PENNSYLVANIA LOTTERY
Lottery Drawing Procedures

Physical Procedures

## Lottery Drawing Procedures

© Pennsylvania Lottery-Department of Revenue
1200 Fulling Mill Rd • Suite 1
Middletown, PA 17057
Revised November 10, 2010

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## Introduction

The procedures have been developed to ensure that the Pennsylvania Lottery properly discharges its responsibilities with regard to The Daily Number, Big 4, Quinto, Cash 5 and Match 6 Drawings. The procedure will cover the preliminary activities required to provide necessary personnel for the drawing, definitions of terms used within the context of the procedures, detailed duties and responsibilities of each of the pre-drawings, live-drawing and post-drawing functions, including overall descriptions of the activities necessary to accomplish successful drawings


## Definitions

## A. On Camera Official (O.C.)

The Lottery Drawing Official who appears on camera with a senior citizen witness to perform the official live drawings. This Official also conducts the machine and ball set selections, the weighing of the selected ball sets and performs all pre and post drawings that are necessary. The Official is also required to observe and call any foul situations during any of the live drawings. The Official will serve as host/hostess to the witnesses and explain procedures to the witnesses.

## B. Coordinator Official (Coord.)

The off-camera Lottery Drawings Official working the show, whose primary functions are to record all events on the certification forms, maintain communications with the Headquarters Official, act as the primary liaison with the CPA's to verify the recording of all drawing results, handle/relay any questions or concerns that the CPA's may have, give cues to the O.C., enter the winning numbers into the online computer system management terminal and observe and call any foul situations during any of the drawings. After the drawing, the Coordinator will then proceed to the Lottery's vendor to enter the prize pay amounts as part of a dual entry procedure into the online computer system and to confirm media fax and web site data. This Official will also serve as host/hostess to the witnesses. (Appendix B)

## C. Headquarters Official (H.Q.)

The Lottery Drawings Official on duty in the nightly drawing control center ("Lottery Headquarters Drawings Room") responsible for monitoring and recording the live telecast, contacting Drawings Manager or the Director for Lottery Security officials as required, relaying additional instructions to Lottery Drawing Officials to handle parameter violations or other exception conditions, changing the see/pay status of the online games' computer records, verifying and then entering the winning numbers into the online vendors and states computer systems, transmitting the winning numbers and payoff amounts to the broadcast media, updating various jackpot announcements, the Lottery website and changing the games' status to paying through the online vendor's and the states computer systems. While viewing the live
drawing, the Headquarters Official is in a position to call a foul over the phone if he/she detects a problem that is overlooked in the studio.

## D. CPA Representatives

The persons from the Certified Public Accounting firm contracted by the Lottery to observe and certify all security and drawing activities carried out at the nightly drawings. Observation and certification include all drawing-related activities and start with the initial entry into the secured rooms, ball sets and machines selection, ball/ball set weighing and mathematical calculations for parameter violations. CPA's will assist with moving machines to drawing areas to perform nightly pre-drawing and post-drawing testing, the live drawing and ends with the final securing of the drawing equipment and the secure rooms. Each night, there are two auditors from the contracted, independent auditor. One of the individuals must be a CPA.

## E. Drawings Manager

That Drawings Official who has the overall responsibility for the coordination and operation of all Lottery drawings and for ensuring their integrity. Responsibilities include the writing and updating of all drawing procedures, forms and assisting in changes to the drawing show. This official is also responsible for writing, updating, distributing the drawing scripts, coordinating with the Manager or marketing Communications and Programs or Assistant Marketing Director any new script inserts to the TV studio, and responsible for overseeing the preparation of the scheduling of senior citizen witnesses who will appear on the telecast. Also acts as primary liaison with the TV studio to coordinate all drawing activities as well as coordinates in the designing, acquisition, maintenance and operation of all drawing equipment and drawing set requirements. This official is in charge of scheduling the training of new Drawing Officials and is responsible for the annual certification of the scales, ball sets and machines.

## F. Director for Lottery Security (Lottery Security Director)

That Official who has the overall responsibility for the reviewing and monitoring operations of all security procedures, and monitors all Lottery drawings ensuring their integrity. Responsibility includes security systems, auditing of forms, staff background checks, CPA liaison, drawing analysis and all other security-related functions at the TV studio, the vendor Lottery office, the BIS and Lottery Headquarters. The Director for Lottery Security or his/her designee is responsible for being at periodic certification of the ball sets, machine repairs and other related drawing issues. Parameter violations, unusual occurrences, fouls, computer system and tape security problems, etc., are to be cleared through this Official.

## G. Drawings Staff

These individuals are responsible for conducting all official Lottery nightly drawings and may function as the On-Camera Official, Coordinator Official or Headquarters Official according to a monthly assignment schedule prepared by the Drawings Manager. In their assignments, they are responsible for ensuring that all drawing data is properly documented, verified and entered into the appropriate computer systems and that all information is correctly transcribed and verified before distribution to the general pubic and the media. They are further responsible for scheduling senior citizen witnesses for the nightly drawings,
training new Drawing Officials, and acting as liaison with the TV studio drawing show personnel to coordinate drawing activities during the course of the nightly drawings.

## H. Senior Citizen Lottery Witnesses

Those persons volunteering to appear on camera and act as witnesses before, during and after all live Lottery drawing telecasts. The requirements for being a senior citizen Lottery witness are that they be fifty-five years or older and a resident of Pennsylvania. A senior citizen Lottery witness will function as an off-camera witness their first night and as on-camera witness the second night. The back-up witness will be responsible for the random selection of the machines and ball sets used for that night's drawing.

## I. Emergency Standby Witness

That person who can be called to the TV studio in an emergency situation to assume the duties of one of the scheduled witnesses who could not report for the drawing. The emergency witness list is created and maintained by the Lottery Drawings Officials.

## J. Lottery Certification Forms

The forms used by the Coordinator at the drawing site to record names of personnel in attendance, adherence to security procedures, machine and ball set selection, ball set weights, pre-air drawing selections, the official numbers, post-air drawing selections, plus comments or problems and signatures of witnesses and CPA's as required. This form is to be turned into the Lottery Headquarters Drawing Room and eventually will be picked up by Lottery Security for auditing and archiving. (Note: The CPA's also record the information on a similar set of forms to ensure performance and verification of all official duties and accuracy of data. These forms are delivered to the Director for Lottery Security on a weekly basis unless a severe security situation is noted.)

