Table Games Protection Series #8

By Richard Marcus | Casino Table Game Protection Consultant/Trainer and Founder of the Global Game Protection and Table Games Conference

SLOT PROTECTION: IS THERE REALLY ANY OF IT?

By Richard Marcus | Casino Table Game Protection Consultant / Trainer and Founder of the Global Game Protection and Table Games Conference

If ETGs are neglected in the field of game protection, the most important part of casino gaming is neglected even more. That would of course be the millions and millions of slot machines that dominate virtually every casino in North America. The first question I would ask both Table Games and Surveillance is, "What do you know about how a slot machine works?" I would then ask the same question to the non-technician people in the slot department itself. The answers more than not are "nothing."

The next question I would ask any casino floor person from any department is, "How often are the slot machines observed by personnel from any department? The answers range from "never" to "seldom," with "almost never" being the best guess. If I ask surveillance personnel how often they actually observe slot machines on their monitors, the answer-range remains the same.

Is this a game protection problem? Or a slot protection problem, whatever you want to call it?

Well, whichever you choose, it is a giant problem!

Over at least the past fifteen years, as slot technology has advanced exponentially, casinos have more and more ignored their slot machines. The attitude has become "the slots take care of themselves." Or "whatever happens to them as far as cheating goes is just a minute piece off the bottom line; no need to worry about game protection with slot machines."

All casino employees seem to know this. The problem is when the wrong employees know it. If I asked you who are the people who do the big slot machine scams, I'd bet you'd know it's often employees. And those employees who do engineer big slot scams know as well that no one besides them and the slot techs have a clue as to the inner workings of a slot machine.

I begin the slots-cheating segment in my training class with perhaps the biggest slot machine scam of all-time, at least in its duration, and as far as total take, it's right in the race as well. During a five-year period between 2011 and 2015, the Miccosukee tribal casino near Miami, Florida suffered losses of $5.3 million at the hands of four slot employees working with four associates who took down the money. It is absolutely mind-boggling that they were able to scam the casino sixty-three times over that five-year period. I do not know how they eventually got caught and why it took four years to indict the eight cheats in July 2019. What I do know is that the four slot employees knew how to pull off the scam with the guarantee that no one else in the casino would ever know what hit them.

What the employees did is open up the machines and rig them by connecting one end of a wire to a device inside that recognized the coins while the other end of the wire was connected to another metal plaque inside the EGM that caused the machine to record the false coin-in total. Then the four associates simply "played" the machine, which issued them credit vouchers for the phony deposits. Then they redeemed the vouchers at the casino cage or the ATMs inside the casino. The last part of the scam, the real coup de grâce, is when the employees performed a "RAM" clear or hard reset to wipe out the memory of the false coin-in amounts.

And so they did it an astounding sixty-three times, $8,000 a pop on average. How is this possible? This casino is far from being the largest casino in

Slot Protection: Is there really any of it?

By Richard Marcus | Casino Table Game Protection Consultant / Trainer and Founder of the Global Game Protection and Table Games Conference

the US. How did they keep the secret of the scam buried for five years without a single employee of the casino catching on? Where was surveillance?

Well, we all know that surveillance has the 24/7 video coverage of that entire casino which includes every slot machine that was victimized. But there's a small problem. Even if surveillance was observing the crooked employees at the machine, their cameras cannot see inside the machines. They cannot see what the employees are doing! Each time a slot tech opens the door to access the machine, surveillance cannot see what they're doing. And even if they could see what they're doing, they still might have no idea what they're doing.

We will come back to some solutions, or I should say improvements, for this extremely dangerous situation. One development worthy of note is that some US casinos have been using a special tape that makes unauthorized "RAM clears" much harder to get away with. A few other notable slot scams I cover are thefts from TITO kiosks and the bill stacker scams, where the cheats fill the bill stackers up with cash, then they get the tickets and cash out only to return later and force open the machine and recoup their cash. It's a very brazen scam and there are only two ways to get access into the machine. One is a master key. The other...bust the machine open, which gangs in Europe and South America are actually doing.

I now introduce another type of slot-hacking scam which needs no employees. It only requires a group of recruited slot players who need to go into the slot areas with, you know, that weapon of mass destruction. The scam is reverse engineering slot machines with non-complex pseudo random number generators and then uses algorithms to predict jackpots. What does that mean?

How the hell would I know! I barely know what a random number generator is! LOL.

But, you don't really have to know how these scams work. You just have to know how to protect yourselves from them, and that much I do know because it's the same way you protect your ETGs. Do your reconnaissance of your slot areas and find those smart phones being used as weapons of massive destruction!

