRELAND

I think that they played a fundamental role because it was a collection of these experts, people, I suppose in some way you could call them geeks, people who understood electronic voting, understood programming, who raised some very important issues and made contributions then to the Commission that was set up to look at these issues. And therefore, we had to act on that. And that's what we did and we acted responsibly then as

a government.

RATHER (VOICE OVER)

THE IRISH PRESS HAD A FIELD DAY WHEN GORMLEY, IN A LAST DITCH EFFORT, TRIED TO RECOVER SOME MONEY...HE ATTEMPTED TO SELL THE LIGHTLY USED AND COMPLETELY DISCREDITED DUTCH-MADE MACHINES. NOT SURPRISINGLY, THERE WEREN'T ANY TAKERS.

GORMLEY

Those markets which would have been open to us were now closed because they dispensed of electronic voting as well and this particular software. So yes, of course it's a hard sell when it has been dispensed with in other countries and our own.

RATHER (VOICE OVER)

THE MACHINES ARE NOW GATHERING DUST AND IRISH VOTERS ARE ONCE AGAIN VOTING WITH STUPID OLD PENCILS. HERE IN GERMANY, THE GOVERNMENT ALSO TRIED TO, AS THE GOVERNMENT PUT IT, BRING VOTING INTO THE 21ST CENTURY...STARTING SOME 10 YEARS AGO, THE GOVERNMENT BEGAN TRYING OUT ELECTRONIC VOTING MACHINES IN A NUMBER OF DISTRICTS... AND IT WAS CATCHING ON...THAT IS UNTIL ULRICH WIESNER AND HIS LATE FATHER CAME ALONG.

ULRICH WIESNER, ACTIVIST

I was probably six or seven when my father first time took me to a polling station.

RATHER (VOICE OVER)

FOR COMPUTER SCIENTIST ULRICH WIESNER, AND HIS FATHER, JOACHIM, ELECTIONS ARE A NEAR-RELIGIOUS EXPERIENCE. ULRICH WIESNER'S GRANDFATHER DIED FLEEING HITLER'S THIRD REICH AFTER IT INVADED HIS HOMELAND OF SILESIA. THAT TRAGEDY LED JOACHIM WIESNER TO A LIFE OF ACTIVISM. HE SPENT MUCH OF THE REST OF HIS LIFE VOLUNTEERING AS AN ELECTION OBSERVER AT HOME AND ABROAD.

WIESNER

It was always a big motivation for my father to help preventing that something like during the Hitler regime in Germany doesn't happen again. So democracy being a fundamental concept and being something that prevents war and maintains freedom that has always been important.

RATHER (VOICE OVER)

WIESNER AND HIS FATHER SAW THE SPREAD OF ELECTRONIC VOTING MACHINES AS THE THREAT TO THIS FREEDOM -- THE GERMAN CONSTITUTION CLEARLY STATES THAT ELECTIONS MUST BE TRANSPARENT...AND LITTLE WAS KNOWN ABOUT HOW SECURE THE NEW ELECTRONIC VOTING MACHINES WERE FROM HACKERS AND COMPUTER GLITCHES. SO THE TWO BEGAN SEEKING ANSWERS FROM GOVERNMENT OFFICIALS.

WIESNER

So I sent an email to the Ministry asking for the certification report and I was told that that report could not be shared with me because to protect the intellectual property of the vendor. And that was certainly not what I wanted to hear.

RATHER (VOICE OVER)

UNSATISFIED, THE FATHER AND SON FILED A COMPLAINT WITH PARLIAMENT AFTER GERMANY'S 2005 ELECTION—IT WAS THE FIRST STEP TO GETTING A HEARING IN GERMANY'S HIGHEST COURT. THE TWO MAINTAINED THAT THE MACHINES VIOLATED THEIR RIGHT TO A TRANSPARENT ELECTORAL PROCESS. GERMANY'S CONSTITUTIONAL COURT EAGERLY TOOK THE CASE. JUSTICE RUDOLF MELLINGHOFF, WHO EVENTUALLY WROTE THE DECISION, TOLD US WHY.

RUDOLF MELINGHOFF, JUSTICE, GERMAN CONSTITUTIONAL COURT

You really realize at the first moment that this is a very important constitutional matter because it's in the heart of democracy how the vote comes to the people who are representatives of the people. So that is why we looked at it very carefully and decided the way we did.

RATHER (VOICE OVER)

AFTER TAKING THE CASE, MELLINGHOFF AND HIS COLLEAGUES BEGAN SEEKING TESTIMONY FROM THE SAME COMMUNITY OF ACTIVISTS THAT HELPED ROP GONGGRIJP HACK THE MACHINE IN HOLLAND.

MELINGHOFF

We have some kind of Chaos Computer Club who looked at these machines and gave us some expertise that it was easy—in a few minutes, just to change everything, even to play chess on these computers—so you can really easily manipulate these computers.