## K. Headquarters

-The Lottery offices are located at 1200 Fulling Mill Rd, Middletown, PA, 17057. Drawing Room-717-702-8071 or 8072 Fax 717-702-8074
L. Television Station
-The televised live Drawings are currently performed at WHP-TV, 3300 North Sixth St, Harrisburg, PA, 17110. 717-238-2100. Rehearsal Area 717-238-338.1 Fax 717-238-2940 or 4903. The Coordinator Official office is at this location. 717-238-3381
M. Lottery Vendor Office
-The current Lottery vendor office is Scientific Games, 1200 Fulling Mill Rd, Suite 4, Middletown, PA, 17057. The Coordinator Official office is at this location. 717-561-7160 Lottery Office 717-561-7178

## N. Bureau of Information Services (BIS)

-The BIS office is located at 831 Strawberry Square, Eight Floor-Revenue Towers, Harrisburg, PA, 17112.

## Preliminary Activities and Responsibilities

## A. Drawing Staff Schedules

The Lottery Drawing Officials are issued a schedule, prepared by the Drawings Manager, indicating the appropriate drawing personnel for the Lottery's nightly drawings. Should a member of the Drawing staff become unable to carry out a duty, the Drawings Manager will be contacted and another official will be contacted. Of no official can be located, the Drawings Manager will fill in for the official. A list of approved TV studio personnel is also made available to all Lottery Drawing Officials. (Appendix B)

## B. Senior Citizen Witnesses' Schedule

The Drawings staff is responsible for the scheduling of senior citizen witnesses who will appear on the nightly drawing telecasts. The assigned Drawings official will contact and schedule witnesses on a monthly basis, prepare the monthly witness schedule, distribute the witness schedule to other Lottery units and update and maintain the senior citizen witness database. Drawing officials will review and verify the invoices for the restaurant meals at the restaurant immediately after the witness dinner. The invoice shall be audited after the fact by the Lottery's Purchasing Unit to ensure proper and accurate expenses. (Appendix B)

## C. CPA's Schedule

The CPA firm will be responsible for providing a monthly schedule to the Drawings Manager. This schedule will be posted in the HQ Drawings room and the TV studio. One back up CPA will be named on this schedule. (Appendix B)

## D. Keys, Weekly Scripts, Tapes, Packets and Promotion Items

-Necessary keys are issued to each Lottery Drawing Official who is responsible for the proper use and safekeeping of same.
-The Coord. will pick up and take the upcoming week's scripts containing the current messages for that week's telecasts and the witness packets to the studio every Friday.

## Pre-Drawing Activities (TV Studio Rehearsal Area)

## A. Anrival

Each night, the member of the assigned Drawing official team is to meet the senior citizen witnesses at 4:00 p.m. at the assigned restaurant. They are to dine with the senior citizen witnesses and will be responsible for verifying and signing the dinner invoices for the senior citizen witnesses and the Drawing officials. During this time, the Drawing officials will be on "official duty" and are expected to get to know the guests and attempt to brief and relax them with regard to the upcoming activities. After dinner, the Drawing officials will escort them to the Lottery rehearsal area at the TV studio. The CPA's will also be at this area no later than 5:15 p.m. The Coord. will enter the names of all officials, witnesses, CPA representatives and any visitors on the Lottery Certification form at this time. Only those persons listed on the current "Authorized Personnel" list or those who the Drawing Officials have been notified by the Security Director or the Executive Office as having specific clearance are permitted in the rehearsal area and/or the studio area. Concurrently scheduled witnesses will be an exception.

## B. Secure Room

The Drawings party, including the Drawing officials, witnesses and CPA's are to enter the Drawing equipment secure room at 5:20-5:25 p.m.
-The Coord. will first disarm the intrusion system by entering their code into the keypad. This must be done before the room is opened. Failure to properly disarm the alarm will result in the system reading a "break-in" and the police will be summoned. Each Lottery Drawing official will have been issued their own unique identification code for the alarm system. If the alarm is set off, call the monitoring service at 1-800-4344000. The official will need the "Lottery Studio Signal Number" and the unique 4 digit pass code. The alarm company will need to be advised that everything is ok and that the alarm was triggered by mistake, Also, the Lottery Security Director must be notified and they will in turn, follow up with the alarm company.
-After the security system has been disarmed, the O.C. and Coord. Officials will open the Lotterycontrolled lock on secure room door. It is necessary to enlist a TV studio representative who will use a second key for the TV studio-controlled lock on the secure room door. In addition, the Lottery Drawing Officials must use their electronic badge and fingerprint scanner to open the door.
-The Coord. Official will note the entry time on the Lottery Certification Forms. If entry cannot be made for any reason, the H.Q. Official must be contacted immediately, who will in turn immediately contact the Lottery Security Director or his/her designee.
-The Coord. will unlock and open the secure room and enter along with the senior citizen witnesses and the CPA representatives. The time of entry into the room and the ball cabinet seal number must be noted on the Lottery Certification Form. The H.Q. Official will call at approximately 5:35p.m. to confirm entry and notify the Drawing Officials of his/her presence at Headquarters. If the H.Q. official does not call by 6 p.m., the Coord. Official shall call Lottery Headquarters. If the H.Q. Official does not answer, the Coord. Official shall immediately call the Lottery Security Director.
-Upon entering the secure room, the CPA representative will inspect the seal and lock on the ball cabinet and along with the Coord., record the seal number. CPA's will retain all used seals and return them to Lottery Security on a weekly basis. After inspecting the seal, the CPA will break the seal and the O.C. Official will remove the envelopes used for machine and ball set selection. At the appropriate time, the O.C. Official will remove and open all the selected ball containers for all games being drawing that evening. The O.C. Official will cut the matrix ball container seals as necessary. The Coord. and CPA will record the seal numbers, and the CPA representative will retain all used seals forwarding them to Lottery Security on a weekly basis.

## C. Machine Selection

-By means of a random drawing utilizing an envelope containing cards numbered 1-9, the back-up senior citizen witness will select the three machines to be used for the TDN drawing and the four machines used for the Big 4 drawing. The O.C. Official will call out which machine is being selected as the witness draws the cards. In addition to these seven machines, an additional machine shall be selected and made available for use as a back-up in the event a problem develops with one of the primary TDN or Big 4 machines prior to airtime. The machines will be positioned in the order selected. The selections that are called out will be documented on the Lottery Certification Forms by the Coord. and the CPA paperwork by the CPA.
-By means of a random drawing utilizing an envelope containing two cards, the back-up senior citizen witness will select the machine used for the Quinto drawing. Each card will be designated Ari and Lloyd. The machine that is not selected will become the spare machine for that night's drawing by default.
-By means of a random drawing utilizing four envelopes containing cards designated Vince, Eric, Turtle and Johnny, the back-up senior citizen witness will select the machine to be used for the Cash 5 Drawing and on Match 6 nights, a second machine will be selected.

