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Office of the Inspector General
Miami-Dade County

Memorandum

To: The Honorable Alex Penelas, Mayor
Miami-Dade County

Received by Date

The Honorable Gwen Margolis, Chair
And Members of the Board of County Commissioners

Received by Date

From: Christopher Mazzella, Inspector General

Date: 9/20/02

Re: Office of the Inspector General Inquiry into Circumstances Surrounding the September 10, 2002, Election in Miami-Dade County

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As requested, I am submitting to you a report providing the results of our inquiry to date.

cc: Mr. Steve Shiver, County Manager

Received by Date

Mr. Robert Ginsburg, County Attorney

Received by Date

Mr. David Leahy, Director
Elections Department

Received by Date

I. INTRODUCTION

Many public officials and credible community representatives and organizations have described the Miami-Dade County Primary Election of September 10, 2002, as nothing less than a debacle. Indeed, despite concerted efforts by County officials to accurately re-calculate the vote count, public cynicism relative to the very integrity of the election process continues to foment.

Accordingly, on September 11, 2002, the Honorable Alex Penelas, Mayor, Miami-Dade County, requested that the County's Office of the Inspector General (OIG) conduct an official, independent inquiry into irregularities, both perceived and otherwise, surrounding the election. On September 12, 2002, the Miami-Dade County Board of County Commissioners joined in this request. Because of the momentous implications impacting the County's electoral process, I initiated an inquiry on September 12th and, as requested, I am submitting a report to the Mayor and the Board of County Commissioners today, September 20, 2002.[1]

The focus of this report is two-fold. First, let me emphasize that the report does not dwell on the group of things that went wrong. We all know, for instance, through ample and sometimes sensationalized news media coverage, that a number of polling stations failed to open on time and staggered their closings, creating an unbalanced opportunity throughout the county to vote, that voting machines were rendered inoperable because of technical and human errors, that an undetermined number of registered voters were unable to vote, etc. We all understand that these irregularities led to the ultimate electoral collapse – the failure of our elections officials to accurately calculate a final vote in a timely manner. Rather than dwell on what happened, this report focuses on the causes or reasons for these irregularities. Secondly, and perhaps more importantly, this report spotlights basic recommendations that the County should consider to help insure that it conducts future elections properly. It is our expectation that County officials will use this report as a blueprint for future successful elections.

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[1] The Mayor and the Board of County Commissioners specifically requested that the OIG submit its report by Friday, September 20, 2002. As such, the OIG only had eight (8) days to investigate this matter and submit a Final Report. Because of the extreme time constraints, the OIG was not able to provide a draft copy of this report, as required by County Code, to the parties primarily involved and responsible for running the primary election. Given the nature of the Mayor and Board's request, it is our opinion that the 10-day notification provision, which allows those parties the opportunity to comment or provide a response to a draft report, as otherwise required by the Inspector General Ordinance, does not apply under these circumstances.

Before delving into the substantive issues and recommendations, I want to take this opportunity to set the election disenchantment in proper perspective. Even on a good day, running a successful election in Miami-Dade County is a daunting task, and now is even further complicated by new technology. Nevertheless, I absolutely believe that the identified irregularities that did arise in this past election are not only inexcusable, but were preventable. We must hold those officials responsible for administering the election to the highest standards of accountability because they are ultimately responsible for protecting our most basic right – the right to vote. But we must not lose sight of the fact that these same officials, and the thousands of public employees and volunteers who man polling stations for countless hours under the most stressful of circumstances are, for the most part, honest and dedicated servants who deserve our thanks and gratitude. Indeed, many polling places did experience positive results.

I must add, however, that I regret the letter directed to the Governor dated September 19, 2002, which attempts to explain what went wrong during the recent primary election, is not complete. It does not point out that the County's own audit director informed County officials repeatedly, and as early as June, 2001, about serious deficiencies impacting the electoral process and that responsible County officials failed to take adequate measures to correct these shortcomings. Nevertheless, it is now vitally important for this community to stand together to support its officials in their efforts to restore the public's trust in its electoral process but, at the same time, to send them a clear message that future failures will not be tolerated.

Finally, I want to stress that the OIG is not comfortable with the iVotronic System procurement process and the performance of the contractual obligations of the vendor. As such, it has initiated a separate inquiry to examine this contract.

II. SCOPE OF THE OIG'S INVESTIGATION

The OIG has performed an extensive investigation into this matter in a very short period of time. OIG Special Agents performed site visits to other County jurisdictions (such as Pasco County, north of Tampa) to interview their elections personnel and obtain appropriate materials. The OIG also contacted other Florida jurisdictions that used Election Systems and Software (ES&S) equipment and obtained information about their experience with the equipment during the September 10, 2002 election.

OIG Special Agents performed a site visit to the elections warehouse and interviewed elections personnel there to obtain information on the organization, storage, and maintenance of the voting equipment, and problems that occurred during the September 10, 2002 election.

OIG Special Agents made repeated visits to the Elections Department to interview elections personnel, and ES&S personnel, and obtained documents, related to the primary election. The documents obtained and reviewed by the OIG include, but are not limited to, procurement contracts, training materials, complaint sheets, emails, correspondence, absentee ballots, videotapes of Board of County Commission meetings and news media coverage, etc. The OIG also obtained information, and reviewed documents and material, from other jurisdictions such as Pasco County, from the State Attorney's Office, from GSA, from the Communications Department, from the County Manager's Office, etc.

All of this complex information had to be reviewed in order for the OIG to fully understand the problems that occurred and the issues involved, in order to develop proposed recommendations and solutions, and prepare this report.

III. WHAT WENT WRONG and WHY

The OIG has been tasked to investigate what went wrong. We all know from our own experiences what went wrong. This community does not need the OIG to repeat what the media has already reported. We all know that many polls did not open on time, many voting machines did not work, the lines were long, voters were turned away, and once again an excessive delay in the reporting of the election results calls into question the integrity of the vote tabulation process. It does not take the OIG to report that Miami-Dade County's inability to run a non-controversial problem-free election continues to be the focus of national ridicule.

Rather than repeat the failings, our purpose is to attempt to explain why things went wrong – to give a fair and truthful account of the cause(s) of the failures. The remainder of this report will examine Miami-Dade County's election process for preparing for the September 10, 2002 Primary Election. We have grouped all the issues into three categories: (1) Planning, Organization, and Implementation; (2) Equipment-related Deficiencies; and (3) Training. Most prophetic is the matter of Planning, Organization, and Implementation, the lack of which is directly or indirectly the cause of all other problems that materialized on September 10th and the week thereafter.