RATHER (VOICE OVER)

IN 2009, THE COURT ISSUED ITS LANDMARK RULING: THE MACHINES GERMANY WAS USING WERE IN VIOLATION OF GERMANY'S CONSTITUTION, BECAUSE THERE WAS NO WAY FOR THE PUBLIC TO VERIFY THE MACHINES RECORDED VOTES CORRECTLY.

MELINGHOFF

The problem with these machines was that you just only could cast your vote and you didn't know what the machine does with the thing you have pushed on the touch screen. You really didn't know anything about it. And early in the evening, the machine came out with some result and you didn't know whether it was correct or not. So it was behind a black curtain, a black box.

RATHER (VOICE OVER)

LIKE IRELAND AND THE NETHERLANDS, GERMANY WAS SUDDENLY BACK TO VOTING ON PAPER BALLOTS. FOR WIESNER AND HIS FATHER, WHO DIED SHORTLY AFTER THE DECISION, THE WHOLE PROCESS WAS A DEMONSTRATION OF DEMOCRACY AT WORK...PROOF OF THE POWER OF THE ORDINARY CITIZEN.

WIESNER

The hearing was a great experience. It was experienced democracy; it was experienced division of powers between the government and the Court on the other side.

RATHER (VOICE OVER)

THE GERMAN HIGH COURT DID NOT BAN ALL ELECTRONIC VOTING MACHINES -- JUST THOSE THAT CAN'T BE VOTER VERIFIED...SO THE DUTCH MANUFACTURER IS TRYING TO ADJUST AND THINK AHEAD...

THE COMPANY IS CALLED NEDAP, AND IT'S ONE OF HOLLAND'S BEST-KNOWN ELECTRONIC COMPANIES -- MAKING EVERYTHING FROM WATER PURIFIERS TO LIVESTOCK TRACKERS TO VOTING MACHINES. THE COMPANY EVEN MADE AN UNSUCCESSFUL BID FOR NEW YORK'S VOTING MACHINE CONCESSION.

MATTHIJS SCHIPPERS, VOTING MACHINE MANUFACTURER

We've been in the election systems industry since the mid-60s.

RATHER (VOICE OVER)

AND WHEN WE SPOKE TO THE HEAD OF NEDAP'S ELECTIONS DIVISION, MATTHIJS SCHIPPERS, HE BEGRUDGINGLY GAVE THE ACTIVIST CREDIT

FOR FORCING HIS COMPANY TO ADAPT.

SCHIPPERS

Well, I think we commend the advocacy groups. They raised issues on the use of electronic voting. Since -- we're talking here about democracy and this means that it's not only a technical issue. You also need to understand that elections are for the people, by the people and from the people.

RATHER (VOICE OVER)

NEDAP HAS DEVELOPED A NEW MODEL OF VOTING MACHINE THAT THE COMPANY SAYS WILL ADDRESS PUBLIC CONCERNS. THIS ONE PRINTS A PAPER RECORD OF EACH VOTE CAST.

SCHIPPERS

And here the ballot is printed and the vote is recorded electronically and physically. By changing the design of these systems, making sure that the --the casting of the vote is on paper again and the counting is on paper -- from paper again. So that's a --a principal change in the design philosophy that we took.

RATHER (VOICE OVER)

THIS IS A PROMOTIONAL VIDEO FOR THE NEW MACHINES, INTENDED FOR A FRENCH AUDIENCE. SCHIPPERS TOLD US THE NETHERLANDS HAS SHOWN INTEREST, AS HAVE OTHER FOREIGN GOVERNMENTS THAT HE REFUSED TO DISCLOSE.

BUT ROP GONGGRIJP AND OTHERS REMAIN UNCONVINCED. HE SAYS THE ONLY WAY VOTERS CAN TRUST THE MACHINE IS COUNTING VOTES CORRECTLY IS TO PUBLICLY COUNT EACH PAPER BALLOT...AND IF THAT'S THE CASE, THEN WHY HAVE A MACHINE AT ALL?

GONGGRIJP

You can't beat paper in terms of transparency; you can't beat counting people- people counting votes, in terms of distributing the trust you must have in the process. Anything that centralizes that trust anything, that has pieces of software counting votes instead of people counting votes is going to centralize the process done by thousands, tens of thousands, or hundreds of thousands of people back to just a handful that write that software.

RATHER (ON CAMERA)

BELIEVE IT OR NOT, THAT GERMAN CASE HAS SENT RIPPLES AS FAR AS NEW YORK...MORE SPECIFICALLY, NASSAU COUNTY, ON LONG ISLAND, WHERE THE COUNTY ATTORNEY IS SUING NOW TO KEEP FROM USING THE NEW COMPUTERIZED VOTING MACHINES. THE COUNTY ATTORNEY TOLD US HE BELIEVES THE RULING FROM THE GERMAN HIGH COURT WOULD BE QUOTE "PERSUASIVE" IN STATE AND FEDERAL COURT HERE.

