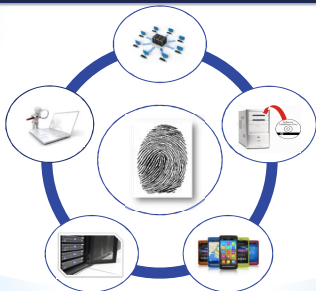


Forensics in Tribal Gaming



Information Technology Division

Digital Forensics



Course Overview



WHAT?

- Common Types
- Investigations

WHY?

- Chain of Custody
- Evidence Gathering

WHO?

- First Responders
- Gaming Commissions

HOW?


- Plan of Action
- Collected Evidence

 **Gaming Forensics**


-  Criminalistics
-  Video Analysis
-  Accounting

 **Gaming Forensics**


ANOTHER JACKPOT MALFUNCTION

 **Common Types**


- Non-existent payline or bonus awards
- Physical reel strip vs. prize/award mismatch
- Credit award not present within prize schedule
- Electromechanical fault (reels continue to spin)
- External bonus awarded to selected player accounts
- Physical tampering (electrical shock or interference)
- Backend system manipulation - new investigating further



 **Investigative Purpose**



Public Trust


MICS 547.5 TGRA chooses ITL for certification 

 **Chain of Custody**


Include:

- Inception Evidence Collection
- Paper Trail
- Integrity of evidence until processed
- TGRA &/or Regulatory body determine extent of actions
- Best Practice Guideline
 - US DOJ (Justice) / NIST(National Institute of Standards and Technology)

 **Evidence Gathering**


HARDWARE & SOFTWARE MANUALS





 **Evidence Gathering**




MICS 547.13 Program Storage Media 

 **Evidence Gathering**




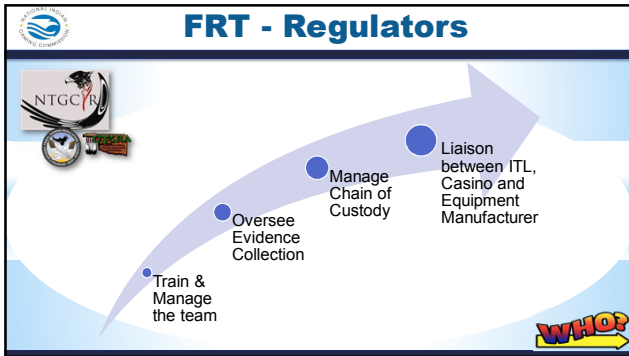


 **First Responders**

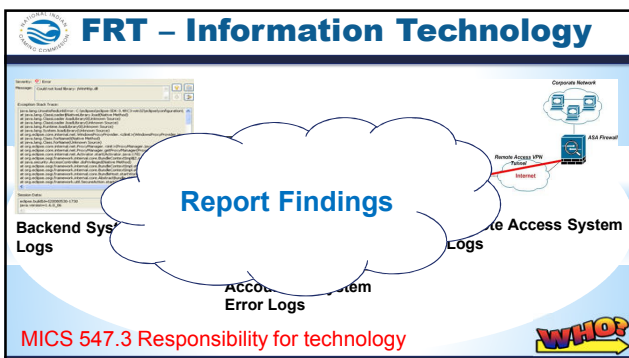
Those directly affecting gaming integrity

- Regulators
- Gaming Operations
- Information Technology
- Security
- Surveillance
- Accounting and Auditing









FRT - Security

Report Findings

MICS 547.5 TGRA responsible for security

WHO?

FRT - Surveillance

Report Findings

MICS 543.21 Surveillance

WHO?

FRT - Accounting & Audit

Report Findings

MICS 547.8(2)(k) Critical Memory gain (i) Accounting data

WHO?

Gaming Commission

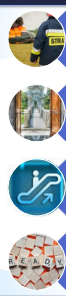
As the regulatory body submits information and components for a forensic examination following a thorough investigation and gathering of information and evidence.



Logos include Cherokee Nation, NEIDA Gaming Commission, and others. A 'WHO?' graphic is in the bottom right.

Plan of Action

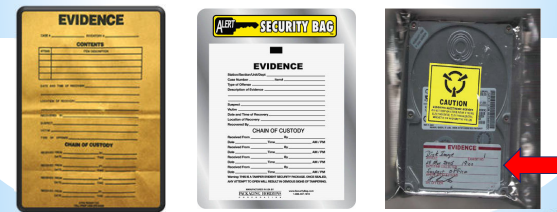
- First Responder Team
- Forensic Threshold
- Escalation
- Readiness Training




Icons for each step: a person, a scale, a staircase, and a group of people. A 'HOW?' graphic is in the bottom right.

Collected Evidence

Must be secured and stored in a controlled environment





Images show an 'EVIDENCE' form, an 'ALERT SECURITY BAG' form, and a security bag with a red arrow pointing to it. A 'HOW?' graphic is in the bottom right.

 **Collected Evidence**

Areas of concern for gaming operators are:


- Game malfunction for server connected/controlled games (SBG, Server Supported, etc.)
- Verification of Jackpots (Server level vs. terminal level)
- Patron disputes over game outcomes
- "Superuser" type accounts on the player tracking side
- Gaming Equipment or Host Server tampering
- Disgruntled Manufacturers and internal/external (vendor's) IT employees




 **Risk Mitigation**

Risks factors YOU can control:

- **Licensure:** Vetting vendors who have remote access
- **Internal user accounts:** does one person have too many access rights (who watches the watchers?)
- **Tape Seal management:** Are all appropriate areas sealed up? Are all seals tracked/accounted for?
- **Proper accounting/reconciliation:** are there any detectable patterns or abnormal behaviors (runaway meters, mismatch to indicate theft, etc.)?

 **WIIFM?**

- Understand how to identify when a forensic occurs
- Familiarize yourself with the common types to assist with addressing
- Have a Plan of Action for Forensic events/investigations
- Know your First Responder Team and contact information
- Always review protocols and understand your Risks

 **Questions**

Tim Cotton IT Auditor timothy_cotton@nigc.gov	Jeran Cox IT Auditor jeran_cox@nigc.gov	Michael Curry IT Auditor michael_curry@nigc.gov
Sean Mason IT Auditor sean_mason@nigc.gov	Travis Waldo Director, IT travis_waldo@nigc.gov	
