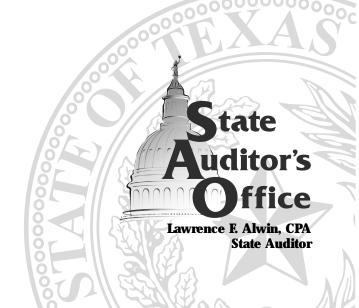
An Audit Report on

Selected Controls over Instant Tickets at the Texas Lottery Commission

August 2004 Report No. 04-046



SAO Report No. 04-046 August 2004

Overall Conclusion

Although we did not identify any instances of misuse, we did identify multiple internal weaknesses in controls over instant tickets at the Texas Lottery Commission (Lottery) that

require immediate attention and correction. These weaknesses over instant ticket reconstructions and returned tickets (see text box) negatively affect the Lottery's ability to prevent and detect misuse of these tickets. The weaknesses create a risk that someone within the Lottery or the contracted lottery operator could potentially misuse the information or the instant tickets. It is important to note that these weaknesses are unlikely to be exploited by the general public or others who are outside of lottery operations.

In fiscal year 2003, the Lottery issued 961 million tickets to retailers. While a relatively small number of tickets were reconstructed and returned, inadequately safeguarding these tickets could affect

Background

This audit focused on controls over the following aspects of instant ticket ("scratch off") game operations:

- Reconstructions of instant tickets. Ticket reconstructions provide information about tickets, such as the prize value. The Lottery requests this information from manufacturers primarily for investigative purposes.
- Returned tickets. Retailers return tickets to the contracted lottery operator's warehouse for various reasons. The lottery operator distributes tickets to retailers and receives any returned tickets from retailers.
- Tickets used by the Marketing and Security Divisions. The Marketing Division uses tickets for promotional purposes. The Security Division uses them for various purposes, such as investigations.

players' perceptions regarding the integrity of instant ticket games. Specifically:

- The Lottery does not reconcile its logs of reconstruction requests against those kept by the manufacturer. Such a reconciliation is a detective control that would allow the Lottery to determine whether all requests were logged and authorized and to investigate discrepancies in a timely manner. In addition, the Lottery has difficulty linking reconstructions to the reasons they were requested and does not require formal approval for full-pack and multiple-ticket reconstruction requests. These weaknesses are significant because the same employees request ticket reconstructions, log in the requests, receive the reconstruction information, and have access to the lottery management system (ProSys), which identifies the location of the actual tickets.
- Controls in the lottery operator's warehouse are not sufficient to safeguard tickets that are returned by retailers. In addition, the Lottery does not adequately monitor the use of a feature in ProSys that allows Lottery employees in the warehouse to change a ticket's status, which could include changing a ticket to a playable status. Although the majority of the tickets were returned to the warehouse in a non-cashable status in fiscal year 2003, nearly 5 million tickets could have potentially been changed to a playable status using this feature.

The Lottery has adequate controls over the tickets used by its Marketing and Security Divisions; however, we noted opportunities for improvement.



For more information regarding this report, please contact Nick Villalpando, Audit Manager, at (512) 936-9500.

The largest provider of instant ticket games filled 5,004 reconstruction requests from 2001 through 2003. A single request can cover multiple tickets or even full packs of tickets. A pack contains between 75 and 250 tickets with a maximum prize value range of \$500 to approximately \$2 million. In fiscal year 2003, 33.6 million tickets were received at the warehouse.

We conducted this audit based on an allegation received by the Lottery. The anonymous allegation suggested that agency employees had inappropriate knowledge of the location of all winning instant tickets. While our audit found significant weaknesses over reconstructions, we found no indication that the information or the tickets were misused.

Summary of Management's Response

Management generally agrees with our recommendations.

Summary of Information Technology Review

Based on audit procedures performed and the results of an external audit for ProSys application controls and instant ticket services at the lottery operator, the data from ProSys for the instant ticket games is reliable for use in this audit. Our audit work related to returned tickets identified that some lottery operator employees share accounts and that ProSys allows users to log on to more than one computer at a time. While these issues need to be addressed because they weaken accountability for instant ticket transactions, they do not significantly affect the reliability of ProSys data overall.

In addition, the Lottery needs to improve its administration of ProSys user accounts.

Summary of Objective, Scope, and Methodology

Our objective was to determine whether the operation of the Lottery's instant ticket games reasonably ensures their integrity. Specifically:

- > Does the Lottery have safeguards in place over ticket reconstructions to prevent misuse?
- Does the Lottery have safeguards in place over returned tickets and tickets used internally to prevent misuse?

The audit scope encompassed the Lottery, the lottery operator, and one instant ticket manufacturer. We reviewed ticket reconstructions for fiscal years 2001, 2002, and 2003. For processes related to returned tickets and tickets used internally, we reviewed transactions for fiscal year 2003.

Our methodology consisted of collecting information; performing selected tests and other procedures; analyzing and evaluating the results against established criteria; and interviewing management and staff from the Lottery, the lottery operator, and ticket manufacturers.

Table of Results and Recommendations <u>denotes entry</u> is related to information technology

The Lottery does not reconcile its logs of requests for instant ticket reconstructions to those kept by the manufacturer. (Page 1)

The Lottery should periodically reconcile its reconstruction logs against the manufacturers' records and investigate discrepancies to ensure that it detects any unauthorized reconstructions in a timely manner.

The process for requesting reconstructions of instant ticket information does not consistently ensure accountability for requests. (Page 2)

The Lottery should:

- Periodically review reconstruction requests to ensure that there is a valid reason for them and that procedures for ticket reconstruction are being followed. To facilitate this review, the Lottery should devise a more efficient way to link requests to the reasons for the requests.
- Ensure that proper access controls are in place for information technology used to make reconstruction requests. Specifically:
 - Provide a separate account and password to each staff member who is authorized to request reconstructions to provide an audit trail.
 - Require each authorized user to change his or her password periodically as required by the Texas Administrative Code and industry practices.
- Require employees to obtain written approvals when requesting reconstructions of multiple tickets and full packs of tickets and keep the approvals on file for future reference.

There is no indication that reconstructed instant ticket information was misused. (Page 4)

No recommendations.