...UP NEXT IN OUR PROGRAM, STUDYING VOTING MACHINES ACROSS AMERICA...SOME SURPRISING RESULTS.

QUESTIONING THE COUNT ACT 2:

RATHER (ON CAMERA)

AND NOW FOR SOME CONTEXT AND PERSPECTIVE, I SAT DOWN WITH LAWRENCE NORDEN, SENIOR COUNSEL FOR THE DEMOCRACY PROGRAM AT NEW YORK UNIVERSITY'S BRENNAN CENTER FOR JUSTICE. HE RECENTLY RELEASED A REPORT EXAMINING ELECTRONIC VOTING IN THE UNITED STATES

RATHER

Why did you do this study?

LAWRENCE NORDEN, SENIOR COUNSEL, BRENNAN CENTER FOR JUSTICE,
NEW YORK UNIVERSITY SCHOOL OF LAW

Well, first of all, because we work on-- in the area of voting systems, the-- the Brennan Center does. And-- we'd heard reports about problems and we'd heard complaints from election officials-- that they didn't have data about their systems. And we-- we wanted to confirm whether or not this was really an issue. So we attempted to find out have-- have there been a repetition of certain kinds of problems? Is there a problem with-- when problems do occur, with vendors not-- responding in a timely way and investigating the problems thoroughly? And-- you know, when we first started looking, what we realized was there's nowhere to go to figure out the answer to this because this-- this information isn't reported anywhere. We had to-- what-- basically what we had to do is go back-- and look at news reports. That-- that was our only source. We had to go back and collect all the news reports we could of particular problems and then-- do an investigation on our own, calling up the election officials and asking them what happened, asking them if-- if they had heard about the same problems that had happened a couple of years earlier-- in another county.

RATHER

What's the most important thing that I should know about our American voting system?

NORDEN

I think the most important thing that a lot of Americans probably don't realize is that-- no-- there-- there is no federal agency that is keeping track of the problems-- that we have with these systems unlike-- toasters or automobiles or-- most of the commercial products that are out there in the United States. There's nobody out there that has the power-- an individual government agency to investigate those problems-- to make sure that they're corrected for the future. And unfortunately-- all too often what that means is that-- these problems go unreported. And they occur again a couple of years later in another jurisdiction using the same machine.

RATHER

It seems incredible. You are telling me there is no federal agency, no federal group or committee that's empowered to get to the bottom of questions about electronic voting machines?

NORDEN

The-- there-- there isn't. I mean-- what's especially incredibly about that is that we've had this massive change in the way we run elections in the country after the 2000 election. We invested billions of dollars-- the federal government put billions of dollars into these new machines. And-- and really we-- essentially privatized our elections in a way-- that just didn't exist before. Private companies are now responsible in a way they weren't before for what the ballots looked like and-- and how the ballots are counted.

RATHER

Private companies?

NORDEN

Private companies, private learning system-- vendors. And-- the congress did put in place an agency called the Election Assistance Commission. But-- in many ways, it is-- it is really toothless. It doesn't have the independent power to set up regulations-- for these-- voting systems to investigate to find-- vendors if there are problems again, in contrast-- to-- many of the private commercial products that you and I might purchase-- at the supermarket or in the drug store.

RATHER

What are the consequences of this?

NORDEN

Well, the worst consequences unfortunately are that votes get lost. And--

RATHER

That's a fact, votes get lost.

NORDEN

Votes get lost, yeah, votes get miscounted. Votes get lost. And I think we've done a pretty good job of documenting this fact. Another consequence is-- it's difficult for election officials when they're buying new equipment to-- to know what's the best equipment-- to know what works, what doesn't. There are problems-- look, sometimes the machine-- votes don't get lost. Sometimes the machines just break down. They're not reliable. That can cause long lines. It doesn't directly lead to-- to lost votes. But, you know, p-- when people go to vote on Election Day, they come in the morning. They have to go to work. If they machines are down-- and they-- and they can't vote in the morning, maybe they can't come back later. So that's kind of an indirect-- disenfranchisement of voters.

RATHER

Well, if one is not to think that this is outrageous, why is one not to think it?

NORDEN

I think it's out-- look, I think it's outrageous. I think-- and-- and again-- to me, there's no explanation for why-- we regulate-- a toaster so much more thoroughly than we do a voting machine. This is our-- our democracy. There's-- there are few things more important-- than voting and making sure that all votes are counted accurately. And if you're-- you know, we've made a decision as a country-- that we're gonna have private companies-- responsible for ensuring that our votes are counted accurately. That's a decision that we m-- that we've made. And I don't think that's-- that's not gonna change anytime soon. So if we're gonna live with that decision-- I think then at the very least, we should be regulating voting-- the voting machine industry in the same way that we do others.

