UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SONY ONLINE ENTERTAINMENT LLC, BLIZZARD ENTERTAINMENT, INC., AND BACKFLIP STUDIOS, LLC Petitioners

v.

AGINCOURT GAMING, LLC Patent Owner

Case No. 2014IPR-00XXX U.S. Patent No. 8,454,432

**DECLARATION OF DWIGHT E. CREVELT** 

I, Dwight E. Crevelt, hereby declare the following:

# I. BACKGROUND AND QUALIFICATIONS

1. I am an expert in the field of design and operation of gaming machines and systems for the casino industry.

2. I am the founder and presently president of Crevelt Computer System, Inc., a gaming business consulting and engineering development company that is located and incorporated in Las Vegas, Nevada. I founded Crevelt Computer in 1977. Although I discuss my expert qualifications in more detail below, I also attach as **[Appendix A]** a recent and complete curriculum vitae, which details my educational and professional background.

3. My formal, post-high school education started at the University of Las Vegas in 1973. I continued my education at the U.S. Naval Academy from 1975 to 1977. I then attended Iowa State University, where I received my Bachelor of Science degree in Computer Engineering in 1979.

4. My professional experience in the casino gaming industry started in 1974, when I joined Gamex Industries as a software engineer. As a software engineer, I designed and developed casino game management systems, including an on-line slot accounting and monitoring system, and I also maintained Gamex's on-line casino table game accounting system. I was also responsible for

maintaining the system that monitored the play of table games and slot machines as installed in Caesar's Palace, Las Vegas.

5. In 1977, I started my own consulting company, Crevelt Computer System, Inc., and near the end of 1977 I worked at United Audio Visual as a software engineer developing audio/video controllers for multimedia shows.

6. From 1979 to 1980, I continued to work in the gaming industry as a computer engineer for Sircoma (later becoming IGT). At Sircoma, I developed various gaming machines, including video Poker, video Blackjack, video Red Dog and Whirlwin. I also had responsibility for maintaining the software for the video slot machines. I also acted as a technical gaming control liaison, which involved providing the Nevada Gaming Control Board staff with technical information regarding the company's gaming devices. The Nevada Gaming Control Board regulates the gaming industry in Nevada, overseeing the licensing and compliance of casinos as well as manufacturers and the equipment used in gaming.

7. In 1981, I worked for Mills-Jennings as a Director of Corporate Research. In this role, I assembled and supervised a research and development team that designed a complete line of video casino gaming machines and an online casino accounting system.

8. From 1984 to 1986, as a consultant with Crevelt Computer System Inc., I worked with Electronic Data Technologies, where I designed and developed the first complete on-line Player Tracking System.

9. From 1988 to 1996, I worked for Electronic Data Technologies (EDT) and International Game Technologies (IGT). I was responsible for design, development and implementation of player tracking and accounting systems for casino games. Specifically, I was responsible for the development, deployment and support for over 150 installations of the SMART system and the first cashless system utilized by Caesar's Palace, Las Vegas. In 1995, I was promoted to Product Manager for Cashless Applications. In this role, I prepared business plans and strategies for implementing cashless gaming products, including IGT's first SMART card-based cashless gaming system installed at SBM in Monte Carlo. I also spent time evaluating casino-related intellectual property, particularly patents, especially those pertaining to cashless gaming and progressive systems.

10. As a consultant with Crevelt Computer Systems, I have worked with many gaming equipment manufacturers on the design and development of casino gaming devices, including slots, video games, Keno and Bingo systems. I also have provided independent laboratory analysis of games for regulators in New South Wales, Australia and the state of Mississippi. Additionally, I have conducted mathematical analyses for casino gaming devices.

11. From 1998-2013, Crevelt Computer System was a Partner in FootTraffic Promotional Gaming LLC. As a Partner with FootTraffic Promotional Gaming LLC, I have designed, developed, managed and marketed a series of promotional games for casinos, retailers and trade shows. These are free-play games that are designed to bring or attract patrons to the casino with an opportunity to win cash and prizes. These games have been very successful and several have been incorporated into permanent promotions at several casinos, including Peppermill Casino (Reno), Casino Fandango (Carson City), and Silver Legacy (Reno).

12. In sum, I have over thirty years of engineering and management experience in the gaming industry, both as a consultant and an employee. During this time, I have worked extensively with OEMs, casinos, casino gaming regulators and agencies worldwide, including the Nevada Gaming Control Board. I am also the co-author of two books that relate to the casino gaming industry – <u>Slot Machine Mania</u> and <u>Video Poker Mania</u> – which are still in publication twenty years after they were first published. Additionally, I have been interviewed for numerous magazines, radio programs and television shows regarding gaming machines and the casino industry, including appearances on <u>Secrets Revealed</u> (a documentary on The Learning Channel) and <u>High Rollers</u> (a documentary on the Discovery Channel). Throughout my career, I have kept up to date with the latest

developments in the casino industry by subscribing to casino-related trade publications and attending casino gaming shows. In addition, I am a named inventor on six United States patents related to casino gaming systems (<u>i.e.</u>, cashless and progressive gaming systems).

13. I have been retained as an expert in various cases and, as expert for Japan Cash Machine (JCM) v Mars Electronics Inc (MEI) Nevada 2:05-CV-01433-RCJ (RJJ), was qualified as an expert in the Hardware and Software Design and Development of Gaming Machines and Gaming Systems. Including; Player Tracking Systems, Cashless Systems, Progressive Systems and Promotional Systems.

14. I have been retained by Petitioners and am submitting this declaration to offer my independent expert opinion concerning certain issues raised in the petition for *inter partes* review ("Petition"). My compensation is not based on the substance of the opinions rendered here. As part of my work in connection with this matter, I have studied U.S. Patent No. 8,454,432 ("the '432 patent"), including the respective written descriptions, figures, claims, in addition to the original file history and U.S. Patent Nos. 5,816,918 ("the '918 patent") and 6,007,426 ("the '426 patent"). Moreover, I have reviewed the Petition for Inter Partes Review of the '432 patent and also considered the following references:

- U.S. Patent No. 8,454,432 to Matthew F. Kelly, et al. ("the '432 Patent") entitled, "Method for Providing Network Gaming System," filed on December 9, 2011, and issued on June 4, 2013 [Exhibit 1001]
- U.S. Patent No. 5,618,232 to Martin ("Martin") entitled, "Dual Mode Gaming Device Methods and Systems," filed on March 23, 1995, and issued on April 8, 1997 [Exhibit 1002]
- U.S. Patent No. 5,539,450 to Handelman ("Handelman") entitled, "Methods and Systems for Providing Additional Service Application in Pay Television," filed on June 21, 1993, and issued on July 23, 1996 [Exhibit 1003]
- U.S. Patent No. 5,811,772 to Lucero ("Lucero") entitled, "Gaming Machine System Operable with General Purpose Charge Cards," filed on September 20, 1996, and issued on September 22, 1998 [Exhibit 1004]

- U.S. Patent No. 6,036,601 to Heckel ("Heckel") entitled,
  "Method for Advertising Over a Computer Network Utilizing Virtual Environments of Games," filed February 24, 1999 and issued on March 14, 2000 [Exhibit 1006]
- U.S. Appln. Ser. No. 08/628,490 to Kelly et al. ("Kelly '490"), entitled "Redemption Game for Awarding Specific Prized, and filed on April 5, 1996 [Exhibit 1005]
- U.S. Patent No. 5,816,918 to Kelly, et al. ("the '918 Patent"), entitled, Prize Redemption System for Games, filed on November 14, 1996 and issued on October 6, 1998 [Exhibit 1009]
- U.S. Patent No. 6,007,426 to Kelly, et al. ("the '426 Patent"), entitled "Skill Based Prize Games for Wide Area Networks," filed on March 17, 1998 and issued on December 28, 1999
   [Exhibit 1010]

### **II. OPINION**

### A. Level of a Person Having Ordinary Skill in the Art

15. In determining the characteristics of a hypothetical person of ordinary skill in the art of the '432 Patent at the time of the claimed invention, I considered several factors, including the type of problems encountered in the art, the solutions to those problems, the rapidity with which innovations are made in the field, the sophistication of the technology, and the education level of active workers in the field. I also placed myself back in the time frame of the claimed invention, and considered the students who I had taught and with whom I had worked at that time. In my opinion, a person of ordinary skill in the art would be a person having a bachelor's degree in computer science or computer engineering, or in a related field, with 2-4 years of experience and technical training may substitute for educational requirements, while advanced degrees may substitute for experience.

16. Based on my education, training, and professional experience in the field of the claimed invention, I am familiar with the level and abilities of a person of ordinary skill in the art at the time of the claimed invention. Additionally, I was a person having ordinary skill in the art as of the filing date of the '432 Patent.

#### III. BACKGROUND OF THE TECHNOLOGY

# A. <u>Background Regarding Player Tracking and Slot Accounting</u> <u>Systems</u>

17. Gaming machines were first connected online to a central computer system in January 1975, when Gamex Industries revealed its online Slot Accounting and Security System at the London AMOA show. The system was subsequently installed in Caesars Palace Las Vegas. The communication network was modeled after Gamex's Table Game Accounting System that was at the time operational in the Caribe Hilton in San Juan Puerto Rico. Each gaming machine had a unique address and was polled by the central computer system using a series of multiplexers throughout the casino. The gaming machine would return a serial data stream of accounting and security data. (Appendices B-F)

18. In response to Gamex's development, Bally Mfg. developed its first Slot Data System (SDS) and installed it in the Las Vegas Hilton in the late 1970's. This system had a central computer system monitoring individual signals from the gaming machines on the casino floor.

19. In the early 1980's, I worked on designing and developing online slot accounting and security systems for various companies, including Mills-Jennings, a company that had contracts to develop systems for Steve Wynn/Golden Nugget and Harrah's Casino. The Golden Nugget system was to provide a complete accounting system that would eliminate the need to count the coins collected from

the gaming machines. The Harrah's contract was to complete development on their in-house developed slot machine and to provide an online slot accounting system to go along with them. Both of these casinos ultimately canceled development of these projects in light of economic conditions. Additionally, similar systems had limited success in the market because they did not directly produce revenue for the casino and the revenue savings provided by those systems – primarily resulting from minimizing or eliminating accounting and security losses – were not seen to be sufficient to justify the cost of the systems.

20. In 1984, Electronic Data Technologies (EDT), a subsidiary of IGT, developed and installed the first casino-wide online Player Tracking and Slot Accounting System. By 1996, that EDT system, which was originally called the EDT Action System and was later renamed the SMART System, was installed in over 150 locations worldwide. This represented a larger installation base than that of all competing systems combined. The EDT system became the model for most subsequent systems, including those from Bally, Casino Data Systems (CDS) and Grips.

21. The Player Tracking concept is simply to award bonuses to players for their play. Typically, a player would enroll in a Player's Club at a casino-run booth. Upon enrolling, the player typically would receive a player identification card. Then, whenever the player inserted his card into a card reader attached to the

gaming machine, he would be greeted with a message and an updated player account balance reflecting the bonus points in the player's account. During gaming machine play, the player might receive 'y' bonus points for every 'x' coins played. These bonus points are tracked by the system, and the player could redeem them for merchandise, cash, comps (complementary meals, room, shows, etc.) or other items the casino desires to make available. (Slot Machine Mania 1988, pp186-188; Video Poker Mania 1991, pp120-121)

The basic flow of information from a player tracking unit in a gaming 22. machine to a player tracking system is as follows: Upon insertion of the player identification card into the card reader of a player tracking unit installed in a gaming machine, a message is sent to the host system to retrieve the player's The account information is looked up in the system's account information. database using the account number from the card. The player's account balance, name, and any other necessary data is then sent back from the host computer/server to the player tracking unit in the gaming machine. While the player's card remains inserted, all of the player's play activity is tracked by the system. While the player is playing, periodic play activity messages are sent to the host to update real-time displays and to provide a backup in case of equipment failures. When the player removes his card, his play activity information is sent to the host, where the system updates the player's account balance.

Every gaming machine in a player tracking or slot accounting system 23. has a unique address associated with it. That unique address code enables the host computer or server in the system to transmit information to and receive information from the gaming machine and to track gaming machine accounting information. Casinos often provide different bonuses to players playing selected subsets of gaming machines on the casino floor. Those subsets of gaming machines are typically selected according to certain code groups based upon criteria such as denomination (e.g., \$.05, .25, \$1, etc), machine type (e.g., slot, poker, reels, video), manufacturer, and location on the floor. Each group has its own bonus conversion rate to allow incentives for players to play the machines in that group. For example nickel machines may award 1 bonus point for every 20 coins played and/or won, while new dollar video games just placed on the floor may award 2 bonus points for each dollar played. These machine groups and the bonus conversions assigned to those groups are configured and updated at a host workstation and stored in the database.

24. The system also included an additional table for comps. This table was based upon earning 'x' dollars for 'y' dollars in play. This table was configured by groups like the bonus table however, it was tracked separately. The value in this field was frequently used by casinos to determine if a player had played enough to earn certain comps or even to provide a cash award back to the player.

25. The EDT system described above included various hardware components, including Slot Machine Interface Boards (SMIBs), Data Collection Units (DCUs), a Front End Controller (FEC), a File Server/Transaction Processor, and a series of computer workstations on a token-ring network. Those computer workstations were designed to handle various tasks, such as administration, accounting, player enrollment, player redemptions, jackpots/hopper fills, slot maintenance, marketing and promotions, coin scale interface, and security.

26. The SMIB is a microprocessor-based device including erasable programmable read-only memory (EPROM) and random access memory (RAM), along with an alpha-numeric display for messages, a card reader for reading a player identification card, several lights and buttons to facilitate player interaction with the system, an interface board to provide signal conditioning for the connections to the gaming machine, and a serial interface to the DCU. The SMIB monitored the following signals from the gaming machine: coin in, coin out, coin to drop, jackpots, handle pulls, slot door, drop door, and tilt/blackout. This allowed the SMIB to monitor the gaming machine and report accounting and security information to the central system. Additionally, the SMIB provided the system interface to the player via the card reader and display.

27. The DCU is a microprocessor-based store and forward device. Each DCU continuously polls the SMIBs to which it is connected (up to 32 per DCU)

for accounting, security, and player tracking transaction information, and forwards that information to the FEC of the host computer system. The DCU also stores configuration data from the host computer system and forwards it to the SMIBs. Additionally, the DCU sends player tracking transaction response information from the host computer system to the SMIBs.

28. The FEC is a computer workstation on the host system network. The FEC's primary function is to handle communications with the DCUs and SMIBs and the Host System. This included downloading configuration data, polling the DCUs, and responding to the messages received from the floor. Some messages, such as a message indicating card insertion, were handled directly by the FEC, while others, such as card removal messages and accounting updates, were sent to the transaction processor.

29. The Host System consists of several file servers and workstations on a token-ring network. All workstations were configured to operate and download their programs over the network, and the host system transactions were client/server based. This allowed all workstations to be used for any process based upon its login and password.

30. The host workstations are user input devices that allow casino personnel to access, configure, and monitor the data in the system. The basic functions of the host workstations include:

a. Club Functions – functions include player enrollment, account establishment, card issue, bonus point redemption, and account adjustments.

b. Marketing – functions include bonus and comp table setup, promotion tracking, player activity reports, mailings, player group setup and tracking, temporary card setup, Hot Player Monitor, and Active Player Monitor.

c. Slot Accounting – functions include gaming machine address setup, gaming machine performance reports, coin scale interface, bill counter interface, and drop reconciliation.

d. Jackpot/Fills – functions include process requests for hand pay jackpots and hopper fills.

e. Maintenance – functions include maintenance monitoring and repair tracking.

f. Security – functions include security monitoring for slot machine and drop doors and jackpots.

31. Other features of player tracking systems included real time monitoring displays for Hot Players, Active Players, Jackpots and Fills. Hot Players were patrons playing 'x' dollars within 'y' minutes on a gaming machine without using a player tracking card. The casino would select subsets of gaming machines and assign the rates of play to each group. This data was sent to the SMIBs where it would be used to generate a message if the predetermined

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condition was met. Active Players were players using their cards in the machine, these player were displayed in different colors based upon their total play history.

# B. <u>Background Regarding Bonusing, Promotions, and Cashless</u> <u>Gaming</u>

32. By 1989 and 1990, most major casinos had player tracking systems. Every system provider and casino was looking for ways to differentiate itself from the competition. Automating existing promotions provided one way to do so, and some casinos (e.g., Sands Atlantic City, Hilton Hotels Nevada, MGM Las Vegas, Harrah's Entertainment) developed their own system for this purpose. Among the promotions known at that time were bus promotions, double jackpot time, double bonus point time, cash back, and cashless gaming. "One casino even modified its system to give players of regular slot machines extra payouts if they are using their club card." (Video Poker Mania, 1991, p122).

33. Bus Promotions have long been part of Nevada and Atlantic City casino marketing campaigns. In such a promotion, a group of people would travel by bus to the casino, and upon exiting the bus, each player would be given a roll of quarters and a coupon for a free buffet at the casino. The goal of the promotion was to encourage the players to wager the coins provided on the gaming machines on the casino's floor, and the casino hoped that the players would ultimately wager some of their own money as well. However, there was no way to ensure that the patrons acted accordingly, and many just kept the money and ate the free meal. As

described above, automated player tracking systems allowed the casino to give these patrons a player identification card to use when playing the machines. This allowed the casino to track the activity of the players in the group, in order to determine who should be invited back.