## D. Ball Selection

-After the drawing machines have been selected and properly recorded, the same back-up senior citizen Lottery witness will be asked to make the ball selections. Fifteen sets of ten balls each numbered $0-9$ will be contained in boxes A through R (EXCLUDING I AND O) The back-up witness, by means of a random drawing utilizing an envelope containing fifteen cards designated A through R (EXCLUDING I AND O), shall determine which ball set shall be placed in which machine utilizing the same order machines were selected. Example: First ballset selected will be placed in First machine selected. An additional ball set shall be selected and placed in the back-up machine for use in the event a problem develops in one of the TDN or Big 4 ball sets. This ball set shall remain in the ball case unless needed.
-By means of a random drawing utilizing an envelope containing three cards designated Adams, Truman and Monroe, the back-up senior citizen Lottery witness shall select the set of balls to be used in the Cash 5 game. A second card will be drawn to select a back-up ball set to be used in the event a problem occurs with the primary ball set.
-By means of a random drawing utilizing an envelope containing cards designated Taft and Grant, the back-up senior citizen Lottery witness shall select the set of balls to be used in the Match 6 game. A second card will be drawn to select a back-up ball set to be used in the event a problem occurs with the primary ball set.

## E. Ball Weighing

-Using the certified electronic scale, the O.C. Official will weigh each selected ball set for each machine/game to determine the set weight. The CPA representative will compare the actual weight with the respective range chart established and certified for each game's ball sets. If the actual set weight is within the certified tolerance range, the balls will be inserted into the preview tubes of the respective machines, placing then in sequence 0 through 4 on one side and 5 through 9 on the other side. The back-up Lottery witness will then verify that all balls ( $0-9$ for TDN, 0-9 for Big 4, 0-9 for Quinto 1-43 for Cash 5, 1-49 for Match 6) have been properly placed in the appropriate, selected machines. Note: The matrix ballsets will not be place in order in the matrix machines. The Drawing Officials are to inform the CPA's and Lottery witnesses to note all the balls are in the case prior to weighing and that this will be the last time in order until the end of the Drawings process. This information is to be recorded in the appropriate spaces on the Lottery Certification Form, and the senior citizen witnesses, CPA and the Coord, are to sign the form attesting to the accuracy of this information. If any ball set is out of range, re-weigh that ball set. If all ball sets are out of range revert to the back up scale and re-weigh all ball sets. If all ball sets are then within range, proceed using the back-up scale.

In the event any ball set is outside the range established for that set using the back-up scale. Immediately re-seal the ball set, record the seal and place the ball set in an evidence bag (bags are located in the ball cabinet) and call the H.Q. Official. The H.Q. Official will immediately call the Lottery Security Director. If two or more ball sets are outside their established ranges, all drawings for that night will be fouled.

## F. Ball Set Verification

-The Lottery Officials, Witnesses and Auditing staff shall ensure that all balls for all games are loaded into their respective machines in the secure room. The O.C. Official shall manage the loading of the balls with assistance from the Coord. Official if needed. It is very important that the Senior Witnesses, Auditors and Officials verify that the correct ballsets and correct number of balls are loaded into the machines. All balls will be dropped into the machine preview tubes. For the matrix games, the balls will be dropped immediately after loading in the preview tubes while in the secure room. An extra power cable is provided for plugging the matrix machine in while still in the secure room. Following this procedure, the balls are not to be handled again, except for normal handling during practice and the re-racking (physical check) prior to live drawing, until the ball sets are ready to be put away and sealed at the end of the last post-draw, unless there is reason to believe a machine or ball(s) has been damaged. In such case the O.C. Official under the observation of an auditor and witness, is to inspect both the machine and or balls within the machine for possible damage. In such an occurrence, follow the procedures found in Section 8 (F, H, J, N, T).
-The Coord. Accompanied by a witness and a CPA representative will take the selected machines, in selected order, to the rehearsal area where the ball sets are already in the mixing chambers. Following this procedure, the balls are not to be handled again, except for normal handling during practice and the re-racking (physical check) prior to live drawing, until the ball sets are ready to be put away and sealed at the end of the last post-draw, unless there is reason to believe a machine of ball(s) has been damaged. In such case the O.C. Official under the observation of an auditor, is to inspect both the machine and or balls within the machine for possible damage. In such an occurrence, follow the procedures found in Section 8 (F, H, J, N, T).

## G. Securing the Secure Room

-Once the machines and ball sets are selected and the ball weighing is completed, a CPA must lock the ball cabinet. The Lottery Drawing Officials, along with both senior citizen witnesses and the CPA's, will move all necessary drawing equipment, scripts computer etc., from the secure room. After all items are removed, the Coord. will be responsible for closing and locking the secure room and arming the security system. The O.C. Official will be responsible for closing and locking the secure room that houses the matrix machines. Be sure that all equipment necessary for that night's drawings along with personal belongings are removed. The Coord. must note the time that the security system was armed, on the Lottery Certification Form. If by this time, the H.Q. Official has not called the studio phone, a call must be made by a Lottery Drawing Official to confirm weather or not someone has arrived at Headquarters. If unable to contact the H.Q. Official, call the Lottery Security Director. If contact cannot be made with the Lottery Security Director, call the Director of the Lottery.

## H. Pre-Drawings

-Each night, the TDN, Big 4 , Quinto and Cash 5 (and additional games depending on the night) predrawing tests will be conducted in the appropriate manner and sequence. During the time the equipment is out of the secure rooms, a Lottery Drawing Official along with a senior citizen Lottery witness and a CPA representative should keep all ball sets and machines under their direct observation at all times until the equipment is returned and re-secured in the secure rooms at the end of the evening.. Move all drawing equipment into the rehearsal area in the order they were selected and place the machines in their designated areas. The Coord. is to power up and turn on the spare TDN/Big 4 machine to ensure proper working order. The O.C. Official and one CPA must also verify this procedure. At all times, one witness, one Lottery Official and one auditor will remain in the presence of the equipment.

## I. TDN, Big 4 and Quinto pre-drawings

-Familiarize the senior citizen witness with the machines and games and fully explain what will be done during the rehearsal.
-When everyone is ready, the O.C. Official will turn on the blowers and after sufficient mixing of the balls, operate the machine until a result (ball) comes to rest at the top of the machine. After the result reaches the top, the O.C. Official will read the result aloud to the Coord. and CPA. The O.C. Official will read each result individually. The O.C. Official will repeat ten complete drawings of the TDN, Big 4 and Quinto games. The results will be recorded by the Coord. and the CPA. Once the TDN, Big 4 and Quinto pre-draws are completed, the CPA will verify that the Coord. has written the same results on his/her paperwork. If there are any discrepancies that can not be resolved, note them on the Lottery Certification Forms.

