



PERFORMANCE AUDIT REPORT

Kansas Lottery: Security in the Operation of the Kansas Lottery

**A Report to the Legislative Post Audit Committee
By Delehanty Consulting, Under Contract with
the Legislative Division of Post Audit
State of Kansas
February 2014**

Legislative Division of Post Audit

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January 30, 2014

To: Members, Legislative Post Audit Committee

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This report contains general findings, conclusions, and recommendations from the completed performance audit, *Security in the Operation of the Kansas Lottery*. Delehanty Consulting, a firm under contract with the Legislative Division of Post Audit, conducted this audit. As provided for under the Kansas Open Records Act, the audit also resulted in a confidential report that gives detailed findings and recommendations regarding security matters.

We would be happy to discuss the findings, recommendations, or any other items presented in this report with any legislative committees, individual legislators, or other state officials.

Sincerely,

Scott Frank
Legislative Post Auditor

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This audit was conducted by Delehanty Consulting, under contract with the Legislative Division of Post Audit. Julie Pennington was the audit manager. If you need any additional information about the audit's findings, please contact Julie at the Division's offices.

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Security Audit of the Kansas Lottery

A Report to the
Kansas Legislative Post Audit Committee

FINAL PUBLIC REPORT December 19, 2013

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Executive Summary

Delehanty Consulting LLC conducted a comprehensive lottery security audit of the facilities, operations, systems, games, policies, and procedures for the Kansas Lottery. An organizational meeting was held on October 10, 2013 with representatives from the Kansas Lottery, Kansas Legislative Division of Post Audit, and Delehanty Consulting. Field work began immediately thereafter on October 10, 2013 and was completed on October 31, 2013. This audit was performed to meet the requirements of K.S.A. 74-8707(b) and was conducted in accordance with the invitation for bids issued June 27, 2013.

The contents of this document are intended solely for the purpose of providing information to the Kansas Legislative Division of Post Audit, the Kansas Lottery and any of its subcontractors or state agencies the Lottery or the Legislative Division of Post Audit deems appropriate. This public report provides a summary of our findings but does not describe specific security findings. Because those specific findings contain information that would jeopardize Kansas Lottery security, specific findings have been kept confidential under K.S.A. 45-221(12). The Legislative Division of Post Audit and the Kansas Lottery have been provided a separate, confidential report to address specific issues identified during the audit

Objectives

The performance audit's overall objective was to perform an assessment of the security established by management to ensure the security, integrity, honesty, and fairness of the Kansas Lottery operations and games.

In addition to including all aspects of the Kansas Lottery's traditional games and processes, this audit also included a comprehensive evaluation of the Kansas Lottery's activities performed to meet its responsibilities pursuant to the Kansas Expanded Lottery Act.

The audit did not include a review of the state's internal accounting controls, procedures, and financial reporting. The audit did not include a review of the physical controls in place at the Great Bend regional office because this office is expected to close in the near future. The audit did not include a review of the sales or cashing activities performed by Lottery retailers.

Methodology

To accomplish these objectives Delehanty Consulting LLC used the following approach:

- Obtained and evaluated various documents and information from the Kansas Lottery
- Met with Kansas Lottery management to clarify issues and to understand Kansas Lottery management's priorities and any special concerns
- Surveyed lottery employees to verify compliance with controls and to identify known and suspected risk areas
- Interviewed key Lottery, Casino, and certain lottery contractor personnel

- Verified the existence and effectiveness of the controls and processes in place to meet the Lottery's security objectives
- Identified weaknesses and associated risks
- Provided draft Confidential Report to the Kansas Lottery and Division of Legislative Post-Audit for review and comment
- Provided draft Public Report to the Kansas Lottery and Division of Legislative Post-Audit for review and comment
- Provided final Confidential Report
- Provided a final Public Report

The primary focus of the work effort was on high-risk areas based upon the input from the Kansas Lottery management team and upon our experience in the lottery industry.

Summary of Findings

Our review indicated the overall security of the Kansas Lottery is exceptional. The results of our organizational scan indicated a very strong security culture within the organization. Employees believe that management sets a strong tone on the importance of security and believe that security measures are consistently applied throughout the organization. Every Kansas Lottery employee supports the Lottery's security program.¹

Most procedures and systems are very sound and appear to be strictly adhered to by the Lottery staff. We found all practices appear to be in strict compliance with the Lottery laws.

During the review we identified fourteen security related issues. Each issue was assigned a *High*, *Medium*, or *Low* risk² level based on the likelihood and consequences of an occurrence of the risk. There were no High, two Medium, and twelve Low risk issues.

1. PERSONNEL SECURITY

We began our audit with an Organizational Scan to assess the risks, determine priorities, and understand the existing Kansas Lottery culture as it relates to security. The scan included an employee survey to elicit information that was used during the audit.

The results of the survey indicated a very strong security culture within the organization. Employees believe that management sets a strong tone on the importance of security and believe that security measures are consistently applied throughout the organization.