Here's basically how the scam works. A group of recruited slot cheats are hired to infiltrate casinos worldwide whose Aristocrat and Novomatic machines (and probably by now others) have been previously "reverse-engineered." They find these machines, place their smart phones in strategic but suspicious to the eye positions (like sticking out of a shirt pocket) and video record ten to fifteen spins of the slot machines. They then send the recorded information to a master hacker in a location that can be anywhere in the world but is most likely Russia. The master hacker inputs the data into a program to spot key patterns and predict the times of upcoming jackpots. A new algorithm is designed and quickly loaded onto an app running on the cheat's smart phone. As the cheat plays the app, the phone vibrates when the next jackpot may be coming. With one hand on the phone waiting for the vibration and a finger on the play button, the cheat's success depends on how fast he can react and make the plays. The app is programmed to hit smaller jackpots for only a few grand, allowing the cheats to remain under the radar and avoid having to show ID to the casino in order get their cash.

This scam is believed to have occurred during the years 2012 through 2017. In June 2014, accountants at the Lumiere Place casino in St. Louis, Missouri noticed the numbers on slot machines had gone haywire in a very negative way.

By Richard Marcus | Casino Table Game Protection Consultant / Trainer and Founder of the Global Game Protection and Table Games Conference

A surveillance investigation ensued, and some very sharp people working the department caught on to a guy playing the machines with his iPhone very close to the screen. Closer observation, surveillance and a widened investigation led to findings that several other casinos in the US had their slot machines attacked by these cheats.

There is a lesson to be learned here on what to look for when trying to spot this type of sophisticated slot-cheating operation. I have stressed and re-stressed the smart phones, but there is more. Look for suspicious players delaying the push of the start button for up to twelve to fifteen seconds after the last result. They will also bet the maximum amount each spin and run their credit meters up to avoid missing out when jackpot-time is near. Finally, any time you see players intently focused, not moving at all, just seeming to be uptight and not like a normal slot player, you may be on to someone who's recording the screen. Then the next step is spot the smart phone and you may have your guy—or woman.

Let's look at some general deficiencies we can work on to improve slot protection. I think one of the major parts of the puzzle is the way casinos watch their slot machines. Or I should say don't watch their slot machines. If we compare slot machines to table games in this light, the ratio of observation of tables games/slots tells a very daunting story. A large casino can have three hundred table games, giant casinos even more. How many supervisors are there per table game? I don't know the number but would guess maybe one supervisor for somewhere between four to six tables. How many slot machines are there in a large casino? I don't know the number for that either but it's in the thousands, right? How many slot staff employees are watching these thousands of machines?

Notice I didn't say slot supervisors because they don't even "exist," which answers the aforementioned question. Practically zero.

Again, it's the overall attitude that the machines take care of themselves. And then of course there's the operating budget control factor. Table Games comprise a huge payroll. So casinos need to reduce their overall employee cost somewhere, and since slots take care of themselves, they don't have to hire personnel to do that job. The only time you see slot employees on the floor is to clear the bill stackers, attend to winning jackpots, or specific problems that might require a visit to slot machines from the slot techs.

The slot cheats know this and they take advantage of this lack of supervision. They also know that the other slot players are no threat to them, the majority more or less hypnotized by the machines they play. On table games, the players are always chatting among themselves at least some of the time. On slot machines, three people can play next to each other for six hours without a single world being issued from one person to another. And this has nothing to do with fear of catching viruses! Because of this non-social behavioral reality, slot cheats need not fear rats, unless of course, one of them accosts a machine and whacks it several times with a sledge hammer to get inside and swipe the bill stacker.

What about the camera coverage, you might ask? Okay, what about it? It's not exactly cutting-edge, is it? Sure, you have PTZ cameras watching a dozen machines or so. But who's really paying attention to those monitors when the surveillance game-protection arm is focused on those huge baccarat and craps games going simultaneously? I think that cameras can play a more

Slot Protection: Is there really any of it?

By Richard Marcus | Casino Table Game Protection Consultant / Trainer and Founder of the Global Game Protection and Table Games Conference

proactive role in slot protection, but they need to be used in an entirely different way. I'm not saying the PTZs should be reduced or anything like that, only that different types of cameras and uses should be added to the protocol.

I'm not an expert here but I have researched the subject and have learned about interesting possibilities to achieve this goal. One might be the installation of tiny cameras inside the machines, like ATM cameras, that are triggered by motion. This would definitely be a defense against the Russian hacker-type scams where their smart phones have to get close to the screens. This type of camera can also be used as a facial recognition tool to spot known slot cheats and hackers and maybe even their wives and husbands.