A. Planning, Organization and Implementation

The Department of Elections is not a new department within Miami-Dade County. The staff of the Elections Department is comprised of seasoned veterans of the elections process. The OIG recognizes that the task of running any election, large or small, is a difficult task in Miami-Dade County. But thanks to the events of November 2000, and the resulting state mandated change from a manual archaic voting system to a 21st century technology driven system, the types of responsibilities related to running this and future elections changed dramatically. These new responsibilities included:

- Procuring a new voting system. Prior to the actual procurement process, efforts included researching available systems to find a system most suitable for the needs of Miami-Dade County. The procurement process itself included learning about the intricacies of the proposal, the corresponding terms of the resulting contract, pricing terms and warranty issues.

- Learning and adapting to the new technology. This includes learning how the system operates, how data is stored, how the ballots are generated, how the votes are stored and counted, and the security features to protect against tampering. While procurement processes and changes in technology are on-going events within the function of county government, these two fields were forcefully placed upon a Department that had not experienced change in many years.

- Identifying the skill sets needed within the Elections Department to meet the challenge. Elections Department staff undoubtedly have experience in running elections. However, elections as we know it were about to forever change in the State of Florida, especially in those jurisdictions implementing touch-screen technology. It was incumbent on County and Elections Department management to identify the shortfalls and weaknesses within the available human resources. Once identified, it was incumbent on them to ask -- even demand, that those gaps be filled either by finding staff with the necessary skill sets or by training existing staff, well in advance, to teach them the necessary skills.

- Coordination with other county resources to support this new effort. Because of Miami-Dade County's form of governance, the Elections Department has the ability to draw upon other County departments for support. This includes support in the fields of technology, training, general services, communications and audit and consulting services. As the County's efforts to move into a new way of voting progressed, it was the responsibility not only of the Elections Department, but of the County itself, to recognize the multi-disciplinary requirements needed to hold a successful election.

In essence, it involved intensive efforts in planning, organization and implementation to succeed in this new technologically driven election environment. It is our conclusion that County and Election officials did not do enough planning, organizing and implementing ever after being notified repeatedly by the County's Audit and Management Services Department about deficiencies.

B. Equipment-related Deficiencies

Miami-Dade County procured the iVotronic touch-screen system by contract with Election Systems and Software (ES&S) dated February 4, 2002. On January 29, 2002, the Board of County Commissioners (BCC) approved the request to award the voting systems contract to ES&S, waiving the bid protest procedures. This procurement procedure was officially initiated by BCC approval six months earlier on July 24, 2001. As previously mentioned, the OIG will conduct a more exhaustive inquiry of the procurement process after issuance of this report.

The two most widely discussed equipment-related deficiencies are the problems associated with the failure to include proper statutory language on the ballots (which necessitated last minute efforts to modify and replace all the flash card devices within the machines) and the conversion to the "bitmap" ballot to allow for a tri-lingual ballot in all machines. The conversion to the bitmap has been noted as a major contributor to the failure to open the polls on time, as the bitmap required a longer – 6½ minute—boot-up time per machine. Both of these last minute modifications will be examined in the remainder of this section.

The tri-lingual ballot and change to bitmap technology

The County's Request for Proposals made public in July 2001 contained specifications for touch-screen voting machines that would accommodate three languages. It was the County's intention to provide the voting public with a tri-lingual ballot in English, Spanish and Creole.

Section 2.1 of the RFP, Scope of Services, Introduction/Background, reads: "Ballots throughout the County must be available in English and Spanish. Ballots are also available in Creole in 60 of the County's 617 precincts, although the County has a desire to provide ballots in English, Spanish and Creole in all its precincts." Section 2.1[sic] Requirements and Services to be Provided, Voter Adaptation No. 9, reads: "Ballots must be available in English, Spanish and Creole."

ES&S's proposal stated that its touch-screen technology, at that time, could produce only bi-lingual ballots (either English/Spanish or English/Creole). ES&S did state that it anticipated tri-lingual ballot capability in the near future. In specific response to Voter Adaptation No. 9 (cited above) ES&S's proposal stated: "Although we comply with this requirement through our ability to format English/Spanish and English/Creole units that can be used simultaneously in the same precinct, we are currently working on software modifications to deploy units that have three language capabilities. These software modifications will be completed by the beginning of next year [2002], and prior to the May 2002 implementation timeline."

In January 2002, just prior to the BCC awarding the voting systems contract to ES&S, it was explained to the Board that the touch-screen system would be in three languages: English, Spanish and Creole.[2] At that point, ES&S had not yet been certified by the State of Florida for its bitmap technology, and the text-based technology was only accommodating two languages. Municipal elections held in Miami-Dade County prior to the September 10th primary (Medley General Election, April 2, 2002, Bay Harbor Islands Municipal Election, April 2, 2002, and Opa-locka Special Election, April 29, 2002) which all used the new touch-screen devices were bi-lingual ballots.

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[2] According to Appendix F of the Contract: "ES&S Firmware versions will change between execution of the contract and final acceptance due to ongoing certification of Updates. The ES&S Firmware that will be finally received upon Final Acceptance will be that which will provide a full color, bitmap full bar touch-screen functionality ... will function in English, Spanish, and Creole language at the voters' choice..."

The OIG has learned that ES&S did attempt to create a tri-lingual ballot for the September 10th primary. According to Mr. David Leahy, Miami-Dade County's Supervisor of Elections, it was known early on that Bitmap was necessary to provide this type of ballot. ES&S developed the first ballot design without any input from the County and had it State Certified in or around May/June 2002. According to Mr. Leahy, when the ballot was finally reviewed by him, it was completely different from what was previously demonstrated to the Elections Department staff. The new ballot design was a two-column ballot rather than a single column ballot. Mr. Leahy told the OIG that the two-column design conjured up nightmarish visions of the infamous "Butterfly Ballot" and he immediately demanded that ES&S make numerous revisions. The ballot was changed and the State of Florida re-certification was granted on August 21, 2002 -- only twenty (20) days before the election.[3]

The events surrounding the bitmap ballot is relevant to the issue of what went wrong and why, because it is a major contributor to what was characterized by poll workers as a malfunction in the machines. In conjunction with last minute revised instructions that were difficult to understand, the extra boot-up time necessitated by the bitmap ballot created an atmosphere of early morning confusion and chaos. Not realizing that the boot-up time for each regular machine went from one minute to six and a half minutes, poll workers may have prematurely pulled out the activation cartridge, causing the start-up to fail. Additionally, the 6½-minute boot-up time compounded difficulties in opening the precincts on time. While there have been reports of precincts opening at 7:00 am with only some of the machines activated, there have also been reports that some precincts were unwilling to open their doors until all or a majority of its voting machines were working.

