July 1, 2002

Mr. John S. Carr  
President  
National Air Traffic Controllers Association  
1325 Massachusetts Avenue, NW  
Washington, DC  20005

Dear Mr. Carr:

Thank you for your letter of February 1, 2002, concerning computer security and operational stability of the Federal Aviation Administration's (FAA) Cru-X system. As you know, FAA plans to install Cru-X, which is designed to collect information concerning payroll, personnel, training, and quality assurance, at about 400 air traffic control facilities. To address your concerns regarding the vulnerability of Cru-X, we observed Cru-X operations at selected sites. We also performed a vulnerability assessment with an automated scanning tool and reviewed FAA's plan to convert Cru-X from the existing Access database to an Oracle database.

Based on our review, we found that there were no major vulnerabilities with the Cru-X computer system. FAA already was taking steps to address computer security issues and better secure personnel and payroll information within the Cru-X system. To do this, FAA is placing Cru-X on dedicated computers with enhanced computer security by August 2002. FAA's planned conversion to an Oracle database also should provide Cru-X with better operational stability. The following are our detailed results.

**FAA Is Taking Steps to Enhance Cru-X Computer Security.** Our vulnerability assessment disclosed that the Cru-X computer also serves other administrative functions, such as hosting internal web sites. To accomplish other functions, the Cru-X computer is configured to allow user access with network services. Consequently, personnel and payroll information in the Cru-X database could be vulnerable to unauthorized access. However, FAA already recognized this vulnerability and is implementing a plan to move Cru-X to dedicated computers with better access security. As of June 12, 2002, FAA reported it had installed dedicated computers at 121 sites and will move all Cru-X databases to dedicated computers by August 2002. This will significantly mitigate the vulnerability to unauthorized access.

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FAA also could strengthen controls over Cru-X user passwords. For example, users' identification codes also were used as passwords, and users were not required to periodically change passwords. This is a simple but important control because passwords could be compromised (stolen or guessed) over time. FAA has agreed to take corrective action to ensure adequate password protection.

**FAA Is Converting to an Oracle Database.** FAA is in the process of converting the Cru-X computer code from Access to Oracle, which provides a more reliable and robust platform for large user environments like air traffic control facilities. Converting Cru-X from Access to Oracle should address your concerns with the operational stability of the Cru-X platform.

Sincerely,

Alexis M. Stefani  
Assistant Inspector General for Auditing

cc: FAA Administrator