RATHER

What would-- what would it take for you, an expert on this who's studied it, to be satisfied that as far as it's humanly possible, that our-- that there's integrity in our voting, what would it take?

NORDEN

Well, look-- w-- one thing it would take would be to h-- for-- for some central agency to be tracking these problems and-- and publicizing them. These are complicated machines. There are always going to be some kinds of problems with some machines somewhere. That-- that's not-- that's not really the issue. The issue is making sure that we're doing as much as possible to minimize those problems. The second thing that we should be doing and-- many states have done this is to make sure that there's some kind of independent record of the software of-- of voters votes. In lots of states-- voters now fill out paper ballots. And those are-- are scanned into a machine. The-- the machines may be running on software. But there's-- a paper record that the voter has filled out that can be used to check against the machine. Others, there are touch screen machines. Many of those touch screen machines now have printouts that the voter can look at.

RATHER

Many but not all?

NORDEN

Not all, not all. And so that-- that's still a big problem. And we've got six states in the United States where not a single machine has any kind of, what we call, independent voter verified paper record.

RATHER

Many but not all?

NORDEN

Not all, not all. And so that-- that's still a big problem. And we've got six states in the United States where not a single machine has any kind of, what we call, independent voter verified paper record.

RATHER

How can that be?

NORDEN

I-- to me, it's a mystery especially with-- with all the problems that we've seen with these systems. And again -- I don't know that it's particular to voting machines these machines run on thousands of lines of code. They're complicated systems; there are all kinds of things that can cause problems with them.

RATHER

Well-- we've gone to Europe where there are three countries, the Netherlands, Ireland and Germany where they had electronic voting machines, questions were raised about them, the government says, "Oh, don't worry. There may be some few problems. But this high tech. This is 21st century. This is the way to go." And lo and behold when they had investigations, they found the machines were really-- well, corrupt comes to mind. But they just didn't work. And they've gone back to old-fashioned paper ballots. Well tell me if it's true, why we shouldn't do the same?

NORDEN

Well, you know, I-- I should say that there are-- there are some advantages of the electronic systems that we have now that we didn't have in the past. I think a lot of people remember-- Florida, 2000, in some sense those punch card machines were paper-- systems. And they had plenty of problems. We've gotten rid of a lot of those problems. We don't have hanging chads. There's less uncertainty about voters intentions. So that-- that-- that is-- that is one benefit-- of those systems.

RATHER

But we're talking about what Ireland, the Netherlands and Germany's done is go back-- you mark it on a paper ballot and you drop the paper ballot in the slot.

NORDEN

Yep, yeah-- and-- you know, I-- I-- there's-- it's a good question about whether or not that would be possible in the United States. In the U.S., we have-- many, many contests that we're voting on at once. So counting it might t-- counting it by hand might take longer.

RATHER

Might be more honest, though.

NORDEN

It might-- it might be more honest. S-- one thing that I think we should be doing if we're not gonna do that-- and we're-- we're doing in some places is-- people are filling out paper ballots. They're-- they're being scanned. And then we check the machines by doing-- what's called a post election audit. We look at some percentage-- of the paper ballots. And we compare that. Is the total from the hand count of the paper ballots-- the same as it is in the machine total? And if we get a certain percentage, we can feel confident-- that the machines are actually recording those votes accurately. And if they're not, then we can recount everything by hand.

RATHER

Let's talk about testing the machines. Is there a rigorous and integrity-filled system for testing the machines?

NORDEN

For the most part, for the most of the systems that are used in the United States-- there was-- there really was not a good testing system. That-- that again goes to this issue of the fact that no-- that there is no central authority collecting data with the pro-- problems of the system, right, because it-- it may be that you've tested the system and-- and it seems to be fine under the standards that exist-- and then you discover because of the way the system is stored-- or-- or the-- the way it is transported or the way that poll workers or voters interact with the system, that there are additional problems. And there's no feedback loop to say, okay, you know what, we've discovered that there's an additional problem with this system that wasn't part of our testing program. We're gonna, first of all, make that part of our testing program for future systems and, second of all, require-- that this system be fixed because it's causing problems. It just doesn't exist right now.

RATHER

I should have asked you before, as Butch Cassidy said to the Sundance Kid, "Who are these guys?" Yeah, who are these manufacturers?

NORDEN

Well-- the fact of the matter is-- is that-- in 2002, when counties and states were purchasing all of these new systems with this federal money that-- that-- came out after the 2000 election, there were many different manufacturers of voting systems. I think a lot of people have heard of Diebold, for instance-- but there were many other manufacturers-- Sequoia, and a whole bunch of others. Today, there are really only two big manufacturers. There's been a huge amount of consolidation-- in the voting s-- systems industry. There's ES&S, which is based in Nebraska, and there's Dominion-- which is based in-- in Canada, I believe. They control-- as much as 90 percent of the voting system market. And in some ways, this has put election officials at-- a tremendous disadvantage when working with voting system vendors. First of all, the vendors are responsible for doing everything for a lot of these jurisdictions-- for programming the-- for them, for making sure that they have their ballots, for counting their votes, for troubleshooting when there are problems.