The Lottery does not have sufficient controls in place over the use of the undo feature. (Page 6)

The Lottery should:

- Develop a process for monitoring the use of the undo feature in ProSys. Such monitoring should include routine supervisory reviews of the feature's use. The Lottery should monitor all uses of the undo feature—particularly the ones that change ticket ranges—identify any ticket that is cashed after its status is changed, and investigate any potential misuse of tickets. Monitoring and follow-up should continue until the tickets can no longer be cashed (180 days after the game is closed).
- Maintain documentation supporting each use of the undo feature. Such documentation could take the form of comments
 entered in ProSys and include items such as who made the comments, the time and date the comments were entered, and
 the reason for using the undo feature.
- Develop written procedures that address issues such as when to use the undo feature, who is authorized to use it, how to
 monitor its use, the frequency of monitoring, and who should conduct any necessary follow-up.

Significant weaknesses over the receiving and transferring of returned tickets impair the Lottery's ability to prevent and detect internal misuse. (Page 8)

The Lottery should ensure that its lottery operator establishes and implements written procedures to:

- Reconcile the bags received by the warehouse to the numbers of bags dispatched by the various districts. This reconciliation should be performed at the time that the bags are delivered to the warehouse.
- Verify that the seal numbers on returned ticket bags match supporting documentation to ensure that the seals have not been
 removed and replaced.
- Ensure that manually returned tickets are safeguarded from the time they leave the retailer until they are transferred to Lottery staff or issued to retailers.

The Lottery should also ensure that the lottery operator develops a process to account for and maintain information supporting tickets returned by retailers until the Lottery performs its end-of-game reconciliation.

Table of Results and Recommendations <u>denotes entry is related</u> to information technology

Lottery operator employees who process tickets share ProSys accounts, and ProSys allows users to log on at more than one location at a time. (Page 11)

To hold users accountable, the Lottery should ensure that proper access controls are in place for information resources used to process instant tickets. Specifically, it should:

- Require each authorized user to use his or her own account to process instant tickets and require users to log off ProSys
 when not in use or to lock their workstations.
- Disallow users' access to multiple sessions in ProSys.

There is no indication that returned tickets were misused, and the Lottery appropriately monitors tickets that are in transit. (Page 12)

No recommendations.

Controls over instant tickets used by the Marketing Division are adequate to prevent internal misuse. (Page 13)

The Lottery should:

- Ensure that the lottery operator's district sales representatives sign the required forms when taking possession of
 promotional tickets that they deliver to retailers as required by the Lottery's own procedures.
- Perform periodic reconciliations of the instant tickets requested for promotions to the tickets issued in ProSys. Reconciliations could occur quarterly or after each event.
- Develop written procedures for the transfer of unused promotional tickets to the Security Division for safekeeping. These
 procedures should ensure that a log of the tickets transferred is maintained each time such a transfer occurs, including the
 game, pack, and ticket numbers. In addition, the logs should track to whom the tickets are transferred, from whom, and
 when.

Controls over instant tickets used by the Security Division are adequate to prevent internal misuse. (Page 14)

The Lottery should:

- Develop and implement procedures for destroying those tickets for which the Security Division cannot identify claimants. The procedures should ensure that tickets are not destroyed until after the game has closed and the time period for cashing the tickets has passed.
- Formally approve draft procedures for distributing instant tickets for investigations and testing.

Although the data in ProSys is considered reliable, the Lottery needs to improve its administration of users' accounts. (Page 16)

The Lottery should limit the use of generic accounts that are not assigned to a specific user. If it chooses to use generic accounts, it should document the risk analysis demonstrating that there is no need for individual users to be accountable, as required by Texas Administrative Code, Title 1, Part 10, Section 202.7(c)(1).

In addition, the Lottery should closely monitor active and inactive accounts to ensure that users have the appropriate accountability. It should promptly deactivate accounts of employees who leave the agency and move them to the user group that indicates they are former employees. In addition, the Lottery should ensure that accounts that are not logged into are deactivated within a reasonable timeframe.

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Detailed Results

Chapter 1

Significant Weaknesses in the Instant Ticket Reconstruction Process Impair the Lottery's Ability to Prevent and Detect Internal Misuse

Significant weaknesses in the process for requesting reconstructions (see text box) of instant ticket information negatively affect the Texas Lottery Commission's (Lottery) ability to prevent and detect internal misuse of the information. Specifically:

What Is a Reconstruction?

A reconstruction provides the Lottery with information about instant tickets, such as the game number, pack number, ticket number, and prize amount of the ticket. The Lottery requests this information from manufacturers primarily for investigative purposes. Tickets can be reconstructed while at a retailer or while in an employee's possession.

- The Lottery does not reconcile its logs of reconstruction requests to records kept by the manufacturer. This weakness increases the risk that instant ticket reconstructions could be requested for inappropriate purposes and not be detected by the Lottery. Reconciling its request logs to those from an external source is a detective control that would help the Lottery to determine whether all requests were logged and authorized and to investigate discrepancies in a timely manner.
- The Lottery's process for requesting reconstructions does not ensure (1) that each request is made for a documented reason, (2) that requests can be traced to the person who made them, or (3) that

requests for reconstructions of multiple tickets and full packs of tickets are formally approved.

These weaknesses are significant because the same employees request ticket reconstructions, log in the requests, receive the reconstruction information, and have access to the lottery management system (ProSys), which identifies the location of the actual tickets. Because of the risk created by these weaknesses, we performed additional tests and determined that there was no indication of misuse of reconstructed tickets.

Chapter 1-A

The Lottery Does Not Reconcile Its Logs of Requests for Instant Ticket Reconstructions to Those Kept by the Manufacturer

While the Lottery keeps logs of its reconstruction requests, it does not reconcile its logs to those of the manufacturer. Doing so would allow it to ensure that all reconstruction requests are known and authorized and that discrepancies between the two logs are investigated in a timely manner.

When we reconciled the Lottery's logs to those kept by the largest provider of instant ticket games for January 2002 through August 2003, we determined that the Lottery's log was incomplete. Seven percent of the requests on the manufacturer's log were not on the Lottery's log. Over the course of three months, the Lottery was able to provide additional documentation, such as e-mails, to demonstrate that most of the requests were legitimate, bringing the discrepancy to 3 percent. Many of the remaining errors are due to the Lottery's not following its standard procedures. For example, an employee may have faxed a request instead of using e-mail and then

failed to log the request. Lottery policies and procedures require employees to log each reconstruction request.

