



STATE OF TENNESSEE
COMPTROLLER OF THE TREASURY
DEPARTMENT OF AUDIT
DIVISION OF COUNTY AUDIT
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August 27, 2007

Sequatchie County Executive and
Board of County Commissioners
Sequatchie County, Tennessee

To the County Executive and County Commissioners:

In conjunction with the annual audit of Sequatchie County, we have performed a limited review of the information systems in the Offices of County Executive, Highway Supervisor, Director of Schools, Trustee, County Clerk, Circuit and General Sessions Courts Clerk, Register, and Sheriff as of August 23, 2007. This letter transmits the results of our review.

Our audit of Sequatchie County is required to be conducted in accordance with standards contained in Government Auditing Standards, issued by the Comptroller General of the United States. These standards specify that we perform general and application control reviews of computer-based accounting and information systems to determine whether an entity's existing procedures and controls provide adequate assurance of data accuracy and financial and operating statement reliability.

Because of inherent limitations in any internal control structure, errors, irregularities, or control weaknesses may exist and may not be detected. However, our information system reviews performed in the Offices of County Executive, Highway Supervisor, and Trustee did not reveal any matters that we considered to be a significant deficiency. Significant deficiencies were identified in the Offices of Director of Schools, County Clerk, Circuit and General Sessions Courts Clerk, Register, and Sheriff. These deficiencies may be included in the annual financial report of Sequatchie County. These matters are also presented in detail in the enclosed Review of Internal Controls Regarding Information System Operations – Findings and Recommendations.

A brief summary of the significant deficiencies by office is presented below:

DIRECTOR OF SCHOOLS

1. The office had deficiencies in computer system back-up procedures.

COUNTY CLERK

1. The office did not review software audit logs.

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CIRCUIT AND GENERAL SESSIONS COURTS CLERK

1. The office had deficiencies in computer system back-up procedures.

REGISTER

1. The office did not review software audit logs.

SHERIFF

1. The office did not have formal policies and procedures for computer operations.
2. The office did not develop a disaster recovery plan.
3. The office had deficiencies in computer system back-up procedures.
4. Sufficient user documentation for the software application was not maintained.
5. The office did not have adequate controls over check-signing procedures.

Please contact Penny Austin, Assistant Director, or me if you have any questions regarding our review of the information systems in the aforementioned offices of Sequatchie County, Tennessee.

Sincerely,



Richard V. Norment
Assistant to the Comptroller

RVN: pa

Attachment

cc: The Honorable Tommy Sims, Highway Supervisor
The Honorable Johnny Cordell, Director of Schools
The Honorable Larry Lockhart, Trustee
The Honorable Charlotte Cagle, County Clerk
The Honorable Karen Millsaps, Circuit and General Sessions Courts Clerk
The Honorable Connie Green, Register
The Honorable Ronnie Hitchcock, Sheriff
Mr. Carl Lowe, Mid-East Tennessee Audit Manager

SEQUATCHIE COUNTY, TENNESSEE
REVIEW OF INTERNAL CONTROLS REGARDING INFORMATION SYSTEM
OPERATIONS — FINDINGS AND RECOMMENDATIONS
AS OF AUGUST 23, 2007

The review of controls over information systems in the Offices of Director of Schools, County Clerk, Circuit and General Sessions Courts Clerk, Register, and Sheriff indicated a need for improvement. It should be noted that this was the first information system review performed in the Office of Sheriff. The following findings and recommendations have been made to aid these offices in the implementation of controls to better secure their computer systems and the information contained therein. These matters were reviewed with management to provide an opportunity for their response. Management offered oral responses to these items but did not submit written responses. We did not include oral responses in this report.

OFFICE OF DIRECTOR OF SCHOOLS

THE OFFICE HAD DEFICIENCIES IN COMPUTER
SYSTEM BACK-UP PROCEDURES

1. FINDING

The following weaknesses regarding computer system back-up procedures in the office were identified:

- A. Daily backups were not stored in a secure location. Unsecured access to system backups exposes the data to environmental hazards, as well as to possible sabotage.
- B. System backups were not stored off site. In the event of a disaster, all back-up data could be destroyed, resulting in costly delays in generating and recording information accounted for through the automated process.

RECOMMENDATION

Management should store daily backups in a secure, fireproof location. In addition to daily system backups, a weekly system backup should be performed, and two copies of this backup should be maintained. These backups should be rotated off site on a weekly basis. A complete systems backup should also be performed at fiscal year-end. These year-end backups should be stored off site and retained indefinitely. Some possibilities for an off-site storage location would be another county office building with a fireproof vault or a safe-deposit box at a local bank.