34. The next request was to have the money put on the player tracking card and loaded directly onto the gaming machine vs. giving the player cash. EDT's Instant Keno was the first truly online cashless gaming system. The system was installed in the 4 Queens Hotel in Las Vegas NV during 1990. This system allowed a player to deposit cash on account and then play the Instant Keno game machines using these funds with the provided ID card. Winnings were credited to the central account. (U.S. Patent No. 5,326,104 to Crevelt) (**Appendices G-I**)

35. Double Jackpot Time has been a downtown Las Vegas staple since the early 1970's. In such a promotion, the casino would announce "Its Double Jackpot Time" and would announce how long the promotion would last. During the duration of the promotion, whenever a player won a jackpot on a machine, the casino would pay the player cash to double the amount of the jackpot awarded on the gaming machine. By way of example, the Pioneer Club in downtown Las Vegas had every machine tied into a large board that would display the machine number whenever a jackpot was won.

36. Double Bonus Point Time was a player tracking bonus point equivalent of the long standing Double Jackpot Time promotion. The Double Bonus Point Time feature allowed the casino to select groups of machines for which player tracking bonus points accrued for game play would be multiplied by a factor of 2 or some other value for a specified period of time. This promotion was designed to provide an incentive for players to play certain machines (e.g., dollar video slot machines) and/or to play at certain hours (e.g., 2-3 AM). Initially the start and stop commands were issued at a host computer workstation and later these were programmed to occur on a schedule.

37. A cashback promotion permitted the player to convert bonus points into credits to be wagered on a gaming machine.

38. Cashless gaming systems permitted players to transfer credits between a gaming machine and an account on a host computer system so that the player could play gaming machines in a casino without carrying currency and coins from game to game.

39. Cashback and Cashless systems were initially a challenge to implement in the early 1990's because gaming machines were not configured with serial communication ports. As a result, the only method to get credits on and off a gaming machine without actually inserting coins or cashing coins out of the machine was to effectively "trick" the machine using the coin in and coin out

signals. Because these early – and rather crude – cashless systems replicated the electrical signals that accompanied coin in and coin out, the gaming machines operated as if they were being played with coins. The first implementation of the Sands Cash system operated in this manner. Similarly, a company by the name of Seven's Unlimited produced a line of bill acceptors to be used in gaming machines that used this same method for cashless play. (Slot Machine Mania 1988, pp225-226)

40. One problem with online systems in the early 1990's resulted from the variety of different meters involved. More specifically, those systems maintained one set of accounting meters, while each gaming machine contained its own sets of mechanical meters and internal electronic meters. These meters had to be physically read, recorded, and reconciled for accounting purposes. The development and use of a serial number chip in the gaming machine harness allowed data from the various meters to be read and sent to the host along with the gaming machine accounting data. Once the unique serial number for each gaming machine was added to the system database, as discussed above, the system could track if a particular gaming machine was moved and associate and reconcile the accounting data related to that machine. This greatly simplified the process and eliminated the problems discussed above related to multiple meters.

41. In response to these needs, gaming machine manufacturers started producing machines with serial communication ports in the early 1990's. However, each manufacturer had its own protocol. For example, Bally developed its proprietary Complex Serial and Simple Serial protocols to be used in Bally games. IGT developed its proprietary SAS protocol to be used in IGT games. CDS and WMS Gaming also developed similar proprietary protocols to be used in their own games. These protocols allowed the system to read the electronic meters directly from the gaming machine and use them for accounting, thereby eliminating the reconciliation process. Eventually, the commands necessary to transfer credits on and off the gaming machines – commands that were necessary for cashless gaming features – were included in these protocols. (U.S. Patent Nos. 5,371,345 and 5,470,079 to LeStrange)

42. In approximately 1993, the Sands Casino in Atlantic City developed its own player tracking system that included a feature called Action Cash. The Sands Action Cash system allowed a patron to put money on account in the system and then transfer the funds from the account to the gaming machine for play. After playing a gaming machine, the player could transfer any funds left on the credit meter, along with any winnings from game play, back to his player account. The player could also cash these "player owned" funds out of the gaming machine's coin hopper if the hopper had the necessary capacity for the disbursement. Further

still, the system included "Action Cash" — promotional funds from the casino that the casino could deposit into the players account. These promotional funds were "non-cashable," because they could be transferred to and from the gaming machine using the system, but they could not be cashed out at the machine. Since these non-cashable promotional funds had to be wagered on the gaming machines, this system provided a solution to the well-known bus promotion problem described above (in which casino guests would take the rolls of quarters given to them by the casino but would not wager that money on the casino's gaming machines). In addition, this system provided casinos with opportunities to craft new promotions with the assurance that the promotional credits given to players would be wagered on that casino's machines.

43. When the MGM casino opened in Las Vegas in 1993, it used a player tracking system developed in-house. Its casino floor also included approximately 400 coinless gaming machines. These gaming machines had no coin handling capabilities whatsoever. Instead, they relied upon bill acceptors to put money on the machine and printed bar coded tickets to cash out any credits left on the machine. These tickets could be taken to a cashier to be redeemed for cash, or they could be inserted into another gaming machine to play. Because this cashless system was ahead of its time, it was never really accepted by players, and the gaming machines were later converted back to regular coin play.

44. In 1994, Caesars Palace Las Vegas and IGT jointly developed and installed an online cashless system called "Request." The Request system allowed a player to open an account at the cage, where he would receive an ATM-style card. The player was then able to go to a gaming machine transfer funds from his account to the gaming machine using his Request card. Once the funds were transferred to the gaming machine, the player could then wager those funds and play. Upon completion of play, the player could then transfer the credits on the gaming machine back to his player account. The Request system therefore enabled players, especially in the high limit area, to move between gaming machines without having to worry about exchanging tokens. (Crevelt U.S. Patent Nos. 5,902,983; 6,347,738; 6,547,131)

45. The Request system at Caesars Palace communicated with the gaming machine using the IGT SAS 3.x protocol. The system was designed to enable a player to use his bank ATM card to transfer funds to the gaming machine. Because those funds belonged to the player from the outset (as compared to promotional funds given to the player by the casino), the player was permitted to cash them out at will from the gaming machine hopper. Funds of this type that can be cashed out at the player's election are known as "cashable credits."

46. The Request system also used non-cashable credits – credits that could only be transferred to and from the players' account on the system. Since the

initial installations at Caesars Palace were in the 'High Limit Slots' area, where \$100 and \$500 dollar machines are located, the casino required that the credits be non-cashable credits to prevent a player from laundering money or circumventing the federal currency reporting requirements by, for example, depositing cash at the cage and then withdrawing other (laundered) currency from the gaming machines. The Request system was also configured to provide the player with promotional credits – casino funds deposited into the player's account as an incentive or award. However, once these promotional credits were transferred to the gaming machine, they had to be wagered. These promotional credits could not be cashed out of the hopper or transferred back to the player's account.

### C. Background Regarding the SAS Protocol

47. With the proliferation of player tracking and slot monitoring systems, the casinos desired the ability to extract more information from the gaming machine. Additionally, they desired the ability to add and remove credits from the gaming machines to provide additional promotions and game play flexibility.

48. As discussed above, originally, gaming device manufacturers did not have serial communication capabilities designed into the gaming devices. This required player tracking system developers to "hard wire" signals into the gaming device to monitor its activity. The systems had to maintain separate accounting meters that had to be manually reconciled with the internal meters of the gaming

devices. Additionally, if player tracking systems wanted to add or remove credits from the gaming device, it was necessary to interrupt the coin handling signals and "fool" the machine into accepting or cashing out credits.

49. Around 1990, gaming device manufacturers started adding serial communication capability to their machines and, to utilize the feature, manufacturers developed their own protocols to communicate with the machines. Bally's protocol was called SDS and IGT's protocol was DLI (Direct Link Interface), which was later renamed to SAS (Slot Accounting System). Other gaming device and system manufacturers developed their own protocols. However, IGT had the largest installed base of gaming machines and player tracking systems, with Bally in second. Their two protocols dominated.

50. Initially these protocols contained commands to extract the internal accounting meters along with expanded exception reporting. These protocols were generally licensed to system and gaming manufacturers with non-disclosure agreements. This enabled most manufacturers to interface to the most devices and systems and to minimize development expenses by primarily supporting SDS and SAS.

51. When the ability to transfer credits on and off the gaming device became available, the protocol licenses became more restrictive. The protocols were released to gaming device manufacturers for use in the gaming devices only.

This was to allow the gaming device to communicate with that manufacturers system. However, the protocols were held back for use by other system providers to prevent the creation of additional competition.

52. Casinos and developers became frustrated because each gaming device generally had its own communication protocol. In order for a player tracking system to interface with multiple gaming devices of the floor of any particular casino, a different set of code had to be written for each manufacturers' gaming device protocol (or whichever protocol it supported).

53. IGT dominated the installed base of gaming devices in casinos and SAS became a de facto standard. A group called GAMMA was formed in the mid 1990's with the goal of developing an industry standard protocol. IGT put forth SAS to be that standard and over the next several years, GAMMA (eventually renamed GSA - "Gaming Standards Association") and IGT came to an agreement that the SAS protocol would become the industry standard.

#### D. WIDE AREA NETWORK GAMING SYSTEMS

54. Wide area networked gaming systems have been around since the late 1980's. IGT's Megabucks was the first system that networked gaming machines in multiple casinos around the state of Nevada together to create a large progressive jackpot. A central server system was connected via phone lines to a controller in each casino. The casino controller was connected to the gaming machines as well

as signs and displays. IGT is the primary supplier of these wide area progressive systems and they are operating in most gaming jurisdictions around the world.

55. In the early 1990's more states were interested in expanding their lottery systems. Video lottery was the result. In short the IGT Megabucks style system was used as the base. The gaming machines used bill validators to accept cash and the hoppers were removed to require a patron to go to a cashier station to receive their winnings.

56. By the mid 1990's cashless gaming, Internet gaming and downloadable gaming functions were developing. Internet gaming was illegal in the US and most operations were done offshore. Antigua and the Cook Islands were two locations that embraced Internet gaming. Initially Internet gaming used downloaded clients to a person's personal computer to access the network and provide the rich graphics desired. All decisions and actual gaming functions were carried out by the host to prevent cheating, and the PC was merely a display. Many companies like Boss Media produced and ran these sites as early as 1996. As the browser technology advanced with javascript, java, flash, etc., these Internet sites were able to operate without the downloaded client for graphics and everything would be sent to the browser on demand.

57. The Gaming industry was very active in creating downloadable systems. The first of these included the ability to download new firmware to the

machines bill validator and player tracking systems. Since these devices were called 'associated equipment' to the gaming device the gaming regulators were able to approve the controls and procedures necessary for their implementation. The concept of downloading the actual gaming machine software was being pursued and was demonstrated at the G2E show by the middle of the decade. There were many gaming machines at the time that used internal CD-ROMs and similar drives to hold the actual game software, so moving to a downloadable version was not a technological leap. It, however, took regulators and manufacturers longer to agree on safeguards and controls before these could make it to market.

### IV. PRIORITY

58. I understand that the "priority date" of a patent is typically the date on which the application is filed. I understand, however, that the claims of a patent may be entitled to an earlier priority date than the filing date of the application if the patent makes a priority claim (e.g., as a continuation or continuation-in-part) to an earlier application and the subject matter of the patent was adequately disclosed in the earlier application within the line of priority and all intervening applications. I understand the subject matter was adequately disclosed if it would satisfy the written description requirement of 35 U.S.C. § 112, ¶ 1, described below.

59. The written description requirement of 35 U.S.C. § 112, ¶ 1 provides that the patent specification must convey with reasonable clarity to one of ordinary

skill in the art that the inventor was in possession of the claimed invention as of the filing date of the application leading to issuance of the patent<sup>1</sup>.

60. Possession is shown by describing the invention with all of its limitations using such descriptive means as words, structures, figures, diagrams, formulas, etc., that fully set forth the claimed invention.

61. In order for a patent claim to satisfy the written description requirement, the specification must convey with reasonable clarity to one of ordinary skill in the art that the patentee invented what was claimed in the claim.

62. The written description requirement mandates that an inventor provide enough detail in the patent application to show that, at the time of filing the patent application, the inventor actually had in mind what is later purported to be the invention, from the perspective of one of ordinary skill in the art at the time.

63. The purpose of the written description requirement of 35 U.S.C. § 112, ¶ 1 is to ensure that the claims of the invention do not overreach the scope of the inventor's contribution to the field as set forth in the patent specification. As such, the written description requirement of 35 U.S.C. § 112, ¶ 1 requires that the claims of a patent can be no broader than the supporting disclosure set forth in the specification.

<sup>&</sup>lt;sup>1</sup> A patent specification "shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make, and use the same. . . ." 35 U.S.C. § 112, ¶ 1.

64. The level of detail required to satisfy the written description requirement varies depending on the nature and scope of the claims and on the complexity and predictability of the relevant technology. For generic claims, a number of factors can be utilized for evaluating the adequacy of the disclosure, including the existing knowledge in the particular field, the extent and content of the prior art, the maturity of the science or technology, and the predictability of the aspect at issue.

65. The written description analysis is governed by a comparison between the claims of the invention and the disclosures set forth in the specification.

66. I was asked to consider the '432 patent's Fig. 9 and the accompanying disclosure at 11:14-25 and 12:3-64 relating to a prize database server receiving various identification codes, including a user identification code, and upon receipt of those codes, downloading and executing on the game apparatus an installer. Specifically, I was asked to consider whether this disclosure appears in or is supported by U.S. Patent Nos. 5,816,918 or 6,007,426, to which I understand the '432 patent claims priority.

67. Looking to the '918 and '426 patents, I do not see any disclosure in either of those patents that corresponds to or provides support for the disclosure in the '432 patent at 11:14-25 or 12:3-64. Instead, the disclosures at Fig. 9 and 11:14-25 and 12:3-64 are brand new, as compared to the '918 and '426 patents,

and would have been understood to be brand new by a person of ordinary skill in the art.

68. The only disclosures in the '918 and '426 patents relating to receiving information identifying a user is where a player "input[s] some form of identification to access certain features of the game unit 10, such as to access a credit account storing previously-accumulated prize credits, a tournament, prizes to be sent to the player's address, etc." Ex. 1009, *'918 Patent* at 22:3-7, 21:31-42. But none of these disclosures pertain to transmitting an installer or other software to the game apparatus from the server in response to a request containing information identifying a user.

69. The '918 and '426 patents do describe a game unit downloading a game that has been selected. Ex. 1009, '918 Patent at 16:60-63. However, to one of ordinary skill in the art, this disclosure teaches that a server transmits a selected game to a game unit in response to receiving a request identifying a *game unit*, not a *user*. This is an important difference. To a skilled artisan in the field at the time, it would be typical and expected for a central server to receive a request identifying a game machine and, in response, transmit game client software to the game machine, such as for loading a new game to networked game machines.

70. One of ordinary skill in the art would not understand the '918 and '426 patents to be describing transmitting any game client software to a game machine

in response to receiving any request containing information identifying a user. Nor do the '918 and '426 patents reasonably suggest to a person of ordinary skill in the art that the inventors were in possession of such a feature as an aspect of their invention at the time of filing of those patents.

71. Therefore, in my opinion, a person of ordinary skill in the art would not have understood from the disclosures of the '918 or '426 patents that the inventors of the '432 patent were in possession of an invention that included "transmitting a game client software" in response to a request identifying a user at the time of filing of the '918 and '426 patents.

### V. INVALIDITY UNDER 35 U.S.C. § 103

#### A. <u>Legal Framework</u>

72. I understand that, under 35 U.S.C. §102(b), a U.S. or foreign patent qualifies as prior art to an asserted patent if the date of issuance of the patent is more than one year before the earliest effective filing date of the asserted patent.<sup>2</sup> I further understand that a printed publication, such as an article published in a magazine or trade publication, constitutes prior art to an asserted patent if the publication occurs more than one year before the earliest effective filest effective filing date of the asserted patent if the asserted patent.

 $<sup>^2</sup>$  Title 35, section 102(b) of the United States Code providers: "A person shall be entitled to a patent unless (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States."

73. I understand that, under 35 U.S.C. § 102(e), a U.S. patent qualifies as prior art to the asserted patent if the application for that patent was filed in the United States before the invention of the asserted patent.<sup>3</sup>

74. I understand that documents and materials that qualify as prior art can be used to invalidate a patent claim as anticipated (35 U.S.C. § 102) or as obvious (35 U.S.C. § 103).