Because the Lottery does not reconcile its logs with the manufacturer's logs, there is a risk that unauthorized requests could be made and go undetected.

Recommendation

The Lottery should periodically reconcile its reconstruction logs against the manufacturers' records and investigate discrepancies to ensure that it detects any unauthorized reconstructions in a timely manner.

Management's Response

The agency concurs with this recommendation.

While the SAO concludes that no instances of misuse were identified relating to any aspect of the instant ticket reconstruction process, the agency recognizes that there is room for improvement.

The agency is currently implementing procedures addressing the reconciliation of instant ticket reconstruction requests.

Chapter 1-B

The Process for Requesting Reconstructions of Instant Ticket Information Does Not Consistently Ensure Accountability for Requests

The Lottery's process for requesting reconstruction information does not ensure that each request is made for a documented reason, that requests can be traced to the person who made them, or that requests for multiple tickets and full packs of tickets are formally approved.

Nearly 8 percent of the reconstruction requests we tested did not have documented reasons for the requests. Without documented reasons, the Lottery cannot ensure that these requests were appropriate and that the reconstruction information and instant tickets were not misused. The Lottery's policies and procedures require that the request log contain a reason for the reconstruction, such as an investigative case number, business name, or retailer number.

We tested a random sample of 180 requests for fiscal years 2001, 2002, and 2003. Due to the variety of locations in which the reason for a request might be found, the Lottery's staff assisted us with the test. Initially, 78 percent of the requests did not have documented reasons, but Lottery staff members were able to reduce this error rate to 8 percent over the course of two months. That it took the Lottery two months to locate documented reasons for these requests indicates the need for improvement in how the requests are logged.

Multiple employees use the same computer account and password to make requests and receive reconstruction information. These inadequate controls increase the risk that this sensitive information might be misused for personal gain. The two employees

who are authorized to request reconstructions from the manufacturer share a password that allows them to access the e-mail account used to make requests. In addition, the password had not been changed in more than two years.

The Texas Administrative Code contains rules about the use of passwords, which the Lottery did not follow for this computer (see text box). Furthermore, the Lottery's Information Technology Security Manual states, "Sharing passwords is not

Title 1, Part 10, Chapter 202, Rule 202.7 of the Texas Administrative Code (TAC)

The TAC contains the following rules regarding individual identification for computer users:

- Each user of information resources shall be assigned a unique identifier except for situations where risk analysis demonstrates no need for individual accountability of users. (C)(1)
- Information resources systems which use passwords shall be based on industry best practices on password usage and documented agency security risk management decisions. (C)(4)
- A user's access authorization shall be appropriately modified or removed when the user's employment or job responsibilities within the agency change. (C)(2)

authorized." The Department of Information Resources recommends that all passwords be changed every 90 to 120 days.

Because of these weak controls, we tested to determine whether there were indications that an unauthorized user accessed the computer. Our test identified that several requests were made while the authorized users were on leave. The Lottery explained that a third employee served as a temporary backup during this time, so we ultimately found no indication of misuse of the computer. The third authorized user is no longer an employee of the Lottery; however, as stated above, the password had not been changed since this person left.

As a result of our audit, the Lottery reports that the password has been changed and that it has initiated a procedure to change the password every 30 days.

The Lottery does not require written approval for reconstructions of full packs of tickets. It also does not require any approval for reconstructions of multiple tickets. The Lottery's procedures require supervisor approval whenever an entire pack of tickets is to be reconstructed. Because this approval does not have to be

documented, we could not obtain evidence of approvals for 49 out of the 67 (73 percent) full-pack reconstructions that occurred during fiscal years 2001, 2002, and 2003.

Lottery employees do not need approval to reconstruct multiple tickets. We found requests that contained as many as 221 tickets, which in some cases was more than the number of tickets in a pack. Thus, requests for reconstructions of multiple tickets could be used to reconstruct a large number of tickets or even the full pack to locate winning tickets without having to get supervisory approvals.

Our samples included requests of reconstructions for multiple tickets and full packs that were made while the tickets were still in retailers' possession. Employees who traditionally receive reconstruction information also have access to the inventory screens in ProSys that tell them which retailers are selling which packs of instant tickets. While there are legitimate reasons an active pack might be reconstructed, there is a risk of Lottery employees misusing the ticket information for personal gain unless the requests are properly authorized.

Recommendations

The Lottery should:

- Periodically review reconstruction requests to ensure that there is a valid reason for them and that procedures for ticket reconstruction are being followed. To facilitate this review, the Lottery should devise a more efficient way to link requests to the reasons for the requests.
- Ensure that proper access controls are in place for information technology used to make reconstruction requests. Specifically:
 - Provide a separate account and password to each staff member who is authorized to request reconstructions to provide an audit trail.
 - Require each authorized user to change his or her password periodically as required by the Texas Administrative Code and industry practices.
- Require employees to obtain written approvals when requesting reconstructions of multiple tickets and full packs of tickets and keep the approvals on file for future reference.

Management's Response

The agency concurs in principle with these recommendations.

While the SAO concludes that no instances of misuse were identified relating to any aspect of the instant ticket reconstruction process, the agency recognizes that there is room for improvement.

The agency is currently evaluating processes to more effectively link reconstruction requests and the documented reasons for them. The agency is working with the instant ticket manufacturers/vendors to evaluate alternatives for providing enhanced access controls to the vendor system in making reconstruction requests. The agency began requiring authorized users to change passwords at regular intervals in March 2004.

The agency began requiring authorized employees to obtain written supervisory approval for ticket reconstructions involving multiple tickets (10 or more) and full pack reconstructions during the course of the audit. The agency will update current procedures to reflect all implemented changes.

Chapter 1-C

There Is No Indication that Reconstructed Instant Ticket Information Was Misused

Because of the weaknesses discussed above, we conducted additional audit tests to determine whether there were any indications of misuse of reconstruction information in fiscal years 2001, 2002, and 2003. We started by identifying all reconstruction requests that specified a game, pack, and ticket range that were cashed

for mid- or high-tier prizes (\$25 or greater). We then tested to determine whether these requests had documented reasons. We were able to identify documented reasons for 98 percent of the reconstructions tested.