OFFICE OF COUNTY CLERK

THE OFFICE DID NOT REVIEW SOFTWARE AUDIT LOGS

1. **FINDING**

The software applications used by the office generate daily logs that display transaction changes made by users. Because these logs provide the only audit trail of these changes, they should be reviewed daily. The office did not review these logs. Without knowledge of system activity, errors and improper changes could occur and go undetected.

RECOMMENDATION

Management should review these logs on a daily basis. Any unusual transactions should be investigated.

OFFICE OF CIRCUIT AND GENERAL SESSIONS COURTS CLERK

**THE OFFICE HAD DEFICIENCIES IN COMPUTER
SYSTEM BACK-UP PROCEDURES**

1. **FINDING**

System backups were not stored off site. In the event of a disaster, all back-up data could be destroyed, resulting in costly delays in generating and recording information accounted for through the automated process.

RECOMMENDATION

In addition to daily system backups, a weekly system backup should be performed, and two copies of this backup should be maintained. These backups should be rotated off site on a weekly basis. A complete systems backup should also be performed at fiscal year-end. These year-end backups should be stored off site and retained indefinitely. Some possibilities for an off-site storage location would be another county office building with a fireproof vault or a safe-deposit box at a local bank.

OFFICE OF REGISTER

THE OFFICE DID NOT REVIEW SOFTWARE AUDIT LOGS

1. **FINDING**

The software application used by the office generates a daily log that displays transaction changes made by users. Because this log provides the only audit trail of

these changes, it should be reviewed daily. The office did not review this log. Without knowledge of system activity, errors and improper changes could occur and go undetected.

RECOMMENDATION

Management should review this log on a daily basis. Any unusual transactions should be investigated.

OFFICE OF SHERIFF

RECOMMENDATIONS

1. **MANAGEMENT SHOULD FORMALLY DOCUMENT POLICIES AND PROCEDURES FOR COMPUTER OPERATIONS**

Management should prepare a computer policies and procedures manual that defines policies and procedures for operations such as system startup/shutdown, application access, system access security, system backup and retention schedules, output distribution, hardware/software maintenance, and other general data processing functions. Upon completion, the manual should be distributed to all appropriate personnel.

2. **THE OFFICE SHOULD DEVELOP A DISASTER RECOVERY PLAN**

Management should develop and regularly update a disaster recovery plan defining procedures for personnel to follow in the event of a major hardware or software failure, or temporary or permanent destruction of facilities. The plan should contain provisions for a contingency operations site, as well as the adequate backup of data files, system programs, user documentation, supplies, and computer hardware so that operations could continue as normally as possible. A copy of the plan should be kept in a secure area within the office, as well as at a secure, off-site location.

3. **SYSTEM BACK-UP PROCEDURES SHOULD BE IMPROVED**

Management should improve system back-up procedures. Backups should be rotated off site on a weekly basis. Year-end backups should also be stored off site and retained indefinitely. Some possibilities for an off-site storage location would be another county office building with a fireproof vault or a safe-deposit box at a local bank. Furthermore, a current log of all backups that includes label descriptions, date of creation, contents, and storage location should be maintained.

4. **SUFFICIENT USER DOCUMENTATION FOR THE SOFTWARE APPLICATION SHOULD BE MAINTAINED**

The office should maintain user documentation pertaining to all software applications. Management should contact their vendor and obtain current user documentation for all components of their computer system.

5. **CONTROLS OVER CHECK-SIGNING PROCEDURES SHOULD BE IMPROVED**

The office affixed digitized signatures to checks generated by the application used to maintain the commissary operations. Various employees generated signed checks, but a log of these checks was not reviewed. Adequate internal controls should be maintained over the use of the digitized signatures, such as the review of an activity log that documents the date, check number, and user name of the employee generating the check.

PRIOR AUDIT RECOMMENDATIONS IMPLEMENTED

(Ref: Review of Internal Controls Regarding Information System Operations as of June 6, 2005)

OFFICE OF DIRECTOR OF SCHOOLS

Finding Number	Page Number	Subject
1	2	The office had deficiencies involving its check-signing machine

OFFICE OF COUNTY CLERK

Finding Number	Page Number	Subject
1	2	The office did not implement adequate controls to protect its information resources

OFFICE OF REGISTER

Finding Number	Page Number	Subject
1	3	The office should implement adequate controls to protect its information resources