RATHER

So it isn't just--

NORDEN

So--

RATHER

--selling the machine and walk away from it.

NORDEN

No, absolutely not, absolutely not. They are, you know, and a lot of these contracts, the election-- the counties are paying-- through the nose-- e-- every year. So-- I-- and I've had election officials say to me-- when there is a problem, we go to the vendor, we're not necessarily interested in-- making as much noise about this as possible for the very reason that-- we're reliant on them in the future.

RATHER

Well, let's pull back to what we call on television the wide shot. Are or are not American voters better off today in terms of the integrity of the elections-- than they were before the Help America Vote Act was passed which ushered in the electronic voting machine era?

NORDEN

I-- I think in many respects actually we are better off than we were. The new systems-- are an improvement. They allow-- disabled voters to vote privately and independently for the first time, which they couldn't do before 'cause the systems are computerized and they have all kinds of features that allow-- disabled voters and language minority voters to vote independently. There's much less ambiguity-- when people vote, so you don't have these things like hanging chads-- that you had where it was very difficult to tell how people voted and you don't have all these votes being thrown out. So all those are good things. I think where we went wrong is that we thought that technology-- a new

technology would solve all our problems. All we had to do was buy new machines, all our problems were solved. We didn't have to think about voting again. So we didn't put in place the right procedures and that's how come we had-- after 2002, all of these paperless systems. We didn't put in procedures to make sure those machines were counting accurately. We didn't put in place a regulatory scheme to ensure that if we're going to be privatizing our elections in this way-- that the manufacturer's are-- are regulating and reporting the kinds of problems that they have so that they can be dealt with. All of those things, we still need to work on. We've made some improvements, I think, with the new machines since 2002-- but we definitely still have a long way to go.

RATHER (ON CAMERA)

...LAWRENCE NORDEN. WHEN WE COME BACK, ONE MANS QUEST FOR ANSWERS ABOUT VOTING MACHINES AFTER A PECULIAR ELECTION IN SOUTH CAROLINA.

QUESTIONING THE COUNT ACT 3:

RATHER (ON CAMERA)

AND NOW THE STORY OF ONE MAN WHO WAS TROUBLED BY THE VOTING MACHINES IN HIS HOMETOWN. THE MACHINES WORKED PERFECTLY...HE WAS TOLD. BUT THE STORY GETS INTERESTING WHEN HE ASKS THE LOCAL AND STATE ELECTIONS ADMINISTRATORS...TO PROVE IT.

RATHER (VOICE OVER)

SOUTH CAROLINA IS THE CENTER OF SOUTHERN GENTILITY. AND IF ANY CITY'S RESIDENTS PERSONIFY THAT GRACIOUSNESS, IT'S CHARLESTON ... THIS QUIANT OLD CITY BY THE SEA HAS BEEN CALLED AMERICA'S "BEST MANNERED" CITY...BUT WHEN IT COMES TO POLITICS IN THE PALMETTO STATE, ALL THAT GENTILITY CAN SUDDENLY BE GONE WITH THE WIND.

TAKE THE DEMOCRATIC PRIMARY FOR THE US SENATE. LAST JUNE, ALVIN GREENE – AN OUT OF WORK VETERAN FACING A PORNOGRAPHY CHARGE – WON THE NOMINATION.

ALVIN GREENE, SOUTH CAROLINA DEMOCRATIC SENATE NOMINEE

Hi, how ya doin'?

RATHER (VOICE OVER)

ALVIN GREENE RECEIVED 100-THOUSAND VOTES AND WON ALL BUT THREE COUNTIES, EVEN THOUGH HE DIDN'T SPEND A PENNY ON ADVERTISING. THE NATIONAL MEDIA COULDN'T GET ENOUGH OF THE STORY.

(TV shows about Greene)

GREENE'S VICTORY HAD POLITICAL PUNDITS ASKING "HOW DID THIS HAPPEN?" AND LEFT DEMOCRATS CRYING FOUL.

CAROL FOWLER, CHAIR, SOUTH DEMOCRATIC PARTY (IN LOCAL NEWSCAST)

Somebody with a serious charge hangin' over him has no business in a senate race.

RATHER (VOICE OVER)

IN THIS POLITICALLY IRREVERENT STATE DEMOCRATS ACCUSED REPUBLICANS OF PLANTING GREENE IN THE RACE, REPRESENTATIVE JAMES CLYBURN DEMANDED AN INVESTIGATION.

