



**DEPARTMENT OF THE AIR FORCE**  
AIR FORCE AUDIT AGENCY

4 May 2004

MEMORANDUM FOR SAF/IEB (MR. AIMONE)

FROM: AFAA/FS  
5023 4th Street  
March ARB CA 92518-1852

SUBJECT: Interim Memorandum – 2005 Base Realignment and Closure – Installation Visualization Tool Data Controls (Project F2004-FB4000-0082.000)

1. This interim memorandum provides preliminary results of our ongoing audit of the Air Force 2005 Base Realignment and Closure (BRAC) Installation Visualization Tool (IVT) data controls, announced on 18 November 2003 with the title 2005 Base Realignment and Closure – Installation Visualization Tool System Controls. We initiated this audit as part of your request to review the IVT process, imagery, and associated layers to evaluate reliability for use in the Base Realignment and Closure 2005 deliberative process. Data reliability is being reviewed under Project F2003-FB4000-0854.000, 2005 Base Realignment, and Closure – Installation Visualization Tool Data Reliability.
2. During preliminary planning, we discussed and examined software certification and accreditation requirements and controls over IVT data. We accomplished this portion of the audit at the Civil Engineer Information Resources Management Office (AF/ILE-I); HQ Air Combat Command (ACC); and Pope, Langley, and Seymour Johnson AFBs from 17 November 2003 through 22 January 2004.
3. Preliminary results disclosed that, while program managers at the locations reviewed generally maintained software certification for computer servers storing IVT data, servers were located outside the network control centers (NCC), which increased potential control weaknesses and vulnerabilities. In addition, none of the locations reviewed had contingency plans. To minimize control weaknesses, Air Force Instruction (AFI) 33-115, Volume 1, 15 November 2002, requires service level agreements (SLA) between the NCC and workgroup managers maintaining computer servers outside the NCC to define division of responsibilities for network operations and services. Of the locations reviewed, Pope AFB was the only location with a SLA in place; AF/ILE-I did not require a SLA because the server was not connected to the network, and HQ ACC, Langley, and Seymour Johnson did not have SLAs with the NCC. Further, Pope AFB civil engineer (CE) workgroup managers complied with most of the SLA provisions and maintained adequate physical security, system software, and access controls while workgroup

managers at the locations without SLAs did not. The SLAs were not in place at those locations because geographic information systems (GIS) Analysts/GIO Consultants assumed that the servers were going to be moved to the NCC. In addition, no timetables were given and therefore no SLA was initiated. As a result, IVT data were exposed to control weaknesses such as lack of backups or off-site storage, use of unauthorized software, and no monitoring for unauthorized access to sensitive data. Specifically:

a. Physical Security. Seymour Johnson AFB did not perform backup or off-site storage of IVT data. Although workgroup managers at the other locations performed backups, the HQ ACC GIS consultant and the Langley AFB GIS analyst used their homes as off-site storage locations instead of approved facilities described in AFI 33-115v1.

b. System Software Controls. System software in use on the network was not listed on the approved software list at HQ ACC, Langley, Pope, and Seymour Johnson. In addition, Pope was the only location using audit logs to aid in the tracking of selected events such as unsuccessful attempts to change file permissions.

c. Access Controls. Although all personnel using the IVT data servers at the locations reviewed were authorized access, CE workgroup managers at ACC and Seymour Johnson allowed all authorized personnel full privileges to the data without limiting access rights, as appropriate. Under such conditions, sabotage, fraud, unauthorized system use, data modification, software modification, and intentional or inadvertent disclosure could occur.

4. We previously briefed these results to you and Air Force Information Resources Management Office (AF/ILE-I) on 15 January 2004. The IVT program managers stated that corrective action would be taken. We further suggest that you issue a joint memorandum with the Civil Engineer requiring major command GIS offices ensure SLAs are put in place for all IVT data servers not located within the NCC and that commands and installations comply with the requirements and responsibilities of the SLAs.

5. Our final report of audit will include these results and corrective actions taken. If you have questions or comments, please have your staff contact the Associate Director, Ms. Valerie Muck, at DSN 447-4929, or the Program Manager, Mr. Fred Jones, at DSN 447-4930.



DONNA L. EDSALL  
Assistant Auditor General  
(Financial and Systems Audits)

cc:  
SAF/AG  
SAF/IE