We also matched claims and payments for high-tier prizes (and some mid- and lowtier prizes) against reconstruction requests. For each claim that matched a reconstruction request, we compared the winner's information against Lottery personnel files to look for "near matches" based on name and address. We found no indications that information on reconstructed tickets was misused.

Management's Response

While the SAO has confirmed that no instances of misuse were identified relating to any aspect of the instant ticket reconstruction process, the agency recognizes and takes seriously its responsibility of properly managing the reconstruction process. Business reasons mandate the use of an instant ticket reconstruction process in order to provide customer service and ensure the integrity of the instant ticket product. However, the agency recognizes that the reconstruction process itself inherently creates security challenges.

Chapter 2 Significant Weaknesses in the Process for Returning Instant Tickets Impair the Lottery's Ability to Prevent and Detect Internal Misuse

Significant weaknesses in the processing of instant tickets that are returned to the warehouse by retailers impair the Lottery's ability to prevent and detect internal misuse. Although the majority of the 33.6 million tickets received at the warehouse

Ticket Status

Instant tickets are assigned various statuses in ProSys. The status determines whether a ticket is cashable or not. Tickets that are classified as available, returned, issued, or in transit are not cashable. Tickets that are classified as activated or settled are cashable. in fiscal year 2003 were returned in a non-cashable status, nearly 400,000 were returned in a cashable status (see text box). During our review, we noted the following weaknesses:

The Lottery does not sufficiently monitor the use of the "undo" feature in ProSys, which allows employees in the warehouse to change the number of tickets returned and to change a ticket's status, which could include changing a ticket to a cashable status. Insufficient monitoring of this feature could result in the misuse of instant tickets. Nearly 5 million tickets in fiscal year 2003 could have potentially been changed to a playable status through the use of this feature. Winning tickets could then be cashed at any retailer if they contain a prize value. The primary

purpose of the undo feature is to correct the range of tickets that may have been entered erroneously in ProSys by the lottery operator's staff. Because of the risk created by this weakness, we performed additional tests and determined that there was no indication of misuse of the returned tickets whose status had been changed using the undo feature.

- The contracted lottery operator does not (1) reconcile bags of returned tickets dispatched from districts to bags received at the warehouse, (2) check seals to ensure that the bags have not been tampered with, (3) have two staff members process return tickets, or (4) account for tickets transferred to Lottery staff that may be cashable. These weaknesses increase the risk that missing tickets will not be detected in a timely manner. While the Lottery holds the lottery operator accountable for tickets returned to the warehouse in an "in-transit" status, having checkpoints throughout the return process would help detect missing tickets in a timely manner.
- The Lottery's ability to track the actions of users processing returned tickets is hampered by the fact that employees of the lottery operator share ProSys accounts. In addition, ProSys allows users to be logged into the system on more than one computer at a time. These two issues increase the risk that someone will be able to make unauthorized changes without accountability.

Chapter 2-A

The Lottery Does Not Have Sufficient Controls in Place over the Use of the Undo Feature

The Lottery does not adequately monitor use of the undo feature, which warehouse employees can use to change a ticket's status. Warehouse employees have this ability so they can change the ticket range recorded in ProSys if what was recorded does not match what was received at the warehouse. Monitoring the use of this feature would help the Lottery detect possible misuse of the feature. Specifically:

- The information the Lottery uses to monitor ticket range discrepancies is inaccurate. In fiscal year 2003, the undo feature was used 247 times to change the range of tickets received. The weekly status reports, which the Lottery uses to monitor ticket range discrepancies, captured only 132 instances.
- No supervisory follow-up appears to have occurred to determine whether the ticket range amendments listed on the weekly status reports were justified.
- Ninety-three percent of the fiscal year 2003 ticket-range changes we tested did not provide reasons for changes in ProSys, which the Lottery's procedures require. Based on these results, we estimate that between 217 and 243 instances of ticket-range changes (out of the total of 247) did not have explanations.
- Written procedures for using and monitoring the undo feature do not exist although the function was introduced in June 2002. Formal procedures will help ensure that Lottery staff use the undo feature appropriately and consistently.

In our testing, we found one instance that occurred in May 2003 in which three tickets with prize values totaling \$210 were cashed on the same day they had been reverted to a cashable status using the undo feature. These tickets had been in a non-cashable status for 12 days. ProSys did not contain comments to explain why the undo feature was used to change the tickets' statuses from returned to being at the retailer. When we referred this instance to the Lottery's Security Division in May 2004, it determined that four additional tickets with a total prize value of \$80 also had their statuses changed and were validated on the same day as the other three tickets. The Lottery reports that there is insufficient evidence to continue with an investigation. If the Lottery had performed timely monitoring of the undo feature and had conducted a prompt investigation of these tickets, it might have been able to determine whether the tickets were misused.

The Lottery reports that it has requested that the contracted lottery operator provide a report generated from ProSys with ticket range amendment data so that it can monitor the use of the undo feature.

Recommendations

The Lottery should:

- Develop a process for monitoring the use of the undo feature in ProSys. Such monitoring should include routine supervisory reviews of the feature's use. The Lottery should monitor all uses of the undo feature—particularly the ones that change ticket ranges—identify any ticket that is cashed after its status is changed, and investigate any potential misuse of tickets. Monitoring and follow-up should continue until the tickets can no longer be cashed (180 days after the game is closed).
- Maintain documentation supporting each use of the undo feature. Such documentation could take the form of comments entered in ProSys and include items such as who made the comments, the time and date the comments were entered, and the reason for using the undo feature.

 Develop written procedures that address issues such as when to use the undo feature, who is authorized to use it, how to monitor its use, the frequency of monitoring, and who should conduct any necessary follow-up.

Management's Response

The agency concurs with the recommendations.

While the SAO concludes that no instances of misuse were identified relating to returned tickets whose status had been changed using the undo feature, the agency recognizes that there is room for improvement.

On July 12, 2004, the agency and the lottery operator implemented bar code scanning technology for recording ticket return ranges in ProSys which is anticipated to significantly reduce the number of incorrect entries of ticket return ranges by lottery operator personnel. As a result, the overall number of and need to perform "undo" transactions should be reduced. The agency has also enhanced monitoring of the undo feature through the creation of a report in ProSys that identifies all uses of the "undo" feature. This report was implemented on May 17, 2004 and is being used by management to monitor these transactions.