## J. Cash 5 and Match 6 games

-Familiarize the senior citizen Lottery witness with the machine and game that you will be predrawing. Fully explain what will be done during the rehearsal.
-Conduct the pre-drawing tests in the following manner:
-Attach power cord to the machine
-Select the appropriate ball selection by pressing the tab buttons for winning number selection on the back of the machine on the power panel.
-Turn on power switch located on power panel
-Activate the "RESET" button on the operator panel on the side of the machine.
-Press the "Release" button to release the preview tubes.
-Press the "Blower" button to start the blower.
-After sufficient time to mix the balls, press the "Select"
button to select the balls.
-After the balls are selected, the machine will automatically power down. At this point, the O.C. Official will read aloud the results. Once the Coord. has copied the numbers down, the Coord. will inform the O.C. to proceed. This procedure will be repeated nine more times to complete the pre-drawings for each matrix game.

## K. Parameter Violations

-In the event that any parameter is met or exceeded after the first ten pre-draw tests, call the H.Q. official who will contact the Lottery Security Director for further instruction. (Appendix A)

## L. Move to Studio

-At 6:30 - 6:35 p.m., the Lottery Drawing Officials, along with the CPA's, studio staff and senior Lottery witnesses will move the equipment to be used for the show into the studio according to the preestablished "drawing machine move" guidelines. These guidelines are posted on the bulletin board at the studio and basically illustrate how to proceed so that the CPA's and witnesses can observe all Lottery Drawing equipment while in movement. If the studio staff have not arrived at 6:35 p.m., the O.C. or Coord. Official may proceed to the studio to seek out the studio staff and ascertain the reason for delay. This reason shall be documented on the Lottery Certification Form as well as the CPA's paperwork. See Drawing Machine Diagram, (Appendix B)
-At all times, a Lottery Drawing Official, a CPA and a senior Lottery witness must keep the drawing equipment under direct visual observation until the equipment is re-secured in the secure rooms at the end of the evening.
-The senior citizen witnesses must be positioned strategically so they are in constant view of the drawing equipment during the move into the studio. The machines are to be placed in their respective places in the order previously determined and prepared for the remaining practice/rehearsal drawings.

## Pre-Drawing/Rehearsal Drawings on Set

## A. Initial Move to Studio

-After the equipment has been moved into the studio area, the O.C. Official and the CPA's must verify that the machines are placed in the correct selected drawing order. The Coord. Official will go about their normal duties of setting up the announcer podium with the scripts (regular, fouls and verification scripts), opening the computer cabinet and signing onto the online gaming computer system. The studio staff and the O.C. will push the drawing machines into place and plug them in. Once the equipment and personnel are moved into the studio, no official shall leave the set until after all post-drawings are completed (except for emergencies i.e. Bathroom). The CPA is to directly observe the drawing ball sets, drawing personnel and all pre-drawing, live drawing and post-drawing activities.
-No visitors are permitted on the set until after all post-drawing activities are completed. Any deviations form this procedure should be noted on the Certification Form. All equipment must be set up and officials and studio personnel ready to go as soon as possible after arrival into the studio area.
-The Coord. Official will connect the studio telephone, unlock and cut the seal to the computer cabinet and sign onto the computer system. The Coord. Official will read the cut seal to the CPA along with a new seal number that will be put into place to secure the cabinet after the evening procedures are completed. He /she will also supply the studio control room with the script and all drawing-related information they will need for that night's drawings. The Coord. will verify the fonts, inserts and dates. The Coord. will also have the scripts ready for the announcer.
-The O.C. Official will inform the studio staff of any missing or non-working studio equipment, monitor malfunction, etc. The control room auditor will see that the Lottery web site is brought up on the control room computer ready for later verifications. Both Lottery Drawings Officials will also check for proper foul scripts, camera angles and set lighting.
-The O.C. Official is to introduce the WHP announcer to the senior citizen witnesses and others present and then work with the announcer and the senior citizen witness to rehearse the drawing procedure. If the O.C. Official finds that the announcer is delayed, he/she can begin the rehearsal draws with the Coord. reading the script.

## B. Rehearsal Drawings

-After the announcer arrives, the pre-draws are to continue with the announcer and full crew participating. Two full rehearsal pre-drawings must be conducted prior to the live drawing. The results of the rehearsals are to be recorded on the Certification Form and verified with the CPA form for accuracy. The rehearsal drawings are performed with all staff performing their function as they would for the live Drawing.
-It is a requirement to practice "fouls" so that Lottery and studio personnel are prepared to respond to irregularities. "Fouls" are to be regularly practiced at least once a month by each Drawing Official in each capacity, O.C. and Coord. Only Lottery Officials initiate "fouls." CPA's and WHP staff do not need to be informed of a pending practice foul. The reaction(s) of the CPA's and WHP staff shall be reported to the Drawings Manager.

## C. Parameter Violations

-Immediately following the twelve pre-drawings, the CPA representatives will review the numbers selected for all game drawings that night against established parameters and notify the Coord. of the type and nature or any parameter violation. In the event that any parameter is met or exceeded as a result of twelve predraw tests or any other problem occurs that the Lottery Drawing Officials and or the CPA's are uncomfortable with continuing, the Coord. Official is to notify H.Q. H.Q. will in turn notify the security director for further directions. Nothing is to be touched until further instructions are received from the Lottery Security Director, The Deputy Director of Marketing, or the Drawings Manager or other authorized designee. (Appendix A)

## D. Pre-live Drawing

-At approximately 6:52 p.m., the H.Q. Official will place a call to the Coord. at the studio and this line will be kept open until all necessary communication and entry of the winning numbers at the studio is completed. This call may be initiated by the Coord. Official if time allows. With direct contact established with H.Q., verification of the winning numbers can take place, and the post-drawing information can be quickly relayed. This will provide prompt confirmations of the winning numbers and rapid transmission to vendor's online computer system for validation of winning tickets.
-After the two studio rehearsal drawings are completed, the drawing team members, witnessed by the auditors and the senior Lottery witnesses, must physically remove the balls from the machine chambers, physically check them for cracks or debris, and place them back into their respective machines via the preview tubes. When all are satisfied that the balls are fit for the live drawing, the officials will drop them back down into the chambers in anticipation of the live draw. It is critical that at this point, that the O.C. and Coord. Officials check to see that there are no balls left in the preview tubes.
-At the two-minute warning (which is called out by the studio staff), the O.C. Official will check the set and lighting, examine each machine and make sure there are no balls in the landing positions. At the oneminute warning, the O.C. Official will activate power on all drawing equipment., give last minute instructions to the on-air witness and take his/her proper starting position. The Coord. and O.C. Officials will verify that all personnel are in their proper positions.