#### i. Anticipation

75. I understand that a patent is only valid when the invention claimed in the patent is new, useful, and non-obvious in light of the "prior art." Prior art is generally the state of technology in the relevant field at the time of the invention and includes such documentary materials as patents and publications, as well as evidence of actual uses or sales of a technology within the United States. Categories of prior art include: (1) anything that was publicly known or used in the United States by someone other than the inventor before the inventor made his invention; (2) anything that was in public use or on sale in the United States more than one year before the application for the patent was filed by the inventor; (3)

<sup>&</sup>lt;sup>3</sup> Title 35, section 102(e) of the United States Code provides: "A person shall be entitled to a patent unless (e) the invention was described in - (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language."

anything that was patented or described in a printed publication anywhere in the world before the inventor made his invention; (4) anything that was patented or described in a printed publication anywhere in the world more than one year before the inventor filed the application for the patent; (5) anything that was invented by another person in this country before the inventor made his invention so long as the other person did not abandon, suppress, or conceal his prior invention; and (6) anything that was described in a patent that issued from a patent application filed in the United States or certain foreign countries before the inventor made his prior invention.

76. I understand that a person cannot obtain a patent on an invention if someone else has already made the same invention. If an invention is not new, then the invention has been "anticipated" by the prior art.

77. I understand that the implicit or inherent disclosures of a prior art reference may anticipate the claimed invention. Therefore, a claim is "anticipated" by the prior art if each and every limitation of the claim is found, either expressly or inherently, in a single item of prior art.

78. I also understand that a single prior art reference may incorporate by reference disclosures from other prior art references and still be considered a single reference. But to incorporate matter by reference, a host document must contain language clearly identifying the subject matter which is incorporated and where it

is to be found and a mere reference to another application, or patent, or publication is not an incorporation of anything therein. That is, the host document must identify with detailed particularity what specific material it incorporates and clearly indicate where that material is found in the various documents.

#### ii. Obviousness

79. I understand that a person cannot obtain a patent on an invention if his invention would have been obvious to a person of ordinary skill in the art at the time the invention was made. A conclusion of obviousness may be founded upon more than a single item of prior art. In determining whether prior art references render a claim obvious, courts consider the following factors: (1) the scope and content of the prior art, (2) the differences between the prior art and the claims at issue, (3) the level of skill in the pertinent art, and (4) secondary considerations of non-obviousness. In addition, the obviousness inquiry should not be done in hindsight. Instead, the obviousness inquiry should be done through the eyes of one of skill in the relevant art at the time the patent was filed.

80. I may consider the scope and content of the prior art including the fact that one of skill in the art would regularly look to the disclosures in patents, trade publications, journal articles, industry standards, requests for comment published by standard setting organizations, and materials from industry conferences. I believe that all of the references that my opinions are based upon are well within

the range of references a person of ordinary skill in the art would consult to address the type of problems described in the Challenged Claims.

81. I understand that the United States Supreme Court revised the standard for determining whether a patent is obvious in 2007. Specifically, I understand that the existence of an explicit teaching, suggestion, or motivation to combine known elements of the prior art is a sufficient, but no longer necessary, condition to a finding of obviousness. Thus, the teaching-suggestion-motivation test is not to be applied rigidly in an obviousness analysis. Therefore, in determining whether the subject matter of a patent claim is obvious, neither the particular motivation nor the avowed purpose of the patentee controls. Instead, the important consideration is the objective reach of the claim. In other words, if the claim extends to what is obvious, then the claim is invalid. I further understand the obviousness analysis often necessitates consideration of the interrelated teachings of multiple patents, the effects of demands known to the design community or present in the marketplace, and the background knowledge possessed by a person having ordinary skill in the art. All of these issues may be considered to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent.

82. I also understand that in conducting an obviousness analysis, a precise teaching directed to the specific subject matter of the challenged claim need not be
sought out because it is appropriate to take account of the inferences and creative steps that a person of ordinary skill in the art would employ. I understand that the prior art considered can be directed to any need or problem known in the field of endeavor at the time of invention and can provide a reason for combining the elements of the prior art in the manner claimed. In other words, the prior art need not be directed towards solving the same specific problem as the problem addressed by the patent. Further, the individual prior art references themselves need not all be directed towards solving the same problem. Under the revised standard, common sense is important and should be considered. Common sense teaches that familiar items may have obvious uses beyond their primary purposes.

83. I also understand that the fact that a particular combination of prior art elements was "obvious to try" may indicate that the combination was obvious even if no one attempted the combination. If the combination was obvious to try (regardless of whether it was actually tried) or leads to anticipated success, then it is likely the result of ordinary skill and common sense rather than innovation. I further understand that in many fields it may be that there is little discussion of obvious techniques or combinations, and it often may be the case that market demand, rather than scientific literature or knowledge, will drive the design. I understand that a combination must do more than yield predictable results to be non-obvious.

84. Because the claims must be obvious to a person of ordinary skill in the art at the time of the invention, I understand that the factors to consider in determining the level of ordinary skill in the art include (1) the educational level and experience of people working in the field at the time the invention was made, (2) the types of problems faced in the art and the solutions found to those problems, and (3) the sophistication of the technology in the field.

85. I understand that at least the following rationales may support a finding of obviousness:

- Combining prior art elements according to known methods to yield predictable results;
- Simple substitution of one known element for another to obtain predictable results;
- Use of a known technique to improve similar devices (methods, or products) in the same way;
- Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;
- "Obvious to try"—choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;
- A predictable variation of work in the same or a different field of endeavor, which a person of ordinary skill would be able to implement;
- If, at the time of the alleged invention, there existed a known problem for which there was an obvious solution encompassed by the patent's claims;
- Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art; and/or
- Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior-art reference or to

combine prior-art reference teachings to arrive at the claimed invention.

86. I understand that even if a *prima facie* case of obviousness is established, the final determination of obviousness must also consider "secondary considerations" if presented. In most instances, the patentee raises these secondary considerations of non-obviousness. In that context, the patentee argues an invention would not have been obvious in view of these considerations, which include: (a) commercial success of a product due to the merits of the claimed invention; (b) a long-felt, but unsatisfied need for the invention; (c) failure of others to find the solution provided by the claimed invention; (d) deliberate copying of the invention by others; (e) unexpected results achieved by the invention; (f) praise of the invention by others skilled in the art; (g) lack of independent simultaneous invention in the prior art.

87. I further understand that secondary considerations evidence is only relevant if the offering party establishes a connection, or nexus, between the evidence and the claimed invention. The nexus cannot be to prior art features. The establishment of a nexus is a question of fact.

### B. <u>Martin</u>

88. I was asked to consider a few discrete issues with respect to Martin. I provide my opinions below.

89. First, I was asked to consider whether the system controller in Martin (*see, e.g.*, Martin, at 3:66-4:30, 2:3-9, 5:45-49; Fig. 1) would be considered a "server" to one of skill in the art as that term is used in claim 1. It is my opinion, as one of skill in the art, that the system controller of Martin is a "server."

90. A person of ordinary skill in the art would understand the broadest reasonable meaning of "server" to include at least any computer, system, or program that performs centralized functions or manages centralized resources and responds to and serves the requests of another program, such as a client.

91. Martin describes gaming machines that communicate with a system controller that can be located remotely, to perform various functions. The communications are two-way. Ex. 1002, *Martin* at 5:45-49. One such function is that the scoring circuitry of each gaming machine communicates with the account balance register "in accordance with the success or lack of success of the player" and increments or decrements the account balance register accordingly. Ex. 1002, *Martin* at 3:66-4:13. Another function that the system controller provides on behalf of each gaming machine, via the account balance register, is that it controls payouts of the gaming machines, whether by credit, cash or tokens. Ex. 1002,

*Martin* at 4:42-53. Another function that the communications capability provides is that players on the gaming machines are able to request an online catalog or menu from the system controller. Ex. 1002, *Martin* at 5:49-62. The central system controller performs these functions for "a plurality of electronic game machines" in communication with the central system controller. Ex. 1002, *Martin* at 11:49-66; 12:46-60.

92. Thus, because the system controller performs certain functions at the request of or on behalf of the gaming machines, such as maintaining an account balance and receiving orders for drinks, it is my opinion that Martin discloses a "server" as required by claim 1, within the broadest reasonable meaning of that term as described above.

93. I was also asked to consider whether Martin discloses a "database server" as required by claim 4. According to Martin, the system controller includes an "account balance register" that is connected with the scoring circuitry of the gaming machine to increase or decrease the account balance. The system controller also provides an online catalog or menu of items such as drinks, food, or merchandise that can be ordered by players. Thus, it is my understanding that an account balance register would store, organize, and update various data, including, for example, data relating to the current value of accounts, available items to order, orders placed by players, etc.

94. A person of ordinary skill in the art would understand the broadest reasonable meaning of "database" to include at least an organized collection of data and that a "database server" is a server that provides services related to an organized collection of data. I further note that claim 5, which depends from claim 4, states that the "database server" and the "server" may be the same.

95. Therefore, it is my opinion that it would have been obvious to utilize a "database server" as the system controller of Martin as the term is used in claims 4 and 5 of the '432 patent. Further, to the extent that it is found that the system controller is not a "server", it is my opinion that it would have been obvious to one of ordinary skill in the art to modify Martin to include a server to perform the same functions. This would have been well within the level of ordinary skill in the art at the time and would have had a reasonable expectation of success.

96. Finally, I was asked to consider whether Martin discloses an "application programming interface" as used in claim 7. An "application programming interface" (API) specifies how software modules interact with each other. An API specifies how the processes transfer information, the data to be transferred, the format of the data, any error checking correction, etc. APIs have been an integral form of programming since the inception of the computer. APIs are used by processes within a given machine, between multiple machines in a

local network and for wide area networks like the Internet for accessing databases, receiving inputs, and sending outputs to and from other computer hardware.

97. The '432 Patent discloses that software components, including, for example, "a communicator module," "a buffer module," a "game module," and a "modem module" constitute an API. Ex. 1001, '432 Patent at 15-24. Additionally, as described by the '432 Patent, the API executes calls or functions in order to communicate necessary information to, for example, a server. Ex. 1001, '432 Patent at 7:22-8:48. The '432 Patent discloses a "beginGame" call where "the server is given the number of credits to be played and attempts to debit the player's account." '432 Patent at 7:52-61. The '432 Patent also discloses a "getAvailable Credits" call that "is used prior to each game as a way of displaying to the player a number of credits that are available." Ex. 1001, '432 Patent at 8:23-26.

98. Martin similarly teaches that a centrally located system operator controller can provide account balance information to each player. Ex. 1002, *Martin* at 4:8-12. Martin also discloses that the system operator accepts funds for wagering, "where the funds are translated into an account balance." *Martin* at 4:27-29. Based on these disclosures, it is my opinion that Martin discloses an application programming interface that is used to allow the system operator controller to perform calculations on behalf of the game machine.

### C. <u>Handelman</u>

99. As with Martin, I was asked to consider whether Handelman discloses a "server" and a "database server" under the broadest reasonable interpretation of those terms as those terms are used in claims 1, 4, 5, and 26. I refer generally to my statements above relating to what one of ordinary skill in the art would understand to be within the broadest reasonable interpretation of a "server" and "database server" in these claims in the context of the '432 patent.

100. Handelman discloses an "accounting apparatus" located on the network computer. Ex. 1003, *Handelman* at 7:17-33. The accounting apparatus increases or decreases a subscriber's account depending on the whether the subscriber wins or loses the game it plays. Similarly, an accounting apparatus increases or decreases the subscriber's account based on purchases made. *Handelman* at 9:11-20. The amounts are stored in a gaming account register and shopping account register, respectively. *Handelman* at 13:12-59, 20:23-37, Figs. 10A, 10B, 18. Handelman also discloses "control circuitry" that administers gaming and shopping functionality. *Handelman* at 7:4, 9:3-4, Figs. 1, 3, 9A-B, 19A-B. The gaming "control circuitry" provides available game and game options to the user for selection, such as providing "betting combinations" for the user to select. *Handelman* at 24:35-43, 23:46-55, 27:23-28:6, Figs. 8, 33. The shopping

"control circuitry" provides available products to the user for purchase. *Handelman* at 26:59-27:10, Fig. 18.

101. The accounting apparatus receives and processes subscriber requests, updates account balance registers, organizes data, and generates control messages and announcements that are transmitted to game units and subscribers. Handelman at 12:31-13:59, 16:4-49, 19:17-20:40, Figs. 10A, 10B, 15A, 15B, 20A, 20B. The accounting apparatus does so for all of the subscriber units in the network. Handelman at Figs. 5, 6, 7:17-20 ("The accounting apparatus 24 may be operated as part of the pay television network accounting system, and may debit and credit, losses and winnings as the case may be to the subscribers' pay television accounts."). According to Handelman, the accounting apparatus "interfaces" with the control circuitry for administering financial transactions related to gaming and shopping. Handelman at 7:13-17, 9:11-15. The accounting apparatus and control circuitry are illustrated as being separate functional components. Handelman at Figs. 1, 3. It is my opinion that it would have been obvious to one of ordinary skill in the art to modify Handelman to include a single server to perform the functions of the accounting apparatus and control circuitry. It is also my opinion that such a server implementation would be capable of storing, organizing, and updating data relating to the current value of the subscriber's account and, therefore, would be within the broadest reasonable interpretation of a database server. This would have

been well within the level of ordinary skill in the art at the time and would have had a reasonable expectation of success.

### **D.** Lucero

102. I was also asked to consider whether Lucero discloses a "server" and a "database server" as those terms are used in claims 4 and 5. I refer generally to my statements above relating to what one of ordinary skill in the art would understand to be within the broadest reasonable interpretation of a "server" and "database server" in these claims in the context of the '432 patent.

103. Lucero describes a network gaming environment where gaming devices in the network communicate with an "intermediate processing system" or "processing facility," which in turn communicates with remote financial institutions. Ex. 1004, *Lucero* at 8:33-41, Fig. 6. According to Lucero, the intermediate processing system is provided with, for example, a user's charge card account information and processes the information to determine whether the player already has an account in the system. If not, the processing system opens an account. *Lucero* at 11:29-38. The intermediate processing system "keeps track of the net playing credit as the player plays games of chance" and communicates such information to remote financial institutions *Lucero* at 8:44-46, 6:11-24. The intermediate processing system maintains gaming accounts and subaccounts for

players, where "the associated data is stored as a variable length record in a computer database." *Lucero* at 12:44-50, Fig. 9.

104. In my opinion, the intermediate processing system of Lucero processes, stores, organizes and updates data and, therefore, is within the broadest reasonable interpretation of a "database server." To the extent that it is found that the intermediate processing system or processing facility are not a "server" or "database server", it is my opinion that it would have been obvious to one of ordinary skill in the art to modify Lucero to include a server to perform the same functions. This would have been well within the level of ordinary skill in the art at the time and would have had a reasonable expectation of success.

105. I was also asked to consider whether Lucero discloses an "application programming interface" as used in claim 7. I refer generally to my statements above relating to what one of ordinary skill in the art would understand to be within the broadest reasonable interpretation of an "application programming interface" in this claim in the context of the '432 patent. Similar to the teachings of '432 Patent and as discussed above, Lucero teaches that the intermediate processing system maintains subscriber accounts and subaccounts, crediting and debiting the account based on the user's gameplay. *Lucero* at 5:60-6:24. As such, the intermediate processing system performs calculations on behalf of the user's gaming machine. Lucero also discloses that prior to playing a game, the player's

gaming machine obtains a credit balance from the intermediate processing system so that it can display the number of credits that are available in the account. *Lucero* at 7:16-21, 9:49-59. Based on these disclosures, it is my opinion that Lucero discloses an application programming interface that is used to allow the accounting apparatus to perform calculations on behalf of the game machine.

### E. Lucero and Martin

106. It is my opinion that it would have been obvious to a person having ordinary skill in the art to combine the system described in Martin with the additional functionalities described by Lucero.

107. Lucero and Martin both describe systems relating to gaming machines that can be used in connection with gambling activities. Ex. 1002, *Martin* at Abstract; Ex. 1004, *Lucero* at Abstract. Lucero and Martin also describe systems that involve the use of credit cards to obtain credits for use in the gaming machine through contacting a remote location. Ex. 1002, *Martin* at Abstract; Ex. 1004, *Lucero* at Abstract.

108. Lucero describes a system that allows, among other things, a player to request credit from the gaming machine that he is sitting at without having to leave the machine. Ex. 1004, *Lucero* at Abstract, 2:14-27, 7:34-48. Lucero describes that a player may use a general purpose credit card, or coins or tokens, to request credits to be used in the gaming environment. Ex. 1004, *Lucero* at 2:14-27, 2:40-

54, 4:62-67, 5:7-27. Lucero describes that a player's account is increased or decreased depending on whether he wins or loses the games he chooses to play. Ex. 1004, *Lucero* at 2:54-62, 6:12-22, 7:45-47, 8:17-22. When a player decides that he is finished playing, Lucero describes that a player may select the manner in which he cashes in his account, including by electing to receive cash or tokens. Ex. 1004, at 5:3-6. The tokens are used to obtain additional credits for playing a gaming machine. Ex. 1004, 4:62-67, 9:15-18.