The agency is currently evaluating the ability to monitor and investigate cashing activity for tickets that have gone through the "undo" process along with other alternatives that may provide additional controls for tickets affected by the process. The agency has implemented the use of "comments" (documentation) in ProSys related to all "undo" transactions. All comments are included in the new "undo" report monitored by management. Written procedures are being developed that will document the agency's processes with regard to the areas identified.

Chapter 2-B

Significant Weaknesses over the Receiving and Transferring of Returned Tickets Impair the Lottery's Ability to Prevent and Detect Internal Misuse

ProSys Does Not Track Manual Returns

Manually returned tickets are those that are not tracked in ProSys while they travel from the retailer's location to the warehouse. Potentially damaged, defective, and miscut tickets are returned manually; they are not tracked through ProSys because the Lottery does not want lottery operator employees to make the determination about whether a ticket is damaged, defective, or miscut. ProSys does not have a status for potentially damaged, defective, or miscut tickets. It has a status only for tickets that Lottery employees have verified as damaged or defective. This status generates a credit to the retailer.

Other manual returns occur when a retailer's ProSys terminal is not working.

The contracted lottery operator's processes for receiving and transferring tickets are not adequate to prevent internal misuse of tickets. Specifically, the lottery operator does not take sufficient steps to ensure that all returned tickets make it to the warehouse. It also does not have complete procedures for tracking the number of manually returned tickets it transfers to Lottery employees (see text box).

According to the lottery operator, approximately 646,620 tickets are returned per week. Although the majority of the 33.6 million tickets returned to the warehouse in fiscal year 2003 were in a noncashable status, approximately 400,000 tickets were returned in a cashable status. In addition, as mentioned above, Lottery employees at the warehouse have the ability to revert the returned tickets to an earlier status that may be cashable. The lottery operator does not take sufficient steps to ensure that all returned tickets make it from the retailers to the warehouse. The lottery operator's courier logs the number of bags of returned tickets picked up from the 10 district sales offices in Texas; however, its warehouse staff members do not reconcile the number of bags received to those dispatched from the districts. Without a reconciliation of bags, the Lottery may not be able to detect in a timely manner that a bag is missing.

In addition, each duffle bag contains smaller bags of tickets that are sealed. The lottery operator's warehouse employees do not check the seals on the bags against the seal numbers documented on the returned ticket forms to ensure that the seals have not been removed and replaced. Furthermore, employees work separately to process returned tickets, which creates an opportunity for misuse.

Currently, the lottery operator's procedures do not require a reconciliation of duffle bags or that two employees process returned tickets. Employees report that they are supposed to verify the seal numbers, but the lottery operator's written procedures do not address this step.

The lottery operator does not have complete procedures regarding manually returned tickets. The lottery operator has procedures that require damaged and defective tickets to be returned manually. However, these procedures do not sufficiently address how manual returns should be safeguarded and accounted for as they are transferred from the retailers to the various lottery operator and Lottery staff members who handle and process the tickets. As manually returned tickets can be in a cashable status, it is necessary to establish sufficient controls and document them in written procedures to safeguard these tickets throughout the return process.

When transferring returned tickets to Lottery staff to determine whether the tickets are defective, damaged, or miscut, lottery operator staff did not record how many tickets were transferred and received during fiscal year 2003. Maintaining a record of the number of tickets, the names of the staff members transferring the tickets, and the dates of the transfers would establish accountability for these tickets. The lottery operator reports that it has started maintaining a log of tickets transferred to Lottery staff.

Furthermore, the lottery operator does not take sufficient steps to account for the returned ticket forms that accompany tickets that are returned to the warehouse. The forms are used to update and verify returned ticket information in ProSys. They are the primary mechanism for tracking manually returned tickets, which may be returned in a cashable status. Missing forms increase the risk that ticket misuse could go undetected.

Recommendations

The Lottery should ensure that its lottery operator establishes and implements written procedures to:

 Reconcile the bags received by the warehouse to the numbers of bags dispatched by the various districts. This reconciliation should be performed at the time that the bags are delivered to the warehouse.

- Verify that the seal numbers on returned ticket bags match supporting documentation to ensure that the seals have not been removed and replaced.
- Ensure that manually returned tickets are safeguarded from the time they leave the retailer until they are transferred to Lottery staff or issued to retailers.

The Lottery should also ensure that the lottery operator develops a process to account for and maintain information supporting tickets returned by retailers until the Lottery performs its end-of-game reconciliation.

Management's Response

The agency concurs in principle with the recommendations.

However, the agency provides the following information regarding this issue. GTECH, the lottery operator for the Texas Lottery, is the world's largest provider of lottery operations and services. As such, GTECH has substantial industry knowledge of both domestic and international lottery operations. With respect to instant ticket accounting systems and procedures, the agency notes that the practice of manually tracking certain ticket returns, especially partial packs of tickets, is common in the lottery industry. This practice allows the agency to determine the proper disposition and accounting treatment for tickets that are deemed defective, damaged, or unusable by the retailer. Procedures used to assure proper handling of manual returns vary greatly due to different rules and policies at each jurisdiction, making appropriate qualitative comparison difficult. The agency notes, however, that the procedures developed by the agency and the lottery operator meet or exceed the controls in place at similar lotteries resulting in the lowest percentage (approximately 1.2%) of cashable manual returns in Texas as compared to other lotteries of comparable size, thus confirming the automated system used in Texas is among the most advanced.

Proper accounting for instant tickets is achieved by establishing robust system functionality which is augmented by appropriate process and procedure. Texas ProSys, the automated system which has been in place at the agency since 1999, has been significantly enhanced over time under the direction of the agency to provide optimum accounting and tracking of tickets. In addition, the procedures used by field and warehouse staff are frequently reviewed and modified, if conditions warrant. This combination of a system supported by procedural controls has established the Texas Lottery as a model for use throughout the world. Visitors from countries such as China, Taiwan, Columbia, and Mexico as well as from U.S. states such as Louisiana, Nebraska, Arizona, and Michigan have visited the Texas Lottery to observe the instant ticket system and procedures. The success of the instant ticket product in Texas in generating revenue for the Foundation School Fund is dependent in large part to the agency's ability to properly handle the inventory. Instant ticket sales account for approximately two-thirds of total sales for the Texas Lottery.