## Live-Drawing Procedures

## A. The Daily Number and Big 4 Drawings

-The live drawing will air at 6:58:50 p.m. (Sundays at 6:59 p.m.). The Coord. and the CPA representative will position themselves at the podium next to the announcer.
-The O.C. Official will be cued by the Coord. to operate the single button presses on the console to draw the TDN, Big 4 and Quinto Games. He/she will then follow the same procedure as in the preceding studio rehearsals. The senior citizen witnesses shall keep their eyes on the machines and watch each digit being drawn. It may be necessary to instruct witnesses on their responsibilities during the rehearsal procedures.
-The O.C. Official will deliberately move from the console position to matrix machine once the O.C. has been cued by the Coord. Each ball for the TDN, Big 4 and Quinto must be viewed on camera. The O.C. Official must wait until he/she sees that the camera has viewed each result of the TDN, Big 4 and Quinto before proceeding to the matrix machines.
-Adhering to the visual cues by the Coord., the O.C. will operate the matrix games and press the select buttons as they get the cue from the Coord.
-The Coord. primary responsibilities are to keep his/her focus on the action, maintain eye contact with the O.C. Official, correct the announcer in case they announce a wrong number and be prepared to immediately "foul" a drawing if required. The H.Q. Official shall also be on the alert for any occurrence that would necessitate calling a foul. The Coord. is not to be recording the results on paper until after the Live Draw.
-After the "live" drawing is complete and the show is off-air, the O.C. Official will power off the TDN and Big 4 machines. All results (balls) shall remain in the result tubes. The O.C. shall confirm the numbers selected with the Coord. and the CPA, who in turn will enter them on their respective Certification Forms. The Coord. will then have his or her form verified by the CPA and then verify the winning matrix numbers with the H.Q. Official via the open telephone line. Under no circumstances shall any machine be opened or otherwise touched as this time. The O.C. Official is the only Official who should be near to and touching the machines as they verify results. The O.C. Official will read aloud each game's result. Once the result has been confirmed, the balls are immediately dropped back down or reloaded into the machines.

## B. Matrix Games

-The Coord. primary responsibilities during the matrix portion of the live drawing, is to watch the monitor and make sure the correct number of balls are selected, assist or correct the announcer if he/she needs help reading the numbers and at the same time, keep some eye contact with the movements of the O.C. Official in case they need support.

## -Cash 5 Drawing

-When operating a matrix drawing machine for the Cash 5 game, the O.C. Official, on cue from the Coord. will press the "Select" button on the operating panel on the side of the matrix machine. The O.C. will then stand stationary and observe the balls as they come to rest in the result tube. The O.C. Official will not move onto the next machine until all results (five balls) are done rolling into the result tube. The matrix machine will power down by itself once the pre-selected amount of results are drawn. At this point, the O.C. shall proceed to the next game, if any.

## - Match 6 or Drawing

-When operating a matrix drawing machine for the Match 6 game, the O.C. Official, on cue from the Coord. will press the "Select" button on the operating panel on the side of the matrix machine. The O.C. will then stand stationary and observe the balls as they come to rest in the result tube. The O.C. Official will not move onto the next machine until all results (eleven balls for Super 7, five balls for mix and match) are done rolling into the result tube. The matrix machine will power down by itself once the pre-selected amount of results are drawn. At this point the O.C. shall look up towards the camera.

## C. Parameter Violations

-In the event that any parameter is met or exceeded as a result of the live drawing, the Coord. is to immediately inform the H.Q. Official who will contact the Lottery Security Director for further instruction. (Appendix A)


## Post-Drawing Procedures

## A. TDN/Big 4/Quinto and Matrix Games Post-Draws

-Immediately following the live drawings, the O.C. Officials will conduct three additional drawings of all the games. The first post-drawing is done in the same fashion as the live drawing. This drawing is not aired to the public but it is performed with a full crew. This drawing is to be produced in the same manner as the live drawing and is to be recorded by the television station. (This drawing is to be marked "verification drawing" on the screen by the studio) and will be maintained as a permanent record with the live drawing. The remaining two post-draws will be conducted in the same manner as the test drawings were done in the rehearsal area: however, they are to be conducted in reverse order, Match 6 or mix and match first, Cash 5 second, then Quinto, The Big 4 and finally The Daily Number.
-The Coord., after the completion of all post-drawings, will record and verify the information on the Lottery Certification Forms. The CPA's (or CPA and accountant) will verify the recorded game's respective drawing results and will sign the Lottery Certification Form attesting to same. The Coord. will then enter the winning numbers into the online system management terminal.
-While the Coord. is attending to his/her duties, the O.C. Official should be removing the balls from the matrix machine(s) and returning them to their proper container under the observation of the CPA and a witness. This must be done in view of a studio surveillance camera.

## B. Parameter Violations

-In the event that any parameter is met or exceeded as a result of the post-draw results, the Coord. is to immediately inform the H.Q. Official who will contact the Lottery Security Director. The Lottery Security Director has a minimum standard procedure for parameter violations. This procedure is three additional drawings for the affected game and re-weighing of the ball(s) that are affected. The entire ball set is also reweighed. (Appendix A)

## C. Dual Number Winning Entry

-After all post-drawings are completed and the parameters are met, the Coord., the H.Q. Official and the CPA need to agree that the drawn numbers are valid. The Coord. will proceed to the online system for purposes of entering that night's winning numbers information into the system (first entries of winning
numbers). This will be accomplished by following the "Procedures for Dual Winning Number Entry" that is kept with the terminal. Essentially, starting with the last matrix game numbers drawn, the winning numbers are to be entered in reverse game order with the TDN being entered last. All winning numbers to be entered in "as drawn" sequence.

## D. Matrix Ball Containerization

-While the Coord. and CPA are performing the winning number entry into the online gaming system, the O.C. Official will return all matrix balls to their respective containers, under the direct observation of a CPA and a witness. Once the matrix balls are loaded into the case, and the CPA and witness(s) agree that they are all in the container and in order, the ball set will be closed and sealed. The seal will have been recorded by the CPA.

## E. Fax Verification

-The CPA representative shall receive the fax from the H.Q. Official to verify the accuracy of dates and winning numbers being sent out to the media. If any errors are found, the CPA will notify the Coord., who in turn will inform the H.Q. Official. When the error(s) is corrected, the H.Q. Official must re-fax the corrected media fax, which must then be re-verified by the CPA.

## F. Web Site Verification

-After all matrix balls are returned to their containers and sealed in the studio; the O.C. Official will instruct the witnesses to keep visual observation of the Lottery equipment and the O.C. Official will go to the control room to refresh the Lottery web page and, with a CPA/accountant, will verify the winning numbers on the Lottery website.

