



STATE OF TENNESSEE
COMPTROLLER OF THE TREASURY
DEPARTMENT OF AUDIT
DIVISION OF COUNTY AUDIT
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July 19, 2005

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

To the County Mayor 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 Mayor, Highway Superintendent, Director of Schools, Trustee, County Clerk, Circuit and General Sessions Courts Clerk, and Register as of June 6, 2005. 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 Highway Superintendent, Trustee, and Circuit and General Sessions Courts Clerk did not reveal any matters that we considered to be a reportable condition. Reportable conditions were identified in the Offices of County Mayor, Director of Schools, County Clerk, and Register. These reportable conditions 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 reportable conditions by office is presented below:

COUNTY MAYOR

1. The Ambulance Service had deficiencies in computer system back-up procedures.
2. The Ambulance Service did not develop a disaster recovery plan.
3. The Ambulance Service did not have formal policies and procedures for computer operations.

DIRECTOR OF SCHOOLS

1. The office had deficiencies involving its check-signing machine.

COUNTY CLERK

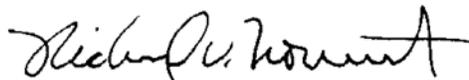
1. The office had not implemented adequate controls to protect its information resources.

REGISTER

1. The office had not implemented adequate controls to protect its information resources.

Please contact Penny Austin, our Information Systems Audit Manager, 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 Roy Johnson, Highway Superintendent
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
Mr. Carl Lowe, Mid-East Tennessee Audit Manager

SEQUATCHIE COUNTY, TENNESSEE
REVIEW OF INTERNAL CONTROLS REGARDING INFORMATION SYSTEM
OPERATIONS — FINDINGS AND RECOMMENDATIONS
AS OF JUNE 6, 2005

The review of controls over the information systems in the Offices of County Mayor, Director of Schools, County Clerk, and Register indicated a need for improvement. It should be noted that this was the first information system review performed at the Ambulance Service, which is under the supervision of the Office of County Mayor. The following findings and recommendations have been made to aid the offices in the implementation of controls to better secure their computer systems and the information contained therein. We reviewed these matters 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 the oral responses in this report.

OFFICE OF COUNTY MAYOR

RECOMMENDATIONS

1. SYSTEM BACK-UP PROCEDURES SHOULD BE IMPROVED

The following procedures regarding the system back-up process at the Ambulance Service should be implemented:

1. Daily system back-up procedures should be improved. A backup labeled for each day of the week should be maintained. These backups should be stored in a secure, fireproof location.
2. 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.
3. A complete systems backup should be performed at fiscal year-end. These backups should be stored off site.
4. A secure, fireproof location should be used to store weekly and yearly backups. 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.
5. A current log of all backups that includes label descriptions, date of creation, contents, and storage location should be maintained.

2. THE OFFICE SHOULD DEVELOP A DISASTER RECOVERY PLAN

Management of the Ambulance Service 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. **MANAGEMENT SHOULD FORMALLY DOCUMENT POLICIES AND PROCEDURES FOR COMPUTER OPERATIONS**

Management of the Ambulance Service 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.

OFFICE OF DIRECTOR OF SCHOOLS

THE OFFICE HAD DEFICIENCIES INVOLVING ITS CHECK-SIGNING MACHINE

1. **FINDING**

The Board of Education used a mechanical check-signing machine to affix the signature of the director of schools and chairman of the Board of Education. The mechanical counter on the machine could be reset; therefore, we could not ensure that all warrants were accounted for.

RECOMMENDATION

The machine should have a counter that cannot be reset indicating the total number of checks processed.

OFFICE OF COUNTY CLERK

THE OFFICE DID NOT IMPLEMENT ADEQUATE CONTROLS TO PROTECT ITS INFORMATION RESOURCES

1. **FINDING**

The office did not implement adequate controls to protect its information resources. The failure to provide such controls increases the risk that individuals could inappropriately access and manipulate the county's software applications and sensitive information.

This finding does not identify specific vulnerabilities that could allow someone to exploit the office's information system or misuse county funds. Disclosing those vulnerabilities could present a potential security risk by providing the readers with information that might be confidential pursuant to Section 10-7-504(i), Tennessee Code Annotated. We provided the official with detailed information regarding the specific vulnerabilities we identified, as well as our recommendations for improvement.

RECOMMENDATION

The office should ensure that adequate controls over information systems and the resources associated with those systems are implemented. Also, the office should take steps to establish or improve any compensating controls until these conditions are remedied.

OFFICE OF REGISTER

THE OFFICE DID NOT IMPLEMENT ADEQUATE CONTROLS TO PROTECT ITS INFORMATION RESOURCES

1. FINDING

The office did not implement adequate controls to protect its information resources. The failure to provide such controls increases the risk that individuals could inappropriately access and manipulate the county's software applications and sensitive information.

This finding does not identify specific vulnerabilities that could allow someone to exploit the office's information system or misuse county funds. Disclosing those vulnerabilities could present a potential security risk by providing the readers with information that might be confidential pursuant to Section 10-7-504(i), Tennessee Code Annotated. We provided the official with detailed information regarding the specific vulnerabilities we identified, as well as our recommendations for improvement.

RECOMMENDATION

The office should ensure that adequate controls over information systems and the resources associated with those systems are implemented. Also, the office should take steps to establish or improve any compensating controls until these conditions are remedied.

PRIOR AUDIT RECOMMENDATIONS IMPLEMENTED

(Ref: Review of Internal Controls Regarding Information System Operations as of March 14, 2003)

OFFICE OF COUNTY MAYOR

<u>Finding Number</u>	<u>Page Number</u>	<u>Subject</u>
1	1	The Office Had Deficiencies in Computer System Back-up Procedures

OFFICE OF HIGHWAY SUPERINTENDENT

Finding Number	Page Number	Subject
1	2	The Office Had Deficiencies in Computer System Back-up Procedures

OFFICE OF DIRECTOR OF SCHOOLS

Finding Number	Page Number	Subject
1	2	The Office Had Deficiencies in Computer System Back-up Procedures
2	3	Adequate Inventory Records Were Not Maintained

OFFICE OF TRUSTEE

Finding Number	Page Number	Subject
1	3	A Disaster Recovery Plan Should Be Developed

OFFICE OF CIRCUIT AND GENERAL SESSIONS COURTS CLERK

Finding Number	Page Number	Subject
1	4	System Back-up Procedures Should Be Improved