While the SAO concludes that no instances of misuse were identified relating to returned tickets whose status had been changed using the undo feature, the agency recognizes that there is room for improvement.

Regarding the recommendations, the agency is currently evaluating alternatives to further enhance tracking of all ticket returns performed by the lottery operator. The lottery operator has recently implemented a "bag count" reconciliation process that is performed at the time that bags containing returned tickets are delivered to the instant ticket warehouse. The lottery operator has also implemented a verification process for all manual ticket returns. These returns are sealed at the retailer location until they are received and verified by instant ticket warehouse personnel.

The agency is currently evaluating the most effective means of requiring the lottery operator to maintain supporting information regarding returned tickets. The agency is also reviewing written procedures prepared by the lottery operator related to those processes implemented by the lottery operator. The agency will require written procedures for any future processes implemented as a result of these recommendations. The agency recognizes the inherent risk associated with manual returns and plans to evaluate alternatives and implement procedures to ensure that these and all returned tickets are safeguarded.

Chapter 2-C

Lottery Operator Employees Who Process Tickets Share ProSys Accounts, and ProSys Allows Users to Log On at More than One Location at a Time

We observed two lottery operator employees sharing a ProSys account to process returned tickets, thus circumventing a control designed to establish accountability. The lottery operator indicates that account sharing by staff members processing instant tickets may be occurring on a regular basis. The Lottery's Information Resources Security Manual requires users to be accountable and responsible for computer actions using the identifiers they have been assigned. When users share accounts to process ticket returns, the Lottery loses its ability to hold individual users accountable for the tickets they process.

Additionally, ProSys allows a single user access to multiple sessions. This means that a user with access to ProSys can be logged into the system at his or her desk and at another terminal simultaneously. This weakness increases the risk that someone might make unauthorized changes using another employee's account. The Lottery indicates that multiple sessions in ProSys are allowed as a convenience to users rather than for a specific business reason. Given that ProSys contains data on instant ticket game transactions, use of multiple sessions can further weaken the audit trail necessary to establish individual accountability over these transactions.

Recommendations

To hold users accountable, the Lottery should ensure that proper access controls are in place for information resources used to process instant tickets. Specifically, it should:

- Require each authorized user to use his or her own account to process instant tickets and require users to log off ProSys when not in use or to lock their workstations.
- Disallow users' access to multiple sessions in ProSys.

Management's Response

The agency concurs in principle with the recommendations.

While the SAO concludes that no instances of misuse were identified relating to returned tickets whose status had been changed using the undo feature, the agency recognizes that there is room for improvement.

The lottery operator has addressed shared access with lottery operator staff and implemented workstation "lock" features.

The agency is working with the lottery operator to limit the use of users' access to multiple sessions in ProSys.

Chapter 2-D

There Is No Indication that Returned Tickets Were Misused, and the Lottery Appropriately Monitors Tickets that Are in Transit

Because of the weaknesses identified above, we conducted additional tests to determine whether there were any indications of misuse of returned tickets in fiscal year 2003. We identified all ticket returns that were subject to the undo feature in ProSys that resulted in ticket range amendments. We then matched these transactions by game, pack, and ticket numbers against the claims and payment file of predominantly high-tier winners and found no indications of misuse.

The Lottery is appropriately monitoring tickets placed in "in-transit" status by district sales representatives from the retailers and levying sanctions against the lottery operator for tickets that are not found at the warehouse in a timely manner. In addition, the Lottery placed the packs that were not recovered in a noncashable status to prevent misuse. According to the Lottery's procedures, the lottery operator has up to 30 days to find these tickets after they have been in an "in-transit" status for more than 15 days past the end of the previous month. If the lottery operator cannot, the Lottery assesses sanctions of \$100 per missing pack.

Management's Response

While the SAO has confirmed that no instances of misuse were identified relating to returned tickets whose status had been changed using the undo feature, the agency takes seriously its responsibility of securing and distributing the instant ticket product.

Chapter 3 The Lottery's Controls over Tickets Used by the Marketing and Security Divisions Are Sufficient to Prevent Internal Misuse; However, We Identified Some Opportunities for Improvement

The Lottery's controls over the tickets used by the Marketing and Security Divisions are adequate to prevent misuse. However, we identified some opportunities for improvement.

Chapter 3-A

Controls over Instant Tickets Used by the Marketing Division Are Adequate to Prevent Internal Misuse

The Lottery has written procedures that establish appropriate controls over the approval, transfer, and distribution of tickets that its Marketing Division uses for promotional purposes. In addition, we noted that the Lottery is generally complying with its procedures that require it to (1) obtain the necessary approval before requesting instant tickets for promotions and (2) obtain signatures from retailers and Lottery staff members involved in distributing these tickets at promotional events. However, we noted the following:

- The lottery operator's district sales representatives did not consistently sign the required forms when taking possession of promotional tickets that they deliver to retailers. Signatures from district sales representatives are required by the Lottery's written procedures and help ensure proper accountability of these tickets.
- The Lottery is not reconciling instant tickets requested for promotions to the tickets issued in ProSys. The Lottery's current procedures do not require such a reconciliation; however, this process will help ensure that the controls for approval, transfer, and delivery of tickets are working as intended.
- The Lottery does not have written procedures governing the transfer of unused promotional tickets to the Security Division for safekeeping. According to the Lottery, there typically are not any tickets left over after a promotional event. However, in instances that all tickets are not used, they are stored in a safe.

Recommendations

The Lottery should:

- Ensure that the lottery operator's district sales representatives sign the required forms when taking possession of promotional tickets that they deliver to retailers as required by the Lottery's own procedures.
- Perform periodic reconciliations of the instant tickets requested for promotions to the tickets issued in ProSys. Reconciliations could occur quarterly or after each event.

 Develop written procedures for the transfer of unused promotional tickets to the Security Division for safekeeping. These procedures should ensure that a log of the tickets transferred is maintained each time such a transfer occurs, including the game, pack, and ticket numbers. In addition, the logs should track to whom the tickets are transferred, from whom, and when.