The revised instruction sheets for opening and closing the polls were provided no earlier than one week prior to the election. Unless one read the footer in small font located at the bottom left hand corner, one may not have even realized that these were revised instructions, as nothing (not even conspicuously) was noted on the top page stating that these were "revised." As these two pieces of paper entitled: "Before the polls open – Activating the iVotronics" and "After the polls close – Deactivating the

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[3] The OIG has also learned that while Broward County anticipated using the bitmap graphics based ballots, Broward election officials changed course and resorted back to the text based system. Miami-Dade election officials, through application and testing of the devices with the new bitmap ballots, were made aware of the increased boot-up time required. As opposed to Broward County, Miami-Dade stayed on course and issued revised instructions just one week prior to the primary election.

regular and audio iVotronics" are perhaps the two most important pieces of election day instructions, one would think that these instructions would be written in a clear and easy-to-read language. The instructions are dense and in small print, and in substance contain many additional elements that were not contained in the original instructions.

The events surrounding the bitmap tri-lingual ballot are also relevant to the lack of absentee ballots available at the various field sites. The County planned to use the touch-screen devices at the absentee ballot field sites.[4] However, because of last minute modifications being made to the devices, e.g. loading the bitmap technology, etc., all the absentee field sites used paper ballots. According to numerous accounts, absentee voting sites often ran out of the paper ballots. Large groups of voters would show up at these locations at one time, casting their vote on the same ballot style, often causing the polling site to run out of a particular ballot style. Had the machines been available and placed at the absentee voting sites, an endless number of absentee votes could have been cast -- and collected -- prior to September 10, 2002. The sites would not have run out of paper ballots.

The conversion of the bitmap ballots also impacted the training regime envisioned by County election officials. Trainers were unable to train using the actual ballots. Instead Inspectors, the first group of poll workers to be trained, were trained with the text ballots from July. The Elections Department waited until August to train Clerks and Assistant Clerks in order to demonstrate the new software/firmware, even though this may not have been the "certified" version ultimately adopted for the September 10th primary. Additionally, by not having the final "certified" ballot design until late August, the Elections Department was unable to develop the voter education video that was planned to be aired on television.

Converting to the bitmap ballot within weeks of the primary election was a calculated risk assumed by the County's election officials. On one hand, there was an expectation generated by prior ES&S explanations of the new voting system that each device would be equipped to handle three languages. On the other hand, that proven technology was not yet available when the County entered into its contract with ES&S. While ES&S did state that the tri-lingual ballot was forthcoming and it anticipated certification by the State and availability prior to May 2002, ES&S went forward with certification of a ballot design without County approval. All of this is compounded by the fact that this is emerging untested technology. The actual bitmap ballot design that was used in the September 10th primary was not certified until August 21, 2002. Two

[4] See Memorandum from the County Manager to the Mayor and BCC dated March 25, 2002: New Election System and Educations Program Status Report.

options were then available: use bi-lingual text styled ballots on the touch-screen machines, in either English/Spanish or English/Creole and designate machines as such at the various precincts; or assume the risk and proceed with the conversion. Miami-Dade elections officials chose the latter.[5]

The OIG spoke with Mr. Leahy, who advised us that certain revisions will be made for the November 5th General Election. Software will have boot-up instructions right on the machine. It will be reprogrammed to allow removal of the Master Activator after two (2) minutes. One can then proceed to the next machine, while the previously activated machine continues to boot itself up without the activator cartridge in place. This programming should be completed by September 20, 2002, and ES&S is seeking to have state certification by September 27, 2002.

If this programming cannot be completed and/or certification is not approved with ample time to test and train with the new system, Mr. Leahy advised the OIG that individual machines will be booted-up/activated at the warehouse. Some type of lock mechanism will be placed on the devices, which can then be opened at the precincts with a password. There are security concerns regarding this procedure, but it is seen at this time as the only alternative.

The OIG cautions that adoption of either of these two alternatives is risky, unless there is ample opportunity for testing and simulation. Given the chaos in the morning hours of September 10th, changing the procedures once again could easily create another state of confusion among the same poll clerks and poll workers. At this point practically all of Miami-Dade County has been made aware that it takes 6½ minutes to activate a regular iVotronic and 23 minutes to activate an audio booth. Perhaps the answer lies in better logistical coordination in the set up/opening process of polling sites and/or having an extra Master Activator[6] in large precincts to

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[5] According to senior management in the County Manager's Office, County management never formally approved the conversion to the bitmap ballot. While the OIG has not seen any documentation seeking approval or providing formal notification, the OIG would consider it negligent on the part of the County Manager's Office to be unaware that the September 10th primary would be using a tri-lingual bitmap ballot.

[6] The OIG is aware of the control-related concerns of having more than one Master Activator (the blue PEB) at each precinct. However, in order to open the polls on time, Elections' systems staff should explore the feasibility of using regular activators (red PEBs) to activate the booths. In the revised "Before the Polls Open" activation instructions, it allowed for audio booths to be opened with any of the (red) ballot activators. In the revised closing instructions, all booths (regular and audio) were closed with the Master Activator. While the OIG is unfamiliar with the actual technology used in the opening/vote collecting procedure, it appears

get all the machines booted. It would also be ideal if all of the polling places could be physically set up the night before, which would then only necessitate activation of the devices in the morning. Arrangements should also be made for either poll workers or county staff to arrive earlier than 6:00 am in order to complete the start-up procedures by 7:00 am.

Ballot missing statutorily required language.

The Democratic Primary for the Governor's race contained three candidates. For each candidate, the name of the candidate for the lieutenant governor was "Not Yet Designated." Those three words, which are statutorily required, were missing from the ballot. This was discovered on or about August 15, 2002. Over two weeks later, in a memorandum from the Supervisor of Elections to the County Manager, dated September 4, 2002, Mr. Leahy outlined a plan of action to rectify the situation.

The OIG examined the events surrounding the three missing words, and the massive effort undertaken just days prior to September 10, 2002, as this matter impacted the lack of human resources available for other crucial logistical matters and overall contributed to the chaotic atmosphere leading up to the primary election.

The OIG has learned that initially 1,000 flash cards were purchased for use in iVotronic devices that were designated for audio use with a text display. A "flash card" is a device that looks like a smaller sized floppy disk. It fits into the machine and loads certain programming material -- the ballot -- onto each device. Upon the decision to convert to the bitmap ballot, the County purchased an additional 6,200 flash cards to be used in the remaining regular (non-audio) iVotronic devices. According to other jurisdictions using ES&S's touch-screen iVotronics, text-style ballots do not require the flash card, and can be loaded through use of the activator/PEB device. Because of the upgraded graphics-based bitmap technology, Miami-Dade County's touch-screen machines required the flash card. Those additional 6,200 flash cards were installed.

On or about August 15, 2002, ES&S was notified by Elections Department staff that a problem existed with the Governor/Lieutenant Governor language on the Democratic primary ballot. Apparently, an employee of the vendor had deleted the three required words ["Not Yet Designated"] and County staff told ES&S that it was

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from the revised instructions that activation does not necessarily have to occur with the Master Activator.

their responsibility to fix the problem. This would require re-programming and loading 7,200 new flash cards.

