

Opening Statement by Burton Squires

For the Election Assistance Commission (EAC) Technical Guidelines Development Committee
Subcommittee on Human Factors and Privacy
NIST, Gaithersburg, Maryland, Wednesday, September 22, 2004

My name is Burton Squires. Let me introduce myself. By training I am a Ph.D. physicist. I did research and teaching in physics for eleven years and then switched to computer science. I served 14 years at Pennsylvania State University, teaching and assisting with the administration of the Computation Center, then 18 years here in the Washington area as Software Manager on several contracts for various government agencies. I retired in 1996.

I have served as a volunteer election worker since the early 60s, first in Illinois, then in Pennsylvania, and recently in Maryland. I currently serve as Chief Judge in a local precinct. Because of the recent introduction of computers into the election process, I have taken a particular interest in election issues as they relate to computers. This does not make me an expert, but it has made me aware of many of the problems.

Concerning the privacy of one's ballot, it is my opinion that the present electorate is not nearly as conscious of why privacy is important, as was the electorate of forty years ago. Of course, the scandals of elections being fixed, by both union bosses and employers, were still fairly recent forty years ago. Today they are matters of history, and I suspect that many of our high school students never heard of these scandals, or if they have, they do not appreciate their significance. As a result, most of the electorate does not understand the reason for the complex elections process from registration, precinct check-in, to the casting of a ballot. All the falderal concerning using computer based touch-screen terminals has little meaning to them. Those who have used these machines overwhelmingly think they are great! The media have not helped. As a gross example, in yesterday's Washington Post I found the following sentence: "As an election judge, [a person] would have made \$130 on Election Day to do such things as greet voters and show them to the machines."!

Do the machines create problems or solve problems? Any change in a voting system does both. The goal, of course, is to solve more problems than you create. One very important goal is to count the ballots accurately. Once I had the opportunity to compare the accuracy of talented operators of Monroe calculators with the accuracy of the IBM 650 computer. Even when operating the Monroe calculators in blind pairs, the accuracy of the computer could not be approached.

Another very important goal is to assure that every person's vote is correctly recorded. In a pinch, a recount is a good test. Unfortunately, neither the lever machines nor the computers allow for a meaningful recount. To compensate for this deficiency, the machines are thoroughly inspected and tested, secured from tampering, and carefully controlled throughout the election process.

Another goal is to allow a disparity of voters the privilege of casting secret ballots. Here computers *really* excel because of their ability to accommodate to persons whose use of English is meager or whose sight or hearing or use of limbs is restricted. In response to the question of access of physically disabled, in Montgomery County we provide one machine at a lower level and equipped with a chair for persons who cannot stand (often an invisible problem) and which is removed for voters in wheelchairs.

Another goal is to thoroughly instruct the electorate on the use of the election tools and to have enough tools available on Election Day to assure a smooth flow of prospective voters. On this point, computers suffer a disadvantage. Because of their cost, fewer computer booths are usually provided than would have been provided for punched cards or lever machines or mark-sense. Also because of cost, at least here in Maryland, the use of a demonstration machine for Election Day voter instruction was discontinued when touch-screen computers were introduced.

A suitable physical set-up of the polling place, good informational signage, and smooth traffic flow contribute significantly to a positive voter experience. Nevertheless, the physical set-up is limited by the characteristics of the available room and good informational signage can easily become overwhelming. Smooth traffic flow depends upon both the number and training of election judges, and also upon the number of election booths available during the busiest hours of the day.

As with every other facility that deals with the public, it is important that election judges respect the voters at all times and treat them in a pleasant manner regardless of how irritating they may become. This requires judges who like people and who can continue to be pleasant throughout the long day. The Chief Judges at each precinct play an important role in providing an example that sets the tone for all of the other judges. Those of you from this area know how Izzie Cohen set the tone of pleasantry throughout all Giant stores. Joe Gibbs is a great coach, but there are lots of great coaches. What distinguishes Joe Gibbs is that he knows how to manage people—he knows how to set the tone for his team.

I cannot but admire the goal of setting standards for election systems. I say this because it seems to me that every election system ever proposed has its set of plusses and minuses. How these can be added up to provide a meaningful evaluation of any particular system has got to be very difficult.

I brought some materials with me that are illustrative of the brochures and signage used by Montgomery County, Maryland. Some are posted on the wall to my right and others are on the table in the back of the room. A few are available for you to take home.