Management's Response

The agency concurs in principle with the recommendations.

While the SAO concludes that the agency currently has written procedures that establish appropriate controls over the approval, transfer, and distribution of promotional tickets and that the agency is generally complying with its procedures, the agency recognizes that there is room for improvement.

To ensure that the lottery operator's district sales representatives sign the required forms when taking possession of promotional tickets that lottery operator staff is responsible for delivering to retailers, as of June 1, 2004, the agency has reinforced this requirement with the lottery operator and will conduct periodic reviews of forms to ensure the procedure is being followed.

The agency will conduct periodic reconciliations of the number of instant tickets requested for promotions to the number of tickets issued in ProSys to ensure accurate accounting of promotional tickets.

The agency is currently evaluating alternatives for the storage and safekeeping of unused promotional tickets and will develop and implement appropriate procedures.

Chapter 3-B

Controls over Instant Tickets Used by the Security Division Are Adequate to Prevent Internal Misuse

Tickets used by the Security Division are physically secure. The Security Division uses tickets for various types of investigations, to try to identify claimants who send in their tickets with insufficient identifying information, and to ensure that the manufacturers are satisfying contractual obligations regarding ticket features.

We did identify some opportunities for the Lottery to improve its policies and procedures. Specifically:

- The Lottery needs to develop and implement formal procedures for destroying tickets for which the Security Division cannot identify claimants. Written procedures will help ensure that Lottery employees dispose of unclaimed tickets appropriately when claimants cannot be identified.
- Existing procedures that govern the distribution of instant tickets for investigations and testing have not been formally approved by Lottery management. Formal approval will help ensure that employees will act consistently in distributing and accounting for these tickets.

Recommendations

The Lottery should:

- Develop and implement procedures for destroying those tickets for which the Security Division cannot identify claimants. The procedures should ensure that tickets are not destroyed until after the game has closed and the time period for cashing the tickets has passed.
- Formally approve draft procedures for distributing instant tickets for investigations and testing.

Management's Response

The agency concurs with these recommendations.

While the SAO concludes that tickets used by the Security Division are physically secure, the agency recognizes that there is room for improvement.

The agency is evaluating destruction programs for tickets submitted to the agency where the claimant cannot be identified through review by the Security Division. The program implemented will ensure that tickets are not destroyed until after the time period for claiming prizes and all agency records retention requirements have expired. These processes will be reflected in written procedures. The agency will complete final review and approval of existing draft procedures for distributing instant tickets for security investigations and testing.

Chapter 4 Although the Data in ProSys Is Considered Reliable, the Lottery Needs to Improve Its Administration of Users' Accounts

Based on audit procedures performed and the results of an external audit for ProSys application controls and instant ticket services at the lottery operator, the data from ProSys for the instant ticket games is reliable for use in this audit. Our audit work related to returned tickets identified that some lottery operator employees share accounts and that ProSys allows users to log on to more than one computer at a time (see Chapter 2-C). While these issues need to be addressed because they weaken accountability for instant ticket transactions, they do not significantly affect the reliability of ProSys data overall.

The Lottery needs to improve its administration and maintenance of users' accounts in ProSys. Specifically:

- A temporary account called TempUser was used by an employee for more than a year because the account created for him was not working properly. Because generic accounts are not associated with a specific person, there is no accountability for the transactions performed under that account. Lottery personnel reported that the account was for testing purposes prior to being used by the employee. Another account has no one assigned to it. The Lottery reports that the purpose of this account is to test new games. According to the Texas Administrative Code (see text box on page 3), "Each user of information resources shall be assigned a unique identifier except for situations where risk analysis demonstrates no need for individual accountability of users."
- The Lottery does not properly disable accounts of former employees or deactivate accounts that are not in use. Specifically:
 - Two accounts were still active despite never having been logged into. One of these accounts could not be associated with an employee. ProSys does not appear to be automatically disabling accounts that are not used within a given period of time. Active accounts that are not being used and that are not properly aged and deactivated are at risk for unauthorized use.
 - Accounts of 38 former employees were not moved to the specific user group for ex-employees, which is required by the Lottery's policies and procedures. One of these accounts is still active. Former employees' accounts are to be maintained in this ProSys group to prevent the employees from claiming a prize of \$600 or more for six months after leaving the Lottery. The external audit firm also found that 8 of 15 terminated employees selected had active ProSys access. The Texas Administrative Code (see text box on page 3) states that "a user's access authorization shall be appropriately modified or removed when the user's employment or job responsibilities within the agency change." Although the lottery operator responded in the July 2003 external audit report that it had ensured that access for all accounts had been eliminated or put into a non-active state for terminated employees, this issue continues to exist.

 The Lottery reports that it is currently using a work-around technique to deactivate access of employees that leave its employment. This work-around technique merely inactivates an account and does not move the account into the user group that signals which employees are no longer in the Lottery's employment. Dormant accounts provide additional opportunities for unauthorized use.

Recommendations

The Lottery should limit the use of generic accounts that are not assigned to a specific user. If it chooses to use generic accounts, it should document the risk analysis demonstrating that there is no need for individual users to be accountable, as required by Texas Administrative Code, Title 1, Part 10, Section 202.7(c)(1).

In addition, the Lottery should closely monitor active and inactive accounts to ensure that users have the appropriate accountability. It should promptly deactivate accounts of employees who leave the agency and move them to the user group that indicates they are former employees. In addition, the Lottery should ensure that accounts that are not logged into are deactivated within a reasonable timeframe.

Management's Response

The agency concurs with these recommendations.

While the SAO concludes that the data from ProSys for the instant ticket games was reliable for use in this audit, the agency recognizes that there is room for improvement.

The agency will review and update the System Administration procedures regarding the use of generic accounts. Additionally, software modifications have been made to the ProSys application that will allow the agency to correctly activate and deactivate user accounts.