109. The system in Martin also describes a system by which a player may request credits from a remote, central location through the use of a credit card. Ex. 1002, Martin at 3:66-4:30. The player's "account balance register" is increased or decreased depending on the results of playing. Ex. 1002, Martin at 4:2:3-9, 3:66-4:5, 4:54-60. The account balance register controls all payouts made by the gaming machine. Ex. 1002, Martin at 4:45-53. The central location in Martin, or system operator, may house the account balance register and, therefore, the gaming machines are capable of two-way communications with the system operator Ex. 1002, Martin at 5:45-49. Martin also describes an "ordering mode" in which players can request an online catalog containing items available for purchase, such as food, drinks and merchandise. Ex. 1002, Martin at 5:45-62, 11:30-42. The cost of items purchased via the "ordering mode" can be deducted from the player's account balance register. Ex. 1002, Martin at 5:57-62. As was the case at the time,

providing players, or potential players, with a plethora of options served to keep, or get, people at gaming stations – an obviously desirable outcome for gaming operators. By the time of the purported invention of the '432 Patent, and as an example of providing such options, it was well known to those of ordinary skill in the art that players could be provided with options for cashing in their accounts and providing the players a way to request a selection of those options. This concept is expressly described by Lucero, but not in detail.

110. Upon reading the disclosure of Martin, therefore, a skilled artisan would have recognized that modifying the system of Lucero to provide a player, upon request, with the ability to select the manner in which to cash out his account would be desirable. Both Martin and Lucero recognize that payouts can be controlled from a central location.

111. Lucero also describes maintaining an account that includes various types of credits and that a player may select the type of credits that he wishes to use to wager. Ex. 1004, *Lucero* at 3:25-53, 13:16-39. Further, Lucero describes that a player may have multiple accounts and provides that these accounts may be "linked" together. *Lucero* at 12:25-13:15. As one of ordinary skill at the time, and also based on Lucero, it would have been obvious that multiple accounts could be used by one or more players.

112. This combination of these known functionalities is nothing more than adding features from Martin to the gaming system of Lucero. One of ordinary skill would have achieved this modification by merely programming the gaming machine in Lucero to permit a player to request and make selections as taught by Martin. This combination, therefore, simply expands upon the express teachings of Lucero to provide a selectable payout method.

113. It would have been natural and nothing more than the application of ordinary skill and common sense to expand upon the teachings of Lucero with respect to electable payouts. It would have been similarly natural to modify Martin to accommodate for the maintenance of various types of credits in sub-accounts and attributing value to those items as described by Lucero.

114. Accordingly, it is my opinion that it would have been obvious to a person having ordinary skill in the art to combine the features of Lucero with the gaming system of Martin. This combination could have been accomplished using known methods in the art and would have yielded predictable results with a reasonable expectation of success and without undue experimentation.

### F. Kelly '490 and Heckel

115. It is my opinion that it would have been obvious to a person having ordinary skill in the art to combine the system described in Kelly '490 with the functionalities described by Heckel.

116. Both Kelly '490 and Heckel relate generally to network gaming. Ex. 1005, *Kelly '490* at 34:32-35:10. Kelly '490 contemplates that its software may be stored and used at a user's home computer. *Kelly '490* at 8:14-16. Kelly '490 further describes a system in which, during operation of a game, a user may request and be presented with a selection of items available in the game. *Kelly '490 Patent* at 31:7-27. A user's account is debited or credited depending on gameplay. *Kelly '490* at 31:28-32:18. Kelly '490 further discloses that remote locations or centralized services may perform various functionalities of the system, such as maintaining an account with ticket account information along with the player's identification information, or a prize server. *Kelly '490* at 31:28-32:18, 38:9-13.

117. Heckel also describes a network gaming system, including software that can be stored and executed on a user's personal computer. Ex. 1006, *Heckel* at Fig. 1. The user obtains the software by requesting and downloading the software from a game server only after providing a user ID and password. *Heckel* at 4:35-43. Heckel expressly describes that his system can be used with Internet games, such as poker or craps. *Heckel* at 2:5-8. In addition to a game server and user computer, Heckel also describes an ad server to be used in connection with its system to provide targeted advertising to sponsors. *Heckel* at 2:59-61, 2:63-3:3.

118. As one of skill in the art, it is my opinion that it would have been obvious to combine Heckel and Kelly '490 to provide game software as described

in Kelly '490 that is downloaded by a user as provided for in Heckel, i.e., after providing user identification information.

119. In particular, one of skill in the art would have recognized that the software delivery system described in Heckel would be beneficial to increasing the number of players (and therefore, revenue generated) that use the networked games in Kelly '490. Specifically, this combination would provide users with the convenience of playing a gambling game from the comfort of their own home, as expressly contemplated by both Kelly '490 and Heckel. This could have been achieved merely by utilizing the game server of Heckel, accompanied by its use of user identification information, to provide the gaming software as described in Kelly '490. This combination would have been obvious to a person of ordinary skill in the art and would have yielded predictable results with a reasonable expectation of success and without undue experimentation. In addition, Heckel provides another aspect of its invention – targeted, in-game advertising. Ex. 1006, This would also obviously be a desirable *Heckel* at 2:35-3:3, 4:35-5:27. modification to Lucero, as it would benefit the players, the game operators and also the advertisers (which could be related to the game operators, such as dining or stores in a casino).

120. As noted above, Kelly discloses that a player may store his credits and identification information electronically at a centralized service. *Kelly '490* at

31:28-33:9. Kelly similarly describes that information relating to gameplay and identification information can be stored at a central database. *Kelly '490* at 37:20-20. Thus, upon reading this disclosure, it would have been obvious to one of ordinary skill in the art to store account information with player identification information at a central database server.

### G. <u>Lucero and Heckel</u>

121. It is my further opinion that it would also have been obvious to a person having ordinary skill in the art to combine the system described in Lucero with the functionalities described by Heckel.

122. As described above, Lucero relates to a network gaming environment in which a player has an account, maintained at a remote facility, that is debited and credited based on gameplay. Also described is that a player using this system can request a selection of items in connection with playing a game, such as the type of wagering units to be used.

123. Lucero further describes an embodiment in which its gaming software can be used with a "personal computer, personal digital assistants (PDAs) and portable computers" having the "appropriate software" from "virtually any location so long as a connection to the processing facility is provided for each player." *Lucero* at 9:29-46, 10:3-6. By doing so, the system creates "electronic gaming tables." *Lucero* at 9:67-10:3.

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124. For reasons similar to those described in the above combination of Kelly '490 and Heckel, it would have been obvious to combine the software delivery system of Heckel, including the use of user identification information, to provide the gaming software in Lucero. More specifically, in the gaming industry, the biggest concern is getting people in, and keeping them at their seats (whether it be at a casino or over the Internet), where they have opportunities to win money. This combination advances this goal dramatically by increasing the number of players to anyone with access to a computer and the Internet. In addition, Heckel provides another aspect of its invention – targeted, in-game advertising. Ex. 1006, *Heckel* at 2:35-3:3, 4:35-5:27. This would also obviously be a desirable modification to Lucero, as it would benefit the players, the game operators and also the advertisers (which could be related to the game operators, such as dining or stores in a casino).

125. Moreover, such a combination would have been little more than the combination of the delivery method of Heckel with the software of Lucero, resulting in a system having a game server for delivering software (as described in Heckel), a database server for maintaining account balances (as described in Lucero) in communication with a user computer having the appropriate gaming software for communicating with all servers (as described in both Lucero and Heckel).

126. Thus, the combination would have required nothing more than ordinary skill in the art and would have yielded predictable results with a reasonable expectation of success and without undue experimentation.

### VI. CONCLUSION

127. I declare that all statements made herein of my knowledge are true, and that all statements made on information and belief are believed to be true, and that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Date:  $\frac{8}{7/2014}$ By:

—Dwight E. Crevelt

### Dwight E. Crevelt

502 E 560<sup>th</sup> Rd Walnut Grove MO 65770 702-858-8294

Dwight Crevelt is a Businessman, Engineer and Author with over 40 years experience in the gaming industry, including extensive work with Gaming Regulators and Agencies worldwide. Dwight also provides expert witness services for patent infringement cases.

Dwight is co-author of the books <u>Slot Machine Mania and Video Poker Mania</u>. Also, he is believed to be the author of the first Computer Program Disassembler, it was written for CDC160/NCR310 in 1971. He holds the 6 patents as inventor for Cashless and Progressive Gaming Systems.

### Education:

Received BS in Computer Engineering from Iowa State University - 1979 Attended the US Naval Academy - 1975-77 Attended University of Las Vegas - 1973-74 Graduated from Chaparral High School - 1975

### Experience:

- Crevelt Computer System, Inc. President/Owner 1977-present Gaming Business Consulting/Engineering Development
- 7C's Winery Co-owner 2005- Present
- FootTraffic Promotional Gaming LLC Partner 1998- 2013 Provides promotional games to Casinos, Retail and Trade Shows

### International Game Technology -

Product Manager Cashless Applications 1995-1996

Prepare business plan and strategies for implementing cashless gaming products. Including the use of Smartcards, ATM/Debit cards and Internet Gaming.

Manager/Director Las Vegas Engineering 1991-1995 Responsible for design, development and implementing player tracking and accounting systems. This included responsibility for the development, deployment and support of over 150 installations of the SMART System and the first cashless system utilized by Caesar's Palace, Las Vegas.

Electronic Data Technologies - Special Projects 1988-1991 Technical Gaming Regulatory Liaison Evaluate new technologies and prepare business plans for their implementation.

Crevelt Computer System - IGT/EDT Contract 1984-1986 Designed and developed the first complete on-line Player Tracking System. Experience: (continued)

Mills-Jennings - Director of Corporate Research 1981 Primary Gaming Regulatory Liaison Assembled an R&D team for the development of a complete line of video gaming machines and an on-line accounting system.

Sircoma (IGT) - computer engineer 1979-80 Developed various gaming machines. Technical Gaming Control Liaison

United Audio Visual - software engineer 1977 Developed Audio / Video Controllers

Gamex Industries - software engineer 1974-75 Designed and developed an on-line Slot Accounting and Monitoring System. Maintained Gamex's on-line Casino Table Game Accounting System.

Member of the following organizations:

US Navy League National Eagle Scout Association American Philatelic Society

Listed in the following Biographies:

Marquis Who's Who in the West Marquis Who's Who in the World Marquis Who's Who in Finance and Industry Marquis Who's Who of Emerging Leaders in America IBC Men of Achievement

# Gamex casino computer system

for computerized monitoring

and control of cash,

chips, and credit transactions---



the Gamex System 2800

A new tool for casino managers

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in the casino area where the action is, and the transactions take place. Information from each table is continually updated with each transaction, and printed in the form of voucher slips or listings.

#### MANAGEMENT REPORTS

Overall summary of casino operations is the focal point of the system. This summary, printed within minutes of the close of each work shift, provides management with table-by-table results and overall casino totals, including cash drop, credit extended, credit paid by chips and cash, net of chip fills and returns by the cashier, volume of play, net win, and percentage of yield. Included also are individual dealer statistics in terms of volume, profit, and minutes spent at the table. The summary also indicates any credit not covered by formal markers, any markers remaining at the pit, and a total of all markers delivered to the cashier.

The summary of cash drop means management will know what is in each drop box prior to its being physically counted. The stringent counting room procedures mandated by taxing authorities may hopefully be relaxed in the future.

#### HOW THE SYSTEM WORKS

Using the 21 table as an example, here is how the Gamex Casino Computer System keeps tabs on gaming transactions and provides for automated monitoring and control.

To open a table, a pitman whose identification card is so authorized can from the pit simply depress the Table Number and the Open Table transaction key. This gives the control of both opening and closing tables to authorized pit personnel and is accomplished in a few seconds from the appropriate pit.

Cash drops, table credits (markers), credit cancellations with chips or cash, chip returns, chip fills, and other transactions are all handled by punching appropriately labeled keys to record and transmit various actions or requests, plus other pertinent data. Procedures for voiding entries are also provided to allow for error correction. Full security is assured through a system of dealer and security-guard ID cards that must be inserted into each keyboard before it will perform various functions. Through keyboards and chip counters at the cash table, all necessary transactions from player credit to chip inventory—are handled by the computer with minimum time and effort required for data entry, and with no slow-down in the normal pace of play. Field experience shows that *time* required for data entry is typically less than **three minutes** per eight-hour shift.

#### WITH MODERN CONTROLS, FASTER REPORTING, MORE PRECISE MONEY-MANAGEMENT, GAMEX SYSTEM 2800 SAVES MORE THAN IT COSTS.

The Gamex Casino Computer System provides all of these valuable functions for accurate data collection, control, and security:

- Monitors tables and slot machines for cheating, performance or malfunctions
- Confirms coin and cash drop transactions
  Provides summaries and management reports on demand
- Monitors dealer performance
- · Provides daily, monthly, and yearly statistics
- Permits comparative analysis of equipment
  and locations
- Prints data on customer-selected forms, with multiple copies



Gamex System 2800 provides control and up-to-the-minute computerized information on all transactions by table, dealer, game or cage.

### THE GAMEX CASINO COMPUTER SYSTEM WAS DEVELOPED TO MEET CASINO MANAGEMENT'S NEED FOR MODERN BUSINESS CONTROLS AND PROCEDURES.

The system is, essentially, a data collection system. With it, management has – for the first time – a degree of management control never achieved before and instant, up-to-the-minute access to information covering all casino transactions. The system also monitors each table and machine for performance, malfunction, and slot cheating.

As the diagram below shows, the Gamex System covers all gaming activities -21, roullette, craps, Big 6, baccarat, and slots. All transactions involving cash, chips, or credit are entered at the tables, and printed records are generated for pit men, cashier, casino manager, security, and slot manager. Control is thus brought from the back office to the casino floor, where it can be more effectively exercised – right





#### PRINTERS

Manufactured by Centronics Data Computer Corp., the parent company of Gamex, remote printers provide hard-copy output of information as required. Fast, quick and ultra-reliable, the printers are located for ease of supervision throughout the casino. A printer in each pit produces vouchers which pertain to that specific control position. Printers in the cage list all cash transactions from the floor, all cashier transactions, and print voucher slips pertaining to the cage. A control printer, located either in the controller's office or in the cage, produces all casino reports.

A time clock provided with the system records the time and date at which each transaction occurs. The time is recorded to the minute on each voucher or listing.

### ELECTRONIC SLOT MACHINES

Automatically transmit data indicating total coins played, coins in the drop box, and jackpot occurrences, as well as information relative to security breaches, cheating attempts, and machine malfunctions. Slot summaries provide current, month-to-date, and year-todate data covering all aspects of machine operation.





**AUTOMATIC CHIP** 

comes from automatic chip

Additional input to the processor

counters located at each table.

These counters electronically

scan and count the amount of

chips at the table and transmit

The correctness of input from the

keyboards is constantly verified

by the automatic chip counters.

from remote locations for control

They also permit inventories

and accounting purposes.

COUNTERS

data to the computer.

**Gamex Industries, Inc.** 3084 South Highland Drive Las Vegas, Nevada 89109 (702) 732-7526 A wholly-owned subsidiary of Centronics Data Computer Corp.



#### THE KEYBOARDS Keyboards are located at each

gaming table, in each pit, and at each cashier's position. In addition, a control keyboard is available for entry of accounting information and program controls. A visual display is incorporated into each keyboard unit for verification of the information before transmission takes place. A "clear key" allows for the correction of the entry before it is transmitted, and an identification card reader transmits the operator number of the person entering the transaction. Pit keyboards provide for on/off control of each table, taking inventories, chip orders from the cashier, and control of player credit.

PROVEN

AND

RELIABLE

CUSTOMER-

ACCEPTED



#### THE COMPUTER

The heart of the Gamex Casino Computer System is a high speed minicomputer customengineered for this application.

Also included with the system hardware is a back-up computer for use in case of failure to the main computer, and for such optional system extensions as a complete Casino Credit System and a Slot Analysis and Control System.

### SYSTEM HARDWARE

Printed in U.S.A.

# **NEW GAMEX SOLID-STATE SLOT MACHINES** with computer-controlled cheat-proof security system

As far as outward appearance is concerned, GAMEX all-solid-state electronic slot machines are like any existing mechanical machines. Inside, however, the GAMEX machines are unique. Advanced electronic circuitry and built-in computer controls make possible unprecedented security and virtually maintenance-free operation. Here are a few of the exclusive advantages these new-generation machines offer casino management.

#### **CHEAT-PROOF**

Sensors throughout each machine, combined with the machine's computer circuitry, continually check for any security breach (and also for machine malfunctions). If tampering occurs, (1) the machine instantly locks in a non-playable position, (2) a flashing light on the top display alerts casino personnel, and (3) an indicator light on the machine's unique "SAFE System" panel (see other side) pinpoints the area of infringement.

Security and reliability are further strengthened by the elimination of all mechanical clocks, variators, relays, and contactors—thus minimizing tampering and downtime.

### THE LOOK, FEEL, AND SOUND OF MECHANICAL MACHINES

GAMEX machines have the familiar coin entry, drop tray and handle plus devices that simulate the action and sound of conventional slot machines. The handle, for example, is designed with a special device to give it the "ratchet feel" of the handle on mechanical machines. And reels are equipped to produce the desired "bounce" on stop. Nothing has been overlooked to assure maximum player appeal.

### VIRTUALLY NO DOWNTIME

The GAMEX solid-state slot machine is all but maintenance-free. Completely modular construction and high-reliability electronic circuitry are used throughout. There are no metal-to-metal contacts to wear. No lubrication or periodic preventive maintenance of any kind is required. There are no adjustments necessary within the machine. There are no relays. Even the plastic, non-magnetic reels are driven by maintenance-free electronic stepper motors. No brushes, brakes, clutches or gears.