JAMES CLYBURN, REPRESENTATIVE (D-SC)

I saw in the democratic primary elephant dung all over the place.

RATHER (VOICE OVER)

BUT SOME VOTERS THOUGHT IT WASN'T THE CANDIDATES...BUT THE COMPUTERS... DID SOUTH CAROLINA'S ELECTRONIC VOTING MACHINES TALLY THE VOTES ACCURATELY?

FRANK HEINDEL IS A COMMODITIES TRADER WHO LIVES OUTSIDE CHARLESTON. HE'S BEEN FOLLOWING REPORTS OF VOTING MACHINE GLITCHES AND BREAKDOWNS FOR THE PAST FEW YEARS.

FRANK HEINDEL, SOUTH CAROLINA VOTER

Once I heard that-- somebody we'd never heard of won the-- senate primary, I was surprised like everybody else was. And I started kinda payin' attention and findin' out more about him and what happened.

RATHER (VOICE OVER)

HEINDEL KNEW THAT SEVERAL INVESTIGATIONS OF TOUCH-SCREEN ELECTRONIC VOTING MACHINES SIMILAR TO SOUTH CAROLINA'S -- HAD FOUND SERIOUS FLAWS WITH THE SYSTEMS. SOUTH CAROLINA HAS 12-THOUSAND ES&S COMPANY IVOTRONIC TOUCH SCREEN MACHINES THAT HAVE NO VOTER-VERIFIABLE PAPER RECORD.

IN THE DAYS THAT FOLLOWED THE PRIMARY, HEINDEL - AND EVERYBODY ELSE - HEARD MANY EXPLANATIONS FOR GREENE'S WIN. BUT HEINDEL WASN'T SATISFIED SO HE DECIDED TO START HIS OWN CITIZEN'S INVESTIGATION.

HEINDEL

I really wanted to find out how many machines malfunctioned on Election Day. How many machines need to be recalibrate on Election Day, and understand more about the machines performance.

RATHER (VOICE OVER)

ESPECIALLY AFTER HE HEARD THE LOCAL ELECTIONS ADMINISTRATOR ON A TELEVISION NEWSCAST.

HEINDEL

I'd seen a TV news -- special where our Charleston county election commission director had said that there was a paper trail on the votes, and there was nothin' to worry about. So, one of the things I asked for was a copy of the paper trail.

RATHER (VOICE OVER)

HEINDEL SAYS HE DIDN'T KNOW WHAT WAS ON THE PAPER TRAIL BUT HE WANTED TO SEE IT.

HEINDEL

I started sendin' off a couple of Freedom of Information Act requests, one to the state Election Commission, and one to the Charleston County Election Commission.

RATHER (VOICE OVER)

EASIER SAID THAN DONE. IT TOOK ALMOST TWO MONTHS FOR HEINDEL TO GET THE INFORMATION AND IT WAS NOT WHAT HE EXPECTED. WHAT HE GOT WAS A CD THAT CONTAINED A SPREADSHEET...WHICH HE THINKS SHOWED THE MACHINES HAD NOT PERFORMED AS FLAWLESSLY ON ELECTION DAY AS OFFICIALS HAD SAID.

HEINDEL

There was about 58,000 lines. So, it took me a while to understand a little bit of it. There's a lot of shut downs, terminal shut down dash I.P.S. exit happens quite a bit. P.E.B. access errors-- there's literally thousands of error messages on the 391 machines on Election Day that I don't think should be happening.

RATHER (VOICE OVER)

BUT HE DIDN'T FULLY UNDERSTAND THE TECHNICAL JARGON AND SO HE SENT THE SPREADSHEET TO DUNCAN BUELL, A COMPUTER SCIENCE PROFESSOR AT THE UNIVERSITY OF SOUTH CAROLINA AND ASKED HIM TO TAKE A LOOK

DR. DUNCAN BUELL, COMPUTER SCIENCE PROFESSOR, UNIVERSITY OF SOUTH CAROLINA

From the Charleston logs, it's clear there are some machines in the June primaries that were really ornery and eventually had to be shut down because they just didn't want to behave that day.

RATHER (VOICE OVER)

BUT WHAT FRUSTRATES HEINDEL MORE THAN THE MACHINES BEHAVING BADLY IS THAT THE STATE ELECTION COMMISSION HAS REFUSED TO HONOR ALL OF HIS FREEDOM OF INFORMATION OR FOIA REQUESTS. HEINDEL HAD ASKED TO SEE A 37-PAGE REPORT THAT OFFICIALLY CERTIFIED THAT THE VOTING MACHINES WORKED BUT.

HEINDEL

Well, they'll say, you know, Mr. Heindel, we're denying your-- your Freedom of Information Act request due to-- due to the ES&S-- proprietary information.