Unfortunately, the Elections Department failed to follow up on having ES&S correct this egregious error. So it was not until two weeks later, on or about September 1, 2002, while conducting a logic test on the iVotronic machines that Election Supervisor Mr. David Leahy found that the "Not Yet Designated" wording had not been fixed by ES&S. To rectify the situation, the County had to purchase 7,200 new flash cards that had to be programmed with the corrected ballot language. Once programmed, the already inserted flash cards had to be physically removed and replaced with the new ones. This was a massive and rushed undertaking performed in the last three (3) days prior to the election. On the Saturday, Sunday and Monday before the Tuesday, September 10th election, County personnel designated as Election Day Troubleshooters had to pull out the flash cards on 7,200 machines and put in the new ones. The touch-screen machines had already been delivered to approximately 320 out of 550 polling places. Elections personnel had to visit each of those 320 polling places to switch out the flash cards. The rest were replaced at the warehouse.

The OIG has learned that these new flash cards could also have been inserted incorrectly into the machines, i.e. upside down, thus making the machine inoperable. While the OIG has not been able to confirm the number of machines where the flash cards were inserted incorrectly, the OIG witnessed a post-election experiment where the flash card was purposefully inserted upside down and the machine was unable to be activated. Again, it cannot be stressed enough that these eleventh hour undertakings exacted a high toll on the ability of staff to carry out its functions without mistakes.

As for the second purchase of the 7,200 additional replacement flash cards, it is the OIG's understanding that the County is withholding payment. This issue will be more fully examined by the OIG, as we are also confident that the County Attorney's Office will undoubtedly provide counsel to the Elections Department on the issue.

At the end of the day, ES&S bears major responsibility for these significant shortcomings, not to mention the combined lack of follow-up by Elections staff, which resulted in further complications.

C. The Lack of Adequate Training

On June 13, 2001, the Miami-Dade County Audit and Management Services Department (AMS) issued its Final Audit Report concerning the elections held in November 2000. Little comment is required to remind everyone about the difficulties encountered by Miami-Dade County during that election. Of specific relevance to the issues at hand today were the findings and recommendations reported by AMS in 2001 about poll worker training and performance issues. Of equal importance was the Election Department's response to those recommendations.

The 2001 audit findings stated, in part:

> "Each of the approximately 5,000 temporary precinct workers receives 2 hours of video training in preparation for a 14-hour work assignment...Despite the training received, poll worker confusion regarding proper procedures was widespread throughout the precincts we observed, and often their repeated attempts to telephone Elections Department headquarters for clarification were unsuccessful due to heavy call volume..."

The findings go on to document other poll worker procedural deficiencies. With respect to the confusion alluded to above, the AMS made the following recommendation:

> "The quantity and breath of the procedural violations we observed are indicative of a system too heavily reliant on inadequately-trained temporary workers who are expected to understand and uphold complex election regulations with a minimal degree of support and guidance. It is unreasonable to expect a high level of performance from these workers after having received just two hours of video training. We recommend that Elections consider using County employees from other departments to staff these temporary Election Day positions at all precincts and the Ballot Reception area. This course of action would enhance the consistency, accountability, stability, and overall effectiveness of the process by creating a permanent, better-trained pool of election workers. Elections must provide comprehensive training to each participating employee to ensure general adherence to established processes and regulations. Training must include cited areas of deficiency...Further, each

worker should also receive training in the use of laptop computers and databases..."

In response to this recommendation for enhanced training, the Elections Department made these assurances:

> "The Election Reform Act[7] recently enacted...requires that Precinct Clerks receive 6 hours of training in a General Election year, with at least 2 hours occurring after June 1st. Inspectors must attend a minimum of 3 hours of training, with at least 1 hour occurring after June 1st. Our current plan is to conduct a half-day intensive training session for Clerks and Assistant Clerks prior to June 1, 2002. In addition to covering polling place procedures, including the changes that will result from the acquisition of a new voting system, they will be taught how to manage and supervise...I believe part of the reason that procedures are not followed and mistakes occur is due to the fact that neither the Clerk nor Assistant [Clerk] assumes a supervisory role at the precinct. The half-day session will conclude with a test that must be passed in order for the participants to be assigned to those positions...Inspectors and Deputy Sheriffs will continue to be trained in a 2-hour session prior to the Primary, and a refresher course prior to the General Election."

The inadequate training issue resurfaced during the observations of the Opa-locka Special Election of April 29, 2002. In the AMS Audit Report issued on August 7, 2002, it was reported that:

> "Another area of vulnerability is the competency and preparedness of the several thousand temporary poll workers recruited to participate in the September election. Procedural violations observed suggest the Department needs to enhance poll worker training-- a concern previously cited in our [AMS'] October/November 2000 Elections

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[7] Referring to the Florida Election Reform Act of 2001, Laws 2001, c. 2001-40 §64. However, only one year later, the Florida Legislature amended that same section (Fla. Stat. Section 102.014) to only require: (4)(a) No clerk shall be entitled to work at the polls unless he or she has had a minimum of 3 hours of training prior to each election. (4)(b) No inspector shall work at the polls unless he or she has had a minimum of 2 hours of training prior to each election. (4)(c) For the purpose of this subsection, the first and second primary elections shall be considered one election." Laws 2002, c. 2002-17 §19, eff. April 11, 2002.

> Audit Report. Poll worker job tasks and many of the procedures to which they must adhere have been significantly changed due to implementation of the new electronic voting system. Contrary to the need for additional training, Florida Statutes have been amended to reduce the required minimum hours of training from six to three for Clerks and three to two for Inspectors. [See footnote six] Although the Department has reduced poll worker training time commensurate with the statutory modification, we firmly believe that additional training is necessary. Moreover, we reiterate a recommendation proposed in the October/November 2000 election audit report—serious consideration should be given to staffing future elections with County employees. Utilization of just a small percentage of the County's total workforce could dramatically strengthen internal controls over the elections process."

It is apparent, especially with the hindsight provided by last week's debacle, that AMS was right. Inadequate training has resurfaced as a significant factor in the problems that occurred on September 10, 2002.

This was explicitly stated over a year ago and restated over a month ago. And while the Elections Department may have read, responded and listened to AMS' calling, it failed to embrace those recommendations early on, when it should have. However, it does not take an audit report to inform County management of something it already knew, or, at the very least, something that they should have already known. This was not a new observation. It was apparent under the old punch card ballot system. And now given the switch to a technology driven voting system, it should have been all the more apparent. A completely new element was introduced. Much attention and blame has been cast by County officials on so-called unqualified poll workers. Some say that the poll workers lacked the technical know-how to grasp the new technology. Others have said that because Miami-Dade received its iVotronic machines later than other counties, Miami-Dade was caught in a time-crunch with not enough time to conduct training.

After extensive review of the "training" issue, the OIG concludes that the matter does not lie in the caliber or technological experience of the poll worker, but is grounded in the absence of quality training sessions and written training materials. The fact that the County's full shipment of iVotronic machines did not arrive until July is also no excuse for the lack of planning that should have taken place with respect to a training curriculum. Basic training could have taken place with the initial shipment of

devices. Obviously, the absence of a quality-training plan affects the successful implementation of any such endeavor.