The only service that may be required involves little more than plug-in module replacements – if and when necessary – and occasional lamp changes, plus clearing of coin jams should they occur. The internal computer design incorporates highly reliable, latest state-of-the-art circuits. The electronics of the entire GAMEX machine are manufactured to the high quality standards of the computer industry.

### **65 MODELS IN ONE MACHINE**

There are four basic GAMEX configurations—single coin, 3-line pay, 5-line crisscross, and 5-coin multiple. But their completely modular construction makes possible all industry-accepted machine configurations—a total of 65 different models. This means you can mix, match, or change configurations to suit particular management needs as well as customer preferences. The modular parts required for each can be added in the field, and are inter-changeable from one model to another. The same universal board is used for all models, and machine options (see other side) are selectable by patch plugs on the board. It is necessary to stock only the basic board.

#### **INCREASED REVENUES**

The high reliability, low maintenance, faster operation, and fool-proof security built into GAMEX solid-state slot machines provide a revenue-boosting combination that assures extremely fast payback on machine investment. The virtual elimination of machine downtime in itself makes the GAMEX machine a profitable choice for today's casino.





No other machine provides the high security and self-diagnostic features of the GAMEX solid-state slot machine.

An internal Security Alert and Function Evaluator system – known as the SAFE system – includes a computer-controlled system of sensors engineered to perform two critical functions. The first is to detect any tampering with the machine, and instantaneously stop further play. The second function is the detection of any abnormal functioning, again instantaneously stopping play. In both cases, an internal display – the SAFE system panel – indicates by means of indicator lights the area of tampering or machine malfunction. The system also triggers a flashing light on the top display, or if tied into a computer, it will print out and alert management.

The diagram of the SAFE system panel below shows how each indicator light is labeled to quickly indicate machine status.



# The unique Gamex security alert and function evaluator (safe) system

### **GAMEX OPTIONS**

Bell Fruit Standard – Popular fruit symbols.

Jackpot Only – bars and blanks. The Lucky Bank Roll – dollar symbols. Bars Any – three bars in any position on three reels wins.

Wild One – a wild symbol to maximize your win.

**Cherry Special** – pays 3 on one cherry rather than 2.

**Pays on Blanks**—a mystery pay on blank symbols.

**Crazy Reel**—random rotation of reels in either direction.

All machines contain the necessary electronics for any of the above options and can be converted any time with ease.

### **GAMEX SYSTEM 2800**

GAMEX solid-state slot machines are equipped with a computer interface that permits ready incorporation of the machines in the GAMEX System 2800, a computerized system for data gathering and analysis of casino table games and slot machines.

Each machine is equipped with the necessary logic and intelligence to feed information and statistics to the system minicomputer, accounting for coin in, coin dropped, percentage of yield and other designated inputs, plus readouts from the machine's internal SAFE system. These inputs are part of a complete accounting report on each machine and all machines as a group. Slot summaries provide current, monthto-date, and year-to-date data covering all aspects of machine operation.

In the field of solid-state coin operated games and casino data acquisition systems, GAMEX is without peer in developed proprietary hardware and operating experience. Write or call for full information about the GAMEX solidstate slot machine or System 2800.

# Gamex Industries, Inc.

3084 South Highland Drive Las Vegas, Nevada 89109 (702) 732-7526-A wholly-owned subsidiary of Centronics Data Computer Corp. 732-9526

# GAMEX ELECTRONIC SLOT MACHINES

New Standards For Player Appeal Security Reliability Versatility

Model 101

GAMEX<sup>®</sup> Gamex Industries, Inc.

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# The Gamex Model 101 Electronic Slot Machine

### **Electronics and Earnings**

What's the advantage of the Gamex Electronic Slot Machine? Earnings! At first glance it looks like any other slot machine. There's a handle and reels that spin and bounce a little when they stop. But on closer examination there's a difference, a difference that is most noticeable on the bottom line.

At the heart of every Gamex machine is a tiny computer, a microprocessor that no one can cheat. The microprocessor controls an electronic system that doesn't wear out, a system that protects the casino's investment by permitting game changes to accommodate the uncertainties of changing player tastes.

On the pages that follow we've pictured a number of the most popular Gamex machines and we've also illustrated eight reasons why players prefer Gamex. No other machine can attract and hold a player like a Gamex. Player appeal builds earnings and so does modern computer technology.

### **Electronic Security**

Gamex's exclusive SAFE system increases revenues by eliminating cheating losses. It is impossible to set up a win, even if the front door were removed to give a cheater full access to the interior of the machine! An intruder can't defeat the SAFE security system because it is controlled by the tiny microprocessor. The system continuously monitors play, providing full protection against stringing, reel walking, drilling and other attempts at cheating. Any deviation from the normal sequence, any touch of the reels, any breach of the cabinetry immediately stops play.

### **Electronic Reliability**

Electronic components don't wear out. The electronic Gamex slot machine is engineered to run continuously, twenty-four hours per day, every day of the year. The payout can't vary due to wear and tear. There are no adjustments, no gears, clutches, brakes, brushes or mechanical stops. There is nothing to lubricate. The machines continue to produce revenues, year after year.

### **Computer Versatility**

It takes just a few minutes to convert a Gamex slot to a totally different game. New programs for new games literally plug in, new programs for games we haven't even thought of yet. Reel strips are easily changed. The reels can even be made to run in opposite directions. Changing coin denomination takes just a few minutes and the display of the super jackpot dollar amount is easily changed without removing the glass.

Model 101 computer versatility also includes the ability to connect to a central computer for on-line operation. Every transaction is recorded in memory in the slot machine. This data can be transmitted to a central point for auditing and analysis.

# The Ultimate in Security and Reliability

Gamex has applied modern computer technology to produce a slot machine with a parts count that is a fraction of that of electromechanical and mechanical machines. Service technicians do not need slot machine or computer background to maintain the machines. A built-in diagnostic system and the SAFE panel pinpoint problem areas. A plug-in module approach is used throughout the machine so repair time is limited to the minute or two that it takes to unplug the faulty reel, electronic module or other component and plug in its replacement.

GAMEX

A A

# The SAFE System –

## **Built-In Testing and Cheat Detection**



Gamex's exclusive SAFE system continuously monitors play and alarms any deviation from the normal sequence. Play is stopped immediately when there is a malfunction or an attempted cheat and an array of lights on the SAFE system panel pinpoints the problem. In addition, the machine can transmit an alarm signal to a central casino monitoring point if desired.

### Meters Plus— An Internal Audit System

Gamex slot machines are equipped with non-resettable meters in accordance with casino and state requirements. In addition, every transaction is recorded in memory in the slot machine. This data cannot be altered and provides an accurate check on revenues.

## **Power Failure Protection**

The Gamex Model 101 slot machine is equipped with a battery back-up system that "remembers" machine status should power be interrupted. When power is restored, play, even payout, is automatically resumed exactly at the point where it left off.

### **Computer-Controlled Coin Monitoring**

Every coin movement is monitored using the most sophisticated system in the industry. Every coin is checked for size, weight and magnetic properties. Stringers are defeated because both direction and speed of coin motion is monitored. No string cutter is required. It is also impossible to have a runaway hopper. Each win is electronically verified before payout starts and then the computer literally counts each coin as it is dispensed.

## The Patented Gamex Reel

The patented Gamex reel is driven by a sealed stepper motor that never requires lubrication. There are no contacts, brushes, wipers, gears, brakes or stops and the reels may be individually unplugged for inspection.

An electronic, random number generator is used to guarantee random wheel stopping. A coded pattern in the side of the plastic, non-magnetic reel is read optically as it spins. These readings are used to detect and alarm any change in speed while the reel is spinning and any movement in position once it stops.

# Versatility That Protects the Casino's Investment

Gamex has applied modern computer technology to the gaming industry, providing a slot machine that cannot become obsolete. The Gamex microprocessor can be programmed to do almost anything. Programs are provided by Gamex stored in a "PROM", a *P*rogrammable *R*ead Only *M*emory. New PROMs literally plug in to change the

odds or the payout schedule or even the entire game. This same modular plug-in approach is used throughout the machine to facilitate other necessary changes. Player tastes will surely change and Gamex has taken every possible step to protect the casino's investment.



Gamex Super Jackpot awards can be changed in minutes. A decal showing the dollar amount is simply removed from the inside of the glass and replaced with one showing the new award. Gamex can supply custom glass to complement casino decor. Changing glass is a simple procedure that involves the removal of only four screws for the bottom glass and only two screws each for the center and top glass.

### **Central Computer Control**

All Gamex slot machines can be connected to a central computer through a selection of Gamex communications interfaces. The interfaces may be factory installed or added to machines already in service.



Gamex Model 101 slot machines can transmit data to a central computer or directly to a printer for statistics reporting.

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	0105 A A C	4371.90	1156.85	250.00	
-	0106 A A B	9328.55	1137.05	435.00	906.85
•	0103 A B C	9171.15	2120.25	360.00	702.05
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# Standard **Features**

- Attendant call button
- Jackpot buzzer
- Win display
- Coins entered display
- Extra wide two inch reels
- Low boy cabinet
- Walnut finish
- Microprocessor electronics
- Internal audit system
- SAFE security system
- Self-test
- Power failure protection
- Five, ten and twenty-five cent coinage

## Standard **Configurations** Features

- Three line, bell fruit
- Three line, jackpot only .
- Five line, bell fruit
- Five line, jackpot only
- Five coin multiplier, bell fruit
- Five coin multiplier, jackpot only
- Five coin multiplier, left right—right left, bell fruit
- Three coin multiplier, left right right left, bell fruit
- Three coin buy pays, left right right left, bell fruit

Gamex Model 101 low boy cabinets measure 16.5" wide by 29.5" high by 16.0" deep (cabinet only). Dimensions including handle, tower light and tray are 19.5" wide by 37.5" high by 19.5" deep.

# Optional

- Oak finish
- . High boy cabinet
- Slot stands
- Special locks
- Remotely controlled electric locks
- Handle interlock.
- Fan thermostat
- Jackpot bell .
- Tower light
- . Special glass
- Special tray
- Special reel symbols
- Easy Way play
- Auto play on last coin
- Central computer interface
- Susan B. Anthony dollar coinage
- Fifty cent coinage

All Gamex Model 101 slot machines meet New Jersey, Nevada and International specifications.

# **Training and Service**

Gamex provides all customers with local service backed by a team of engineers at Gamex headquarters in New Hampshire. Local representatives are furnished

with spare parts and comprehensive documentation and are thoroughly trained in all aspects of machine service.



Gamex Industries, Inc. 21 Park Avenue Hudson, New Hampshire 03051 603-883-1298

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# Instant Keno

Selected Sample Screens & Reports Manual



January 1990



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Instant Keno is an easy-to-play game which many patrons will enjoy playing at their leisure without the need for manual ticket writing.

Instant Keno is designed to accommodate two types of accounts, permanent and promotional. Permanent accounts are the players who return and play on a fairly regular basis. Promotional accounts are set up on an introductory basis to publicize the game, increase play and build the customer base.

#### RULES OF PLAY

Permanent account players purchase an account card, establish a credit balance and are enrolled in a situation similar to other gaming clubs. After enrolling and purchasing an account card, they may play against their credit balance at any time at their leisure.

Promotional accounts are enrolled in groups and are assigned account cards with a pre-set value. These account cards are made available to the player for purchase or provided free of charge as part of a promotion. The player may then play Keno using his/her account card on any AWS at the location.

The player initiates the game by inserting his account card into the AWS. The player's account number is transferred to the Game Controller (GC) for validation.

If the account number is valid, the GC responds by sending the player's current credit balance back to the AWS to be displayed.

While a game is open, all players may bet credits and play their "ticket". However, when the controller closes the game, players may no longer enter picks or wagers.

The player starts by betting any number of credits from his account balance. The player will make his wager by pressing the BET ONE button one or more times. As the BET ONE button is pressed, the number of credits bet will be displayed on the terminal.

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The player may choose to press the button marked BET MAX CREDITS which will cause the configured maximum bet to be displayed. The player selects his picks by pressing the desired numbers on the face of the Automated Writer Station. As in regular Keno, the player may select from 1 to 15 numbers. (The max number of picks is a configurable value.)

The player now has the option to erase his picks using the ERASE button or to play the "ticket" by pressing the PLAY button.

If the player selects ERASE he is required to enter new picks. If the player presses PLAY, the AWS will send the "ticket" to the game controller.

At the end of the "Game Open" period, the GC will "close" the game and transmit the transactions to the backup file server for duplicate posting and printing on the real-time log.

Next, the GC will request a game draw consisting of twenty random numbers from the Random Number Generator (RNG). Upon receipt of the game draw, the GC will calculate the game results based on the picks, bet, draw and pay table. The GC then transmits the results to the backup file server for posting and logging, as well as posting the amount won or lost to the players' accounts.

The game results are then transmitted to the Automated Writer Stations. The game number will be displayed on the message unit and the game draw will be displayed on the game panel one "ball" at a time. "Hits" will be indicated by changing the display status of the pick to "blinking".

After all numbers in the draw have been displayed, the Automated Writer Stations will display the appropriate winning or losing message and each player's new account balance will be displayed.

Finally, the game controller issues a new "Game Open" to initiate another countdown sequence.

If the player wishes to repeat the exact picks and bet of the previous game, he will need only to press the REPLAY button to repeat the game cycle. As an extra feature, if the player holds the REPLAY button longer than 1 second, a message will display requesting that the player enter on the panel the number of times he would like the same picks and wager to be replayed.

#### Chapter 1:OVERVIEW

The player may press the CALL ATTENDANT button for help. Also at any point, any player may remove his card to end his participation in the current series of games.

Players may redeem their account balance at any time by proceeding to a designated redemption station. They may also deposit into or close their accounts at the same booth.

It is also possible to win a Bonus Prize by hitting a pre-configured Bonus Prize condition, such as 6 out of 7. The Prize conditions and prizes are stipulated by the Prize definitions in the configuration section of the Manager Functions menu. A Bonus Prize win will be announced on the AWS display screens, and will display on the Security Monitor screen and the AWS Activity Monitor screen if active.



# INSTANT KENO HARDWARE DESIGN



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### SYSTEM HARDWARE

Physically, the Instant Keno system will consist of up to 254 Automated Writer Stations (AWS), a fiber optic multi-drop network connecting the Automated Writer Stations, a personal computer (PC) serving as the main processor and file server, a PC serving as the backup file server, a Random Number Generator (RNG), a number of PC workstations, card readers, printers, a card punch machine and a token ring network connecting the personal computers.

There will be a Plastic Fiber Universal Connector (PCON) between the AWS units and the main processor to convert the fiber optic light signals to digital data signals.

#### GAME CONTROLLER/MAIN FILE SERVER

The Game Controller (GC), located on the Main File Server PC, will handle all communications with the Automated Writer Stations through the fiber optic network. It opens and closes games, logs all game transactions and calculates all game results.

The GC will also communicate with a Random Number Generator (RNG). The RNG will provide all game draws upon demand from the GC.

#### BACKUP FILE SERVER

The next device on the network will be the Backup File Server which, in addition to providing all the necessary data redundancy, will print the real-time log of all game transactions as they occur. The End-of-Period reports are also printed from the Backup File Server.

The Backup File Server will usually display the Security Monitor Screen which notifies manager personnel of security problems and exceptions. Such exceptions may include large wins, problems at a specific writer terminal, or any other type of problem alert that will require some type of action on the part of management personnel.

#### Chapter 2:HARDWARE

#### WORKSTATIONS

2:2

Also on the network will be one or more workstations that will be utilized for:

- 1. The establishment of accounts and recalling account data.
- 2. The establishment and maintenance of employee records.
- 3. Cashing out account balances up to the total account balance.
- 4. Recalling detailed account transactions for the resolution of disputes.
- 5. Maintenance of cash drawer balances.
- 6. Display of the writer terminal activity.
- 7. Punching player account cards.
- 8. The establishment and maintenance of the game configuration and payout schedules.
- 9. All accounting, analysis and audit reports.
- 10. Employee password maintenance.

#### CARD READERS

Each AWS has a built in card reader which is used to send the player account number to the Game Controller. In addition, selected workstations will have a card reader attached. This card reader is used to automatically input the player account number when an Operator is performing account functions. The player's account card must be in the card reader when account withdrawals are being performed. A manager may override this requirement.

#### AUTOMATED WRITER STATION (AWS)

The AWS has an eighty number Keno display/touch entry pad. This pad will be used by the player to enter his game picks (spots). This same pad will also be used to display the game draw. The unit has two sixteen character display screens which are used to inform the player of his current account balance, game number, wins and any system messages. The last componenent of the AWS unit is the card reader which is used to initiate Keno game activity and to read the player's account number.

#### WORKSTATION EQUIPMENT

Workstation equipment consists of personal computers and one or more printers.

#### Personal Computers

Though the several PCs may not be identical, they will be similar and generally operate in the same manner.

