UOCAVA Solutions Working Group Summary

August 6-7, 2011

Westin St. Francis Hotel, San Francisco, CA

On August 6-7, 2011, the Federal Voting Assistance Program (FVAP) held a Uniformed and Overseas Citizens Absentee Voting Act (UOCAVA) Solutions Working Group meeting at the Westin St. Francis Hotel in San Francisco, CA just prior to the USENIX Security conference held at the same venue.

This two-day meeting brought together 64 leading voices in the field of election technology, including representatives from government agencies, election jurisdictions and election technology providers; experts in computer science, political science, cryptography and computer security; and other advocates and election community members interested in shaping the future of UOCAVA technical solutions.

The purpose of this UOCAVA Solutions Working Group meeting was to focus this divergent group toward the achievement of the following goals:

- Develop security recommendations that FVAP can share with states and localities for online blank ballot distribution during the November 2012 election
- Identify security requirements and recommendations for proprietary and open source technology in the future

On Day 1 of the UOCAVA Working Group meeting after a briefing from Joel Rothschild from FVAP, the participants were divided into two smaller groups - Group A and Group B. These groups met in separate breakout rooms for the purpose of facilitated group exercises and discussions focused on the following topics in order to make progress toward the above stated goals:

- Defining the properties of a complete electronic / Internet voting system
- Identifying characteristics of a comparative risk model for the current UOCAVA balloting process versus an electronic / Internet-based platform
- Determining the acceptable level of risk for an electronic / Internet voting system

Group A and Group B were each further divided into smaller teams / tables of 6-8 individuals who completed assignments as instructed by the facilitators for the purpose of sharing their work and ideas with their broader group for productive discussion and debate.

On Day 2 of the UOCAVA Working Group meeting, all members of Group A and Group B were brought together for a back-briefing of the previous day's sessions led by the facilitators. The

back-brief focused on the many common discussion points between the two groups during the previous day.

At the conclusion of the back-briefing by the facilitators to the group and FVAP Director Bob Carey - which included a great deal of participation by the entire group - an open forum commenced which focused on risk definition and assessment, possible system architecture and next steps.

These notes have attempted to capture the main points of this very productive session that seemed to draw this divergent group to the following key points:

- FVAP is charged with:
    - Creating electronic absentee voting demonstration project as directed by Congress
    - Improving UOCAVA voter success rates
    - Complying with federal law
- FVAP is not:
    - Advocating or demoting internet voting
    - Relying on the Remote Electronic Voting Demonstration Project to solve UOCAVA voting problems
    - Creating new voting system
- If the pilot project is going to happen, it needs to be done <u>right</u> with regard to:
    - Processes (Registration, Obtaining ballot, Ballot marking, Return of voted ballot, Certifying/canvassing as required for recount plus other aspects added to this list by session participants.
    - Properties (from the perspective of the Voter, Outside Observer, Election Official and Saboteur)
    - Risks
        - Difficult to evaluate “risk” in the abstract
        - Design of architecture is vital to effective risk evaluation
        - Risk management must be embedded in process of developing electronic voting system
        - Risk characteristics/dimensions have already been identified

Following are the key take-aways from this two-day session:

- FVAP, state and local election officials need to focus on the following "low-hanging fruit" with regard to improving the current UOCAVA voting processes (in parallel with the development and execution of an electronic / Internet pilot project):
    - Voter registration
    - Voter education
    - Logistics
- A more tangible version of the proposed electronic / Internet voting system architecture is necessary to fully assess risk(s).
- The broader community needs to know, understand and participate in FVAP's future technology plans wherever possible.

The "Next Steps" for FVAP will include:

- In-depth review by FVAP Director and his staff of notes and materials that resulted from this very productive two-day workshop.
- Planning of future UOCAVA Working Group meetings held in conjunction with other meetings of election technology organizations
- Assessment of various process solutions including a multi-stage competition in a similar format as has been previously organized by the National Institute of Standards and Technology (NIST) for the Advanced Encryption Standard (AES) and is now performing for the Secure Hash Algorithm 3 (SHA-3)

To enhance the free flow of ideas, this meeting was not electronically recorded, and as a result there may be some errors or omissions in the many notes that were taken and materials that were presented. Please email Mr. Joel Rothschild immediately with any corrections or additional information that you feel would be helpful to FVAP and the attendees of this meeting and we will make and distribute the appropriate changes.

Mr. Carey, Mr. Rothschild and all at FVAP thank everyone for their invaluable participation in this meeting and in FVAP's work and we look forward to continued cooperation and evolution of ideas.