To more fully understand the training issue, it is important to describe the expected functions of each of the poll workers at the precinct. These are all described on page 11 of the "Playbill" which is the training booklet used and given to all poll workers. The booklet itself is a 5½" x 8½" pamphlet, written in English only. The booklet is heavy on text and light on charts, tables, and graphs. It is in black and white print only, with some text in bold print.

The "Playbill" goes on to more fully describe the duties of each poll worker. As described in the booklet, the Clerk is in charge of all operations. The Clerk is also responsible for all matters related to activating each touch-screen machine, including using the Master Activator to boot-up each device, running zero tapes and signing them, and distributing all other activators to the Activation Inspectors. The Clerk must also be familiar with all other aspects of operating a polling precinct, including check-in and registration procedures, provisional ballot procedures, and election laws regarding solicitation and campaigning prohibitions. The Clerk is also responsible for harvesting or extracting the votes out of each iVotronic machine, closing the machines, closing down the precinct, and the delivery of the votes to the proper relay collection center. At the same time, the Clerk is supervising the other poll workers and often times calling the Help Desk. While many of the Clerks are experienced poll workers, the job can be quite a hectic and stressful one, even without the addition of electrically powered, technology-driven voting machines. And for all this responsibility that a Clerk and Assistant Clerk have, these two positions are only afforded one extra hour of training above the regular Inspector-level poll worker.

Training of Poll Workers: Clerks, Assistant Clerks, Inspectors and Poll Deputies

The OIG interviewed the Training Administrator of the Elections Department, who coordinated the training of the poll workers for the September 10th primary election. The following noteworthy points are discussed below.

The goal of the Elections Department was to train 6,500 poll workers; 5,000 Inspectors and 1,200 Clerks and Assistant clerks. Poll worker training was held at approximately 25 different locations around Miami-Dade County. There were 20

classes per day, with approximately 20 participants per class. Classes started on July 8, 2002 and were run daily on Monday through Saturday, until August 20, 2002.

The inspectors were trained first because the machines were not ready yet. From July 8 to August 8, 2002, classes were only held for inspectors (but some clerks ended up going to the inspector's classes). The clerks and assistant clerks were trained from August 8 to August 30, 2002, using the same materials. Makeup classes were held for clerks from September 3 to September 6, 2002. Clerks and assistant clerks were invited to attend refresher courses, held at three locations (South-end, North-end and Central – the Government Center) during the weekend before the election.

As previously mentioned a "Playbill" booklet was created as the main training material for all poll workers. The handbook is divided into 8 "Acts." These are as follows:

- Act 1 covers ethics and lasts 5 minutes. It includes a 3-minute video on ethics.

- Act 2 covers the "props" and lasts about 20 minutes. They demonstrate the iVotronic ballot machine, activators, the clerks' kit, the communication kit and the document folder.

- Act 3 covers the iVotronic system and lasts about 60 minutes. They assemble the ballot machine, turn it on and disassemble it.

- Act 4 covers the roles and responsibilities of the various poll workers. This lasts about 30 to 40 minutes. Poll workers participate in a skit where they take turns reading portions of the booklet (this also doubles as a "hidden" test of their ability to read English). Participants also role-play -- acting out what the various poll workers are supposed to do. Participants are also told to make sure to read these sections later on as "homework."

- Act 5 covers sensitivity training. It should last 45 minutes but usually lasts only 30 minutes because Act 4 run over.

- Act 6 covers conflict management skills and should last about 35 minutes. It includes a 27-minute video on conflict management.

- Act 7 covers a quiz (5 questions), and "things to remember" (where the trainer tells the prospective poll workers to review the questions and answers on pages 34-38 as **"homework"**). This section is supposed to last 5 minutes.

Clerks and assistant clerks receive one extra hour of training totaling four (4) hours. This fourth hour is covered in Act 8 of the Playbill. Act 8 covers troubleshooting, the running of the tapes, and the collection site. During the extra hour of training for the clerk session, five (5) iVotronics are used (4 regular and 1 audio). Between one and three participants are called up to do hands-on practice on the first iVotronics (activating the machine and voting the ballot). Then a few participants are called up to practice on the next machine. This is done for all the machines in the group. On the last machine, a few participants practice running the total tape and they close down the machine as well. The rest of the class sits and observes while these few selected clerks and assistants participate in the hands-on training. After the four-hour course, the iVotronic machines and trainers are available for an additional 30 minutes after class, if any participant has questions or wants additional training.

According to the Elections Department's Training Administrator, in previous elections poll workers had only 45 minutes of training. For the September 2002 primary, these poll workers were not told in advance that this training session would last three to four hours. Some poll workers refused to stay for the training session. Additionally, the OIG was told that some people who never went to training were still used as poll workers.

Recruitment of trainers responsible for training the poll workers

The Elections Department hires 50 seasonal employees trainers and assistant trainers. These are all seasonal employees who work on an hourly basis and have no benefits. During the training program, each individual works between 20 to 60 hours per week.

It was explained to the OIG that the hiring process for the trainers began in March, 2002. The Elections Department was unable to advertise these training positions through the newspaper or the county job posting. **The job qualifications for these trainers did not require that the trainers had actually ever trained anyone.**

The Elections Department used the following sources to find its training candidates:

1) A list of poll workers who indicated in a 2001 survey that they might be interested in becoming trainers.

2) The Association for Training and Development.

3) The Jewish Vocational Services. A job opening worksheet was listed with this organization.

4) The Broward County work force was advised of the job opportunities.

5) The America Job Bank, where the openings were also listed.

6) A September 11th related website.

The Elections Department Training Administrator called candidates who had shown interest in the training positions and interviewed them over the phone. If they showed promise, they were asked to send in a resume. Office interviews were conducted and the last step was an interview before a panel of Elections Department personnel.

These temporary employees hired as trainers were trained by the Elections Department Training Administrator. The training included three (3) hours of technical training conducted by ES&S personnel. The overall training program was 45 hours, but 20 of these hours were considered "field work." Field work, in this instance, is the Elections Department Training Administrator observing the trainers at work, and evaluating their performance. In other words, these individuals, who may not have otherwise had experience as a "trainer," were unleashed to train poll workers after only 23 hours of training themselves.

Other Election Support Personnel

In addition to poll workers, county management also arranged for county personnel to staff the polling precincts to provide support. These positions were called Troubleshooters, Verification Specialists and Back-up Specialists.

Troubleshooters

Approximately 40 county employees served in the capacity of Troubleshooters. Troubleshooters are roaming technical personnel out in the field, responding to precincts that needed help. County Troubleshooters were in addition to the technical support provided by the vendor, ES&S. Troubleshooters were primarily trained by ES&S personnel, with some additional training provided by Elections technical staff. Troubleshooters are individuals who have the requisite skills to perform this function. From what the OIG has learned during our inquiry, there just weren't enough of them.