#### Printers

The personal computer uses one or more printer(s) to print reports. Most printers have a carriage which will print on standard 8-1/2" wide paper, while others have a longer carriage which will print reports on 14" wide paper.

### SYSTEM OVERVIEW

Instant Keno is a new game which provides Automated Writer Stations (AWS) which may be placed in more relaxing atmospheres. The AWS concept allows players to select numbers on an easy-to-use display terminal, enter a bet and play a Keno Game without the need for manual ticket writing. The object of the new game is to accomplish the following goals:

- 1) Speed up current Keno games reduces a ten minute game to as little as thirty seconds.
- 2) Bring a Keno game to every player in newly-approved gaming areas such as lounges and other locations. Keno Units could also be placed in locations like "quick" Keno lounges.
- 3) Eliminate the need for Keno runners.
- 4) Eliminate the need for Keno writers.
- 5) Establish a unique, convenient cashless system.
- 6) Automate the Keno accounting process.

#### INSTANT KENO ADVANTAGES

Instant Keno's dramatic improvements over traditional Keno can be attributed to two features:

The first is the cashless-based design. Instant Keno is played on account. Keno accounts are established with a configurable minimum credit balance. These preenrolled accounts and associated account cards are made available to the player who will then use them to play Keno. All Keno game play is recorded to the player accounts in the form of credits.

The second improvement is the Automated Writer Station (AWS), a key component of Instant Keno. It is designed to be placed in areas convenient to the more casual player.

In summary, Instant Keno allows a player to play Keno without employee intervention. Thus, Instant Keno dramatically improves the fun, speed, security and accountability of a Keno game.

Instant Keno January 11, 1990 ©Electronic Data Technologies, Las Vegas, Nevada



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### SECURITY

#### SECURITY CONTROLS

Instant Keno was designed with security and control as the prime consideration. The design, which consists of player terminals connected to a central game computer, allows close control of all transactions. The central computer, fileserver, and Random Number Generator (RNG) are kept in a locked enclosure. Since the player terminals only pass the "tickets" to the controller, tampering with the terminal can provide no advantage in the game. Since all transactions are electronic and carefully logged and monitored, any tampering would be reported and logged. The game is closed prior to the game draw being obtained from the Random Number Generator, so there can be no tampering which would affect the game results.

All administrative activity requires an employee username and password to be entered prior to activity, and all adjustments to a player account or to an employee record are recorded and available for monitoring.

The Random Number Generator is monitored to prevent tampering. Any loss of power to the RNG causes a controlled Keno Game Controller shutdown to prevent any further activity.

The operation of the system, including the Paytable, is based on configurations which determine the payouts and the way the game is run. These configuration files, which are described in further detail in this document, are protected by a modified Checksum system which will warn of any unauthorized changes which will affect the game results.

Access to the system programs and the databases via the Token Ring network requires a network password. This virtually eliminates any tampering with the programs or databases by adding an unauthorized workstation into the network.

#### Chapter 3:SECURITY

#### EMPLOYEE TRACKING

The Employee Tracking system adds greatly to the security of the system. Any transaction completed on a workstation is logged with the following information:

Date and Time Workstation Number Employee Username Player account adjusted if applicable The specific function performed

This information is available on a real time monitor, as well as in printed reports. Any transaction which involves large amounts of money or account credits requires a Manager authorization code to complete. The Manager code used is also recorded in this situation. This capability makes it very difficult for anyone to tamper with accounts or change the game configuration without detection.

#### CASH DRAWER ACCOUNTING

The Cash Drawer Accounting system used in conjunction with the Employee Tracking system makes it much more difficult to perform unauthorized transactions.

Any cash removed from a cashdrawer without a workstation entry would cause the cashdrawer accounting system to show a drawer short situation during the end of day procedures. The drawer short situation is logged to the Employee record which can be accessed by a Manager on a workstation screen, as well as displaying on the printed reports.

The workstation will not allow a withdrawal without recording it as either a cashdrawer bleed or a player account payout. Both are logged on the Audit Log.

Basically, any cash transaction, whether authorized or unauthorized, will be detected and reported.

3:2

#### SECURITY MONITOR

This screen is used to display any security messages that may be active on the system. Security messages will be displayed if a Handpay or Bonus Prize occurs, or if the CALL ATTENDANT button is pressed on any AWS unit.

This screen is designed to emit audible warning sounds when certain events occur. One beep indicates that a CALL ATTENDANT key has been pressed on one of the AWS units. Three beeps indicate that a Bonus Prize has occurred. Should a Handpay Prize occur, the monitor will activate a warning sound. The Handpay Prize must be cleared to allow the system to continue to operate in a normal manner.

08/29/	89 INSTANT KENO SECURITY MONITOR	11:06:12 _
Game 1	HANDPAY PRIZES PENDING	- ATTNDT -AWS-Id-
3 Game 1 1	BONUS PRIZES PENDING WS -AWS-Id- Acct-Id Win Description Catches/PicksTime	
3 4 5 6 7		
9  Total	Stn Trns KSCADE	

#### GAME ACTIVITY

This screen displays a real-time log of Automated Writer Station activity. It presents the Game Number, Type, AWS Number, AWS Id, Player Account Id, Name of Player, Amount Bet and the time the transaction was processed.

A separate section on the bottom of the screen displays the most recent Workstation activity on a real-time basis and a cumulative total of transactions.

11/07/89 GAME ACT	IVITY FOR ACCOUNTING DA	03:15:40
GameType AWS -AW	S-Id- Acct-IdNa	meAmt Processed
	Select a Function:	
	Security-Noni Work-Stn-Noni Game-Moni Backup-Data Kxit	
 Total Stn Trns	WORKSTATION ACTIVIT	

3:4

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#### FRONT END CONTROLLER MONITOR (FEC)

The FEC Monitor screen displays error messages which warn of communication problems with the AWS units. Should any abnormal situation occur at one of the AWS units, the FEC monitor will log and display an error message describing the problem. The message will include the AWS identification, the error identified and the time the error situation occurred. The error message activity will also be recorded on the audit log. Any tampering with the fiber optic network connection or the power to an AWS unit will be logged and displayed.

Communications between the FEC and the Automated Writer Stations are checked with the Cyclic Redundancy Check (CRC) message checking procedure. Unauthorized transmissions on the network would be rejected and voided.

#### TRANSACTION MONITOR

The Transaction Monitor is a screen that may be accessed from any workstation, under the System Monitors Menu. It is a real time monitor screen that may also be used to view previous transactions that have taken place on the system. It is an Audit Log monitor which displays all activity on the system, including both workstation and game transactions. It will display any changes to the system with the workstation number and Employee Username, the time of all ticket vends and draws, and any adjustments made to a player account.

08/29/89			INSTANT Audit Log	KENO Monitor		03:56:00
	·····		TRANSAC	TIONS		
	WS	Username	Class	Type	Time	
	a	SYSTEM	Gase	Ticket Vend	04:06:30	
	a	SYSTEM	GRIE	Ball Draw	04:06:30	
	٥	SYSTEM	Gane	Ticket Calc	04:05:31	
	٥	SYSTEM	Game	Ticket Vend	04:06:31	
	0	SYSTEM	Game	Ball Draw	04:06:32	
	a	SYSTEM	Gaue	Ticket Calc	04:06:32	
	1	SAWYER	Manager	Cfg Game	04:19:59	
	1	SAWYER	Manager	Down Ld Cfgs	04:20:01	
	1	SAWYER	Adjustment	Debit Acct	04:28:05	
	1	SAWYER	Data Entry	Clr Prize	04:28:33	
	1	SAWYER	Adjustment	Debit Acct	04:30:09	
4	1	SAWYER	Data Entry	Clr Prize	04:30:29	
	1	SAWYER	Manager	Cfg Paytable	04:36:58	
	1	SAWYER	Manager	Cfg Casino	04:39:46	

#### CUSTOMER DISPUTE MONITOR

This screen is accessed from any workstation using the System Monitors menu. Its primary purpose is to access the Audit Log to check the validity of customer complaints. However, since it provides all required information to validate a winning ticket, it is useful in maintaining security for the Instant Keno game as well. It allows the information on any ticket vended to be retrieved for immediate viewing. A hard copy of the information is also printed on the Audit Trail printer. The screen displays the following information:

Game Number, type of transaction, the AWS number and identification, the player account number and player name, the picks selected on the vended ticket, the game draw, the calculation on each ticket with the results and time processed. Bonus and Handpay Prizes are indicated with the same information.

10/	12/89 INSTANT KENG Customer dispute monitor	08:11:07
Game	aType AWS -AWS-Id- Acct-IdNameAmt 1	rocessed
839	Ticket Vend 002 SHLF2RGT 21 RICHARD GRIECO \$ 5.00 Picks 25	10:54:48
839	Draw 25 27 21 70 12 63 54 48 15 10 37 52 58 73 55 30 06 34 20	33
839	Ticket Calc GO2 SHLF2RGT 21 RICHARD GRIECO \$ 15.00	10:54:51
839	Prize Ticket BASEBALL CAF 01 out of 01	
842	Ticket Vend 002 SHLF2RGT 21 RICHARD GRIECO \$ 5.00	10:55:19
	Picks 25	
842	Draw 43 64 41 50 58 28 52 37 22 72 14 24 42 17 27 73 16 11 33	05
842	Ticket Calc 002 BHLF2RGT 21 RICHARD GRIECO \$ 0.00	10:55:22
845	Ticket Vend 002 SHLF2RGT 21 RICHARD GRIECO \$ 5.00	10:55:50
	Picks 25	
845	Draw 44 26 63 54 27 32 16 04 47 05 17 23 55 58 41 25 31 10 66	35
845	Ticket Cale 002 SHURARGE CARACTERISTER 9 \$ 15,00	10:55:53
845	Prize Ticket BASEBALL CAP 01 out of 01	
646	Ticket Vend 002 SHLF2RGT 21 RICHARD GRIECO \$ 5.00	10:56:20
	Picks 25	
848	Draw 68 46 20 38 66 07 08 72 28 56 24 73 23 62 51 76 77 48 44	59
848	Ticket Cale 002 SHLF2RGT 21 RICHARD GRIECO \$ 0.00	10:56:23
= Fort	ward Backward Top Bottom Select Unselect Return Ne	in-Menu 🛁

#### Chapter 3:SECURITY

#### WORKSTATION ACTIVITY MONITOR

This screen displays a real-time log of all workstation activity. It displays data from the Audit Log related to the workstations, including the following:

Workstation status with the workstation number, Username of the present Operator, the type of transaction last processed and a cumulative total of transactions.

A real-time display of transactions from all workstations active on the system. It presents the workstation number which processed the transaction, the Username of the Operator, the class and type of transaction and the time the transaction was processed.

The number of bad transactions, the last transaction delay, the maximum transaction delay and the average transaction delay.

The information presented on this screen will alert management to any unusual or unauthorized activity which has occurred or is occurring on any workstation on the system.

	29/1				INSTANT KENG STSTEM NONITOR	04:07:
					WORKSTATION PROCESSES	
No	8t	Trns	Id	Usernaze	Program Nama	-Loaded -Login-
1	Dn	a				
2	Dn	٥				
3	Dn	0				
4	Ŭ₽	. 0	4	DON	w:\source\workmoni.exe	16:07:10 15:50:25
5	Dn	0				
6	Dn	0				
7	Dn	0				
8	Dn	0				
9	Dn	0				
10	Dn	σ				
11	Dn	0				
		•				

#### 3:8

#### EXCEPTION REPORTING

The hardcopy Exceptions Report detects and highlights all unusual activity on the system, whether involving workstations or Automated Writer Station terminals. The activities highlighted on this report will also be found on the Audit Log, and game activities will also be found on the hardcopy printed by the Audit Trail printer. The activities highlighted by this report include:

Workstation reboots AWS power failures and communication failures All Front End Controller error messages Card Reader failures Call Attendant

#### Chapter 3:SECURITY

#### CASH DRAWER MAINTENANCE

The Cash Drawer maintenance function is accessed when any type of cash drawer maintenance is desired. It is an easy to use menu-driven system of screens with prompts to assist in the selection of the desired tasks. With this system of screens, the following tasks can be accomplished:

Sign-in - Logs the cashier into the system and opens an activity log and the cash drawer account for the login period. Establishes opening balance.

Sign-out - Logs the cashier out of the system and closes out the activity log and the cash drawer account.

Fills - Amount of money added to provide additional cash on hand.

Bleeds - Money removed from drawer during shift.

Force-out - Procedure which allows a manager to log a cashier out in an abnormal situation.

08/24/89					INSTA Syst:	NT KEI Em mei	10 10					10:25:52
Data Entry	Man	ager )	funct:	ions	8 <b>7</b> 6	tea X	onito	rs	Repor	ts	Help	Logoff
Accounts		2	3	4	5	6	7	8	9	10		
Promotions Punch Cards		12			1			<u> </u> ]	19	20		
Cashier Dra		22							29	30		
	31	32				ħΙ			39	40		
	41	42							49	50		
	51	52							59	60		
	61	62	63	64	65	66	67	68	69	70		
	71	72	73	74	75	76	77	78	79	80		

#### CASHIER SIGN-IN AND SIGN-OUT

This task allows the cashier to sign-in and sign-out of the system, and establish the opening and closing cash drawer balance. The task is accessed from the Data Entry Menu. The Cash Drawer Maintenance screen will display. Other cashier functions supported include Cash Drawer Fills, Cash Drawer Bleeds, and Force Sign-Out of a cashier.







Petitioners Ex. 1007 App'x H Page 1

# CUSTOMER ACCOUNT MAINTENANCE

These functions are used to maintain the player and the game-related databases. The activities could be handled by personnel in the cashier's cage or some other customer service-related location. The following tasks can be performed:

Player enrollment and maintenance of player accounts.

Establishment of Promotional or Temporary Player accounts and maintenance of the accounts.

Punching the player cards.

The pull-down menu lists the major functions available.

			I	NSTAN Syste	T KEN N NEN	а 0				10:26:52
Ha	nager F	uncti	ons	Syst	en Mo	nitor	6 F	eport	.6	Help Logoff
٦	2	3	4	5	6	7	8	9	10	-
	12							19	20	
ver	22	1	<b>, F</b> ,					29	30	
31	32				ħ			39	40	
	42	Π						49	50	]
51	52							59	60	
61	62	63	64	65	86	67	68	69	70	
71	72	73	74	75	76	77	78	79	80	
	Han 31 41 51 61 71	Hanager 2 2 12 31 32 41 42 51 52 61 62 71 72	Hanager Functi 2 3 12 12 31 32 41 42 51 52 61 62 63 71 72 73	Image: Functions       2     3       12       22       31       32       41       42       51       52       61       62       63       64       71     72       73     74	INSTAN STSTE Hanager Functions Syst 2 3 4 5 12 22 31 32 41 42 51 52 51	INSTANT KEN         HERRAGET Functions       System Max         2       3       4       5       6         12       12       12       12       12         31       32       12       12       12       12         41       42       12       14       14       14       14         51       52       53       64       65       66         71       72       73       74       75       76	INSTANT KENO         SYSTEM MENU         Hanager Functions       System Monitor         2       3       4       5       6       7         12       12       12       12       12       12       12         31       32       32       12       12       12       12       12         41       42       41       4	INSTANT KENC         SYSTEM MENU         Hanager Functions       System Monitors       F         2       3       4       5       6       7       8         12 </td <td>INSTANT KENO SYSTEM MENU         Hanager Functions       System Monitors       Report         2       3       4       5       6       7       8       9         12       12       12       19       29       39       19         31       32       12       19       29       39         41       42       49       59       59         51       52       59       56       67       68       69         71       72       73       74       75       76       77       78       79</td> <td>INSTANT KENO SYSTEM MEMU         Hanager Functions       System Monitors       Reports         2       3       4       5       6       7       8       9       10         12       12       12       19       20       29       36         31       32       10       19       20       39       40         41       42       10       19       20       39       40         51       52       53       64       65       66       67       68       69       70         61       62       63       64       65       66       67       68       69       70         71       72       73       74       75       76       77       78       79       80</td>	INSTANT KENO SYSTEM MENU         Hanager Functions       System Monitors       Report         2       3       4       5       6       7       8       9         12       12       12       19       29       39       19         31       32       12       19       29       39         41       42       49       59       59         51       52       59       56       67       68       69         71       72       73       74       75       76       77       78       79	INSTANT KENO SYSTEM MEMU         Hanager Functions       System Monitors       Reports         2       3       4       5       6       7       8       9       10         12       12       12       19       20       29       36         31       32       10       19       20       39       40         41       42       10       19       20       39       40         51       52       53       64       65       66       67       68       69       70         61       62       63       64       65       66       67       68       69       70         71       72       73       74       75       76       77       78       79       80

#### Chapter 4:CUSTOMER

#### ACCOUNT MAINTENANCE

4:2

The account maintenance function is the main function which is accessed when any type of customer account maintenance is desired. It is an easy-to-use menudriven system of screens with prompts to assist in the selection of the desired tasks. With this system of screens, the following tasks can be accomplished:

Enroll Permanent Players "Quick Enroll" Permanent Players Select any enrolled player account by ID or last name Withdraw or deposit credits Adjust account balances Combine or transfer accounts Change account names or delete accounts List and clear Bonus Prizes



#### ENROLLMENT OF PLAYERS

The Enrollment of Players task is broken into two sub choices: Permanent-Enroll or Abbreviated-Enroll. Abbreviated-Enroll is designed to allow the Operator to "Quick Enroll" a player or series of players. In this case, the additional data would be filled in by later accessing the player record and completing the full enroll data screen.