We reviewed the Lottery's Human Resource policies, procedures, and practices. This included pre-employment procedures, terms of employment, post-employment procedures, and threats to employees. Several tests were conducted to gauge the Lottery's security awareness program. The Lottery places significant emphasis on the safety of its employees.

¹ No employees indicated they would be unlikely to report a known or suspected security issue or security violation.

² The issue number is followed by an H, M, or L to indicate the risk level of the issue.

The Lottery recognizes two categories of employees for the purposes of background investigations: 1) executive director and security enforcement personnel and 2) all other employees.

We reviewed the policies and procedures for performing initial background investigations for potential lottery employees, contractors and contractor personnel. Background investigations for these categories of individuals are performed by the Kansas Lottery, Security Division, Enforcement agents. These background investigations are exceptional in scope and thoroughness.

Our evaluation revealed two issues related to personnel security.

2. INSTANT AND PULL-TAB TICKET SECURITY

We evaluated the security features and processes related to instant tickets and pull-tabs. The security features required by the Kansas Lottery and supplied by its vendors are consistent with best practices in the lottery industry.

We also reviewed 2008 instant ticket and pulltab contract and the Lottery's process for the reconstruction of instant tickets.

The Lottery's processes for controlling the information employees could use to determine the location of prizes in pre-printed tickets are very sound. We reviewed the RFPs, proposals, and working papers and obtained additional information to determine whether the ticket vendors have sufficient controls in place to prevent ticket vendor employees from obtaining enough information that they could collude with a lottery employee to locate pre-printed winning tickets

Our evaluation identified one issue relating to instant ticket security.

3. COMPUTER SECURITY

We reviewed the access and control attributes in place to protect the information systems supporting the Lottery. Our review included attributes that could affect the availability, integrity, and confidentiality of the systems and system information.

Overall, we find that the determination of access rights for Kansas Lottery staff, and the procedures to administer these rights, is very well designed and executed. Our audit focused on the core systems within the Production network; especially ACCLAIMS. Access rights for core financial systems, General Ledger, Accounts Payable, etc. are administered by the Kansas State IT organization, OITS.

Our evaluation identified five issues related to computer security.

4. DATA COMMUNICATIONS SECURITY

Our audit included an analysis of the general network design, configuration of key components, and the physical wiring for selected and critical areas. This section of the report relates to the network systems operated by the Kansas Lottery. We reviewed the network segmentation approach used in the Lottery. With exception of the AS/400 test and development system, KSL has a separate test environment.

Our evaluation identified one issue related to communications security.

5. SYSTEM SECURITY

Our audit included evaluation and testing of administrative controls that augment the technical controls discussed in Computer Security and Data Communications Security. We evaluated operational procedures and responsibilities, technical vulnerability management, change and configuration management, and database controls.

No findings.

6. LOTTERY OFFICE AND WAREHOUSE SECURITY

Delehanty Consulting LLC performed an audit to evaluate the existence of, effectiveness of, and adherence to access and monitoring controls. We reviewed the security access levels for employees and performed a review of these facilities:

- Lottery Division Headquarters, 108 N. Kansas Avenue, Topeka, KS
- Lottery Warehouses, 108 and 128 N. Kansas Avenue, Topeka, KS
- Lottery Division Offices, 128 N. Kansas Avenue, Topeka, KS
- GTECH Data Center Office, 128 N. Kansas Avenue, Topeka, KS

We reviewed the security features in the building at 108 N. Kansas Avenue, Topeka, KS. The protective and monitoring practices and devices located in the portions of the building reviewed meet the security requirements posed by the associated risks.

Warehouse functions exist in both buildings (108 and 128). We reviewed the security features on the ground floor of the building at 128 N. Kansas Avenue, Topeka, KS and the warehouse section of building 108. The protective and monitoring practices and devices located in the portions of the building reviewed meet the security requirements posed by the associated risks.

We performed a detailed review of the Lottery Division's facility located within the 128 N. Kansas Avenue facility. Specifically, we reviewed the general lottery offices on the 2nd floor, the Security Office, the Lottery Mail Room, and the Validations area. The protective and monitoring practices and devices located in the lottery areas meet the security requirements posed by the associated risks.

We reviewed the Lottery's Asset Management processes and performed a sampling of the documented inventory.

Our evaluation identified two issues related to physical security.

7. DISTRIBUTION SECURITY

We reviewed the processes and procedures for distributing instant tickets between lottery locations and to retailers. We also reviewed the processes for ticket returns. The Lottery's procedures and systems are sound and appear to be strictly adhered to by the staff. We did not review the physical security controls provided while tickets are in the possession of FedEx.

No findings.

8. VALIDATION AND PAYMENT SECURITY

We reviewed the physical systems and administrative procedures for handling ticket claims at the Lottery Headquarters. This included a detailed review of mailroom processing, Security processing and Finance processing. The procedures were sound and appear to be adhered to by the staff.

Our evaluation identified one issue related to validation security.