Verification Specialists

Verification Specialists were tasked with verifying whether or not citizens attempting to vote were registered to vote and in which precinct they were eligible to vote in. These were the individuals assigned laptop computers containing the Elections Department registration database. The Verification Specialist was not an official poll worker but a representative of the Department of Elections. Discrepancies in a person's registration status were ultimately resolved by the registration section of the Elections Department. However, this support person was intended to alleviate the necessity of the Precinct Clerk from having to contact the Department as often.

Trainers for the Verification Specialists were drawn from the temporary non-county employees hired by the Elections Department. The verification specialist trainers were trained directly by the Deputy Supervisor of Elections. Once the trainers were trained, they in turn trained 1,200 individuals. The training session was four hours long. A substantial number of trainees were county employees, but not all were. Of the 1,200 potential specialists, roughly 600 passed the required written examination. Of all individuals assigned as precinct support, including poll workers, this group had the least reported incidents.

Because verification specialists were not official poll workers, they were not charged with the responsibility of overseeing provisional voting – where, because of unresolved questions of registration status or the lack of proper identification would otherwise prevent an individual from voting, a "provisional" ballot could be cast, subject to verification. Reports of individuals turned away from the polls because of either one of the above issues clearly demonstrates that Precinct Clerks and their Assistants need to be more educated on the guidelines of provisional voting. The Verification Specialist should be charged with the responsibility, as the Department's representative, to ensure that no voter is turned away and that Clerks and Assistant

Clerks afford each individual not otherwise verified, an opportunity to cast a provisional ballot.

Back-up Specialists

By August 7th, after the AMS Audit Report was issued and as developed in the Task Force meeting that took place that same day, County officials developed the position of Back-up Specialist. In a memorandum to the Mayor and BCC, dated August 19, 2002, the County Manager wrote: "I have also specifically directed each County Department Director to offer professional level staff support to assist with start-up procedures and data back-up at each precinct on election day." In a previously issued memorandum to all Department Directors, dated August 8 [one day after the "Task Force" meeting], the County Manager initiated a massive effort to identify and recruit several hundred professional, job-basis County staff to serve as Back-up Specialists, whose "primary job functions will be to assist with start-up of elections equipment prior to the opening of the polls..."

The training of the Back-up Specialists was undertaken by the County Employee Relations Department (ERD) Training Division. The OIG interviewed the ERD Division Director of Training. This Division, comprising a staff of 12 trainers, performed the training of the Back-up Specialists. Again, this was a massive undertaking done within weeks of the upcoming primary election.

First, the trainers had to be trained in the operation of the iVotronic touch-screen device. They had to learn the procedure to activate the machines, print the zero tape and harvest/collect the votes. Next, enough county employees had to be recruited to staff these positions. They had to be scheduled for training and be trained. The training of the Back-up Specialists occurred on September 4, 5, 6 and 9. In total, 11 sessions were held. Each session lasted between 2 to 2 ½ hours. Nine of the sessions were at the Seaport and the last two "emergency" sessions were conducted in conference room 18-2 of the Government Center.

The ERD Training Division staff and several ES&S personnel conducted the training. The training consisted of a lecture on the overview of responsibilities of the back-up specialists, which lasted about 15 minutes; a demonstration of the iVotronics equipment by ES&S, which lasted about 10 minutes; and a hands-on session where the

participants broke up into four (4) small groups of approximately 15 people for the remaining 1½ hours.

There were 50 iVotronic machines set up in four (4) groups of 12.[8] Each participant did a hands-on activation of an iVotronic machine. Since there was only one (1) communications pack for the each of the four (4) break-out groups, each participant could not perform a hands-on running of the total tape and closing of an iVotronic machine. This was instead demonstrated to each of the groups. The participants then learned how to pull out the flash card from the iVotronic touch screen machine and store it in the communications pouch.

While this was a valiant effort by the County Manager's Office, especially with the training assistance of ERD, it was just too little too late.

There was an apparent disconnect between what a Back-up Specialist expected in terms of their job requirements versus what others expected of them. For example, back-up specialists were told that they were primarily there to observe the process and assist as necessary. And while the training was more hands-on than what was provided to the clerks and assistant clerks, the back-up specialist's manual depicts the role as that of an "observer" and to provide advice as necessary. Many back-up specialists had no expectation, based on the training materials, that they would be called upon to actually open and close the polls with respect to activating the machines and collecting the votes. However, for these county employees who observed all the difficulties of that morning, many of the polls may not have opened all together if it were not for them.

It was also planned that the back-up specialists would arrive at the polls at 6:00 am, then leave after the polls were opened and voting began. Back-up specialists were expected to return to their designated polling site at 6:00 pm to observe and assist with the close down procedures. Many back-up specialists (county employees) never left their polling site and stayed all day to assist.

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8 For those attending the last two emergency sessions in room 18-2, not all participants were able to receive hands-on training, as the room was much smaller than the seaport area and they could not set up enough iVotronic voting booths for all of the participants to have hands-on training.

Separating the voting system function from the electoral function

As an integral part of our examination of training procedures, the OIG visited Pasco County and reviewed its training regime for poll workers. Most impressive was that Pasco County designated one poll worker to be in charge of the actual voting system devices. This person was not also the Clerk or Assistant Clerk, as their duties are already substantial. The Clerk is the boss of the precinct and is responsible for all of the electoral related functions of the precinct. To have this person or his/her assistant to also be in charge of the voting equipment (setting up booths, testing electrical outlets, activating machines, collecting votes, and shutting down machines) is an unreasonable load to carry. While Miami-Dade County realized this with the development of the Back-up Specialist, the implementation of the plan was too late. With only two weeks remaining, it was amazing that county staff actually got hundreds of employees trained. A hands-on training that lasted for 2 to 2 ½ hours was as much as could be expected in the week prior to the election.

Pasco County realized this during their early planning stages and made preparations to have one individual per precinct responsible for this function. This person is called the Voting System Supervisor (VSS) and in the precinct organizational structure, he/she reports directly to the Clerk and Assistant Clerk. The training protocol for the VSS was quite rigorous. This individual received four (4) separate three-hour sessions, which were intensively a hands-on based training. The VSS learned all aspects of opening and closing polls as it related to the functioning of the iVotronic voting machines.

Future training of poll workers

In our interview with the ERD Division Director of Training, we inquired why ERD trainers did not conduct the training of the poll workers, as this training staff is comprised of professionals whose job it is to train and develop training curriculum. It was explained that ERD was never asked to assist in that training. We inquired if ERD would have been capable (time and resources) to have conducted such a massive training program. The Training Division Director stated yes, that ERD could have done the training and would have been happy to do so.