03/21/89	ENROL	INSTANT KENO 0 L PERMANENT ACCOUNT	4:11:00
Name Preferred	Xane		
Title Code	- Sour	ce Code	<u> </u>
	Titles	Sources	
	Code Description 1 2 3 4 5 6 7 8 9 9	Code         Description           1	

### SELECT-BY-ID AND SELECT-BY-LASTNAME

Select-By-ID and Select-by-Lastname allow the retrieval of a player's account for viewing or performing various maintenance functions. The account desired is selected by typing in the player's identification number or lastname. The Display/Update Account screen will display with all current account data visible.

03/21/89	INSTANT N Display / updat	ENO B ACCOUNT	04:31:40
Acct-Id	Naue		
Prefname		Account Type Source Code	
City		VIP Birth	aday/
Bad Addr _ Phone	()	Couments	
Enroll Date	ACCOUNT S	INMARY Acct Expire	98
Last Play		YTD	STD
Deposit+Won+JP \$	ŧ	+ +	
Withdraw+Lost #	*		
Credit+Debit \$	•	_ ! !	
Acct Balance #	<u> </u>	<u> </u>	

#### WITHDRAW/DEPOSIT

In order to withdraw from or deposit to an account, the Select Account by Acct-ID window must be displayed. The player's account card must be inserted in the card reader. If the account card is not available, type in the desired account ID. A Manager Override is required if the account card is not available. The Account Withdraws or Account Deposits screen will display with all current account data visible and allows the Operator to withdraw from the selected account.

#### NOTE:

The Operator must be signed-in as a Cashier in order to accomplish a withdrawal.



Chapter 4:CUSTOMER



#### DISPLAY ACCOUNT DETAIL

Display Account Detail displays a screen showing account information summarized under four time periods: Day-to-Date, Month-to-Date, Year-to-Date, and System-to-Date. By selecting "Next" or "Back", the next or previous player accounts can be viewed. The history of adjustments that have been made on the account may also be displayed.

27/89		INSTAN Display Acc	T KENO GUNT DETAIL	11:22:
Acct-Id		Nage		
		CRE	DITS	
	DTD	MTD	YTD	STD
Won	ŧ	*	. *	
Lost	ŧ	*	. *	- !
Handpays	*	*		- :
Deposit	ŧ	. *		- !
Withdraw	ŧ	. + <u></u>		!
Credit	*	. *		
Debit	*			*
Balance	*		_ *	
Balance	.djustment-Hi	\$	Back Return	¥ Kain-Wenu

#### Chapter 4:CUSTOMER

#### UPDATE PLAYER ACCOUNT

The Update Player Account task allows a player's record to be changed or updated. This procedure allows the operator to change a player's name, delete or view a player's record, combine accounts, transfer account balances, and display a list of pending bonus prizes.

PROCEDURE FROM THE DISPLAY/UPDATE ACCOUNT SCREEN

06/05/89		09:02:44
Acct-Id Prefname Address City State Bed Addr _ Phone ()	Select a Function: Update View-Detail Deposit Withdraw List-Adjustments Adjust-Balance Change-Name Combine Transfer Player-Delete Prizes-List Wort	Type ode quired Acct Expires
Enroll Date Last Play DTD Deposit+Won+JP \$	Back Back Help Meturn Main-Menu	D 8TD 
Cradit+Debit \$ Acct Balance \$	Display Prev Adjustments	

4:8



# PROMOTIONS

Promotional accounts are designed to introduce new players to the Instant Keno game and encourage them to become permanent players. Promotional account cards can be sold, given away or distributed in many ways.

Enrolling and maintaining promotional accounts is very similar to permanent player account enrollment and maintenance. Access to the screens is from the Data Entry Menu.


#### ENROLL PROMOTION

When "Enroll Promotion" is selected, a screen appears that allows the promotion name, the starting account balance and the source to be entered. A pop-up menu will then appear with the choices "enroll" or "cancel." A help screen is available to explain the choices.

06/02/89	INSTANT KENG Enroll promotion	10:31:04
Promotion Name	Starting A	Select & Function: Cancel Enroll
Source Co	de	Enroll Promotional Acet
	Sources Code Description	
	1 2 3	
	4 5	
	×	

# SELECT PROMOTION BY ID OR PROMOTIONAL NAME

Select-By-ID or Find-by-Promo-Name allows the retrieval of a promotional account for viewing or performing various maintenance functions. The account desired is selected by typing in the promotional account ID or name. The Display/Update screen will display with all current account data visible.





Chapter 5: PROMOTIONS

03/22/89		DISP	INSTANT K Lay / Update	BNO PROMOTION	01:10:0
Prozo	tion-Id		Naze		
Name Address City State	Promotion  Zip	Coordina	tor	Starting Bal Available Cards Sold Receipts	# of Accts Amount
Phone				Balanca Due Comments	•
Enroll C Last Pla	y	 DTD	PROMOTION 8	UMMARY P	STD
Deposit Withdray Credit+F Acct Bal	Hon+JP \$_ +Lost \$_ Debit \$_ Lance \$_			** ** **	

# ADD AND TERMINATE PROMOTIONAL ACCOUNTS

Add Promotional Player Accounts allows player accounts to be added to the Promotion. Terminate Promotional Accounts allows player accounts to be deleted.

06/05/89	INSTANT KENG SPLAY / UPDATE PRONOTION	10:55:02		
Promotion-ID Promotion Co-or Name Address	Select a Function: Update View-Detail List-Adjustments	Select & Function: Cancel Add-Account Return Main-Menu		
City Zip State Zip Phone () Star	ADD PROMOTIONAL ACCOUNT # of Accts Amount ting Bal #	Add Account to Promotion		
Enroll Dats Last Play	Enter Account ID:	o Expires 		
Deposit+Won+JP # Withdraw+Lost # Credit+Debit # Acct Balance #	Add Accounts to Promo			



## CLOSE PROMOTION

Close Promotions allows promotions to be closed.

06/02/89 D:	INSTANT KENG ISPLAY / UPDATE PROMOTION	10:45:07
Promotion-ID	Select a Function:	Select & Function:
Promotion Co-or Name Address	Update View-Datail List-Adjustments	Close a Promotional Acct
City StateZip	Add-Accounts Terminata-Accounts Deposit Close-Promotion	d \$
Phone ()	Next Back	
Enroll Date Last Play DTD	Help Return Nain-Menu	Promo Expires
Daposit+Won+JP \$ Withdraw+Lost \$ Credit+Debit \$ Acct Balance \$	Close an Active Promo	



# REPORTS

The Reports Menu is used to generate a number of timely and accurate Instant Keno Reports. End-of-Periods are run first to update period totals for report printing purposes. The reports provide listings and summaries of system activity and security data.

Ten reports plus selected audit reports can be printed from the Reports Menu. The reports, in the order they display on the menu, are:

CASINO TOTALS

PROMOTION TOTALS

AWS DAILY

AWS MAINTENANCE

AWS HISTORY

SHIFT END CASH DRAWER

SHIFT HISTORY CASH DRAWER

EMPLOYEE SHIFT CASH DRAWER

EMPLOYEE HISTORY CASH DRAWER

COMPLETE AUDIT

OCCURRENCE OF BALLS

## PRINTING REPORTS

All reports are printed using the Reports Menu.





#### CASINO TOTALS

The Casino Totals Report is used to track the totals for Permanent Accounts, Promotional Accounts and the Casino Account for four periods (DTD, MTD, YTD, STD). This report provides information on: Won, lost, bonus prizes, deposits, withdraws, debits, credits and balance. The amounts in each category in the casino account section will be inversely proportional to the sum of the amounts in the Permanent and Promotional account sections. A win in the Permanent accounts section is reflected as a loss in the Casino account.

FIELD	DESCRIPTION
Won	Amount won by Perm Players, the Promos, or the Casino
Lost	Amount lost by Perm Players, the Promos, or the Casino
Prizes	Dollar value of Prizes
Deposits	Dollar value of Deposits
Withdraws	Dollar value of Withdraws
Debits	Dollar value of Debits
Credits	Dollar value of Credits
Balance	Acct Balance of Perm Players, the Promos, or the Casino

#### CASINO TOTALS REPORT

#### Date 01/31/90 Time 09:21:11

Paçe: 1

#### EDT INSTANT KENO EDT Casino Totals for 01/30/90

#### Permanent Accounts

		Daily	Ke	inth to Date		Year to Date		System to Date
Kon	\$	28.50	\$	28.50	\$	28.50	\$	28.50
Lost	\$	20.75	5	20.75	\$	20.75	\$	20.75
handpays	5	17.775.00	\$	15.998.00	\$	19,998.00	5	19,99E.CC
Febasits	\$	755.00	\$	755.00	1	755.00	\$	755.00
withdraws	\$	20,040.00	5	20,040.00	\$	20,040.00	\$	20,040.00
Credits	\$	0.00	5	0.00	\$	0.00	1	0.00
Debits	5	0.00	\$	0.00	5	0.00	\$	0.00
Balance	\$	720.75	\$	720.75	\$	720.75	\$	720.75

#### Promotion Accounts

		Daily	No	nth to Bate		Year to Date		System to Date
Kan	ï	16.50	5	15.50	5	15.50	\$	15.50
Lost	\$	128.00	5	128.00	\$	128.00	\$	128.00
Handpays	5	2,499.75	\$	2,499.75	\$	2,499.75	\$	2,499.75
Decosits	\$	145.00	5	145.00	\$	145.00	5	145.00
Withdraws	\$	2,500.00	1	2.500.00	\$	2,500.00	\$	2,500.00
Credits	\$	0.00	\$	0.00	5	0.00	\$	0.00
<b>Debits</b>	5	0.00	\$	0.00	5	0.00	\$	0.00
Balance	\$	33.25	\$	33.25	\$	33.25	\$	33.25

#### Casino's Account

		Daily	Ko	nth to Date		Year to Date	Sys	tem to Date
Mon	\$	14B.75	\$	148.75	\$	148.75	\$	148.75
Lost	5	22,542.75	\$	22.542.75	\$	22.542.75	5	22,542.75
Deccsita	5	35.00	\$	35.00	\$	35.00	5	35.00
Witndraws	\$	145.00	5	145.00	\$	145.00	5	145.00
Credits	\$	0.00	\$	6.00	5	0.00	5	0.00
Dabits	5	0.00	5	0.00	\$	0.00	\$	0.00
Balance	s	22.504.00	5-	22.504.00	ş-	22,504.00	\$-	22.504.00

#### Accounting Forgulas

Sasing Won = Permanent Lost + Promotion Lost Sasing Lost = Permanent: Won - Handpays ) + Promotion( Won + Hardpays ) Sasing Balance = Sasing( Won - Lost + Decosits - Withgraws - Debits + Drepits )

#### End of Report

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#### PROMOTION TOTALS

The Promotions Totals Report is used to track the totals for Promotional Accounts for four periods (DTD, MTD, YTD, STD). This report provides information on: Won, lost, bonus prizes, deposits, withdraws, debits, credits and balance.

FIELD	DESCRIPTION
Won	Amount won by promotion accounts
Lost	Amount lost by promotion accounts
Prizes	Dollar value of Prizes
Deposits	Dollar value of Deposits
Withdraws	Dollar value of Withdraws
Debits	Dollar value of Debits
Credits	Dollar value of Credits
Balance	Account Balance of Promotional Accounts

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#### PROMOTION TOTALS REPORT

Date 01/31/90 Time 09:12:07 Page: 1

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#### EDT INSTANT KEND EDT Prototion Totals for 01/30/90

#### Promotion Description

Account-Id: 16 Promation Name: EDI SUPER LOTIO

	Xo.	Accts		Aacunt
Starting Bal		1	\$	60.00
Earolled		3	۱	180.00
Cards Sold		2	5	120.00
Receipts		Ũ	\$	0.00
Balance Due		2	3	120.00
*********	=====	******	*****	1111222322

#### Propotion Summary

Last Play 01/30/90 Enroll Date 00/00/00 Expire Date 00/00/00

Balance	i-	43.00	ş-	42.00	ş-	43.00	\$	33.25
Credits	\$	0.00	\$	0.00	5	0.00	\$	0.00
Dabits	\$	0.00	5	0.00	\$	0.00	\$	0.00
Withdraws	\$	0.00	5	6.00	\$	0.00	\$	0.00
Deposits	\$	0.00	5	0.00	\$	0.00	-\$	120.00
Handpays	\$	0.00	\$ .	0.00	s	0.00	\$	0.00
Lost	\$	47.50	\$	47.50	5	47.50	\$	99.25
Nos	ŧ	4.50	\$	4.50	\$	4.50	\$	12.50
		Daily	Mont	th to Date		Year to Date		System to Date

#### Accounting Formulas

Balance Due Azount = Amount of Cards Sold - Amount of Receipts Deposited Balance = Won - Lost + Handpays - Deposits - Withdraws - Debits + Crecits

# AWS DAILY

The AWS Daily Report is used to track daily totals for AWS activity. This report provides information on: Payouts, Handpays and Bets.

FIELD	DESCRIPTION
AWS NO.	The number assigned by the system.
Description	Name entered by user, sometimes the location.
Payout	Dollar value of AWS Payouts.
Handpay	Dollar value of AWS Handpays.
Bets	Dollar value of the AWS bets.

# Chapter 6:REPORTS

## AWS DAILY REPORT

## Date 01/31/90 Time 11:09:30

## Page: 1

## EDT INSTANT KEND EDT AWS Daily for 01/31/90

AWS No.	Description		Payout	Handpay		Bets	Vands
1	2the1eft	ţ	0.00	\$ 0.00	\$	6.25	1
2	leftside	\$	55,75	\$ 22,500.00	\$	146.25	89
3	NEFT	ŧ	C. 00	\$ 0.03	\$	0.00	0
4	LEFT	\$	8.00	\$ 3.03	ŧ	0.03	8
5	LEFT	ŧ	0.03	\$ 0.03	\$	0.00	0
6	LEFT	\$	8.00	\$ 0.03	\$	0.00	Ø
7	LEFT	ţ	6.60	\$ 0.00	\$	0.03	Ø
9	LEFT	5	0.00	\$ 8.63	\$	C. 60	C
9	LEFT	\$	0.03	\$ 6.60	\$	6.03	G
10	LEFT	\$	C. ØØ	\$ 8.83	\$	0.60	Ø
11	LEFT	\$	C. 63	\$ 0.00	\$	6.03	S
12	LEFT	\$	0.00	\$ 0.00	\$	0.00	C
13	LEFT	\$	0.03	\$ 0.00	\$	6.00	0
14	LEFT	ţ	0.99	\$ 0.00	\$	0.00	<b>، 0</b>
15	LEFT	\$	0.60	\$ 6.20	\$	0.00	0
15	LEFT	\$	6. 38	\$ 0.03	\$	6.09	C
17	LEFT	\$	6.69	\$ 0.63	\$	C. 03	ទ
18	LEFT	¢.	0.00	\$ 0.03	\$	6.63	C
19	LEFT	\$	0.03	\$ 0.02	\$	8.63	Ø
22	LEFT	\$	0.03	\$ 0.03	\$	0.00	0
21	LEFT	\$	8,68	\$ 3.03	\$	0.03	0
22	LEFT	\$	C. 69	\$ 0.63	\$	0.03	8
23	LEFT	\$	0.00	\$ 0.00	\$	0.00	C
54	LEFT	\$	0.00	\$ 0.00	\$	0.00	Ø
25	LEFT	\$	0.00	\$ 6.69	\$	6.63	Ű
26	LEFT	\$	C. 22	\$ 0.03	\$	C. 69	G
27	LEFT	4	0.00	\$ 9.63	ţ	0.68	0
25	LEFT	\$	3.80	\$ 8.83	\$	3. 63	0
29	LEFT	\$	0.60	\$ 0.02	\$	0.63	0
39	LEFT	\$	6.60	\$ 0.03	\$	0.03	8
31		\$	9.69	\$ 0.00	\$	0.00	C

#### AWS MAINTENANCE

The AWS Maintenance report is used to track totals for AWS maintenance activity. The report includes the AWS number and description, the total number of occurrances of call attendent, power fail and reader error, plus the present online/offline status.

FIELD	DESCRIPTION					
AWS No.	The number assigned by the system.					
Description	Name entered by user, sometimes the location.					
Call Attendant	Number of times the Call Attendant button was pressed on the AWS unit.					
Power Fail	Total number of power failures experienced.					
Reader Error	Total number of reader errors experienced.					
Status	Present status of the AWS at time of report.					