## Storing and Securing Equipment

## A. Moving Equipment from Studio Set Back Into Secure Rooms

-After all post-drawings are completed, verified and recorded, and after the entry of winning numbers have been entered into the online management system, the computer cabinet must be locked and sealed, all equipment immediately moved from the studio and returned to the secure room. The movement of the drawing equipment must be accomplished under the direct observation of the senior citizen Lottery witnesses and the CPA's and with the assistance of studio personnel in accordance with the pre-established "equipment move" guidelines and chart. (Appendix B)

- At the secure room, the Coord. will disarm the security system before each secure room door is opened. The Coord. and CPA will record the time that the room is re-entered on their respective Certification Forms.
-After obtaining entry into the secure room, all drawing machines are to be placed back in the secure rooms. The Coord. and O.C. Officials will remove the TDN, Big 4 and Quinto balls out of the machines and return them to their respective cases. Once the ball case has been loaded, it must be handed to the CPA. The CPA will then verify that all ten balls are in each case. The CPA will place the ball sets into the ball set cabinet. The matrix ball sets should be sealed in the studio and the numbers will have been recorded by the CPA. The TDN, Big 4 and Quinto cases shall not be sealed as they are loaded/unloaded in the secure room. The CPA will then lock and seal the ball cabinet and, along with the Coord., record the cabinet seal number.
-The Coord. will secure signatures form the witnesses and the O.C. Official as well as record the name of the accompanying studio staff member(s) that assisted with the equipment move back into the secure rooms. The Coord. will sign the CPA form.
-After verification that all equipment is back in place and the ball cabinet locked, the Lottery Officials will turn off the lights and lock both secure room doors. At this time, the studio controlled lock shall be locked by the studio staff. After visual verification of all locks being engaged (RED LED lights on panel by door), the Coord. will arm the security system. The Coord. and CPA will record the time that the room is armed on their respective Certification Forms.
-The O.C. Official will present the senior citizen witness who appeared on-camera with a drawing witness packet. Upon exiting the studio, it is the responsibility of the O.C. Official to ensure that the witnesses have gotten into their transportation and that their transportation is in motion.
-The Coord. will complete the Lottery Certification Form, ensuring that all visitors are noted and necessary signatures have been obtained. He/she will deliver the completed form to the Lottery headquarters' drawing room bin the following morning. If there are any notations, fouls, incidents, etc. on the forms, the Coord. will make a copy and deliver to the Drawings Manager.


## B. Matrix Payout Verification and Entry at Remote Lottery Office (Computer Vendor)

-The Coord., when finished at the studio, will proceed to the Lottery office at the studio. The Coord. will establish connection with the H.Q. Official when he/she is ready to proceed with the dual entry payout procedures. The Coord., will have multiple responsibilities including; verifying the website entries and proofing media faxes and reports. This will be accomplished by following the appropriate checklist step by step. See Appendix B

## Section

## Procedures for Handling Unusual Events

## A. Senior Citizen Lottery Witnesses

-The scheduled senior citizen witnesses are to be contacted earlier in the day to confirm their attendance at the evening's nightly drawing. This is especially critical when inclement weather is expected. If a scheduled senior citizen witness does not arrive by $4: 15 \mathrm{pm}$ at the designated restaurant, the O.C. Official will call the home of the witness. If contact cannot be made, the O.C. Official will begin calling the witnesses listed on the pre-established Emergency Witness List until a replacement is found. Inform the H.Q. Official of the changed arrangements that were made. (Appendix B)
-If a witness is unable to continue in the rehearsal area, take the necessary action to aid the witness, and then utilize the back-up witness. If there is a back-up witness with a spouse or friend that is also a scheduled witness, that person may be used if needed. The studio receptionist may also be utilized as a witness. If something happens to a witness during the live drawing, immediately foul the drawing. In all events, contact the H.Q. Official who will in turn contact the Lottery Security Director.
-If a problem should occur prior to air with the on-camera witness, immediately use the back-up witness on camera.
-If the senior citizen witness selected for the live drawing should experience sudden illness or inability to perform during the live drawing, the O.C. Official must "foul" the drawing at the point where the guest experiences the problem. Then, using the back-up witness, complete the drawing and post-drawing procedures.
-No Drawing procedures are to be conducted without a witness.

## B. Lottery Drawing officials

-If a scheduled Lottery Official does not arrive by the time they are expected, immediately call the H.Q. Official, who in turn will call that Official's home, office or mobile number. If contact cannot be made, the H.Q. Official will begin calling the stand-by officials listed on the Drawings Staff Schedule until contact is made with someone who is available. Tell that official to be prepared to come to the studio immediately in case
the missing Official is not at the studio by $5: 30$ p.m. If the stand-by Official is needed, proceed with machine selection, etc., until he/she arrives. If a stand-by cannot be found, contact the Drawings Manager. The Drawings Manager will contact the Lottery Security Director. (Appendix B)

## C. Studio Announcer

-If the scheduled studio announcer is not in a position to assist with the procedures by $6: 40$ p.m., insist that the studio director find an approved back-up announcer, then proceed with the pre-drawings using the Coord. as announcer. If an announcer is not available, proceed using the procedures outlined in "Production Problems" Page 24.

## D. Equipment Malfunction before Live Drawing

-If the secure room electronic door lock fails to disengage, a Lottery Drawing Official shall immediately contact the H.Q. Official who will contact the Lottery Security Director or the Assistant Lottery Security Director and inform him/her that the back-up key must be used to gain access. Lottery Security will provide the combination to access the manual key.

## E. Scale Problems

-In the event the scale malfunctions, use the back up scale located in the ball cabinet. If the back-up scale does not function correctly, contact the H.Q. Official who will contact the Lottery Security Director. Do not proceed with the live drawing until contacted by the Lottery Security Director.

## F. The Daily Number, Big 4 and Quinto Drawings

-If one of the machines should prove to be defective before airtime, the spare machine and the spare ball set shall be used in its place. Call the H.Q. Official, who will in turn call the Lottery Security Director to notify them that a spare machine and ball set is being placed into service. The defective machine will be immediately taken out of service until maintenance can be performed. The description of the problem must be documented on the Lottery Certification Form.
-If one or more balls should prove to be defective before airtime, the spare machine and the spare ball set shall be used in its place. Call the H.Q. Official who in turn will call the Lottery Security Director to notify them that a spare machine and ball set is being placed into service. The defective ball set will be immediately taken out of service and replaced with a new certified ball set. The description of the problem must be documented on the Lottery Certification Form.
-In either situation above (F), the mandatory 12 pre-drawings must be performed at some point, preferably before the Live Lottery Drawing. If not before the Live Drawing, then all 12 pre-drawings and 3 post-drawings must be completed after the Live Lottery Drawing.