9. UNCLAIMED PRIZES

We reviewed the ability of GTECH Computer Gaming System and processes to guard against the ability for Lottery or vendor employees to fraudulently cash unclaimed prizes.

No findings.

10. TICKET COUNTERFEITING

Our reviews of the online vendor security in Section 6 and of the instant and pull-tab security in sections 2 included assessments of the ability for perpetrators to successfully counterfeit tickets. Our review of the validation and payment process in section 8 included an assessment of the ability for individuals to alter claim forms and to submit false claims

In addition to the reviews discussed above, we also reviewed the Lottery Security database that contains records of all security issues reported to the Lottery. Based upon our review and assessment, the Kansas Lottery is providing adequate security against all known, economically viable counterfeiting techniques. Furthermore, Lottery Security's response to suspicious activity is excellent.

No findings.

11. BUSINESS CONTINUITY / DISASTER RECOVERY

The audit included an evaluation of the Lottery's disaster recovery plan.

Our evaluation identified one issue related to business continuity.

12. ONLINE VENDOR SECURITY

The assessment included personnel policies and employee training as they relate to security and termination procedures. Our review addressed both voluntary and involuntary terminations.

We evaluated access controls for Kansas Lottery systems hosted by GTECH to ensure access to sensitive data was properly restricted. We obtained lists of employees hired and terminated in the audit period and, for new hires, verified that a thoughtful assessment of their access needs occurred and was approved by appropriate managers. In the case of terminated employees, we verified that their access was disabled or removed. GTECH changed their procedure for granting access in the middle of our three-year audit cycle and we did not assess the procedure in use prior to 2009.

We reviewed GTECH's operational procedures and reviewed all incidents that occurred within the past three years. We found GTECH's operations to be very stable and relatively few incidents of operator errors. GTECH installed a new system in 2008.

GTECH conducts a limited background on potential employees. This background is conducted through GTECH's corporate headquarters. If successful, potential employees are then subject to a background conducted by the Kansas Lottery Security Division (see comments in section 1.2). Only after the successful completion of that background is the applicant offered a position by GTECH.

We evaluated the overall network infrastructure for security controls and prudent design. This audit included the configuration of network devices through the tracing of selected critical wiring. The dominant feature is that there are actually two separate networks within the GTECH environment for the Kansas Lottery. One network is tightly controlled and used for gaming systems; called the Production network. The other network is for more general office use, such as e-mail and other general office functions. The goal is to isolate gaming, high risk activity to the Production network.

Strengths of the production network include a robust and segregated design, equipment that is highly regarded in the industry and administration by knowledgeable staff at GTECH corporate offices.

We performed a detailed review of GTECH's facility located at 128 N. Kansas Ave, Topeka, Kansas. Specifically, we reviewed the general offices, the QA room, and the computer operations room. The protective and monitoring practices and devices located in all areas meet the security requirements posed by the associated risks. Security monitoring is provided and controlled by the Kansas Lottery Security Division.

We performed a detailed review of the data center environmental controls in building 128 that are owned and/or operated by GTECH. The facility is well designed and executed, with strong physical security, redundant power supplies, fire and water alarms and other controls. We observed controls to prohibit unauthorized persons from entering the data center or otherwise be escorted.

No findings.

13. RETAILER SECURITY

Retailer management and retailer data are controlled by the Kansas Lottery. Policies, procedures, and practices used to manage retailers and retailer data are sound. Retailer application and Lottery approval process are in line with industry best practices and are closely followed.

Retailer backgrounds are required per K.S.A. 74-8705(c). The statute does not define the substance of the background. The substance of the background is defined in the Security Standards Handbook (Revised May 2010).

A review of a completed retailer background disclosed that the retailer's criminal history and motor vehicle records are checked. For small businesses, the owner would be checked while for a large corporate retailer, the corporate point of contact would be the subject of the background.

The Kansas Lottery's experience with retailer security has been commendable. In the audit period there have been about eight retailer enforcement actions. The Lottery launched a new program to both prevent and detect retailer fraud, the Retailer Honesty Assurance Program. With this program, six retailer enforcement actions have been launched and/or resolved. This is an ongoing program. The Lottery policies and practices regarding retailers are consistent with industry standards. New retailers receive training from the Kansas Lottery prior to beginning sales.

Our evaluation identified one issue related to retailer training.

14. ASSESSMENTS RELATED TO CASINOS

The Expanded Lottery Act divides oversight duties between the Kansas Racing and Gaming Commission and the Kansas Lottery. In general, the Kansas Racing and Gaming Commission is responsible for ensuring the games operate with the utmost integrity and are fair to the players. The Kansas Lottery is responsible for ensuring the State of Kansas receives the money it is due from the casinos.

The audit included an evaluation of the processes used by the Kansas Lottery to ensure the casinos are appropriately accounting for revenue from table games and electronic gaming machines.

No findings.

15. REVIEW OF PREVIOUS FINDINGS

We conducted a review of the findings from the 2010 evaluation. One previous finding related to retailer training had not been resolved.

End of document.