#### AWS MAINTENANCE REPORT

## Date 01/31/90 Time 11:09:49

## Page: 1

## EDT INSTANT KENO EDT AWS Daily Maintenance for 01/31/90

AKS No.	Description	Call Attendant	Power Fail	Reader Error	Status
1	2theleft	5	40	0	Onlina
2	leftsida	15	45	0	Online
3	NEFT	0	0	0	Onlina
4	LEFT	0	8	8	Online
5	LEFT	6	0	C	Online
6	LEFT	Ø	0	G	Coline
7	LEFT	Ø	C	0	Online
8	LEFT	2	0	3	Online
9	LEFT	0	0	G	Online
10	LEFT	0	0	Ø	Online
11	LEFT	0	8	Ø	Online
12	LEFT	9	0	0	Online
13	LEFT	0	9	0	Online
14	LEFT	0	0	9	Onlina
15	LEFT	0	8	G	Online
16	LEFT	8	C	C	Online
17	LEFT	0	e	· · · · · · · · · · · · · · · · · · ·	Onlina
19	LEFT	Ø	Ø	0	Online
19	LEFT	. 0	Ø	· Q	Onlina
29	LEFT	0	Ø	3	Online
21	LEFT	8	Ø	8	Onlina
22	LEFT	0	0	8	Online
23	LEFT	0	3	8	Online
24	LEFT	6	0	0	Online
25	LEFT	0	Ø	0	Online
25	LEFT	0	Ø	0	Online
27	LEFT	0	8	0	Online
29	LEFT	0	0	9	Online
29	LEFT	6	9	8	Onlina
30	LEFT	0	0	0	Online
31		2	0	8	Önline
<b>U</b> 1		-	-		

#### AWS HISTORY

The AWS Play History Report is used to track totals for AWS activity for four periods (DTD, MTD, YTD, STD). This report provides information on: Payouts, Handpays, Bets, Vends, Call Attendant, Power Failure and Reader Error.

FIELD	DESCRIPTION					
Payout	Dollar value of AWS Payouts.					
Handpay	Dollar value of AWS Handpays.					
Bets	Dollar value of the AWS bets.					
Vends	Number of games played.					
Call Attendant	Number of times the Call Attendant button was pressed on the AWS unit.					
Pwr Fail	Number of power failure occurrences.					
Rdr Error	Number of AWS card reader errors.					

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## Chapter 6: REPORTS

## AWS HISTORY REPORT

Date 01/31/90 Tige 09:25:16 Page: 1

#### EDT INSTANT KEND EDT ANS History for 01/30/90

#### AWS No. 1 Id. 2theleft Online

		Dailv	Honth	to Date		Year to	Date		System t	o Date
Payouts	5	0.00	\$	0.00	\$		0.00	5		0.60
Handpays	\$	0.00	5	0.00	5		0.00	5		0.00
Sets	\$	0.25	5	0.25	5		0.25	\$		9.25
Vends		. 1		i			1			i
Call Attnd		5		5			5			5
Power Fail		40		40			40			4ê
Reader Err		Û		0			0.			0

#### AWS No. 2 Id. leftside Online

		Daily	Ma	ath to Date		Year to Date		System to Date
Pavouts	\$	55.75	\$	56.75	\$	55.75	\$	56.75
Handbays	5	22,500.00	ŧ	22,500.00	5	22,500.00	ş	22,500.00
Bets	\$	14c.25	£	145.25	1	146.25	5	145.25
Vends		89		69		E9		89
Call Atto	5	15		15		15		15
Pawer Fai	1	45		43		45		45
Reader Er	r	Ū.		0		0		0

#### AWS No. 3 Id. NEFT Online

		Daily	Month	to Bate	Year	tc Date	Syst	es to Date
Payouts	\$	0.00	5	0.00	\$	0.00	ę	0.00
Nandeavs	ŝ	0.00	1	0.00	\$	0.00	\$	0.00
Bets	\$	0.00	\$	0.00	\$	0.00	\$	Q.00
Vends		٥		0		0		0
Call Attn	d	ů.		0		0		9
Fower Fail	1	Õ		Û		0		0
Reader Er	r	0		0		0		0

#### ANS No. 4 Id. LEFT Online

		Daily	Fonth	to Date	Year	to Date	Ξγs	tes to Date
Payouts	\$	0.00	5	0.00	5	0.00	\$	0.00
Handoays	4	0.00	;	0.00	\$	0.00	\$	0.00
Eats	\$	0.00	5	0.00	\$	0.00	\$	0.00
Vends		ð		0		0		0
Call Attod		¢.		0		9		ê
Fower Fail		9		Ú.		3		)
Reader Err		Э		Ũ		0		

## SHIFT END CASH DRAWER

The Shift-End Cashdrawer Totals by Workstation Report is used to track the workstation cashdrawer activity for daily totals. This report provides information on Drawer Over, Drawer Short and Closing Balance for each workstation.

FIELD	DESCRIPTION
WS No.	The Workstation number assigned by the system.
Drawer over	Amount that actual Cash-out exceeds calculated.
Drawer short	Amount that the Cash-out is less than calculated.
Closng balnce	Balance on hand at Shift Close.

#### SHIFT END CASH DRAWER REPORT

Date 01/31/90 Tige 09:20:34 Page: 1

EDT INSTANT KENO EDT Employee Shift-end for 01/30/90

Shift No. 1 Shift Dosned by SYSMER Shift Closed by MANAGER HARRISON GIBSON Tige-in 23:59 Naœe Time-out 09:19 0000002 Id Opening Balance \$ 100.00 Closing Balance \$ 99.73 0.00 Deposits \$ 0.00 €.00 Draw Ble≘d \$ Draw Over 🔹 10.27 Draw Fill \$ 0.00 Withdraws \$ 0.00 Draw Short 💈 -----\_\_\_\_\_ ----0.00 Over-Short S- 10.27 Bleed-Fill \$ 0.00 Depos-With \$ TIMOTHY & RENNAKER . Tige-in 23:59 Xare Time-out 09:19 0000005 Id Opening Balance \$ 500.00 Closing Balance \$ 197.99 0.00 Deposits \$ 790.00 0.00 Draw Bleed \$ Braw Over \$ Draw Short \$ 1,052.01 Draw Fill \$ 0.00 Withdraws \$ 40.00 Over-Short \$- 1,052.01 Bleed-Fill \$ 0.00 Depos-With \$ 750.00

#### SHIFT HISTORY CASH DRAWER

The Shift-End Cashdrawer Totals by Workstation Report is used to track shiftend workstation totals for four periods (DTD, MTD, YTD, STD). This report provides information on: Draw over, draw short, over-short, bleed, fill, bleedfill, deposits, withdraws and deposits-withdraws for each workstation. A workstation summary is also shown.

FIELD	DESCRIPTION
Drawer over	Amount that actual Cash-out exceeds calculated.
Drawer short	Amount that the Cash-out is less than calculated.
Drwr over-shrt	Over minus short.
Drawer bleed	Amount of money removed from the cash drawer.
Drawer fill	Amount of money added to the cash drawer.
Drwr bld-fill	Bleed minus fill.
Deposits	Amount of deposits to the cashdrawer.
Withdraws	Amount withdrawn from the cashdrawer.
Dpsts-Wthdrws	Deposits minus Withdraws.

## SHIFT HISTORY CASH DRAWER REPORT

## Date 01/31/90 Time 09:33:15

Fage: 6

#### EDT INSTANT KEND EDT Shift History for 01/30/90

Blead-Fill	\$	C.00	\$	0.00	\$	0.00	\$	0.00
Deposit Withdraw	5 5	0.00	\$ £	0.00 0.00	5 5	0.00 0.00	5 5	0.00 0.00
Depos-With	\$	0.00	•••••	0.00	ţ	0.00	\$	0.00

#### Workstation No. 15

		Daily	Кол	th to Data		Year to Date	Sy	stee to Date
Braw Over	5	0,00	\$	2.00	\$	0.00	\$	0.00
Draw Short	5	0.00	\$	0.00	\$	0.00	s	0.00
Over-Stort	\$	0.00	\$	0.00	ţ	0.00	\$	0.00
Blaeds	\$	0.00	5	0.00	\$	0.00	\$	0.00
Fills	\$	0.00	£	0.00	\$	0.00	\$	0.00
Bleed-Fill	\$	0.00	\$	0.00	\$	C.00	\$	0.00
Deposit	\$	0.00	5	0.00	5	0.00	\$	0.00
Kithdraw	5	0.00	5	0.00	5	0,00	\$	0.00
Becos-aith	\$	0.00	\$	0.00	\$	0.00	\$	0.00

#### Workstation Summary

		Daily	Кe	ath to Date	Ŷ	ear to Date	3)	stem to Date
Draw Dver Draw Short	5 3	0.00 1,062.28	5 5	0.00 1,062.23	5 5	0.00 1.062.28	5 5	0.00 1,062.28
Over-Short	ŧ-	1,062.25	<b>t</b> -	1,062.28	\$-	1,062.28	\$-	1,062.28
Blazds	5	0.00	\$	Ċ.0ů	5	0.00	5	C.00
Fills	\$	0.00	\$	0.00	\$	0.00	\$	0.00
Bleed-Fill	\$	0.00	\$	0.00	\$	0.00	\$	0.00
Dacosit	5	790.00	5	790.00	\$	790.00	5	790.00
Withdraw	\$	40.00	\$	40.00	\$	40.00	\$ 0	40.00
Depos-With	\$	750.00	\$	750.00	\$	750.00	\$	750.00

#### 6:17

## EMPLOYEE SHIFT CASH DRAWER

The Shift-End Cashdrawer Totals for Employee Report is used to track shift-end employee totals. This report provides information on: Drawer over and short, drawer fill and bleed, deposits, withdraws, opening balance and closing balance.

FIELD	DESCRIPTION
Drawer over	Amount that actual Cash-out exceeds calculated.
Drawer short	Amount that the Cash-out is less than calculated.
Drwr over-shrt	Over minus Short.
Drawer bleed	Amount of money removed from the cash drawer.
Drawer fill	Amount of money added to the cash drawer.
Drwr bld-fill	Bleed minus fill.
Deposits	Amount of deposits to the cash drawer.
Withdraws	Amount withdrawn from the cash drawer.
Dpsts-Wthdrws	Deposits minus Withdraws.

## EMPLOYEE SHIFT CASH DRAWER REPORT

Date 01/31/90 Tige 09:20:34 Fages 1

750.00

EDT INSTANT KEND EDT Exployes Shiftmend for 01/30/90

Enift Nc.	1	Shift (	]oened by SY	SMGR	Si	ift Closed	oy KANAS	ER
Nare Id	HARRISSN 0060002	GIBSON					Time-in Time-out	23:59 09:17
Spanin	ș Balance	5	100.00		Closing Ba	ilance \$	54	.73
Draw Over Draw Shor	5 t 5	6.00 10.27	Draw Bleed Draw Fill	\$ \$	0.00 0.00	Deposits Withdraws	5 5	0.00 0.00
Over-Shor	τ \$-	10.27	Blesd-Fill	\$	0.00	Depos-With	: <b>\$</b>	0.00
Kame Id	T1KOTSY 0000005	6 RENNAX	ER				Tige-in Tige-out	23:59 09:19
Openia	ç Balance	5	\$90.00		Closing Pa	lance \$	197	99
Draw Over Draw Shor	\$ t \$ 1	0.00 ,052.01	Graw Bleed Draw Fill	\$ \$	0.00	Deposits Withdraws	\$ \$	790.00

End of Report

0.00 Depos-With \$

ŝ

Instant Keno January 11, 1990 ©Electronic Data Technologies, Las Vegas, Nevada

Over-Short \$- 1,052.01 Bleed-Fill \$

## 6:19

## EMPLOYEE HISTORY CASH DRAWER

The Employee History Cash Drawer report is used to track shift-end employee totals for four periods (DTD, MTD, YTD, STD). This report provides information on: Drawer over and short, Drawer fill and bleed, deposits and withdraws.

FIELD	DESCRIPTION				
Drawer over	Amount that actual Cash-out exceeds calculated.				
Drawer short	Amount that the Cash-out is less than calculated.				
Drwr over-shrt	Over minus Short.				
Drawer bleed	Amount of money removed from the cash drawer.				
Drawer fill	Amount of money added to the cash drawer.				
Drwr bld-fill	Bleed minus fill.				
Deposits	Amount of deposits to the cash drawer.				
Withdraws	Amount withdrawn from the cash drawer.				
Depsts-Wthdrws	Deposits minus Withdraws.				

## EMPLOYEE HISTORY CASH DRAWER REPORT

Date 01/31/90 Time 09:36:34 Page: 1

## EDT INSTANT KENO EDT Employee History for 01/30/90

Name TIMOTHY & RENNAKER

0000005

Id

		Daily	Kont	h to Date		Year to Date		System to Date
Bleads	\$	0.00	5	0.00	\$	0.00	\$	0.00
Fills	ŧ	0.00	\$	0.00	\$	0.00	\$	0.00
Blasd-Fill	\$	0.00	ş	0.00	\$	0.00	\$	f 0.00
Deposit	\$	755.00	\$	755.00	\$	755.00	\$	790.00
Withdraw	\$	40.00	\$	40.00	ş	40.00	\$	40.00
Depos-With	\$	715.00	\$	715.00	ŧ	715.00	\$	750.00
Draw Over	\$	0.00	\$	0.00	ţ	0.00	5	0.00
Draw Short	\$	1,052.01	\$	1,052.01	\$	1,052.01	\$	1,052.01
Gver-Short	s	1,052.01	i-	1,052.01	 ب	1,052.01	+	- 1,052.01

#### COMPLETE AUDIT

This procedure is used to select the desired audit reports to print from the Audit Log data. The reports available select and summarize the data in a more usable form than the Audit Trail hardcopy which prints every transaction on the system. Reports can be printed using the following criteria:

Game		Prints Audit Log data on game transactions					
Cash Drawer	-	Selects all cashdrawer transactions					
Adjustment		Prints adjustments to the player accounts					
Data Entry	-	Summarizes all entries to the database					
Manager		Displays all transactions performed under a Manager authorization code					
Exception	-	Presents all transactions which have triggered an exception message					
System	-	Prints all transactions generated automatically by the system program (draws, calculations etc.)					

08/30/89	INSTANT KENO AUDIT LOG NENU	01:05:18
	Select a Function:	Select a Function:
		Cancel Set-Criteria
	SET SELECTION CRIT	Set Selection Criteria
Report Titled: Report Subtitled:	Class Game Cash Drawer Adjustment Data Bntry Manager Exception System	Select Y Y Y Y Y Y I I Log for 08/28/8

## COMPLETE AUDIT REPORT

Dete 01/31/80 Fire 10:54:17

#### . Fage: 7

EDT INSTANT KEND EDT Transaction Audit Log for (1/30/90

Ę	Ceernace	Class	Type	Processed	
4 4 2 3 0 0	TANYA TANYA TANYA TANYA TANYA SYSTEM SYSTEM SYSTEM	Data Entry Data Entry Data Entry Data Entry Data Entry Exception Exception Cash Drawer	Close Acct Close Acct Close Acct Close Acct Close Fromo Power Fail Call Attednt Sign-out	18:07:07 18:07:08 18:07:09 18:07:10 18:07:13 09:04:35 09:04:55 09:04:55 09:04:55	Acct-1d 0001007 Acct-1d 0001004 Acct-1d 0001005 Acct-1d 0001005 Acct-1d 0000014 Proaction Mamma AWS 001 AWS-1d 2theleft AWS 002 FWS-1d leftside Eap-1d 00007 Shift 1 Signout Act. \$ 177.97 Example 0007 Shift 1 Signout Act. \$ 87.73
4	MAN4GER	Nanager	Close-Shift	09:19:52	Eao-1d 00002 Smitt 1

End of Report

Instant Keno January 11, 1990 ©Electronic Data Technologies, Las Vegas, Nevada

#### OCCURRENCE OF BALLS

The Occurrence of Balls Report is used to track the number of times each number was picked for the period of the report. This report reflect totals for DTD, MTD, YTD or System-to-Date (STD) periods.

6:23

FIELD	DESCRIPTION
Ball Number	
DTD Occurrence	Number of times ball has been drawn in period.
MTD Occurrence	Number of times ball has been drawn in period.
YTD Occurrence	Number of times ball has been drawn in period.
STD Occurrence	Number of times ball has been drawn in period.

# Chapter 6:REPORTS

# OCCURRENCE OF BALLS REPORT

Date 01/31/90 Time 10:37:21

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Fage: 2

## EDT INSTANT KEND EDT Occurence of Balls for 01/30/90

Ball Number	Day to Date Occurence	Month to Date Gocurence	Year to Date Occurence	System to Data Occurence
53	22			
54	15	15	15	22
55	20	20	20 10	10
55.	28	28	20 70	20
57	25	25	23 75	25
59	27	27		20
59	20	20	27	27
50	23	23	2.¥ 7.7	20
61	24	20		. 23
62	18	18	24 10	24
£3	19	19	10	19
54	32	17 72	17	15
65	21	71	02	32
66	18	12	21	
67	21	10 2:	15	18
<u>45</u>	23	75	21 57	21
69	19	10	20	25
70	75	17	17.	19
71	20	20	20	25
72	20	27	29	29
73	25	20	20	20
74	11	20	25	25
75	17	11	11	11
76	20	17	17	17
77	19	10	22	22
79	10	18	15	19
79	25	61 20	15	15
80	20	20	25	25
<b>W</b> 12	- <b>i</b>	21	21	21