Management's Response

C. Tom Clowe, Jr. Chairman **TEXAS LOTTERY COMMISSION** James A. Cox, Jr. Commissioner William L. Atkins, Director Charitable Bingo Operations Reagan E. Greer, Executive Director Rolando Olvera Commissioner August 4, 2004 Mr. Nick Villalpando State Auditor's Office Austin, TX 78711-2067 Dear Mr. Villalpando: We appreciate the opportunity to respond to the State Auditor's report on Selected Controls over Instant Tickets at the Texas Lottery Commission. We also appreciate and want to thank you and your staff for responding to our request to review the controls over instant tickets. The Texas Lottery Commission continuously strives to ensure the integrity, security, and effectiveness of our instant ticket program. The attached document contains our response to the issues and recommendations presented in your draft report. If you have any questions or need any additional information, please direct your inquiries to the Director of Internal Audit, Catherine Melvin, at (512) 344-5488. Once again, thank you for your hard work and assistance in our efforts to ensure the integrity, security, efficiency, and effectiveness of the instant ticket program. Sincerely. Reagan E. Greer Executive Director P.O. Box 16630 • Austin, Texas 78761-6630 Phone (512) 344-5000 • FAX (512) 478-3682 • Bingo FAX (512) 344-5142 www.txlottery.org • www.txhingo.org

The State Auditor's Office (SAO) conducted this audit at the request of the Texas Lottery Commission in response to an anonymous allegation received by the agency. The agency contacted the SAO on May 29, 2003, regarding the allegations and the SAO responded with an audit team at the agency headquarters beginning in June 2003.

The agency appreciates the review conducted by the SAO. Based on the results of the review, the agency is secure in knowing that the integrity of the State's instant ticket games is intact and being maintained, and no instances of misuse have been identified.

The agency agrees that the SAO has identified opportunities to improve agency procedures and processes that will further secure the integrity of the instant ticket games and assist the agency in maintaining the highest standards of security. The agency has carefully considered the recommendations of the SAO and will incorporate the SAO recommendations or take other alternative actions necessary to make the recommended improvements. As always, the actions taken by the agency will be based on sound business principles and will be taken in a fiscally responsible manner, considering costs and benefits while keeping with industry best practices.

Appendix

Objective, Scope, and Methodology

Objective

Our objective was to determine whether the operation of the Texas Lottery Commission's (Lottery) instant ticket games reasonably ensures their integrity. Specifically:

- Does the Lottery have safeguards in place over ticket reconstructions to prevent misuse?
- Does the Lottery have controls in place over returned tickets and tickets used internally to prevent misuse?

Scope

We performed our review at the Lottery, the lottery operator, and one instant ticket manufacturer. We reviewed ticket reconstructions for fiscal years 2001, 2002, and 2003. For processes related to returned tickets and tickets used internally, we reviewed transactions for fiscal year 2003.

Methodology

The audit methodology consisted of conducting interviews of Lottery and contractor staff; collecting and reviewing information; performing tests, procedures, and analyses using predetermined criteria; and visiting contractor locations.

Information collected to accomplish our objectives included the following:

- Processes, procedures, practices, contracts, and regulations related to the operation of instant games.
- Internal reports, documentation, and manuals of the Lottery and its contractors.
- Data from the Lottery's information technology systems and the Uniform Statewide Payroll System.
- Results of an external audit for ProSys application controls and instant ticket services at the lottery operator. The outside audit firm's examination was performed in accordance with standards established by the American Institute of Certified Public Accountants and included the procedures necessary to obtain a reasonable basis for rendering an opinion.

Analytical procedures and tests conducted included the following:

Review of policies and procedures, as well as current practices for adequacy of controls.

- Tests to assess the reliability of populations used in the audit:
 - Data analysis of ProSys tables to ensure completeness and reliability of information received and reviews of external audit reports assessing the controls over and the reliability of the information system—The external audit firm's examination was performed in accordance with standards established by the American Institute of Certified Public Accountants and included the procedures necessary to obtain a reasonable basis for rendering an opinion.
 - Reconstructions—For the time period tested (fiscal years 2001, 2002, and 2003), we were able to verify the population of reconstructions against an external source (the manufacturer) for only part of that period (January 2002 through August 2003). However, the results indicated that this population is reliable for the purpose of this audit.
 - Returned Ticket Forms—We could not verify the completeness of the population of returned ticket forms for fiscal year 2003, which was used to test the accuracy of returned ticket transactions.
- Tests of internal controls and transactions, including tests of entire populations as well as sample tests (both random and judgmental). Specifically:
 - Observation tests of processes used in the warehouse where returned tickets are processed and stored.
 - Tests of random and judgmental samples of returned ticket forms, transactions indicating use of the "undo" feature of ProSys, and tests for compliance with policies and procedures related to internal controls.
 - Tests of random samples of reconstruction requests from fiscal years 2001–2003 to determine whether there were documented reasons for the requests; comparisons of all dates of reconstruction requests to dates of authorized employees' leave; and tests of mid- and high-tier validated reconstruction requests from fiscal years 2001–2003 to determine whether there were documented reasons for the requests.
- Data analysis of cashed tickets to determine whether Lottery employees or people closely associated with them had validated instant tickets considered to be high-risk.

Criteria used included the following:

- Lottery procedures
- Texas statutes and the Texas Administrative Code
- Department rules, procedures, and manuals
- Other standard audit criteria and best practices

Project Information

Our fieldwork was conducted from December 2003 to May 2004. A site visit to the ticket manufacturer's facility was conducted in September 2003. We conducted this audit in accordance with generally accepted government auditing standards. The following members of the State Auditor's staff conducted this audit:

- Vandita Zachariah, MBA (Project Manager)
- Susan Van Hoozer, MBA (Assistant Project Manager)
- Fred Bednarski III
- Selvadas Govind, CIA
- Dorvin Handrick, CISA, CDP
- Matthew Hanson
- Courtney Harrison
- Melissa Larson, CIA, CISA, CFE
- Ray Ruiz
- Cesar Saldivar
- Wei Wang, CPA
- Tom Winn, Ph.D.
- Mary Wise, CPA
- J. Scott Killingsworth, CIA (Quality Control Reviewer)
- Nick Villalpando, CPA (Audit Manager)
- Frank N. Vito, CPA (Audit Director)

Distribution Information

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Office of the Governor

The Honorable Rick Perry, Governor

Texas Lottery Commission

Mr. C. Thomas Clowe, Jr., Chair Mr. James A. Cox, Jr., Member Mr. Rolando Olvera, Jr., Member Mr. Reagan Greer, Executive Director