Furthermore, it was explained to the OIG that, under these circumstances, the poll worker training should not have been considered "normal" training. It did not just

consist of teaching new procedures but involved changing a mind-set or culture. Poll workers were being asked to change over from 1900's technology and processes (papers ballots) to a 21st century computerized technology, and touch screen technology no less. Since many of the poll workers are elderly and not familiar with computer technology, it constituted a major change. As explained to the OIG by a professional in the field of training, accomplishing this type of a change does not occur overnight.

IV. RECOMMENDATIONS

Based upon our inquiry, we make the following recommendations:

1. Utilizing the County's crisis management resources

County officials should be commended for their intense efforts to reform the procedural deficiencies that plagued the September election. Specifically, a task force has been assembled by the County Manager consisting of personnel from a wide variety of departments. Personnel have been assigned specific tasks to address the variety of issues that will impact the upcoming election.

The Office of Inspector General respectfully believes, however, that these efforts are insufficient and untested. Time constraints absolutely dictate that Miami-Dade County treats elections, particularly the next election on November 5, 2002, as a crisis situation. Elections are like other major events. For instance, we could not imagine the County hosting the Super Bowl unless it had in place a crisis management plan.

The County has approximately six weeks (42 days) to significantly revise training and operational manuals and retrain thousands of county employees and poll workers in order to be prepared for the November 5, 2002 General Election. We therefore recommend that County officials immediately involve professional crisis management personnel already available at the Miami-Dade Police Department and the Miami-Dade Emergency Management Office and task them to lead the solution effort. These professionals have a proven track record of solving unannounced crisis situations in the most effective and efficient manner. Planning, training and the implementation of strategies are second nature to these highly skilled professionals and we should tap that resource immediately without constraint. County crisis professionals consisting

of police and emergency personnel are among the most recognized, experienced and talented in the country. They have vast training and planning skills and resources. The integration of county staff with our crisis management professionals will enhance the Manager's efforts to promote and expedite a flawless election.

2. **Adherence to an organizational structure with clearly delineated duties and responsibilities**

An important component of training programs for poll workers mandates that poll workers clearly understand their duties and the organizational structures within which they work. Miami-Dade County lacks this vision. We, therefore, recommend that a clear and concise table of organization be developed, issued and reviewed by each person assigned to the polling place. The poll worker must understand completely what their duties are and to whom they report. Administrators must insure that the duties assigned are attainable by the worker. For instance, the poll clerk in Miami-Dade County is expected, along with the assistant clerk, to open and close the polls, fill out and certify all of the necessary paperwork, set up the equipment, and, at the same time, manage and supervise the polling station. Assigning the responsibility for all those tasks to one person is simply unattainable. Further, as noted earlier, we strongly recommend that the voting system functions such as opening and closing voting machines be separated from administrative functions.

As noted earlier, poll workers must understand their specific roles and duties within the polling station. The below reproduced organizational structure derived from Pasco County's training materials is but one example of an organizational chart that clearly delineates the structure and duties of poll workers. Miami-Dade County must adopt a similar structure for its poll workers. The minimum requirement of the organizational chart must insure that the worker's ability is matched to their assigned task. For example, it is unreasonable to expect an elderly or disabled person to be responsible for setting up a iVotronic voting booth when its storage container and device weigh 48 pounds. We must foresee these simple issues.

We, therefore, suggest that the organizational structure of each polling place clearly delineate the following minimal positions:

- The Clerk – This is **THE BOSS!** The eyes and ears of the Supervisor of Elections. The person granted authority by Florida statutes to oversee the activities at the polling place. There should be only one person serving in this position at each polling place. This person should not have any other duties that interfere with the oversight of their particular polling place.

- Voter Registration Technician or Assistant Clerk (or better known in Miami-Dade County as a Verification Specialist). This person is the secretary of the organization, the record keeper, a data entry specialist and a back-up to the Boss. This person's main duty is to verify voter registration, keeping in close contact with the phone bank throughout the day for the purpose of assisting voters. The technician uses a lap top computer to solicit voter information utilizing the phone bank as a last resort.

- Voting Systems Supervisor (VSS) – This person must receive extensive training in the set up and operation of the voting equipment. They should be considered the expert at the polling place on the iVotronic units. If problems arise that they cannot answer, then they should be the ones to contact the phone bank for technical support so that the support center and the caller understand the technical language. This person should stay at the polling place from opening to closing. This person should be designated to set up the voting equipment electronically as an inspector checks off each step in the procedure. The same check off process should also occur at closing. Both the clerk and the VSS should sign off on the paperwork. The VSS can also fill in as an Inspector during the day as needed. THIS POSITION IS KEY.

- Inspectors – These are the people who work as precinct registers, plus one additional assigned to work an iVotronic demonstrator unit. There should also be enough Inspectors assigned to the polling place to assist the VSS as Activators in activating the iVotronic units throughout the day. There should be at least one activating person for every three voting units. These are the front line people who greet voters, offer demonstrations, process voters, and activate ballots for voters to vote.

- Deputies – Florida law requires one Deputy per polling facility. This person is outside all day for the purpose of maintaining law and order.

They serve as Special Deputies with limited authority. They are not armed.

These recommendations are not new revelations. Miami-Dade County presently staffs the polling places with comparable positions. The difference between our recommendations and the status quo are the tasks assigned to each position. We recognize that we are not experts in the field of running elections and that responsible staff may modify our suggestions. So long as these modifications are well justified, we welcome them.

3. Modification of Training Program commensurate with Organizational Structure and Responsibilities

We recognize that electronic elections systems have significantly altered traditional training programs. Consequently, it is critical that an entirely new and comprehensive training program be immediately developed and implemented for poll workers. Without proper and adequate hands on training and instruction, we can never expect to accomplish our goal of a flawless election in which every vote is counted, every polling place is opened on time, and every eligible voter is given the unfettered opportunity to exercise their right to vote.

The OIG has contacted several other Florida counties that purchased and used the same or similar ES&S iVotronic touch-screen ballot system. Although the majority of these counties are smaller jurisdictions with fewer polling places and ballots that are not nearly as complicated as Miami-Dade County's, we, nevertheless, reviewed their training procedures for polling place personnel. We also considered the fact that these jurisdictions offered only the English version of a ballot to their voters. We found that in the most successful counties, even though they had the advantage of simplicity and size, their training programs were longer in duration, more repetitive, more hands on, and, above all, contained complete verification procedures that insured their poll worker trainees were sufficiently knowledgeable and proficient to complete their assigned duties and tasks. In other words, no take home exams! Miami-Dade County failed miserably in its verification effort.

Each poll worker should receive no less than four (4) hours of training prior to the general election. For the individual in charge of the voting system and

devices (the VSS), he/she should have three (3) three-hour sessions of hands-on training and other simulations.