## G. Dropped Ball(s)

-Whenever a ball is dropped on the floor during any drawing procedure, the Lottery O.C. Official is to recover the ball. Only the Lottery Officials may recover the ball. The CPA shall not touch the ball until the ball is first inspected by the Lottery Official. The Lottery Official shall then surrender the ball to the CPA. If the CPA agrees that the ball is free of any cracks or damage, it shall be returned into service. If the ball is found to be damaged by the Lottery Officials and CPA, the ball set will be replaced with the backup ball set or new ball set.

## H. Matrix Games

-If a matrix drawing machine should prove to be defective, inoperable or otherwise damaged before airtime, call the H.Q. Official who in turn will call the Lottery Security Director and advise them that you are returning to the secure room to get a back-up machine if time permits. Transfer the selected ball set from the defective machine to the back-up machine. The mandatory 12 pre-drawings must be performed at some point, preferably before the Live Lottery Drawing. If not before the Live Drawing, then all 12 pre-drawings and 3 post-drawings must be completed after the Live Lottery Drawing.
-If a ball from a matrix game ball set prove to be defective or damaged before airtime, call the H.Q. Lottery Official and advise them that you are going to use the back-up ball set if time permits. Transfer the entire ball set back into its respective case. This ball set is to be removed immediately from service and will be replaced with a new certified ball set. The mandatory 12 pre-drawings must be performed at some point, preferably before the Live Lottery Drawing. If not before the Live Drawing, then all 12 pre-drawings and 3 post-drawings must be completed after the Live Lottery Drawing.

## I. Unavailability of Backup Machine and/or Ball Set

-If time does not permit the use of a back-up machine or ball set as appropriate, the Drawing Officials shall perform the live drawing without power to the subject machine. After the announcer calls for the appropriate game, the O.C. Official will raise his/her hand in the air to declare a foul. This will trigger the reading of the alternate foul script by the announcer. The remainder of the live drawing, if any, should be recovered and successfully drawn on air. The studio must videotape the entire process of both transferring the balls and selecting the winning numbers once the ball sets or machine are made available.

## J. Equipment Malfunction and Drawing Mishaps during the Live Drawing

-Should a machine fail to operate properly during the live drawing, the O.C. Official will signal a foul and the announcer will read the appropriate foul script as directed by the Coord. The remainder of the live drawing, if any, should be recovered and successfully drawn on air.
-In the event during the live drawing one of the TDN, Big 4 or Quinto drawn balls is dropped or falls back down into mixing chamber, the O.C. Official will raise his/her hand in the air to declare a foul. This will trigger the reading of the alternate foul script by the announcer. The remainder of the live drawing, if any, should be recovered and successfully drawn on air.
-In the event during the live drawing one of the machines loses power, the O.C. Official will raise his/her hand in the air to declare a foul. This will trigger the reading of the alternate foul script by the announcer. The remainder of the live drawing, if any, should be recovered and successfully drawn on air.
-In the event the Lottery Coord. notices that a machine has lost power or any other problems that would impair the live drawing, the Coord. will initiate the foul by raising the "foul" card and getting the O.C Officials' attention. Once the O.C. Official notices the "foul" card, they will immediately raise their hand in the air and remain stationary. The O.C. will remain in place with his/her hand in the air until the Coord. uses hand signals to wave them to the next game. The O.C. Official shall proceed to the next game and prepare to return to normal drawing status.
-In as many cases as possible, the control room operator should enter the word "F-O-U-L" in the game result area of the recap screen.
-Example 1: If The Daily Number is fouled, the word "F-O-U-L" should be entered over the entire area of the TDN portion of the recap.
-Example 2: If The Daily Number game has one result drawn and then the foul starts at the second machine, the recap should read 1-F-O-U-L. Or 1 - -.
-Example 3: If a Match 6 Drawing is fouled, and the control room has no time to enter the word F-O-U-L on the recap screen, the recap screen should be left blank for that game.

## K. Live Drawing - Foul Called

-In the event of any mishaps occur during the live drawing involving one or more of the drawn balls, and a foul was called during the drawing, all the valid drawing numbers will remain valid. Only the number(s) declared invalid will be redrawn off-camera and videotaped by studio personnel. In the event that during the live matrix game drawing a mishap occurs involving one or more of the drawn balls, and a foul was not called, all balls drawn before the mishap will be declared valid. All remaining balls will be re-drawn off-camera and videotaped by the studio personnel.
-Example: If the mishap occurs after the first two balls are selected in a game, the first two balls would be declared valid and only the un-drawn balls would be drawn of camera.
-If a ball falls back into the mixing chamber but the number can readily, correctly and conclusively be identified through the review of the drawing videotape at both the studio and at Lottery Headquarters, the number can be declared "valid" upon subsequent review by the Lottery Executive Director and Lottery Security Director, and if appropriate, by the Revenue Executive Management.
-If a ball falls back into the mixing chamber and cannot be sufficiently identified, that ball shall be declared invalid and re-drawn off-air along with any other balls that might follow for the completion of that particular game's drawing.

## L. Wrong Number Announced

-In the event the announcer announces a wrong number and the Coord. is positive what the number is, abruptly interrupt the announcer and have him/her announce the correction immediately at that point or at the recap if there is no time to correct or if the announce has already moved on to the next result. If the Coord. can catch the announcer right after the mistake, before they announce the next result, the desired direction to take is to correct immediately. In both cases, the Coord. must communicate through their headset to the control room to leave the microphone open at the end of the drawing. This is accomplished by saying "Leave the mic open." The Coord. must ensure that the control room will show the recap with the proper result or no result at all. If a correction has occurred on air and there is sufficient time, the announcer should re-read the corrected results when the recap screen appears.

## M. Potential or Real Broadcast Problem

-In the event you are advised of a problem concerning the broadcast prior to live air, if time permits, determine from the studio if all stations are aware of the problem. If they have not demand that all stations be advised. Alert the H.Q. Official and suggest that a conference call be set up. If you are advised of a broadcast problem after the live drawing, ascertain what the problem was and advise the H.Q. Official who will set up a conference call with the stations.

## N. Production Problems

-In the event that the audio portion of the telecast is not possible, the studio director is to establish a message on the screen that due to difficulties the audio portion of the Lottery drawing broadcast is unavailable, but that the video portion will commence. This procedure will be used in case of equipment failure or the absence of the announcer. This is known as a silent drawing.
-In the event that the video portion of the telecast is not possible, the studio director is to establish a slide on the screen indicating that due to technical difficulties the video portion if the Lottery drawing broadcast is unavailable, but that the audio portion will continue. This is known as a blind drawing.