And what about the slot employees who may be tempted to go into business for themselves? Same for slot technicians. Perhaps the techs and maybe some key employees with unlimited access should wear body cameras as police do. So if they decide to do a "Ram clear" scam, they'd have to record themselves doing it! LOL.

Do you know what a slot machine monitoring interface is and what it's capable of? If you're in surveillance and you don't, I think you should read up on it. Surveillance rooms need the real-time machine data that can be supplied by these interfaces. It's all about internally networking your slot machines. With this networking in place, you receive warnings in real time when significant events occur in the slot area. First and foremost, jackpots. Then malfunctions, technical problems, doors opening, whatever can happen that threatens the integrity of your slot operation. Imagine this: if you have your network interfaced in this manner, one employee with access would be able to monitor the totality of

your slot machines simultaneously. The necessary human elements involved are your decisions for programming the warning system. For what and how often do you want to receive the warnings? What will be your responsive decisions? That's up to you.

Another pillar of slot protection enforcement can be to monitor your slot employees at close range, especially those who constantly need to go inside the machines. You can run periodic checks to make sure all slot employees are complying with internal control measures. You can reassure yourselves that all employees understand and follow procedures in all facets of your slot operation.

And finally, when speaking about the future of slot machine protection, I am reading and hearing a lot about the role artificial intelligence (AI) might play in this. As far as table games go, I am not a big advocate that AI is going to buzz the surveillance room and tell them that Richard Marcus just went through your casino and did six blackjack pastposts and got paid all six times and is now over at craps getting ready to do number seven, so all you need to do now is pan, tilt and zoom to record his move and bust him.

But with slot machines, this might be a different story. We may see AI cameras that can monitor and detect certain forms of slot cheating. One reason I think AI is more suited to slots than to table games is that the area of one slot machine is relatively small and all high-tech slot scams depend basically on the same thing, the smart phone, or some other piece of equipment that has to be used to gather information from the machine itself, so it can be hacked or used in an algorithm designed to cheat it. But this is still some time away. There may be a race to see which comes first,
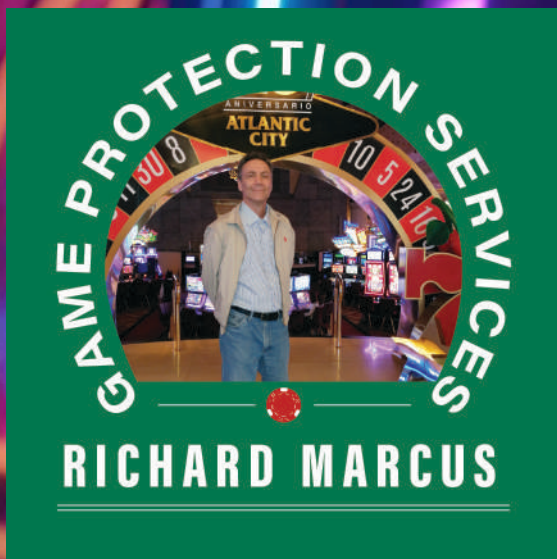
By Richard Marcus | Casino Table Game Protection Consultant / Trainer and Founder of the Global Game Protection and Table Games Conference

effective usage of AI to detect slot cheating or the total eradication of Covid-19.

One final note, regardless of what happens in the near or distant future, you need to keep up with your training programs and impress upon slot employees to be on the lookout for obvious things suggesting the possibility of cheating. This includes but is not limited to people hanging around slot machines who do more observing than playing, as if they're waiting for a certain machine, people playing machines with a hand in their pocket, possibly concealing a device that they're using, watching for players who are excessively running up the credit meters and anything else that just doesn't appear normal.

Another thing casino executives can do is put more pressure on manufacturers of slot machines to train their slot employees, especially in the area of protection. Scams are more and more digital nowadays and few people in the department understand them or know what to look for in order to detect them. And to me, casinos have more or less a reverse monopoly on slot machines, meaning who else buys them? Sure, in some jurisdictions they're found in bars and food markets, but the lion's share of the market is casinos, therefore casinos should not have to pay for training that comes from the manufacturers whose products you're putting in your casinos.

And if all this has not been enough, did you know that Slot Advantage Play has become more profitable than advantage play at card games? Yes, it has, and I will discuss that in a future article. But for now, observe, patrol and protect your slot machines. If you don't, you will be victimized!

To book Richard Marcus Training at your Property, contact:
richard@globaltablegamesprotection.com

Table Games Protection Page:
www.globaltablegamesprotection.com/game-protection-training-at-your-property/
Testimonials:
www.globaltablegamesprotection.com/gp-testimonials/