RATHER (VOICE OVER)

AND THAT GOT HEINDEL REALLY STEAMED. THAT'S BECAUSE THE REPORT SUPPOSEDLY PROVING THAT THE VOTING MACHINES FUNCTION PROPERLY COULD NOT BE SEEN BY THE PUBLIC BECAUSE IT IS SAID IT CONTAINED SO CALLED TRADE SECRETS OF THE MACHINE MANUFACTURER – ES&S– AND THE OUTFIT THAT RAN THE TESTS ON THE VOTING MACHINES – SYSTEST LABS.

HEINDEL

The only secret in an election should be who I voted for. And-- and-- and there's too many secrets with what they've got. It's just-- it's not-- that's not a democracy works as havin' a proprietary software package hiding what our votes are doin'.

RATHER (VOICE OVER)

THE SOUTH CAROLINA STATE ELECTION COMMISSION, OR THE SEC, REFUSED TO BE INTERVIEWED FOR THIS REPORT BUT THEY SENT US A STATEMENT THAT READS IN PART, QUOTE “...THE SEC IS WORKING TO SEPARATE THE EXEMPT AND NONEXEMPT MATERIAL IN AN EFFORT TO PROVIDE MR. HEINDEL WITH AS MUCH INFORMATION AS LEGALLY POSSIBLE.”

DUNCAN BUELL, AT THE UNIVERSITY OF SOUTH CAROLINA SUSPECTS THAT THE STATE IS BOUND BY ITS CONTRACT WITH THE MANUFACTURER TO KEEP THE MACHINE'S PROGRAMMING CODE SECRET.

BUELL

They're going to declare things to be proprietary. And they will hope that that stands up if somebody asks them about it.

RATHER (VOICE OVER)

BUELL CALLS THE ELECTRONIC VOTING MACHINES COMPLEX COMPUTER SYSTEMS AND OVER THE YEARS HE HAS TRIED TO FIND OUT MORE ABOUT HOW THEY WORK, EVEN SUGGESTING AT ONE POINT THE MACHINES BE USED AS A TEACHING TOOL.

BUELL

I asked whether it would be possible to get one of these machines-- to let a team of-- of senior undergraduates-- for their capstone project, open it up, dump the memories, disassemble the code, and basically re-- reverse engineer the machine. I was told, no, no, that would be contrary to the-- contract agreements.

RATHER (VOICE OVER)

BUELL BELIEVES THOSE CONTRACT AGREEMENTS SHOULD NOT PRECLUDE PUBLIC TESTING AND EXAMINATION OF THE THOUSANDS OF LINES OF SOFTWARE PROGRAMMING INSIDE THE VOTING MACHINES.

BUELL

Software is hard. It is just too easy to make mistakes. There's an old joke in computing that if you have a bug in your code, you won't find it, nobody you ask will find it, but the first jerk that walks by with unwanted advice is gonna spot it immediately.

RATHER (VOICE OVER)

AND HE SAYS THERE'S NO PUBLICLY AVAILABLE PROOF THAT THE MACHINES WORK.

BUELL

My understanding is that most of their testing is, you know, if you stick this machine in a warehouse at 120 degrees for six months, it'll still work later. It's not testing and penetration of-- of the code itself.

RATHER (VOICE OVER)

MEANWHILE FRANK HEINDEL SAYS HE'LL KEEP DIGGING IN AN EFFORT TO THROW SOME SUNSHINE ON WHAT HE THINKS SHOULD BE A MUCH MORE TRANSPARENT SYSTEM.

HEINDEL

You know, I don't have proof that anything happened. It could've been poor programming on the machines. It could've been just-- it could've happened just like they said it happened. It could've been—I, I don't know. I don't know. But that's one of the-- that's one of the inadequacies of our voting system is we don't know and we'll never know for sure what really happened. We don't have any way to-- to verify what happened.

RATHER (ON CAMERA)

AND WHILE HE WAITS FOR MORE ANSWERS, FRANK HEINDEL HAS POSTED HIS FOIA REQUESTS AND THE INFORMATION HE HAS RECEIVED ON THE WEB AT SCVOTINGINFO.COM. WE ALSO ATTEMPTED TO REACH THE COMPANY, ELECTRONIC SYSTEMS AND SOFTWARE, ES&S -- THE MAKER OF THE MACHINES IN QUESTION, BUT THEY NEVER CALLED BACK. I'LL BE BACK WITH SOME FINAL THOUGHTS IN A MOMENT.

VOTING PRIMER ACT 4:

RATHER (ON CAMERA)

TONIGHT WE'VE LOOKED AT QUESTIONS SWIRLING AROUND ELECTRONIC VOTING MACHINES. AND WE'VE HEARD FROM COMPUTER EXPERTS WHO BELIEVE IT WOULD BE BEST TO GO BACK TO PAPER AND PENCIL. IT MAY SEEM THAT'S JUST GOING BACK TO THE WAY IT'S ALWAYS BEEN. BUT THE TRUTH IS THAT THE HISTORY OF HOW WE VOTE STRETCHES FAR BACK BEFORE THE ERA OF TOUCH SCREENS AND HANGING CHADS.