The training and training materials should be separated according to the duties that the poll workers are being trained to perform and not grouped together in one training manual, thereby creating confusion. At the last training session, the poll worker should be expected to demonstrate their proficiency in the particular job they were trained for. This did not happen in the Miami-Dade County election. Briefly, we noted that most training materials were grouped together and that training for poll workers was rushed, inadequate, and poorly instructed. We also found the training materials to be poorly organized and not easily comprehensible. Some workers had difficulty with reading the English only version of the training materials. This confusion among poll workers supports the need to promote verification of proficiency.

4. Revision of written training materials

As noted earlier, we reviewed the training materials prepared by the County and distributed to poll workers. We find these materials to be unsatisfactory because these materials are not clear, concise, and easily readable. We have offered to share with County staff some excellent samples of training materials obtained by our office from other jurisdictions that experienced successful elections using the iVotronic system. We hope that County officials review these materials as soon as possible. Again, we recognize that Miami-Dade's needs may be different from other counties but there is no dispute that the concept of the other jurisdictions' materials were proven to be successfully utilized. Proper planning and adequate preparation paid off for these jurisdictions and we should not hesitate to follow their example.

5. Require a mandatory demonstration prior to voting

Recognizing the limited amount of time left before the next elections to train voters at large, we strongly recommend that a very short, hands on mandatory demonstration at polling stations for voters be considered. We propose that this demonstration be conducted by an assigned Inspector through the use of a detached demonstration iVotronic unit placed at a table. We suggest that the demonstration obviously occur prior to voting and involve no less than five voters at a time when called for. The Inspector would simply lift up the unit so that it faces the voters and conduct a quick demonstration. This procedure has

been successfully proven and tested in another jurisdiction to the great satisfaction of the voters. This demonstration should be mandatory and will ease and speed up the process at the voting booth.

6. Increasing the accessibility of absentee voting opportunities

Our office recognizes that any eligible citizen may file an absentee ballot. We recommend that the absentee ballot places be open on the weekend before the election. An opportunity to cast the absentee ballot should be afforded to voters in at least one polling place in each county commission district. The OIG noted that in the last election only one of the fourteen polling places was opened on the Saturday prior to the primary election. This was the Downtown County Government Center. The other thirteen (13)-field absentee voting sites, while open the week before, were closed on Saturday. The county should make every effort to afford all county voters the convenience of absentee voting in the district in which they reside, especially on a Saturday when most people do not have to report to work. Such an effort will also diminish the impact of large voter turnouts on Election Day.

7. Enhancement of communication capabilities – i.e. the HELP desk

This office must address the Election Department's Help Desk. Elections officials must man the Help Desk with the most qualified, informed personnel available. It was noted, after reviewing a large number of complaints by poll workers, that in many cases the Help Desk simply did not have the answers to their questions or concerns. This lack of performance caused the personnel at the Help Desk to place poll workers on hold for long periods of time while they searched for qualified assistance. Subsequently, all telephone lines became unavailable further compounding the problems of the election. Surely, the County crises managers will solve this problem through enhanced communications capabilities at polling locations.

8. Increasing the number of Troubleshooters

The County must deploy enough highly qualified Troubleshooters throughout the precincts to insure a quick response to any unforeseen problems that might arise. Waiting hours for help is just not acceptable.

9. Empowering Clerks

Elections officials must empower Clerks (THE BOSS) to make on-the-spot decisions that are sensible. An example of this notion could be as simple as dispatching a poll worker to a hardware store to purchase a longer electrical cord or telephone line to reach an outlet.

10. iVotronic Batteries

The Elections Department, in conjunction with ES&S, should review problems that occurred with the batteries contained in the iVotronic touch-screen devices. Elections personnel need to determine how long a battery should last for the various machines (a regular iVotronic with the full tri-lingual ballot, an audio iVotronic, and the demonstrator iVotronic). They should also determine how long it takes to properly fully charge a battery, how long that charge last while the iVotronic is stored (and if the battery charge changes under certain temperature and humidity conditions), how to check iVotronics to see if the battery is charged, and how to change out the battery (and provide training procedures to do so). Elections personnel should also consider providing additional, spare charged batteries in the ballot supply box for all precincts on Election Day.

11. Testing and Simulation of Close Down Procedures

Despite explanations directing blame for malfunctions on human error, we have received a substantial number of poll worker comments indicating otherwise. Therefore, the Elections Department, in conjunction with ES&S, should perform testing and simulation of various operational scenarios with the iVotronics touch-screen balloting system. For example, a test and simulation should be conducted by opening a "precinct" (a set of iVotronic ballots) with two blue master activators but only closing them down with one master activator. Or, a "precinct" could be opened with both a blue master activator and a red PEB but only closed down with the blue master activator.

The purpose of such a test and simulation is threefold. First, Elections personnel will understand how the equipment functions in such a situation. Does it "freeze up" or does the screen go blank? What, if any, error messages are displayed? Secondly, it allows the elections personnel to understand how to correct the situation (what steps are necessary to correct the situation?). Personnel can then develop detailed troubleshooting guides that can be covered in training, provided in the manuals, and provided to the Help Desk personnel. Third, elections personnel can also determine what has happened to the votes that have been cast in those machines, and how to properly extract and count

those votes. Can the votes be extracted via a master activator or some other activator? Do the votes have to be extracted via the flash card? Or do the votes have to be extracted from the internal memory chips?

The testing and simulation should cover situations that are known to have occurred in the September 10, 2002 election as well as other situations that may not have occurred yet (for example, if poll worker procedures and/or iVotronic equipment and software are changed before the November 5, 2002 election, those new procedures, equipment and software need to be tested and simulated before the election).

12. Storage Facilities

OIG representatives conducted a site visit of the Medley storage facility, which is used to store elections equipment. We observed chaotic and haphazard storage logistics, to the extent that equipment could not be located within a timely manner. Equipment was not readily identifiable. We also noted that this facility is extremely overcrowded because the new voting machines require considerably more storage space, i.e. they are bigger than the old ballot booths, which incidentally are still being stored there as well. We also concluded that the storage facility is not suitable in size to enable personnel to effectively set up and organize election equipment for delivery to polling sites and to retrieve equipment after the election. Consequently, it is recommended that as soon as possible, new or additional warehouse space be located to store election equipment.

13. Utilization of the County Attorney's Office

It is imperative that the County Attorney's Office be proactively included in the electoral process. Many questions relating to voter eligibility, registration, access and provisional ballots typically arise during elections day. Therefore, at a minimum, a separate phone bank staffed by attorneys should be installed either at the County Attorney's Office, or at a logistically suitable location, to expeditiously answer questions asked by county staff.

14. Poll worker compensation

Finally, Elections officials should review and make strong recommendations for increasing the compensation paid to poll workers who volunteer to work long, arduous and stressful hours. This increased compensation should help attract much-needed additional, qualified volunteers. Election officials should also explore creative ways to attract civic-minded members of the community from all aspects, both private and public sectors, to volunteer to perform these essential duties on election days.