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Election Assistance Commission

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**EAC Voting System Risk Assessment:
What is it? How can it save Money?**

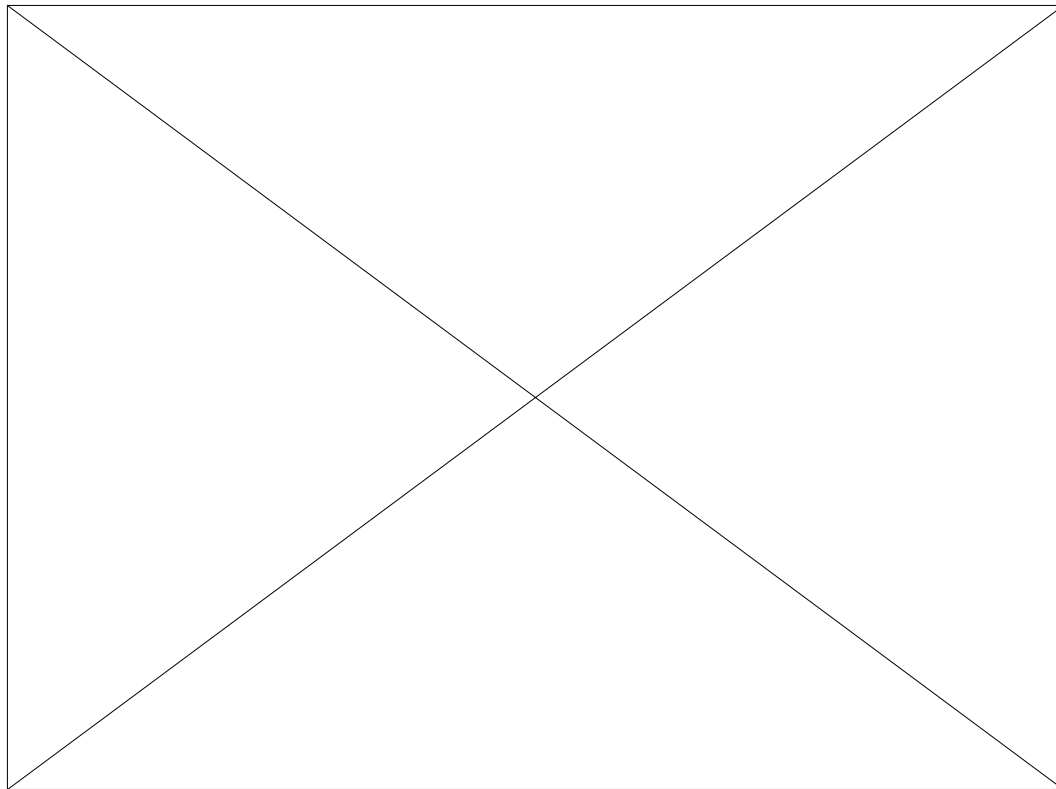
Miami, FL January 29, 2009



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Tired of being in this position?





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Risk Assessment in General

- Risk Assessment is a typical part of information technology design and testing
- NIST has created standards and guidance (NIST (SP) 800-53) for the creation of risk assessments
- Idea is to assess the risks, decide the level of risk that is acceptable, and then develop policies and procedures to cost-effectively reduce the risk to an acceptable level.



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The Voting System Risk Assessment Project

- EAC has contracted for the first complete risk assessment of all forms of voting systems.
- Team from the University of South Alabama was selected to create the risk assessment.
- Team consists of computer scientists and election officials familiar with all forms of voting technology and information technology risk assessment



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Three Phase Project

- **PHASE I - Create Reference Models**
 - Perform Literature Search
 - Develop Federal Election Process Models
 - Develop Generic Voting System Models
 - Validate Voting System Models
 - Support Review by EAC Boards and NIST



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Three Phase Project

- **PHASE II - Develop Threat Matrices & Perform Risk Assessments**
 - Develop Threat Matrices
 - Develop Risk Assessments
 - Refine and Validate Risk Assessments
 - Support Review by EAC Boards and NIST



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Three Phase Project

- **PHASE III - Assurance Level Recommendation, Methodology Documentation, and Update Process**
 - Recommend Voting System Impact Level
 - Document Risk Assessment Model and Methodology
 - Recommend process for updating Risk Assessment



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Goals of the Risk Assessment

- To assess the risks to all forms of voting system
 - Cover everything from hand counted paper ballots to remote electronic voting (internet voting)
- To decide the acceptable level of risk to voting systems
- To create agreement from all segments of the election community as to the risks and the level of acceptable risk
 - All phases of the project reviewed by:
 - Multi-disciplinary review panel
 - EAC Boards
 - NIST



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What's the Point?

- Allows the EAC to make better informed decisions regarding the development of the VVSG
- Allows Policy Makers to better inform themselves with regard to voting systems and possible legislation
- Allows state and local officials to better determine the strengths and weaknesses of their voting system
- Allows manufacturers to better assess threats to their systems and make further security improvements
- Allows Testing Labs to better focus testing on those areas of greatest risk



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How can it save me money?

- Election officials can look at their voting system and their procedures and determine:
 - What are the biggest risks?
 - What risks can be tolerated?
 - What risks am I currently mitigating?
 - What mitigations are costing me the most? What risks am I eliminating with those mitigations?
 - What kind of testing do I need to be doing?
 - How can I create better efficiencies in my processes & procedures in order to mitigate greater risks and save money?



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Conclusion

- There is no such thing as a perfectly secure voting system and if there was no one could afford it or use it.
- It is important to have some general agreement on the risks that exist and the level of danger they pose
- This assessment creates a more efficient use of money by:
 - Making testing more affordable
 - Creating standards that test to the vulnerable areas
 - Informing decision making with regard to voting systems and election procedures
- With this assessment you can more responsibly decide...
Should I surrender or should I jump.