WHEN WE THINK OF A BALLOT, WE THINK OF A PIECE OF PAPER, OR MAYBE NOW A TOUCH SCREEN, WITH A LIST OF CANDIDATES NAMES. BUT THE TERM BALLOT ACTUALLY COMES FROM THE ITALIAN BALLOTTA MEANING "LITTLE BALL." THAT'S BECAUSE, DATING BACK TO THE GREEKS, VOTES WERE OFTEN TAKEN WITH DISCS OR BALLS THAT VOTERS WOULD DROP INTO THE "BALLOT BOX." MANY SECRET SOCIETIES USED WHITE ONES FOR YES VOTES AND BLACK ONES FOR NO VOTES - HENCE THE TERM "BLACK BALLED."

FOR THE EARLY YEARS OF OUR NATION'S HISTORY, POLLING PLACES WERE OFTEN RAUCOUS AFFAIRS. THE ARTIST GEORGE CALEB BINGHAM CAPTURED A SCENE IN MISSOURI IN THE MID-19TH CENTURY IN HIS FAMOUS PAINTING "THE COUNTY ELECTION." WITH BARRELS OF ALCOHOL AND OBVIOUS MAYHEM, IT LOOKS MORE LIKE A TAVERN THAN A SOLEMN DISPLAY OF DEMOCRACY. VOTES WERE GIVEN BY VOICE IN FRONT OF ALL WITHIN EARSHOT. AND THERE WERE NO PROVISIONS AGAINST POLITICIANS, OR ANYONE ELSE, TWISTING ARMS BEFORE THE VOTE WAS CAST.

IN THE 19TH CENTURY MANY JURISDICTIONS DID ACCEPT PAPER BALLOTS. A VOTER COULD WRITE UP HIS OWN, BUT MANY JUST USED ONES PROVIDED BY POLITICAL PARTIES. THE BALLOTS WERE OFTEN IN THE SHAPE OF TRAIN TICKETS, WHICH LED TO THE PHRASE "VOTING A STRAIGHT TICKET." AND IF YOU WANTED TO CROSS OUT ONE OF THE NAMES AND WRITE SOMETHING ELSE, THE POLITICAL PARTIES OFTEN DIDN'T GIVE YOU MUCH ROOM.

BY THE END OF THE 19TH CENTURY, THE AMERICAN ELECTORATE WAS

CHANGING. EUROPEAN IMMIGRANTS WERE POURING INTO THE CITIES AND POLITICAL MACHINES LIKE TAMMANY HALL IN NEW YORK UNDER THE INFAMOUS BOSS TWEED WERE USING INTIMIDATION AND BRIBERY TO SWAY ELECTIONS. THERE WERE CALLS FOR REFORM.

A REVOLUTION IN VOTING CAME FROM OF ALL PLACES -- AUSTRALIA. THE AUSTRALIAN-STYLE BALLOT IS ONE WHERE THE NAMES OF CANDIDATES FROM ALL POLITICAL PARTIES ARE PRINTED ON THE SAME BALLOT AND THE VOTER HAS TO CHOOSE. THEY ARE PRINTED BY THE GOVERNMENT AND HANDED OUT, ONE PER PERSON, AT THE POLLING LOCATION. IT'S A SYSTEM THAT IN SOME FORM OR ANOTHER IS NOW USED IN ELECTIONS AROUND THE WORLD. IT SEEMS SO OBVIOUS. BUT IT WASN'T FIRST USED IN THE UNITED STATES UNTIL 1888. MANY STATES ALLOWED PARTISAN BALLOTS WELL INTO THE 20TH CENTURY.

WHEN WE THINK ABOUT ELECTIONS, WE FOCUS ON CAMPAIGNS AND CANDIDATES, POLICY POSITIONS AND DEBATES. WE TAKE THE MECHANICS OF DEMOCRACY AS A GIVEN. BUT AS WE'VE SEEN TONIGHT, HOW WE VOTE IS SOMETHING WE CANNOT TAKE FOR GRANTED. WE LIVE IN A WORLD NOW WHERE WE ARE CONDITIONED TO LOOK FOR TECHNOLOGICAL ANSWERS. BUT WHEN THOSE WHO UNDERSTAND THE TECHNOLOGY BEST SAY WE SHOULD BE WARY, PERHAPS IT'S TIME TO GIVE THESE VOTING SYSTEMS A HARD SECOND LOOK.

AND THAT'S OUR REPORT FOR TONIGHT. FROM WASHINGTON, FOR HD NET. DAN RATHER REPORTING. GOOD NIGHT.