## O. Failure of Video Portion of Show (network)

-If any one or all of the receiving stations in the network fail to receive the video portion if the telecast, they should call Lottery Headquarters and receive the winning numbers from the H.Q. Official.

## P. Broadcast Failure Prior to Show

-In the event that a problem occurs with the satellite system or other broadcast function that prohibits the signal from reaching the network stations, the H.Q. Official should immediately set up the emergency conference call. The H.Q. Official will the keep this line open and announce the official winning numbers after they have been validated.

## Q. Electrical Power Failure

-If the power fails during the live drawing (and is not restored by the back-up generator), the O.C. Official must "foul" the drawing at the point of failure. If power fails immediately following the live drawing, secure the drawing equipment in the studio and remain with it. When power is restored, complete the normal post-drawing procedures and verify the results with the H.Q. Official. The H.Q. Official will immediately call the Lottery Security Director to notify them of the situation. The Coord. should request that the studio use a battery shoulder pack camera and tape the remainder of the drawings.

## R. Other Difficulties

-In the event the Lottery Drawings Officials or the CPA representatives feel, for any reason, the drawing might be compromised; they must immediately secure the equipment and notify the H.Q. Official. He /she will immediately contact the Lottery Security Director, the Drawings Manager, the Deputy Executive Marketing Director, or the Executive Director. A detailed report must be included in that night's Certification Form.

## S. Failure of the automatic console

-Should the console that operates the TDN, Big 4 and Quinto games fail, the O.C. shall hold their hand up in the air to signify a foul. The Coord. will direct the announcer to read the foul script and move on to recover the matrix games.

## Section

## Equipment Certification, Repair, Replacement and Maintenance

## A. Scale

-The electronic scale used to weigh the balls and ball sets has been certified by the manufacturer and will be recertified on an annual basis. The Lottery Security Department and the Drawings Manager will observe the annual certification. In addition, the Lottery Security Department maintains a set f test weights used for checking the balance. These weights have been certified by the Pennsylvania Bureau of Weights and Measures. Should the scale become suspect or unusable, the spare certified scale shall be used. The spare scale shall be certified on an annual basis as well.

## B. Lottery Ping Pong Balls

-Ball certifications will be conducted and new ball sets will be installed into production every three months. The weights of every individual ball in every set will be recorded and certified by the Drawings Manager, a CPA representative and the Lottery Security Director or his/her designee. A new range chart will be prepared and certified and signed by all officials mentioned above.
-Should a ball set become unusable because of cracks or other damage or weight issues, Lottery Security will immediately be notified and a spare ball set shall be weighed and used.

Individual ball weights will be periodically certified by the Lottery Security Director or designee along with the Drawings Manager and CPA representative.

## C. Drawing Machines

-The drawing machines will be maintained on an annual basis. Any repairs to the drawing machines will be handled by the original manufacturer. Should a machine become unusable, that machine must be taken out of service until the manufacturer can perform repairs. Any repairs or maintenance will be performed under surveillance cameras with presence of Lottery Security and the Drawings Manager.


## Game Specific Parameters

# The Daily Number - Big 4 - Quinto Lottery Games Specific Parameters 

## Pre-Drawings (12 Draws)

PD. 1 -The same single-digit number (ball) is drawn in the same position (machine) seven or more times.

PD. 2 -The same 3, 4 or 5-digit result occurs three or more times.
PD. 3 -Box combinations of the same 3, 4 or 5-digit result occur five or more times.

## Live-Drawing

LD. 1 -The same single-digit number (ball) was also drawn in the same position (machine) in the pre-drawings seven times overall.

LD. 2 -The live result matches an identical result drawn in the pre-drawings one or more times.

LD. 3 -The live result matches a boxed combination of the result drawn in the pre-drawings three or more times.

## Post-Drawings

PST. 1 -The same single-digit number (ball) drawn in the live drawing was also drawn in the same position (machine) in the post drawings three times.

PST. 2 -The same single-digit (ball) drawn in the live drawing was also drawn in the same position (machine) three times total in either the rehearsal predrawings or three times in the post-drawings. (i.e. Any three occurrences of the same number three times in studio rehearsals and post)

PST. 3 -The same 3, 4 or 5-digit (straight) result was drawn in the live-drawing occurs one or more times.

PST. 4 -Boxed combinations of the live number occur two or more times.

## Cash 5 Game Specific Parameters

## Pre-Drawings (12 Draws)

-One or more numbers (balls) are drawn seven or more times.
-Four or more numbers (balls) are drawn five or more times.
-The Chi total value exceeds the Chi square value of 60.48.

## Live-Drawing

-Four or more winning numbers were also drawn five or more times in the predrawings.

## Post-Drawings

-Two or more drawings contain three or more winning numbers.*
-The Chi total value exceeds the Chi square value of 79.08.*
*-Critical Parameter

## Parameter Violation Occurances

While specific rejection rates are not available for the Cash 5 predrawings ( 12 drawings) recap cell test and 16 drawing recap cell test, it can safetly be assumed that, like the Match 6 or mix and match test parameters, the respective test parameters will be exceeded from time to time without necessarily indicating that tampering has occurred with one, some or all of the Cash 5 balls

## Match 6 Lotto Game

## Pre-Drawings

(12 Drawings)
-One or more numbers (balls) are drawn seven or more times.
-Five or more numbers (balls) are drawn five or more times.
-The Chi total value exceeds the Chi square value of 73.31. ( $55^{\circ}$ of freedom - $95 \%$ confidence)

## Live Drawing

-Five or more winning numbers were drawn five or more times in the predrawings.

## Post-Drawings

-Two or more post-drawings contain four or more results from the livedrawing.*
-The Chi total value exceeds the Chi square value of 96.22.*
( $75^{\circ}$ of freedom - $95 \%$ confidence)
*-Critical Parameter

## Parameter Violation Occurrences

Per the Final Report from the Battelle Memorial Institute on the Match 6 Lotto test parameters, it can be expected that actual drawing results will typically exceed the various rejection parameters a certain percentage of the time. It can safely be assumed then that the respective test parameters will be exceeded from time to time, albeit infrequently, without necessarily indicating that tampering has occurred with one, some or all of the balls. The following are the expected rejection rates for the carious Match 6 Lotto drawings.

## Test

12 Draw "Pre-Drawing Total"
12 Draw Recap Cell Test
16 Draw "Grand Total"
16 Draw Recap Cell Test

## Rejection Rate

2.7\%
5.05\%
4.2\%
11.10 .10

Chi Square Test
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## Appendix

